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NSU Health Professions Division

NSU Health Professions Division
Letter from the President

Nova Southeastern University is Florida's largest independent university, based on enrollment, and the sixth largest independent institution in the United States. As president of NSU, I invite you to become an ambassador of this remarkable educational showcase that has now entered its fifth decade.

In 1967, NSU served an entire student body of 17 from one building. Today, we have more than 26,000 students enrolled in 16 academic centers, with programs offered in virtually every state and many foreign countries. The university boasts approximately 86,000 alumni.

The university's sustained growth is due, in large part, to its exploration of alternative strategies in educating professionals, as well as its commitment to excellence in academics and clinical collaboration at all levels and with diverse partners.

As you pursue your studies at Nova Southeastern University, you are welcomed as a member of the university community. Along with your membership to the university community comes many rights and responsibilities. This catalog outlines these rights and responsibilities, university policies and procedures, and university resources.

We look forward to a lifelong partnership with you, our student. The entire NSU community is dedicated to providing service and academic excellence to you as you continue on the road to graduation and your success in the new millennium.

Ray Ferrero, Jr.
President
Letter from the Chancellor

If you wish to be a leader in the health professions, Nova Southeastern University can help you reach your potential.

The Health Professions Division is unique in that it has been developed as an interdisciplinary educational center from its inception. The division was founded on the concept that the interdisciplinary approach to education is beneficial to students of all professions, and by preparing students to work effectively with health care providers from different fields, barriers are broken and patient care is enhanced.

In less than two decades, NSU's Health Professions Division has developed into a multidisciplinary academic health center of international stature. Composed of the Colleges of Osteopathic Medicine, Pharmacy, Dental Medicine, Optometry, Allied Health and Nursing, and Medical Sciences, the health professions division continues its commitment to academic excellence, innovation, and community service, while expanding its mission in research and scholarship. Together, as a team, the distinguished faculty prepares students for an exciting career on tomorrow's dynamic health care team.

Frederick Lippman, R.Ph., Ed.D.
Chancellor

Administration

Irving Rosenbaum, B.A., M.P.A., D.P.A.
Executive Dean for Administration and Provost

Morton Morris, D.O., J.D.
Executive Dean for Professional Affairs

Marla Frohlinger, B.A., M.H.S.A.
Executive Director for Student Services and Professional Coordination

Ray Ferrero, Jr., J.D.
President

Frederick Lippman, R.Ph., Ed.D.
Chancellor

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Executive Dean for Administration and Provost

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A. Alvin Greber, D.O., FACOI
Associate Executive Dean for Professional and Extramural Affairs

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Executive Director for Student Services and Professional Coordination

Stanley Cohen, B.S., M.Ed., Ed.D.
Vice Provost for Educational Support

Jay M. Tischenkel, B.Sc., R.Ph.
Director, Institutional Advancement

Steve Weinstein, CPA
Director of Finance

Robert S. Oller, D.O.
Chief Executive Officer, NSU Clinics
Nova Southeastern University Mission Statement

Nova Southeastern University is a dynamic, not-for-profit independent institution dedicated to providing high-quality educational programs of distinction from preschool through the professional and doctoral levels, as well as service to the community. Nova Southeastern University prepares students for lifelong learning and leadership roles in business and the professions. It offers academic programs at times convenient to students, employing innovative delivery systems and rich learning resources on campus and at distant sites. The university fosters inquiry, research, and creative professional activity by uniting faculty members and students in acquiring and applying knowledge in clinical, community, and professional settings.
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.
2006-2007 Academic Calendar

Note: Individual college schedules may be obtained from the college offices. All dates are subject to change by the administration.

Monday–Friday, July 31–August 4, 2006......Fall Orientation and Registration Week
Sunday, August 6, 2006..................Official Orientation/Registration (Family)
Monday, August 7, 2006..................Freshman Classes Begin
Friday, August 25, 2006..................Allied Health and Nursing Graduation Rehearsal
Saturday, August 26, 2006..................Allied Health and Nursing Graduation Senior Award Dinner
Sunday, August 27, 2006..................Allied Health and Nursing Graduation
Monday, September 4, 2006..............Labor Day, No Classes
Saturday, September 23, 2006...........Rosh Hashanah, No Classes
Monday, October 2, 2006.................Yom Kippur, No Classes
Wednesday, November 22, 2006........Thanksgiving Recess Begins 5:00 p.m.
Thursday–Friday, November 23–24, 2006.Thanksgiving Holiday, University Closed
Monday, November 27, 2006..............Classes Resume
Friday, December 15, 2006..............Winter Recess Begins 5:00 p.m.
Sunday, December 24, 2006............Christmas Holiday, University Closed
Monday, December 25, 2006............Christmas Day, University Closed
Sunday, December 31, 2006.............New Year's Holiday, University Closed
Monday, January 1, 2007..................New Year's Day, University Closed
Tuesday, January 2, 2007.................Classes Resume
Monday, January 15, 2007................Martin Luther King Day, No Classes
Friday, March 30, 2007..................Spring Recess Begins 5:00 p.m.
Monday–Friday, April 2–6, 2007........Spring Recess, No Classes
Friday, April 6, 2007......................Good Friday, University Closed
Monday, April 9, 2007....................Classes Resume

Thursday, May 24, 2007....................Senior Day/Graduation Rehearsal
Saturday, May 26, 2007....................Senior Award Dinner
Sunday, May 27, 2007......................Graduation
Monday, May 28, 2007.....................Memorial Day, No Classes
Wednesday, July 4, 2007..................Independence Day, University Closed
University History

Sustained growth and unity has made Nova Southeastern University (NSU) the largest independent university in the state of Florida. This growth culminated in January 1994, when Nova University and Southeastern University of the Health Sciences merged to become Nova Southeastern University.

Nova University was chartered in 1964 as a graduate institution in the physical and social sciences. Over time, Nova added programs in law, education, business, psychology, computer science, oceanography, social and systemic studies, and hospitality, and, in 1972, introduced its first off-campus course of study, in education. Soon, Nova became nationally recognized for its innovative distance learning programs. Today, field-based programs are located in 32 other Florida cities, in nearly 30 other states, and at selected international sites.

While Nova continued to expand its educational reach, Southeastern University of the Health Sciences also was on 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, Southeastern added Colleges of Pharmacy, Optometry, Allied Health, Medical Sciences, and the College of Dental Medicine, which admitted 88 students in 1997. This growth was unprecedented, but not unsurpassed. There was still more to come.

The merger brought on new possibilities. Prior to 1994, Nova had evolved with innovative technology and Southeastern expanded to provide much needed health care education. With the merger, Nova Southeastern University's resources make possible a more transdisciplinary education. Students have an opportunity to integrate across the disciplines and understand how their professions relate to society as a whole.

Campus

Nova Southeastern University's Health Professions Division offers a rare blend of tropical South Florida weather, plentiful sunny beaches, an easily accessible campus, a dedicated and professional faculty, well established affiliations with many hospitals, clinics, and health care systems in the area, and a mission to educate professionals capable of providing the highest quality health care service.

The university's main campus is located on a lush 300-acre site in Fort Lauderdale, 10 miles inland of the Atlantic Ocean and readily accessible via several highways and Florida's Turnpike.

The Health Professions Division complex, dedicated in June 1996, is located on 21 acres and encompasses more than 1 million square feet of buildings. The division comprises the Colleges of Osteopathic Medicine, Pharmacy, Optometry, Allied Health and Nursing, Medical Sciences, and Dental Medicine.

The division elicited input from students and faculty members and incorporated innovations in architecture, ergonomics, and computer-aided technology to provide facilities that enhance the learning experience.

The complex is an arrangement of eight buildings, four of which are connected by air conditioned lobbies. The Sanford L. Ziff Health Care Center, physical plant, and 1,600-space garage are connected to the central buildings by covered walkways. Administration and faculty offices are on the upper levels of the five-story Terry Administration Building, with the departments of admissions and student affairs, and a cafeteria located on the first floor.

Behind the administration building is the Assembly Building, which consists of a 500-seat auditorium, a 250-seat auditorium, and eight 126-seat amphitheater-classrooms, all equipped with computerized audio/video systems.

Connected to this is the three-story Library/Laboratory Building. On the first floor is the library and a 100-seat cardiac laboratory utilizing "Harvey," a computerized mannequin that duplicates the sounds and symptoms of most heart conditions.

Also on the first floor are patient simulation training rooms and a 50-station computer laboratory for student use. The second and third floors house laboratories, a student lounge, and a research area. Laboratories are equipped for viewing pre-taped medical procedures, and each large laboratory has a video system and hookups to equipment such as an electron microscope, so that illustrations can be amplified for laboratory-wide viewing.

Just north of the Library/Laboratory Building is the Health Care Center, with facilities for primary health care, rehabilitative services, eye care, pharmacy, and a simulation nursing laboratory.

The College of Dental Medicine's 70,500-square-foot building advances the state-of-the-art in dental education facilities. The first floor contains a 100-operatory predoctoral clinic facility and clinics and support laboratories for oral medicine, radiology, and oral surgery. The second floor houses a faculty practice and clinics for postgraduate programs in endodontics, orthodontics, pediatric dentistry, periodontology, and prosthodontics, a 100-position simulation technique laboratory and support laboratories. Faculty offices and an auditorium are on the third floor.

The Health Professions Division added a building to foster opportunities for interdisciplinary education and to meet the need for additional classroom, computer, and research facilities. This modern, spacious facility contains more than 31,000 square feet of instructional and research facilities, including a 312-seat auditorium, ultrasound training center, a 50-station computer science laboratory, and 37 seminar rooms.

Foreign Coursework

Undergraduate coursework taken at a foreign institution must be evaluated for U.S. institution equivalence by one of the three services listed below. You should contact one of the following:

- World Education Services
  P.O. Box 745
Background Checks
Accepted applicants and students are required to authorize the NSU Health Professions Division to obtain background check(s) as per the policy adopted on April 22, 2005. Students also may be required by the Health Professions Division to obtain a background check or authorize, where appropriate, clinical training facilities to conduct the check and to permit the results of the consumer reporting agency to be provided to HPD and/or the clinical training facilities. If the background check(s) reveal information of concern, which the NSU Health Professions Division deems unfavorable, HPD will provide the accepted applicant or enrolled student with a copy of the report and the document entitled “A Summary of Your Rights Under the Fair Credit Reporting Act,” and request the individual to provide a detailed written explanation of the information contained in this report, along with appropriate documentation (e.g., police reports). This information must be returned to the NSU Health Professions Division within 10 business days of the date the communication is sent or another date specified by HPD in its communication with the student.

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 may be terminated.

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.

Voluntary Withdrawal Tuition Refund Policy
Students who wish to withdraw must submit a written request for voluntary withdrawal to the dean, who will evaluate the student’s request. After completing the required withdrawal form(s) and obtaining the dean’s approval, an eligible student may receive partial refund of his or her tuition, according to the following formula:

- First three class days ............... 70 percent
- Fourth or fifth class day ............ 60 percent
- Sixth or seventh class day .......... 40 percent
- Eighth, ninth, or tenth class day ... 20 percent

No refunds will be made after the tenth class day.

(Students with questions should consult the program office.)

Students will not be given refunds for portions of tuition paid by financial aid funds. Instead, the respective financial aid programs will be credited in accordance with federal regulations, which establish the following requirements for recipients of Title IV student assistance funds (Guaranteed Student Loans and Auxiliary Loan Program).

The regulation requires that if the student has received a financial aid overage to assist with related, but indirect educational costs, e.g., living expenses, books, supplies, transportation and/or personal expenses, this must be prorated for the period the student attended the institution. The student must then refund the difference (between the actual overage and prorated amount) to the institution for restoration to the appropriate Title IV account.

Failure to comply with these requirements could jeopardize future receipt of Title IV student assistance funds at any institution of higher education the student may attend.

A refund due the student will be mailed to the student’s permanent home address or deposited directly into his or her checking account as soon as the dean of the respective college has approved the withdrawal. The tuition refund policy is subject to change at the discretion of the university’s board of trustees.

Florida Residency
Eligible students must request in-state tuition on application. For tuition purposes, students’ Florida residency status (in-state or out-of-state) will be determined at initial matriculation and will remain the same throughout the entire enrollment of the student at NSU. Accordingly, tuition will not be adjusted as a result of any change in residency status after initial enrollment registration.
Financial Aid
The purpose of the Student Financial Aid Program at the Health Professions Division is to help as many qualified students as possible to complete their education. Various loans, scholarships, and grants are available to qualified students to help ease the high cost of a health professions education. These financial assistance programs are described in a separate University publication: A Guide to Student Financial Assistance. For a copy, call (954) 262-3380, or write to Nova Southeastern University, Department of Student Financial Aid, 3301 College Avenue, Fort Lauderdale, Florida 33314-7796.

Certificate of Physical Examination
Students must have a certificate of physical examination completed by their physician. Forms will be distributed by the HPD Office of Admissions and Student Services to each matriculant as part of the admissions package.

Students may request that the University Health Service perform these examinations after matriculation. The University Health Service will make appointments in as timely a manner as possible, and 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 the students' files.

Immunization Requirements
Students must have completed the mandatory immunization form.

The following immunization procedures are required of students at the Health Professions Division.

Basic Immunizations
Every student is required to have had an immunization for the following diseases before matriculating at Nova Southeastern University: diphtheria-pertussis-tetanus (or diphtheria-tetanus), varicella (chicken pox), and measles-mumps-rubella. A written memorandum of the immunization given and the date, signed by a physician, must be filed with the Office of Admissions on the day of registration at the latest. These basic immunizations are the financial responsibility of the student.

Hepatitis B Vaccine
Since every student at the Health Professions Division potentially can be exposed to this deadly virus, and since many rotation sites require it of personnel, we will administer and require hepatitis B vaccinations for every entering student during the first year. The cost of this vaccination will be supported through the student activities fee.

Tuberculosis
Because of the resurgence of tuberculosis and the possible exposure of students to TB, the Health Professions Division will require and provide a yearly tuberculosis test for every student. The student activities fee will support this, as well.

Arrangements
The University Health Service will schedule appointments for students for tuberculosis testing and for hepatitis B vaccination. Because both of these require preparation, any student who does not keep a scheduled vaccination appointment will be required to pay for the immunization personally.

The university is not required to provide alternate sites for clinical practicum or rotations should immunization be a requirement for placement. Therefore, the student may be delayed in meeting the graduation requirements of his or her program.

Student Housing
Located in close proximity to the Health Professions Division, Nova Southeastern University on-campus residence halls are available to our entry-level B.S.N. and vascular sonography students. All other HPD students may seek assistance in housing through our off-campus housing office, which is located on the first floor of the Goodwin Residence Hall in Room 110. This office aids students with rental information, roommate matching, renting and purchasing furniture, rental discounts, and anything to do with off-campus housing. This office will try to make your off-campus housing search fun, free, and a pleasant experience. For additional information, please call (954) 262-7052 or visit us on the Web at www.nova.edu/reslife/offcampus.

Dress Code
Students in the Health Professions Division must maintain a neat and clean appearance befitting students 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. Students must wear their white consultation jackets with their names and appropriate college designation embroidered over or on the left breast pocket. A white jacket is to be worn daily over the prescribed attire.

2. 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.

3. Matching scrub sets, socks, and shoes.

4. In addition to the above attire, students must wear their white clinical jacket.

5. Identification badges will be issued at the Division Badge Room and must be worn at all times when the student is on campus or 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.

Please note that on campus, ID badges are necessary for proper use of auditoriums library and recreational facilities, offices, laboratories, and certain restricted parking areas.

Students may not wear the following:
- shorts
- cut-offs
- mini-skirts (higher than mid-thigh)
- jeans
• see-through clothing or halter-tops
• beach/flip-flop sandals or thong footwear
• t-shirts (as the outer shirt)
• jogging or exercise clothing
• hats or caps, unless of a religious nature

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), 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 respective program handbooks for compliance with any program-specific supplemental dress code policy.

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 that may be held by the affiliated facility include, but are not limited to, fingerprinting, a 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. If the placement has already begun, the student will be asked to leave.

Student Insurance Requirement
It is required that each Health Professions Division student (except those in distance education and R.N. to B.S.N. programs) carry adequate personal medical and hospitalization insurance. 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 through the HPD Admissions and Student Services Office, or by accessing the Web site at www.nova.edu/smc/health_insurance.html. Please note that students will see a charge for health insurance appear on their student account as part of the academic registration process.

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. To complete the waiver form, go to www.nova.edu/smc/health_insurance.html and click on the link for the waiver form. The online waiver is the only process by which insurance charges will be removed and coverage will be canceled. 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.

Veterans' Benefits
Standards of Progress
A student receiving veterans' benefits must maintain satisfactory progress. Students will be considered to be making satisfactory progress as long as they meet the academic standards set by their school for retention in their degree programs.

A student who, at the end of any evaluation period, has not attained and maintained satisfactory progress will be certified, in a probationary status, for only one additional evaluation period. Should this student not attain and maintain satisfactory progress by the end of the probationary period (one evaluation period), the student's Department of Veterans Affairs (VA) educational benefits will be terminated for unsatisfactory progress.

A student whose VA educational benefits have been terminated for unsatisfactory progress may petition the school to be recertified after one evaluation period has elapsed. The school may recertify the student for VA educational benefits only if there is a reasonable likelihood that the student will be able to attain and maintain satisfactory progress for the remainder of the program.

For VA payment of benefits purposes, an I (Incomplete) designation for a course must be converted to a credit grade counting toward graduation, or a failing grade, by the end of one calendar year unless permission for a delay is granted by the academic dean for that program. An NG (no grade) designation for a course must be converted to a credit grade counting toward graduation, of a failing grade, by the end of one regular semester unless permission for a delay is granted by the academic dean for that program.

Grade/Progress Reports
Each student who has VA benefits will be provided a grade/progress report at the end of every evaluation period (e.g., term, semester). A copy of each report will be placed in the student's permanent file maintained by the school. The university periodically furnishes each student with a working transcript that shows current status of grades and earned semester hours for all courses completed and/or attempted, plus grades for all courses in which the student is currently enrolled.

Credit for Prior Training (CPT)
Nova Southeastern University complies with federal regulations for veterans' training in that it is mandatory for all veterans' benefit recipients to report either prior education and/or training. A student receiving veterans' benefits who has previous postsecondary educational training/experience must request official transcript(s) to be sent to the school. If the transcript has not been received prior to the end of the student's second term at Nova Southeastern University, the student can not be certified for veterans' benefits for the upcoming term. The student can be certified for veterans' benefits only after the transcript has been received.
The school will evaluate the student's previous training and/or experience and grant credit as appropriate. Should credit(s) be accepted and/or granted, the tuition and training time will be reduced proportionately, with the student eligible for veterans' benefits and VA so notified.

**Student Conduct**

All students are expected to comply with the legal and ethical standards of this institution.

Academic dishonesty and/or non-academic misconduct will result in disciplinary action. Specific instances of misconduct include, but are not limited to, cheating, plagiarism, knowingly furnishing false information to the institution, and forging or altering institutional documents and/or academic credentials.

The institution reserves the right to require a student to withdraw at any time for misconduct as described above. It also reserves the right to impose probation or suspension on a student whose conduct is determined to be unsatisfactory.

Students who feel their rights have been denied are entitled to due process.

Students are expected to consult their respective program handbooks for compliance with any program-specific supplemental student conduct policy.

**Service Units**

**Learning Resources**

The Health Professions Division Library is located on the first floor of the HPD's Library/Laboratory Building. It contains an online catalog of holdings with more than 20,000 book titles; 1,500 journal subscriptions; and 1,500 audio and video tapes, slide sets, and CD-ROMs. Also, 21,000 full-text journals are available online. There are 48 group study rooms equipped with videotape players and monitors. The HPD library maintains an Internet Web site that allows for access to more than 200 health-related and other electronic databases, including MEDLINE and MDConsult. Students also have checkout privileges at other NSU libraries, including the Shepard Broad Law Center Library; the Oceanographic Center Library; and the Alvin Sherman Library, Research, and Information Technology Center (a joint-use facility with the Broward County Board of County Commissioners).

**Health Care Centers**

The Health Professions Division Health Care Centers serve an important function and are an integral part of the training programs. They 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 NE 167th Street
  North Miami Beach, Florida

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 South University Drive
  Fort Lauderdale-Davie, Florida

A primary care facility with state-of-the-art full service radiologic-diagnostic capabilities. Contained here are family medicine, pediatrics, X-ray, occupational therapy, pharmacy, physical therapy, physical medicine and rehabilitation, optometric clinic, optical dispensary, and cardiology and other specialty practices (67,000 square feet).

- **Eye Institute of Fort Lauderdale**
  The Eye Institute at Fort Lauderdale located in the North Broward Hospital District building at 1111 West Broward Boulevard 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 students supervised by experienced faculty members in this 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 section. A wide selection of frames and lenses for both children and adults are available at reasonable cost on-site.

- **Southwest Focal Point Senior Center**
  301 NW 103rd Avenue
  Pembroke Pines, Florida

This facility is designed to service the medical needs of geriatric patients.

- **Hearing and Balance Center**
  3600 South University Drive
  Davie, Florida

This center services patients who need hearing and balance evaluations. Therapeutic intervention is available for pediatric and adult auditory disorders as well as other disorders of the hearing and balance systems.

**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 the awareness of laws that prohibit discrimination against anyone on the basis of race, color, national origin, religion, sex, or qualified disability.

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.
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 should be able to interact with and observe patients in order to elicit information, examine patients, describe changes in mood, activity and posture, and perceive nonverbal communications. They must be able to communicate effectively and sensitively with patients. Communication includes not only speech but also reading and writing. They 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, groups, and colleagues 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 (CPR), 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 functions involving gross and fine movements. Pharmacy candidates and students must have sufficient motor skills to weight 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.

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.

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 prompt completion of all responsibilities attendant to the diagnosis and care of patients; and the development of mature, sensitive, and effective relationship with 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.
Mission Statement

We, the faculty and staff of NSU College of Osteopathic Medicine, are committed to the uniqueness and importance of our osteopathic philosophy and heritage. Working together, we educate and train future osteopathic physicians who will succeed in meeting the needs of tomorrow's diverse patients in an evolving health care system. We are committed to producing competent, compassionate physicians who are holistic, self-directed, and lifelong learners. This is accomplished by

- providing medically superior and committed faculty members as role models
- delivering state-of-the-art and relevant education, training, and research support that realigns with the needs of our communities (local, national, and international)
- demonstrating quality patient care and education through increased clinical experience
- performing ongoing self-evaluations

We listen to and consider the recommendations and needs of our partners in the public and professional communities and the educational needs of our students and residents.

An Osteopathic Physician

Two types of complete physicians may practice medicine in all 50 states: the doctor of osteopathic medicine (D.O.) and the doctor of medicine (M.D.). While both types of physicians are trained in all aspects of patient care, D.O.s offer a distinct, holistic approach to medicine.

Osteopathic medicine is distinguished by an emphasis on primary care, by using osteopathic manipulative medicine when necessary, and by a tradition of caring for patients in underserved rural and urban areas.

Osteopathic physicians recognize the relationship between physical structure and organic function and view the human body as an interdependent unit rather than an assortment of separate parts and systems.

While all medical and surgical specialties are represented within the osteopathic medical profession, the training of vitally needed family physicians and the drive to reach rural, minority, geriatric, and indigent populations, make the osteopathic medical profession unique.

We are proud of our success in producing vitally needed primary care physicians—nearly 70 percent of our graduates practice in the primary care disciplines of family medicine, general internal medicine, or general pediatrics—and we remain committed to training physicians capable
of delivering the highest standards of total-patient care in all practice settings.

**Accreditation**

Nova Southeastern University College of Osteopathic Medicine has been granted accreditation by the Commission on Osteopathic College Accreditation of the American Osteopathic Association. This body is recognized by the U.S. Department of Education and the Council of Post-Secondary Accreditation as the accrediting agency for colleges educating osteopathic physicians and surgeons.

**Administration**

Anthony J. Silvaggi, D.O., Pharm.D., M.Sc., FACOFP
Dean

Lawrence E. Jacobson, D.O.
Vice Dean

Leonard Levy, D.P.M., M.P.H.
Associate Dean for Education, Planning, and Research

Howard Neer, D.O., FACOFP
Associate Dean for Alumni Affairs

Thomas Parrino, M.D.
Associate Dean for Veteran Affairs

Steven Zucker, D.M.D., M.Ed.
Associate Dean for Community Affairs

Joseph DeGaetano, D.O., FAAFP
Assistant Dean of Clinical Curriculum and Graduate Medical Education (GME)

Albert W. Whitehead, D.M.D., M.Ed., M.B.A.
Assistant Dean for Student and Administrative Services

Margaret Wilkinson, Ph.D.
Assistant Dean for Preclinical Education

Cyril Blavo, D.O., M.S., M.P.H. and T.M., FACOP
Director, Public Health Program

Jennie Q. Lou, M.D., M.Sc.
Director, Medical Informatics

**Admission to the College of Osteopathic Medicine**

**Requirements for Admission**

Applicants for the first-year class must meet the following requirements prior to matriculation:

1. a bachelor's degree is preferred and must be from a regionally accredited college or university. A minimum of 90 semester hours of accepted work from a regionally accredited college or university may be considered for admission.

2. have successfully completed
   - eight semester hours of each of the following courses, including laboratory for each:
     - a. general biology
     - b. organic chemistry
     - c. general chemistry
     - d. physics
   - three semester hours of each of the following courses:
     - a. English literature or equivalent
     - b. English composition or equivalent

Note: These are minimum academic requirements for admission. Students are encouraged to take additional courses such as anatomy/physiology, biochemistry, embryology, genetics, behavioral sciences, and the humanities.

Preference will be given to students with a cumulative grade point average (GPA) of 3.0 or higher. However, the dean is empowered to evaluate the total qualifications of every student and to modify requirements in unusual circumstances.

3. All applicants are required to take the Medical College Admission Test (MCAT). Applications for the MCAT may be obtained from your college’s preprofessional adviser’s office, or by writing directly to:
   Medical College Admission Test Program Office
   2255 North Dubuque Road
   P.O. Box 4056
   Iowa City, IA 52243-4056

MCAT scores must be no more than three years old.

The discipline and intensive study required by the osteopathic medicine curriculum make the attainment of a superior GPA in undergraduate studies essential.

The college receives more than 2,000 applications a year, from which only 230 students are chosen. These students have varied backgrounds, and while some many enter the college directly from an undergraduate program, other students come from successful careers. Entering students have included pharmacists, physician assistants, nurses, teachers, pilots, and engineers.

The committee on admissions recommends applicants to the dean on the basis of demonstrated academic excellence, leadership, compassion, and commitment to the osteopathic medical profession.

**Application Procedure**

The college participates in the American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS) for the receipt and processing of all applications. AACOMAS takes no part in the selection of students.

Application packets may be obtained directly from AACOMAS by calling (301) 968-4190 or writing to

5550 Friendship Blvd., Suite 310
Chevy Chase, MD 20815-7231.

For quick results, applicants may also submit applications electronically through AACOMAS online, an interactive Web-based application that can be accessed through [www.aacom.org](http://www.aacom.org).

Listed below are the steps necessary to complete applications before they can be reviewed by the committee on admissions:

1. The applicant should mail the following to AACOMAS by January 15:
   - AACOMAS application
   - An official transcript from the registrar of each college or university attended, mailed directly to AACOMAS by the college or university
   - MCAT scores (must be no more than three years old from the date of application cycle)

2. The applicant should mail the following to the college by March 1:
   - a supplemental application, which will be sent to the applicant by the college on receipt of the AACOMAS application
• a nonrefundable application fee of $50
• a letter of evaluation from the preprofessional committee, or, if such a committee does not exist, then three letters of evaluation: two from science professors, and one from a liberal arts professor
• a letter of evaluation from an osteopathic physician

A personal interview is a part of the admission process; however, being interviewed is not a guarantee of admission. Not all applicants will be granted an interview. Those selected for an interview will be notified of the date and time of such interview by the Office of Admissions.

Notice of acceptance or action by the committee on admissions will be on a rolling or periodic schedule; therefore, early completion of the application is in the best interest of the applicant because of the limited number of spaces available in each class.

After acceptance, final and official documents and requirements must be received by the Office of Admissions within 90 days following the start of the first term. If these final and official documents are not received, or other requirements are not met by that time, the student will not be able to continue his or her enrollment. Financial aid will not be disbursed to anyone until the student will not be admitted until their financial obligations have been met.

The purpose of the Student Financial Assistance Program at Nova Southeastern University is to help as many qualified students as possible to complete their medical education. Various loans, scholarships, and grants are available to qualified students to help ease the high cost of a medical education. These financial assistance programs are described in a separate university publication: A Guide to Student Financial Assistance.

### Academics

#### Transfer of Credit

Circumstances may warrant that a student enrolled in one osteopathic college seeks to transfer to another institution. Credits may be transferred from medical schools and colleges accredited by the American Osteopathic Association or by the Liaison Committee on Medical Education (LCME) or from other professional schools if, in the opinion of the dean, these schools have provided coursework comparable to that of the College of Osteopathic Medicine.
Transfers from one college of osteopathic medicine to another shall require that the last two years of instruction be completed within the college granting the D.O. degree.

Transfers from an accredited medical school or college shall require that no less than the last 50 percent of instruction be completed within the College of Osteopathic Medicine.

Transfer credits shall be given only if the student is eligible for readmission to the previously attended college of osteopathic medicine or other medical school.

Credit is only given for completed courses with grades of 70 percent (C) or greater.

Anyone wishing to transfer to Nova Southeastern University College of Osteopathic Medicine must:

1. make a formal application to Nova Southeastern University College of Osteopathic Medicine Office of Admissions

2. meet all admission requirements to Nova Southeastern University College of Osteopathic Medicine, which include submitting official transcripts of all college work (including osteopathic transcripts); MCAT scores; National Board scores, if taken; and letters of evaluation (No applicant will be accepted without an interview.)

3. be in good standing at the transferring institution, as documented by a letter from the dean of the transferring institution

4. supply a letter of recommendation from a faculty member of the transferring osteopathic institution

5. supply a written statement outlining reasons for request for transfer

Decisions on transfer are made by the dean. The decision will be based on factors which include, but are not limited to, academic record, circumstances leading to the transfer request, available space, and admission standards.

Advanced Placement

Request for advanced placement for any course at Nova Southeastern University College of Osteopathic Medicine must be declared and all supporting documentation must be submitted by the student no later than the first day of class. The student must present all supporting documents to the College of Osteopathic Medicine Office of Student Affairs.

The student will be required to attend all classes and take all examinations until the disposition of the advanced placement request is finalized.

A student must have taken a course judged to be equivalent by the appropriate academic department, within two years prior to the first day of classes. The involved academic department will also have the option of requiring a comprehensive examination given for the purpose of determining the student's competency in the subject matter involved. The passing requirement for this examination will be determined by the department.

The decision regarding the request for advanced standing will be transmitted in writing to the student by the dean. The Office of the Registrar will be appropriately notified. Courses for which advanced standing is granted will be designated as advanced placement on the student's transcript and will not show a grade or contribute to the student's grade point average.

Course of Study

The College of Osteopathic Medicine has a dedicated faculty; well established affiliations with medical centers, hospitals, and health care systems; a nationally recognized rural medicine program; and a mission to educate the finest osteopathic physicians possible. We place our students and residents at the nation's fourth largest public hospital system—the North Broward Hospital District—or at one of our regional academic centers throughout the state to improve continuity and coordination of clinical education within our vast and growing clinical training network.

Our innovative curriculum is designed to fulfill our mission of training primary-care physicians. The design of the curriculum is based on successful academic models—carefully developed and integrated. It emphasizes interdisciplinary collaboration, guiding students to develop a holistic, and more importantly, an osteopathic approach to medicine. We continually correlate basic scientific information with fundamental clinical application. Students are exposed to clinical settings in their first semester, which gives them the opportunity to prepare for the "real world" of medicine.

This clinical exposure continues into the second year when students have increased opportunity to interact with standardized patients on campus as well as be involved, under physician supervision, with real patients in the office and hospital setting.

A notable aspect of the clinical program is a required three-month rotation in a rural practice setting. In rural clinics throughout the state of Florida, our students provide health care to medically underserved and indigent patients. Our students learn to treat various patients whose lifestyles, practices, and attitudes toward health care differ from those seen in more traditional training sites. This enriching educational experience is one that cannot be taught in the classroom.

Physicians do not work in a vacuum, but rather in a health care team, and NSU promotes interdisciplinary cooperation whenever possible. Students share faculty members and campus facilities with NSU's pharmacy, dental, optometry, physician assistant, physical therapy, occupational therapy, public health, nursing, and medical science students.
## Curriculum Outline

### FIRST YEAR

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<thead>
<tr>
<th>Course Code</th>
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<th>Credit Hours</th>
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<tr>
<td>ANA 5114</td>
<td>Medical Histology</td>
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<tr>
<td>ANA 5218</td>
<td>Gross Anatomy</td>
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<tr>
<td>BCH 5113</td>
<td>Medical Biochemistry I</td>
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<tr>
<td>FME 5105</td>
<td>Basic Life Support</td>
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<td>IDC 5112</td>
<td>Clinical Practicum I</td>
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<tr>
<td>IDC 5211</td>
<td>IGC Preceptorship I</td>
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<tr>
<td>IDC 5505</td>
<td>Ethnocultural Medicine</td>
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<td>OPP 5112</td>
<td>OP and P I</td>
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<tr>
<td>PHS 5123</td>
<td>Medical Physiology I</td>
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**Total Hours** 24.0

### Elective Courses

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<tr>
<td>IDC 5313</td>
<td>Preclinical Preceptorship I</td>
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<td>IDC 5513</td>
<td>Research I</td>
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### SECOND YEAR

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<td>IMX 5211</td>
<td>Principles of Radiology</td>
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<td>MIC 5127</td>
<td>Medical Microbiology II</td>
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<td>OPP 5222</td>
<td>OP and P II</td>
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<td>PHS 5124</td>
<td>Medical Physiology II</td>
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<td>PRM 5222</td>
<td>Preventive Medicine and Public Health Preparedness</td>
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<tr>
<td>PSY 5125</td>
<td>Substance Abuse: Tobacco Cessation</td>
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**Total Hours** 24.5

### Elective Courses

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<tr>
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<tr>
<td>IDC 5213</td>
<td>Research II</td>
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<td>IDC 5523</td>
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<tr>
<td>IDC 5722</td>
<td>Guided Study II</td>
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### PSY 6112 | Substance Abuse: Tobacco Cessation                | 0.5          |

**Total Hours** 24.0

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**College of Osteopathic Medicine—Osteopathic Medicine Program**
### SECOND YEAR

#### Second Semester Core Courses

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>FMC 6421 Medical Jurisprudence</td>
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<tr>
<td>FME 6221 Advanced Cardiac Life Support</td>
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<tr>
<td>FME 6321 Pediatric Advanced Cardiac Life Support</td>
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<tr>
<td>IDC 6023 Nervous System</td>
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<tr>
<td>IDC 6105 Medical Ethics</td>
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<td>IDC 6122 Clinical Medicine II</td>
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<tr>
<td>IDC 6422 Musculoskeletal System</td>
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<tr>
<td>IDC 6523 Gastrointestinal System</td>
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<tr>
<td>IDC 6722 IG Preceptorship IV</td>
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<tr>
<td>IDC 6822 Renal/Urinary System</td>
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<td>OPP 6422 OP and P IV</td>
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**Total Hours:** 20.5

#### Elective Courses

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<td>IDC 6123 Research IV</td>
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<td>IDC 6522 Community Service IV</td>
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### THIRD YEAR

#### Core Clinical Rotations

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>BMP 7108 Psychiatry</td>
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<tr>
<td>FMG 7108 Geriatrics</td>
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<tr>
<td>FMN 7108 Family Medicine—Clinic</td>
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<tr>
<td>FMN 7208 Family Medicine</td>
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<tr>
<td>IMA 7108 Internal Medicine</td>
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<tr>
<td>IMA 7208 Internal Medicine</td>
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</tr>
<tr>
<td>IMA 7308 Internal Medicine</td>
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<tr>
<td>OBG 7108 Obstetrics/Gynecology</td>
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<tr>
<td>PED 7108 Pediatrics—Ambulatory</td>
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<tr>
<td>PED 7208 Pediatrics—Hospital</td>
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<tr>
<td>SGN 7108 General Surgery</td>
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<tr>
<td>SGN 7208 General Surgery</td>
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### FOURTH YEAR

#### Core Clinical Rotations

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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>FME 8108 Emergency Medicine</td>
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<tr>
<td>FMR 8108 Rural Medicine—Ambulatory</td>
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#### Elective Clinical Rotations

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<tbody>
<tr>
<td>BMA 8108 Addiction Medicine</td>
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<tr>
<td>BMP 8108 General Psychiatry</td>
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<td>BRC 8108 Board Review</td>
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<td>IDC 8118 Integration of Clinical Services</td>
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<td>IDC 8608 International Health IV</td>
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<tr>
<td>IMA 8108 General Internal Medicine</td>
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<tr>
<td>IMA 8208 The Cardiology Patient Simulator, “Harvey”</td>
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<tr>
<td>IMC 8408 Cardiology</td>
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<tr>
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<td>IMI 8308 Nuclear Medicine</td>
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<td>OPP 8148 OP and P Fellowship I</td>
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College of Osteopathic Medicine Course Descriptions

Note: Listed at the end of each entry are lecture clock hours, laboratory clock hours, and credit hours.

Anatomy

ANA 5114—Medical Histology
Study of cells, tissues, and organs of the body as seen through the light microscope, involving both lectures and laboratory work. Covers transmission and scanning electron micrographs. (36-54-4)

ANA 5218—Gross Anatomy
Study of the structure of the human trunk, extremities, head, and neck, including dissection by student teams. (108-54-8)

ANA 5423—Neuroanatomy
Study of the gross structure of the brain and spinal cord and the functional relationship among their parts. Emphasizes major motor and sensory pathways and integrative mechanisms of the central nervous system. (36-18-3)

Biochemistry
Chair and Professor: R. E. Block | Professor: E. E. Groseclose | Associate Professor: K. V. Venkatachalam | Assistant Professor: W. G. Campbell

BCH 5113/5124—Medical Biochemistry I and II
Covers biochemical reactions and pathways of normal human health, nutrition from a biochemical viewpoint, the biochemistry of the gastrointestinal, pulmonary, renal, musculoskeletal, endocrine, and other systems. (108-0-7)

Pathology
Chair and Professor: M. A. Khin | Professor Emeritus: D. C. Bergman | Professor: K. Khin | Assistant Professors: B. C. Jones, A. B. Trif

PTH 6113—Principles of Pathology
Basic concepts and principles of pathology needed for the applied clinical courses to follow during the semester. (36-0-3)

Microbiology
Chair and Professor: H. Hada | Professor: H. E. Laubach | Associate Professor: D. Burris | Assistant Professors: J. Coffman, K. Davis

MIC 5127—Medical Microbiology
Basic principles of infectious agents and their application to disease states. Includes study of immunology. (126-0-7)

Pharmacology
Chair and Professor: C. E. Reigel, Jr. | Assistant Professors: L. Gorman, T. Panavell, M. Parker, C. Powell

PCO 6112—Principles of Pharmacology
Basic pharmacological concepts and principles needed for the applied clinical science courses to follow during the semester. (36-0-2)

Physiology
Acting Chair and Professor: H. E. Laubach | Professors: H. Mayrovitz, S. Taraskevich | Associate Professor: W. Schreier | Assistant Professor: Y. Zagvazdin

PHS 5123/5124—Medical Physiology I and II
Study of general physiology (cell function, membrane translocation, electrophysiology, muscle physiology), cardiovascular, renal, gastrointestinal, respiratory, endocrine, and neurophysiology. (133-0-7)

Psychiatry
Chair: TBA | Clinical Assistant Professor: F. Lewis

BMP 7108—Psychiatry
Introduces the major clinical concepts of psychiatry. Emphasizes the biophysical model as it relates to the assessment, diagnosis, empathic, and compassionate treatment of major psychiatric disorders as listed in the DSM-IV. (36-0-5)

Division of Medical Humanities
Chair and Professor: S. Cohen
Family Medicine
FMC 6421—Medical Jurisprudence
Seminar and lecture series covering physician-attorney relationships, legal terminology, and principles. Emphasizes medical risk management. (18-0-1)
FME 5105—Basic Life Support
American Heart Association-approved course leading to certification upon successful completion. (0-8-0.5)
FME 6221—Advanced Cardiac Life Support
American Heart Association-approved advanced cardiac life support course, taken prior to clinical rotations. (0-18-1)
FME 6321—Pediatric Advanced Cardiac Life Support (0-18-1)
American Heart Association-approved pediatric advanced cardiac life support course, taken prior to clinical rotations. (0-18-1)

Division of Physical Medicine and Rehabilitation
Chair and Clinical Assistant Professor: R. Tolchin
Geriatics
Chair and Associate Professor: N. Pandya | Assistant Professors: S. Ledbetter, M. Warhaftig
FMG 6121—End of Life Seminar
Review of the normal geriatric patient and pertinent pathological processes. Stresses psychosocial aspects, therapeutics, and chronic care management. (10-0-0.5)
Preventive Medicine
Chair and Clinical Assistant Professor: J. Malneck | Clinical Assistant Professor: R. Trensche
PRM 5222—Preventive Medicine and Public Health Preparedness
This course will present the role of the physician in population-based medicine and community health. The course will teach the student physician the fundamentals of preventive medicine and public health, including bioterrorism preparedness. Special emphasis will be made on the concept of separating patients from risk. (42-0-2)

Rural Medicine
Chair and Professor: J. Howell | Professor: R. Perraud
FMR 6205—Rural Medicine
Introduces concepts of rural practice, the role of the rural practitioner, and problems associated with health care delivery in rural and medically underserved areas. (10-0-0.5)

Division of Correctional Medicine
Chair and Professor: D. Thomas
Osteopathic Principles and Practice
Chair and Professor: E. Wallace | Assistant Chair and Professor: M. Patterson | Associate Professor: M. Sandhouse | Assistant Professor: E. Shamus | Professors Emeritus: A. Snyder, M. Greenhouse
OPP 5112—Osteopathic Principles and Practice I
Introduces general principles and techniques of diagnosis of the axial skeleton and paraspinal regions. Introduces students to basic terminology and examination skills through lecture, demonstration, and hands-on performance. (18-36-2)
OPP 5222—Osteopathic Principles and Practice II
Covers principles and techniques on a regional basis. Stresses the neurophysiological aspects of muscle dysfunction and pain mechanisms. Treatment modalities include counterstrain, myofascial release, indirect technique, and muscle energy technique. (18-36-2)
OPP 6112—Osteopathic Principles and Practice III
Continues the study of osteopathic diagnosis and treatment and the development of skills learned in previous semesters. High velocity, low amplitude techniques are included. Interdisciplinary clinical correlation is emphasized. (18-36-2)
OPP 6422—Osteopathic Principles and Practice IV
Development of the osteopathic approach to systemic diseases, using skills learned in previous semesters. Cranial osteopathic technique is included. Interdisciplinary clinical correlation is emphasized. (18-36-2)
OPP 8148—Osteopathic Principles and Practice Fellowship I
The first of two practica, this rotation introduces the OMM Fellow to the concepts of ongoing ambulatory osteopathic care and offers some teaching and research experience. (0-960 [Clinic]-48)
OPP 8248—Osteopathic Principles and Practice Fellowship II
A continuation of the first practicum, this rotation builds on the OMM Fellows' patient care responsibilities and stresses a more intense teaching and research load. (0-960 [Clinic]-48)

Internal Medicine
Chair and Associate Professor: S. Snyder | Associate Professor: J. Bleicher | Assistant Professors: L. Graham, G. Hill, G. Merlino, J. Spalter

Division of Cardiovascular Medicine
Chair and Professor: A. A. Greber | Clinical Professor: R. Kaufman | Clinical Assistant Professors: C. Vogel, E. Naccarato
Division of Dermatology
Chair and Clinical Professor:
- S. Skopit | Residency Program
- TBA
Director and Assistant Professor:
- B. Portnoy | Clinical Professor:
- H.A. Schwartzberg

Division of Endocrinology
Chair and Clinical Professor:
- L. Chaykin | Clinical Assistant Professor:
- C. Coelho

Division of Gastroenterology
Chair: TBA | Clinical Associate Professor:
- A. Levine
Clinical Assistant Professors: M. Carp, G. Cowan, M. Lamet

Division of Hematology/Oncology
Chair and Clinical Assistant Professor:
- J. Leslie | Associate Professor:
- J. Krathen, S. Rozin

Division of Infectious Diseases
Chair and Assistant Professor:
- J. Spalter

Division of Nephrology
Chair and Clinical Associate Professor:
- S. Snyder | Clinical Assistant Professor:
- J. Waterman

Division of Neurology
Chair and Clinical Assistant Professor:
- H. M. Todd | Professor:
- L. Jacobson | Assistant Professors:
- T. Hammond, J. Harris, M. Swerdloff

Division of Pulmonary Medicine
Chair and Clinical Professor:
- E. Bolton, Jr. | Clinical Assistant Professor:
- D. Saltzman

Division of Radiology
Chair: TBA | Professor Emeritus:
- D. Finkelstein
IMX 5211—Principles of Radiology
Introduces basic concepts of radiology to give an orientation to more in-depth radiographic diagnosis that will take place in the second year. (18-0-1)

Obstetrics and Gynecology
Chair and Professor:
- D. R. Barkus | Assistant Professors:
- R. Alexis, K. Johnson

Pediatrics
Chair and Associate Professor:
- E. Packer | Professors:
- C. Blavo, D. Mulligan-Smith | Assistant Professor:
- H. DeGaetano

Surgery
Chair and Professor:
- D. Thomas | Professor:
- M. Morris | Professor Emeritus:
- S. Kaye

Division of Anesthesiology
Chair and Clinical Associate Professor:
- R. H. Sculthorpe

Division of Ophthalmology
Chair and Clinical Professor:
- W. Bizer

Division of Orthopedic Surgery
Chair and Clinical Professor:
- M. Rech | Professor:
- M. J. Morris

Division of Otorhinolaryngology
Chair: R. Contrucci

Division of Urology
Chair and Clinical Professor:
- TBA

SAN 6105—Anesthesiology
Introduction to the basic principles and concepts of the use of anesthetics in medical practice. (9-0-0.5)

Interdisciplinary Courses

PSY 5125—Substance Abuse: I Tobacco Cessation
Emphasizes development of knowledge and skills valuable in assisting patients to change attitudes and behaviors regarding the cessation and prevention of tobacco use. (6-8-0.5)

PSY 6112—Psychiatry and Behavioral Medicine
This course introduces the major clinical concepts of psychiatry and behavioral medicine. It emphasizes the biopsychosocial model as it relates to the recognition, sensitivity, assessment, diagnosis, and management of mental illness and relevant psychosocial issues. (54-0-2)

IDC 5505—Ethnicultural Medicine
Covers skills and insights needed to deal with problems of providing health care to minorities and patients from different cultural backgrounds. Stresses need for effective communication, understanding of cultural factors, and how they impact on patient compliance and the doctor/patient relationship. (8-0-0.5)

IDC 6005—HIV Seminar
Diagnosis and management of HIV infections and disease, with emphasis on counseling and comprehensive care of the HIV-infected patient. (6-0-0.5)

IDC 6705—Introduction to Complementary and Alternative Medicine
Concepts and practices of alternative and complementary medicine. (8-0-0.5)

IDC 6105—Medical Ethics
Discusses and explores important issues in medical ethics, especially those involving physician/patient relationships. (10-0-0.5)

IDC 5312—Community Service I
Provision of health care to an approved community health facility. (0-36-2)

IDC 5122—Community Service II
A continuation of Community Service I. (0-36-2)

IDC 6202—Community Service III
A continuation of Community Service II. (0-36-2)

IDC 6522—Community Service IV
A continuation of Community Service III. (0-36-2)
IDC 5513—Research I
Beginning with the second year of the curriculum, students may engage in research projects under the mentorship of faculty in the clinical and/or basic medical sciences. This includes acquiring experience in the development of research protocols and participating in the implementation of clinical and biomedical science projects. A limited amount of grant support for students has been acquired to further encourage promising student researchers. (0-54-3)

IDC 5213—Research II
Continuation of Research I. (0-54-3)

IDC 6213—Research III
Continuation of Research II. (0-54-3)

IDC 6213—Research IV
Continuation of Research III. (0-54-3)

IDC 5313—Preclinical Preceptorship I
Supervised clinical training experience in clinic, office, or hospital setting. (0-54-1)

IDC 5323—Preclinical Preceptorship II
This course is a continuation of Preclinical Preceptorship I. (0-54-1)

IDC 6303—Preclinical Preceptorship III
This course is a continuation of Preclinical Preceptorship II. (0-54-2)

IDC 6323—Preclinical Preceptorship IV
This course is a continuation of Preclinical Preceptorship III. (0-54-2)

IDC 5112—Clinical Practicum I
Introduces medical history taking and physical examination techniques. Emphasizes communication skills and physician/patient interactions. (21-36-2)

IDC 5522—Clinical Practicum II
Develops history and physical examination skills using simulated patient examinations. (24-18-2)

IDC 6112—Clinical Medicine I
Assessment of clinical problems through multiple formats incorporating interactive small group discussions, standardized patient assessments, and computer assisted instruction. (36-0-2)

IDC 6222—Guided Study IV
Continuation of Guided Study III. (0-36-2)

IDC 5225—Integration of Biomedical and Clinical Science
Review of medically important concepts in biological science and clinical medicine. (120-0-5)

IDC 8821—Senior Seminar
A series of presentations prior to graduation to reinforce knowledge and skills useful for the internship experience. Topics include: medical economics, risk management, on-call medication, physician impairment, professional liability, medical licensure, emergency management. A mock trial is presented. (20-0-1)

Interdisciplinary Preceptorships
The interdisciplinary generalist preceptorships introduce students to primary care clinical settings (specifically managed care) early in their medical education through placement with primary care physician mentors. Students get exposed to the central role of the primary care physician in managed care and to the various components of managed care through rotations at managed care organizations (MCOs). First-year students rotate once every two weeks with a physician mentor in either family practice, general internal medicine, or general pediatrics. Second-year students continue these experiences on a weekly basis and also rotate through MCO headquarters.

IDC 6022—Guided Study IV
Continuation of Guided Study III. (0-36-2)

IDC 6225—Integration of Biomedical and Clinical Science
Review of medically important concepts in biological science and clinical medicine. (120-0-5)

IDC 8821—Senior Seminar
A series of presentations prior to graduation to reinforce knowledge and skills useful for the internship experience. Topics include: medical economics, risk management, on-call medication, physician impairment, professional liability, medical licensure, emergency management. A mock trial is presented. (20-0-1)

Interdisciplinary Systems
The systems courses involve participation by the departments of Family Medicine, Internal Medicine, Pediatrics, Obstetrics and Gynecology, Behavioral Medicine, Surgery, and Basic Sciences. Traditional classroom lectures are given in an integrated fashion so that clinical aspects, pathophysiology of diseases and disorders of each system are addressed. Infectious diseases and malignancies are addressed in each system. Pharmacology and pathology are integrated extensively in all the systems. Osteopathic principles and practice are also integrated into all the systems.

IDC 6212—Hematopoietic and Lymphoreticular System
Diagnosis, management of hematopoietic, lymphoreticular system diseases, disorders, hemostasis, platelets, white blood cells, and myeloproliferative, lymphoproliferative, immunoproliferative and oncologic disorders. (36-0-2)

IDC 6215—Cardiovascular System
Pathophysiology, diagnosis, and management of common cardiovascular disorders. Teaches electrocardiography, and includes training in the use of “Harvey.” (82-0-5)

IDC 6613—Reproductive System
Pathophysiology, diagnosis, treatment of common gynecologic and obstetric disorders and diseases of the breast.
Special issues are discussed, such as domestic violence. (56-0-3)

**IDC 6313—Respiratory System**
Pathophysiology; diagnosis; management of common respiratory disorders, infectious disorders, neoplasms of the respiratory system, ventilatory functions; and management of respiratory failure. (53-0-3)

**IDC 6023—Nervous System**
Pathology of the nervous system, neurologic dysfunctions, pathophysiologic mechanisms of neurologic diseases, pharmacotherapeutics, and rehabilitative aspects of nervous system dysfunctions. Addresses the application of osteopathic manipulative medicine to nervous system disorders. (65-0-3)

**IDC 6415—Endocrine System**
Pathophysiology, diagnosis, management of hormonal disorders; diseases of the pituitary, thyroid, adrenals, pancreas, parathyroid; neoplasms, and infectious diseases affecting the endocrine system. (27-0-1.5)

**IDC 6422—Musculoskeletal System**
Diseases, disorders of the muscoskeleton system. Addresses pathophysiology, diagnosis and management of rheumatologic disorders, orthopedics, aspects of physical medicine, and rehabilitation.

**IDC 6822—Renal/Urinary System**
Renal pathophysiology, glomerular, tubulointerstitial diseases, renal failure, congenital disorders, metabolic disorders, neoplasms of the renal/urinary system, and urology. (56-0-2)

Osteopathic manipulative medicine is in this system. (50-0-3)

**Affiliated Hospitals**

**Aventura Hospital**
North Miami Beach
D.M.E.: Stanley Simpson, D.O.

**Bay Pines Veteran Affairs Medical Center**
Bay Pines

**Bethesda Hospital**
Boynton Beach
D.M.E.: Marlene Carabello, D.O.

**Broward General Medical Center**
Fort Lauderdale
Associate Medical Education Director: Glenn R. Singer, M.D.
CEO: Wil Trower
D.M.E.: Myron Howell, D.O.

**Columbia Hospital**
West Palm Beach
CEO: Valerie Jackson
D.M.E.: Bradley Feuer, D.O., J.D.

**Coral Springs Medical Center**
Coral Springs
Hospital Administrator: Debra Mulvihill
Associate Medical Education Director: Daniel Hurwitz, M.D.
D.M.E.: Myron Howell, D.O.

**Florida Hospital East Orlando**
Orlando
President: Sandra Randolf, M.B.A.
D.M.E.: Joseph Allgeier

**Kendall Regional Medical Center**
Miami
D.M.E.: Stanley Simpson, D.O.

**Memorial Regional Hospital**
Hollywood
CEO: Frank Sacco
Director of Medical Affairs: Stanley Marks, M.D.

**Miami Children's Hospital**
Miami
CEO: Thomas Ruszek
Chief of Staff: Christian C. Patrick, M.D., D.O.
D.M.E.: Marco Danon
Osteopathic Program Director: Iran Niroomand-Rad, D.O.

**Miami Heart Institute**
Miami
D.M.E.: Gary Melino, D.O.

**Mount Sinai Medical Center**
Miami Beach
CEO: Steven Sonenreich
D.M.E: Paul Katz, M.D.

**Naples Community Hospital**
Naples
D.M.E.: Dan Kaplan, D.O.

**North Broward Medical Center**
Pompano Beach
Associate Medical Education Director: H. Murry Todd, M.D.

**Northwest Medical Center**
Margate
D.M.E.: John Cuhna, D.O.

**Palmetto General Hospital**
Hialeah
CEO: Ralph Alemán
D.M.E.: Marc Morganstine, D.O.

**Palms West Hospital**
Loxahatchee
CEO: Alex M. Marceline
D.M.E.: Bradley Feuer, D.O., J.D.

**Parkway General Hospital**
North Miami Beach
D.M.E.: Stanley Simpson, D.O.
Sacred Heart Women's Hospital  
Pensacola  
CEO: Bill McLaughlin  
Administrator: Steve Morse

South Florida State Hospital  
Pembroke Pines  
D.M.E.: Deborah Kirsh, M.D.

Sun Coast Hospital  
Largo  
CE0: Jeffrey A. Collins  
Regional Dean and D.M.E.: Anthony Ottaviani, D.O., M.P.H.

UM/Jackson Memorial  
Medical Center  
Miami  
CEO: Ira C. Clark  
Director of Emergency Care Center: Kathleen Schrank, M.D.

West Palm Beach Veterans Affairs  
Medical Center  
West Palm Beach  
Chief of Staff: Thomas Parino, M.D.  
Administrator: John Ribnikar  
D.M.E.: Shanta Loungani, M.D.

Westchester General Hospital  
Miami  
D.M.E.: Harris Mones, D.O.  
Administrator: Gilda Baldwin

Special Academic Programs

The Interdisciplinary Generalist Curriculum (IGC) Program

The IGC Program exposes medical students to primary care clinical settings from the beginning of their first year, with the long-term goal of increasing the numbers of graduates who will pursue careers in family medicine, general internal medicine, and general pediatrics. The premise of the program is that exposure to professional role models is a significant determinant of medical students' career choices, and that an early clinical experience is an essential learning component for medical students to begin to correlate classroom knowledge with actual patient encounters. The IGC Program is composed of three components: (1) the IGC Physician Mentor Program, (2) the IGC Business of Medicine/Managed Care Program, and (3) the College of Osteopathic Medicine in Community Service (COM²Serve) Program.

IGC Physician Mentor Program

Students are placed with physician mentors, either one or two students at a time. They may elect to switch mentors every semester and are required to switch primary care disciplines and mentors after their first year. In addition to providing a broad exposure to the role of a primary care physician, the physician mentor provides the student with the opportunity to perform patient histories and physical examinations within the limits of the student's ability, and educates the student by providing timely feedback and engaging in discussions and explanations of

Osteopathic Principles and Practice Laboratories

The development of the palpatory skills used for diagnosis and treatment is a significant distinction between the educational programs in osteopathic and allopathic medical schools. Stedman's Medical Dictionary defines palpation as "examination with the hands and fingers; touching, feeling, or perceiving by the sense of touch." Palpation in the osteopathic medical education context is the use of touch to examine the body. Palpatory skills are used in all areas of osteopathic medical practice and are especially important in the evaluation, diagnosis, and treatment of the musculoskeletal system.

The development of palpatory skills is taught in the first- and second-year osteopathic principles and practice (OPP) courses. Successful completion of these courses requires active participation in all laboratory sessions. During the two years, each student will palpate, in the laboratory setting, a variety of people, representing both genders and individuals with different body types to simulate the diversity of patients expected in a practice setting. Being palpated by other students helps the student understand from the patient's perspective how palpation feels and enables the students to provide feedback to their laboratory partners, thus enhancing the palpatory skills of all students.

The osteopathic medical profession uses a variety of treatment models, and through the skills development process, the student learns the art and skills of manipulative treatment. Psychomotor skills are developed by repeated practice. Reading and
observation, although helpful, do not develop the skills required to perform palpatory diagnosis and manipulative treatment. Each student is required to actively participate in all skills development laboratory sessions. These skills are taught by treating and being treated by a cadre of students of both genders and with varying body types to simulate a medical practice setting.

Area Health Education Center (AHEC) Program

The mission of NSU's Area Health Education Center (AHEC) Program is to improve the access to and the quality of primary health care service to medically underserved communities by linking the resources of academic health centers with community-based health care providers. Nova Southeastern University's College of Osteopathic Medicine, the first medical school in the state of Florida to develop an AHEC Program, officially began its program in 1985. Since its inception, the program has worked to develop effective and comprehensive training programs that improve access to quality primary health care for Florida's medically underserved rural and inner-city urban communities.

Our nationally recognized program now serves underserved communities and populations throughout a nearly 20,000 square mile area of South and Central Florida. Our first AHEC center—the Everglades AHEC—reaches underserved areas within a 10-county region extending from the inner city of northern Miami-Dade County to rural communities around Lake Okeechobee. Based on the success of the Everglades AHEC, the university was awarded additional funding to develop a Central Florida AHEC, which now serves nine counties and extends from Lake Okeechobee to north of Orlando. By including training programs in community settings, we expose students to the challenges, rewards, and practice opportunities related to working in medically underserved areas. Students have opportunities to work together while learning to provide valuable primary care services to the community.

Consortium for Excellence in Medical Education (CEME)

In January 1999, the College of Osteopathic Medicine established an innovative program to revolutionize clinical education and training. The Consortium for Excellence in Medical Education (CEME), in affiliation with Nova Southeastern University College of Osteopathic Medicine, was formed to increase opportunities for postdoctoral medical training, including internships, residencies, fellowships, and continuing education programs.

The CEME is an alliance of affiliated clinical sites linked through electronic networks; teaching, research, and community health collaborations; and a shared commitment to excellence in the education of tomorrow's physicians. CEME partners are joining forces on postgraduate clinical education, research initiatives, and public health and preventative medicine programs to benefit Florida's elderly, indigent, and minority patient populations. The CEME creates a unified medical education system composed of Nova Southeastern University College of Osteopathic Medicine and 18 teaching hospitals and hospital systems spanning the state of Florida and includes ambulatory centers, county health departments, and social service agencies. Four additional affiliated programs are located in Georgia, Louisiana, and North Carolina.

The CEME, as a dynamic network of affiliated regional academic training centers, uses distance learning systems to strengthen teaching, research, and community health collaboration while also nurturing a shared commitment to excellence in the education of tomorrow's physicians.

West Palm Beach Veterans Affairs Medical Center

The College of Osteopathic Medicine has a major affiliation with the West Palm Beach Veterans Affairs Medical Center (VAMC). This state-of-the-art health care facility's close academic ties with the college include sharing academic positions, granting faculty appointments to VAMC staff, a shared residency training program in preventive medicine, and major participation in the clinical program of the college. The VAMC employs a computerized paperless patient record system. It also permits X rays to be visualized with high resolution, includes laboratory and other reports that can be retrieved and tracked, has systems that ensure the selection of appropriate drugs for patient safety, and facilitates arrangements for specialist consultations. Students may spend as much as six months at the facility during their clinical years.

Rural Medicine Program

Since its establishment in 1979, the College of Osteopathic Medicine has been committed to educating students about rural medicine and having them train in underserved communities. The Department of Rural Medicine's instructional programs have been recognized nationally for helping to meet the health care needs of underserved communities and enhancing the medical skills of our students.

Our fourth-year medical students train for three months in rural and underserved settings. They are expected to expand their diagnostic and therapeutic skills as well as their patient and community proficiency in relation to addressing multicultural populations. Training sites include community health centers, private physicians' offices, ambulatory care facilities operated by the West Palm Beach Veterans Affairs Medical Center, and leading health care institutions of the Florida Department of Corrections.

The Rural Medicine Training Program provides our students with a unique and enriching experience. A number of our graduates are now clinical directors at the community health centers or have established successful practices in a rural Florida region.

Preventive Medicine

Prevention, in its broadest sense, is practiced by all physicians and other health professionals who help their patients to stay healthy. Preventive medicine, however, is also a distinct medical specialty, one of 25 recognized by the American Board of Medical Specialties.

The specialty of preventive medicine is based on our knowledge that
promoting health and preventing disease requires work with both individuals and communities. Preventive medicine physicians are trained in both clinical medicine and public health. They have the skills to understand and reduce the risks of disease, disability, and premature death both in individuals and population groups. The distinctive aspects of preventive medicine include knowledge and competence in:

- biostatistics
- bioterrorism
- epidemiology
- environmental and occupational health
- planning, administration, and evaluation of health services
- the social and behavioral aspects of health and disease
- the practice of prevention in clinical medicine

The American Osteopathic Association grants certificates to physicians who have successfully completed three years of supervised training and a written examination in any one of the three areas: general preventive medicine/public health, occupational medicine, or aerospace medicine. Specialists in general preventive medicine/public health focus their skills on population groups, such as the residents of a particular community or state or the patient population of a health center, hospital, or managed care organization.

Preventive medicine specialists work in a wide variety of settings, including primary care and managed care settings, public health and community agencies, industry, and academia.

These physicians usually engage in multiple activities, including planning, administration and evaluation of disease prevention and health promotion programs, research, teaching, and direct patient care. The varied career paths include managed care, public health, occupational medicine, aerospace medicine, clinical medicine, informatics, policy development, academic medicine, international medicine, and research, covering all levels of government, educational institutions, organized medical care programs in industry, as well as voluntary health agencies and health professional organizations. About 6,000 physicians nationally are board-certified in preventive medicine.

In addition to the need for more physicians trained in the specialty of preventive medicine, there is a need for more training in prevention in all the other medical specialties, especially in primary care. Toward this end, the Department of Preventive Medicine is initiating efforts to strengthen prevention education, particularly in relation to individual patient care. This will be accomplished by weaving the distinctive aspects of preventive medicine throughout all coursework offered to medical students at the College of Osteopathic Medicine. Specialists in preventive medicine, who have skills in population-based prevention as well as individual preventive interventions, can assist the other specialties in the further development of education in prevention and the population-based health sciences for residents and medical students alike.

Geriatric Teaching Program
The College of Osteopathic Medicine has a strong commitment to teaching students, residents, and physicians about the care of the geriatric patient. As a result, the college requires a didactic geriatric course in the M-2 year, which addresses “successful aging.” Attention is given to elderly populations and their diverse profiles and circumstances. During the M-3 year, students participate in a monthlong, required geriatric clerkship, where they care for elders in a variety of settings under the supervision of a geriatric specialist.

The College of Osteopathic Medicine also provides clinical teaching in geriatrics for second-year family medicine residents from its Palmetto Family Medicine Residency during a one-month rotation. The College of Osteopathic Medicine, along with the North Broward Hospital District, sponsors a geriatric fellowship training program for family medicine physicians who successfully complete an American College of Osteopathic Family Physicians (ACOFP) approved family medicine residency program. This will prepare the physician for a Certificate of Added Qualifications (CAQ) in geriatrics. We are excited about what we are doing in geriatrics and are looking for ways to expand our programs and teaching facilities.

Dual Admission Program
Nova Southeastern University Health Professions Division has established a dual admission program with the Nova Southeastern University Farquhar College of Arts and Sciences for a select number of highly motivated, qualified students interested in pursuing both undergraduate and professional studies in osteopathic medicine. This allows candidates to receive their doctoral degrees in osteopathic medicine in a seven-year or eight-year period.

Candidates must maintain a specified grade point average (GPA) and attain an acceptable SAT score to be eligible for the dual admission program and also achieve acceptable scores on the Medical College Admission Test (MCAT).

In the seven-year program, students will be awarded a B.S. degree from the Farquhar College of Arts and Sciences upon the successful completion of the first year of medical education at Nova Southeastern University College of Osteopathic Medicine.

Students in both programs will receive the D.O. (doctor of osteopathic medicine) degree after four years of training at Nova Southeastern University College of Osteopathic Medicine.

For complete information and requirements, contact the Office of Admissions, Farquhar College of Arts and Sciences, Nova Southeastern University, 3301 College Avenue, Fort Lauderdale, Florida 33314-7796.

M.B.A. Program
The master of business administration program is available to all students who are academically in good standing and have completed the first semester of their first year. The H. Wayne Huizenga School of Business and Entrepreneurship administers the M.B.A. degree. Students may contact the Huizenga School program representative for details on this program. Participation in this program is at the discretion of the dean of the College of Osteopathic Medicine.
M.P.H. Program
The Master of Public Health Program is available to students who are academically in good standing and have completed the first semester of the first year. This degree program is administered by the College of Osteopathic Medicine. Students may contact the public health program director for further information. Participation is at the discretion of the dean of the College of Osteopathic Medicine.

M.P.H. Scholarship
All College of Osteopathic Medicine students who have completed the first semester of their first year and are currently enrolled in NSU-COM classes and in good academic standing are eligible to receive a scholarship for the payment of M.P.H. tuition if they are enrolled in the on-campus program option. To apply for the M.P.H. scholarship, a brief letter must be submitted to the dean of the College of Osteopathic Medicine. The student should indicate the reasons for requesting the scholarship in the letter. Students who receive the scholarship must remain in good standing with the college. Students are eligible for the scholarship while they are enrolled in the College of Osteopathic Medicine. The scholarship is not available after graduation, unless the student continues as an intern, resident, or fellow with any of the Nova Southeastern University College of Osteopathic Medicine affiliated institutions. All scholarships require renewal by the College of Osteopathic Medicine each academic year.

Master of Health Law
Students in good academic standing matriculated at the College of Osteopathic Medicine may, with the permission of the dean, apply for admission to the NSU Shepard Broad Law Center for the 30-credit Master of Health Law Program. This program, available to students upon completion of their first year of study, is designed to prepare future physicians to identify legal issues within their health professional responsibilities. It will help them acquire in-depth knowledge of the laws and regulations governing medical care and health professional practice. Students who complete the D.O./M.H.L. dual degree also will be especially qualified for leadership positions in managed health care environments as well as other organizations and programs that continue to evolve in the complex world of health care.

Master of Science in Education
The Fischler School of Education and Human Services, in collaboration with the College of Osteopathic Medicine, offers a certificate or master of science degree in medical education for osteopathic medical faculty members who wish to improve their skills as medical educators. The certificate is 18 credit hours, while the master's degree is 36 credit hours. It is designed for career medical faculty members, helping them to become master educators who are better able to train medical students and residents, develop curriculum, and evaluate education and training programs.

D.O. Program for Doctors of Podiatric Medicine (D.P.M.)
A program has been established leading to the D.O. degree for D.P.M.s in an accelerated period of time. It is designed for students from podiatric medical schools accredited by the Council on Podiatric Medical Education who have been accepted to a podiatric medical and surgery residencies. Particular interest is in those applicants who intend to acquire the D.O. degree to provide added value to podiatric medical practice. A limited number of D.P.M.s will be accepted each year. The program leads to a D.O. degree and a license to practice osteopathic medicine in states requiring one year of internship as well as to eligibility for certification by the American Board of Podiatric Orthopedics and Primary Podiatric Medicine (ABPOPPM). Applicants admitted to the program will be granted credit for the core basic sciences courses in the D.O. curriculum. The ABPOPPM will determine the amount of credit it will grant toward the completion of the two-year residency in podiatric medicine and surgery. Applicants may apply from all states but preference will be granted to those who are legal residents of Florida. Additional information about the program, including details about the curriculum, may be obtained by contacting the associate dean of education, planning, and research, Nova Southeastern University College of Osteopathic Medicine, 3200 South University Drive, Fort Lauderdale, Florida 33328-2018.
Master of Public Health Program

The Master of Public Health (M.P.H.) Program is an accredited graduate level program designed to prepare students to define, critically assess, and resolve public health problems. The program provides training in the theories, concepts, and principles of public health and their application. To meet the rapidly changing needs of health service professionals, including preventive medicine specialists, the curriculum is structured to accommodate a diversity of backgrounds and individual career goals.

The demand for public health professionals is increasing as a result of emerging and re-emerging diseases, environmental health concerns, health care reform, health care system, socio-political factors affecting our nation’s health, and expansion of health issues that are global in scope. Professionals with the M.P.H. degree may hold positions of responsibility in a variety of settings including health care facilities, county and state health departments, social service agencies, health policy and planning organizations, universities, and community-based health education and health promotion settings, nongovernmental organizations, governmental agencies, international health organizations, and the corporate world. These positions often involve active participation of the M.P.H. graduate in the coordination, planning, development, implementation, and evaluation of health programs and services. Some students pursue further advancement in their graduate education upon completion of the M.P.H. degree program.

Program Mission

To improve the health of the population through education, research, and service, with emphasis on multicultural and underserved populations.

Goal: Education

To provide quality education in public health

Goal: Research

To contribute to the discovery and application of knowledge in public health

Goal: Service

To provide public health leadership and service in the community

Course of Study

The M.P.H. Program offers a general master of public health (M.P.H.) degree, which requires a minimum of 42 semester hours of study. This consists of 27 semester hours of required core courses, including a public health field experience (6 semester hours), and a minimum of 15 semester hours of public health elective courses. Coursework may be taken on a full-time or part-time basis. M.P.H. students are required to complete their course of study within five years of matriculation. A full-time student may be able to complete the requirements within two years or less. The M.P.H. degree may be completed on-site or online. The curriculum for the two options is identical, although the modality of instruction is different. On-site classes are offered in the evening, with each class generally scheduled one evening per week. Up to 12 credits of online courses are allowable to complete the onsite option. The online option requires a weekend on-site session at the beginning of the program and a weekend on-site capstone experience at the end of the program, prior to graduation. There are supervised elective field-based courses, projects, and research opportunities available to students.

The schedule of course offerings and other pertinent information about the program is available on the program Web site: www.nova.edu/ph.

Accreditation

The M.P.H. Program is accredited by the Council on Education for Public Health (CEPH) (www.ceph.org).

The College of Osteopathic Medicine is accredited by the American Osteopathic Association.

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS).

Admission to the Master of Public Health Program

Admission Requirements

The M.P.H. Program evaluates the overall quality of its applicants, including academic achievement, personal motivation, knowledge about the public health profession, health care and life experience, and recommendations. Criteria for admission are as follows:

• The applicant must hold a bachelor’s, master’s, or a doctoral degree from an accredited college or university.

• A cumulative grade point average (GPA) of 3.0 and above, on a four-point scale, is preferred.

• Public health or health care related experience is desirable, but not required.

• Evidence of having taken one of the following standardized tests: GRE, PCAT, OAT, AHPAT, MCAT, DAT, GMAT, or LSAT, if the applicant does not hold a health-related graduate or professional degree. The scores must be no more than five years old. Applicants with a health-related graduate or professional degree may be required to submit official test scores upon evaluation of their application.

• Applicants enrolled in another area of study within Nova Southeastern University must be in good academic standing, must provide a letter of recommendation from the dean or program director of the other college or program, and must meet the M.P.H. admission requirements.

• All application materials must be received in a timely manner to enable the Office of Admissions and the admissions committee to process the application promptly.

Application Procedures

The Office of Admissions processes applications on a year-round basis. Applicants may apply for matriculation into any one of three semesters (fall, winter, summer), and may contact the Office of Admissions at (954) 262-1111 or access the M.P.H. Program Web site (www.nova.edu/ph) for the exact deadline and start dates. All application materials should be sent to

54 College of Osteopathic Medicine—Public Health Program

College of Osteopathic Medicine—Public Health Program 55
Applicants must provide the following:

1. a completed online application, along with a $50 nonrefundable application fee

2. official transcripts of all coursework attempted by the applicant at all colleges and universities. It is the responsibility of the applicant to ensure that arrangements are made for all transcripts to be sent. A final transcript of all the applicant's work up to the time of matriculation must be forwarded to the Office of Admissions prior to matriculation.

3. official scores of one of the following standardized tests taken by the applicant: GRE, PCAT, OAT, AHPAT, MCAT, DAT, GMAT, or LSAT (if the applicant does not hold a health-related graduate or professional degree. The scores must be no more than five years old. Applicants with a health-related graduate or professional degree may be required to submit official test scores upon evaluation of their application.

4. three letters of evaluation, one of which must be from a health professional. The other two letters of evaluation must be from individuals (other than relatives) such as academic advisers, professors, coworkers, or supervisors who are familiar with the applicant's character, scholastic aptitude, and work ethic.

5. copies of any professional certificates or other relevant credentials earned by the applicant.

Upon receipt of the completed application and required material, the committee on admissions will review the application and make recommendations to the program director. The applicant's file is, subsequently, reviewed by the committee on admissions, which submits a recommendation to the program director. The director submits his or her recommendation on admission to the dean. The final decision on admission is made by the dean of the College of Osteopathic Medicine.

Nondegree-Seeking Students

A nondegree-seeking student is one who wishes to take a course in the public health program, but does not intend to pursue the master of public health degree at the time of application. The nondegree-seeking student must provide the following admission requirements in order to take classes in the M.P.H. Program:

- completed online application form
- official transcripts
- nonrefundable application fee of $50
- one letter of recommendation (academic)

Undergraduate students must have a minimum cumulative GPA of 3.0 with at least 90 hours of coursework, 30 hours of which must be upper level courses. An official transcript showing the coursework is required.

Application for nondegree status by students holding a bachelor's degree or higher will be considered by the admissions committee, through a review of the required records and an interview.

Nondegree-seeking students are limited to a maximum of 12 semester hours of public health program courses. Enrollment in these courses does not guarantee acceptance into the Master of Public Health degree-seeking program. After taking classes in the program as a nondegree-seeking student, the student must submit a complete application to the program to become degree-seeking. The student must also meet all the requirements for admission.

Nondegree-Seeking Students

Graduate students from other NSU programs who elect to take public health courses may do so with the written consent of the course director. The university reserves the right to modify any requirements on an individual basis as deemed necessary by the dean of the College of Osteopathic Medicine.

The college reserves the right to require the student's withdrawal at any time the college deems it necessary to safeguard its standards of scholarship, conduct, and compliance with the regulations, or for such other reason as deemed appropriate. The student, by his or her act of matriculation, concedes the college this right.

Tuition and Fees

Tuition is $450 per credit hour. Students who concurrently pursue another degree in the Health Professions Division of NSU are charged a tuition of $350 per credit hour. Tuition and fees are subject to change without notice. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

Financial Aid

The purpose of the Student Financial Assistance Program at Nova Southeastern University is to help as many qualified students as possible to complete their educational pursuit. Various loans, scholarships, and grants are available to qualified students to help ease the high cost of their education. These financial assistance programs are described in a separate university publication: A Guide to Student Financial Assistance.

Transfer of Credits

Applicants to or enrollees of the NSU-COM M.P.H. Program may petition for transfer of a maximum of 12 credit hours of elective or core courses from a regionally accredited graduate program toward their M.P.H. degree. The core courses must have been taken at a program, school, or college accredited by the Council on Education for Public Health (CEPH). Any courses taken at another academic program or institution that the student wants to transfer to meet the requirements of this M.P.H. degree program must have the prior approval of the program director. All courses considered for transfer into the program must have been successfully completed with a grade of B (80) or better and must not have been applied to another awarded degree. Transfer course grades are not calculated toward the student's grade point average.

The course transfer applicant must submit a written request to the program director, along with the appropriate verification documents.
(i.e., official transcripts, syllabi, and catalogs). The curriculum committee will review all applications for transfer of credit, including the documents provided on the petitioned courses. The committee will submit its recommendations to the program director who makes the final decision. The program does not give course credit for prior work experience.

Graduation Requirements
To be eligible for the M.P.H. degree, the student must

- satisfactorily complete, with a grade point average of 80 or higher and within five years of matriculation, the course of study required for the M.P.H. degree—a minimum of 42 semester hours of courses (27 hours of required core courses, including the Public Health Field Experience, and 15 hours of electives)
- successfully pass the comprehensive examination
- complete an exit survey
- satisfactorily meet all financial and library obligations

Upon satisfactory completion of degree requirements, the student is expected to attend the rehearsal and commencement program, at which time the degree is conferred. Students who do not plan to attend the commencement ceremonies must notify the program office before the established deadline for the commencement application.

Program Core Faculty
Director and Professor: C. Blavo | Professors: M. Fernandez, R. Foster, J. Howell, L. Levy | Associate Professors: J. Fleisher, J. Lou, G. Suciu | Assistant Professors: S. Bowen, J. Dodds, P. Hardigan, K. Johnson, A. Perez, D. Steinkohl

Curriculum Outline
Core Courses (required)

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<th>Lecture</th>
<th>Practice</th>
<th>Semester Hours</th>
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Elective Courses

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<td>Genetics in Public Health</td>
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<td>PUH 5314</td>
<td>Global Health</td>
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<td>PUH 5420</td>
<td>Epidemiology of Diseases of Major Public Health Importance</td>
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<td>PUH 5500</td>
<td>School Health</td>
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<td>Children's Health</td>
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<td>PUH 5503</td>
<td>Women's Health</td>
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<td>PUH 5510</td>
<td>Maternal and Child Health</td>
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<td>0</td>
<td>3</td>
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<tr>
<td>PUH 5513</td>
<td>Public Health Nutrition</td>
<td>45</td>
<td>0</td>
<td>3</td>
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<tr>
<td>PUH 5516</td>
<td>Public Health Informatics</td>
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<tr>
<td>PUH 5802</td>
<td>Epidemiologic Surveillance and Outbreak Investigation</td>
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<td>30</td>
<td>3</td>
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<td>PUH 6005</td>
<td>Public Health Research I</td>
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<td>PUH 6006</td>
<td>Public Health Research II</td>
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<td>PUH 6008</td>
<td>Public Health Advocacy</td>
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<td>PUH 6009</td>
<td>Disaster Management</td>
<td>30</td>
<td>30</td>
<td>3</td>
</tr>
<tr>
<td>PUH 6016</td>
<td>Survey Methods in Public Health</td>
<td>30</td>
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</table>
Master of Public Health Program Courses

Note: Listed at the end of each entry is lecture hours, laboratory hours, and semester hours, also note prerequisites.

PUH 5101—Introduction to Public Health
An introduction to the history, concepts, values, principles, and practice of public health. It provides an overview of the essential areas of public health including biostatistics; epidemiology; social and behavioral sciences; environmental and occupational health; and health policy, planning, and management. (45-0-3)

PUH 5102—Community Service Experience
This course provides students with the opportunity to participate in a supervised service learning experience at community health centers and/or community-based service organizations. Students will be assigned to attend community-based meetings or events that address public health issues. Students will assist in providing health care and other needed educational and social services to medically underserved minority and at-risk populations. (0-30-1)

PUH 5110—Culture, Ethnicity, and Health
Introduces students to skills and insights necessary in promoting health in diverse populations. Issues discussed include the need for effective communication, with an understanding of cultural factors and how they impact on preventive efforts, health care status, access to health care, and use and cost of health care services. The course also explores traditional modalities of health maintenance among various populations. (45-0-3)
This course addresses global health
issues of women such as domestic
violence and breast cancer. (45-0.3)

PUH 5510—Maternal and
Child Health
This course addresses public health
services and health care resources for
mothers and children in the United
States and abroad, public health
issues affecting mothers and children,
and public health practices that
impact their well-being. (45-0.3)

PUH 5512—Health Policy,
Planning, and Management
Discusses principles and logic
involved in health policy, planning,
and management. Addresses
history, political, and environmental
contexts, and their incorporation
into population research. (45-0.3)

PUH 5513—
Public Health Nutrition
This course will provide students with
methods and skills to identify
nutrition-related health problems and to plan
community-based prevention programs
for diverse populations. (45-0.3)

PUH 5516—
Public Health Informatics
This course focuses on developing
the knowledge and skills of systematic
application of information, computer
science, and technology to public
health practice. Students will acquire
a basic understanding of informatics
in public health practice, and be able
to apply the skills of use of some
informatics tools in practice (e.g.,
evidence based practice, GIS).
Prerequisites: PUH 5301, PUH 5430
(45-0.3)

PUH 5520—Legal and
Ethical Issues in Public Health
Introduces nonlawyers to the important
roles law and ethics play in determining
the public's health. Students develop
skills in analyzing political, legislative,
and ethical aspects of public health
issues. (45-0.3)

PUH 5802—Epidemiologic
Surveillance and Outbreak Investigation
This course provides a descriptive
analysis of basic components and
strategies required for the surveil-
ance and investigation of disease
outbreaks. Surveillance data collec-
tion, analysis, and reporting are
emphasized as well as indicators for
assessing the effectiveness of such
programs. Prerequisites: PUH 5430,
PUH 5501 (30-30-3)

PUH 6001—Social and Behavioral
Sciences Applied to Health
Introduces students to the social,
cultural, and behavioral foundations
of modern public health practice as
applied to interventions for disease
prevention and health enhance-
ment. Reviews the linkage between
public health and other social
sciences. Students gain knowledge
and awareness of today's most press-
ing public health problems and the
social and behavioral factors deter-
mining them. (45-0.3)

PUH 6002—Public Health
Field Experience
The field experience is a culminating
experience for all M.P.H. students.
This required course (200 hours of
structured activities) takes place at a
public health agency or public health-
related institution. The student will
work under the supervision of a site-
based preceptor and a faculty adviser,
who identify the appropriate educa-
tional objectives for the experience.
The student is expected to acquire
skills and experiences in the application of basic public health concepts and specialty knowledge to the solution of community health problems. A comprehensive written report and an oral presentation will be required upon completion of the field experience. **Prerequisites:** PUH 5430, PUH 5301, PUH 5512, PUH 5220, PUH 6001 (0-200-6)

**PUH 6005—Public Health Research I**

Students conduct supervised research in any of the major areas of public health. The student and the faculty adviser define the project and its objectives. **Prerequisites:** PUH 5430, PUH 5301 (0-90-3)

**PUH 6006—Public Health Research II**

This course may be a continuation of PUH 6005 or new research project. The student will conduct supervised research in an area of public health significance. The student and the faculty adviser will define the project and its objectives. **Prerequisite:** PUH 6005 (0-90-3)

**PUH 6008—Public Health Advocacy**

This course will enable students to develop tools and skills to influence the political processes at the national, state, and community levels to enhance the public's health and welfare. A number of faculty and guest lecturers will share their insights and strategies. Speakers will include elected officials, public health leaders, and community advocates. Students will analyze their own attitudes and insights and enhance their political advocacy skills. Case study methods will be used with emphasis on communication, marketing, and education. (45-0-3)

**PUH 6009—Disaster Management**

This course addresses the immediate effects and short term management of disasters, the impact on resources of the affected region, and the roles of relief organizations. Emphasis is put on the public health implications of disasters. (30-30-3)

**PUH 6016—Survey Methods in Public Health**

This course addresses the theory and practice of designing and conducting surveys in public health research and practice. Topics will include survey designs, sampling strategies, data collection methods, interviewing skills, coding, and data analysis. **Prerequisites:** PUH 5430, PUH 5301 (30-30-3)

**PUH 6017—Special Studies in Public Health I**

This elective is a guided study course designed to address a specific area of public health interest to the student, which is not specifically or significantly addressed in other courses. The course director and faculty adviser will guide the student to define the objectives of the course and to fulfill the desired expectations. This course is didactic, not original research, or field experience. **Prerequisite:** PUH 6017 (0-90-3)

**PUH 6019—Community Health Project I**

This course is designed to give the student the opportunity to plan, implement, or evaluate a specific community health initiative. It is an applied experience in collaboration with a field-based site. The project is approved and monitored by the course director. (0-90-3)

**PUH 6022—Community Health Project II**

This course is designed to give the student the opportunity to plan, implement or evaluate a specific community health initiative. It is an applied experience in collaboration with a field-based site. The course requires a new project or significant extension of PUH 6022. The project is approved and monitored by the course director. **Prerequisite:** PUH 6022 (0-90-3)

**PUH 6023—Health Care Organization and Administration**

This course provides students with an overview of health care management. Organizational behavior, marketing, operations, organization strategy, quality assurance, information systems, and financial management are addressed. The importance of the integration of these components is emphasized. **Prerequisite:** PUH 5512 (45-0-3)

**PUH 6104—Health Services Planning and Evaluation**

An in-depth study of basic planning and evaluation techniques for the implementation of a community health care program. It addresses policy analysis techniques as well as the conceptual framework for the planning and management of health care programs. The course also reviews essential methods for effective planning and evaluation considering the economic, political, epidemiological, demographic, and other components that contribute to the assessment of health needs and resource allocation. **Prerequisites:** PUH 5430, PUH 5512 (45-0-3)

**PUH 6201—Tropical Diseases**

This course will address tropical diseases in the world today and their public health significance. Malaria, yellow fever, trypanosomiasis, leishmaniasis, filariasis, dengue fever, malnutrition, diarrheal diseases, and other tropical diseases will be discussed in relation to epidemiology, clinical presentation, and management. The impact of these diseases on global health and economic issues will be discussed. (45-0-3)

**PUH 6521—Budgeting and Accounting for Health Care Organizations**

This course will provide knowledge and skills in various aspects of budgeting and accounting as it applies to health care organizations. (45-0-3)
PUH 6522—Strategic Marketing for Health Care Organizations
This course provides students with knowledge and strategies in marketing as it applies to health care. (45-0-3)

PUH 6523—Strategic Leadership in Management of Human Resources
Focuses on the concepts and dynamics of leadership in health care organizations. Emphasizes the interactions and influence processes of leadership to effectively use problem-solving mechanisms in the management of human resources. The student will develop competencies through application of the case study approach in public health practice. (45-0-3)

PUH 6604—Research Methods in Public Health
Provides an intermediate level review of basic research methodology, concepts, and principles common in public health and epidemiological studies. Issues related to the design, development, and realization of public health studies, including sampling, surveying, data collection, and management as well as the interpretation and reporting of findings are discussed. Prerequisites: PUH 5430, PUH 5301 (30-30-3)

Master of Science in Medical Informatics
Nova Southeastern University College of Osteopathic Medicine (NSU-COM) in collaboration with the NSU Graduate School of Computer and Information Sciences (GSCIS) and the West Palm Beach Veterans Affairs Medical Center (WPB VAMC) has developed a course of study leading to the degree of master of science in medical informatics. It is designed to educate future managers in the development, dissemination, and evaluation of information technology as it relates to the health care environment. Medical informatics deals with patients, hospitals, medical laboratories, X rays, and other imaging technology, as well as physicians and other health professionals.

There has been an emergence of medical informatics as a discipline due to advances in computer and communications technology and an increasing awareness of the exponential growth of biomedical knowledge. This has been accompanied by clinical information that has become unmanageable by traditional, paper-based methods and the growing realization that the process involved in knowledge retrieval and decision making are important to modern medicine and clinical decision making.

Medical informatics is an interdisciplinary field that incorporates computer and information sciences, cognitive and decision sciences, epidemiology, telecommunications, and other fields. Researchers in this evolving field discover new methods and techniques to enhance health care, biomedical research, and education through information technology.

Those in the discipline study and encourage the use of appropriate information to support clinical care, research, teaching, and health services information.

Medical informatics allows physicians and other health professionals to integrate advanced information system capabilities with a clinical outlook and approach. The methods, tools, and resources developed through medical informatics often help physicians and other health professionals accomplish tasks they were already doing, but in a more efficient, accurate, or entirely new manner. It also allows for the performance of tasks that were not previously possible. Informational technology now provides physicians and other health professionals with the potential to possess large databases. As a result, they can now begin to think like epidemiologists, in addition to being providers of patient care.

Specific areas of added value provided by medical informatics include
- generating information from data in the form of basic statistics, ideas, or facts
- analyzing information to develop new knowledge and information
- developing action plans to use the new knowledge and to maintain a continuous quality improvement cycle
- using information and feedback to create an impact on organizational performance
- improving the quality of an academic health center's computing and information technology environment to profoundly influence its ability to compete in education and research
improving the ability to collaborate with other health organizations including hospitals, health departments, medical societies, and clinics in rural and remote areas

- serving as the only such program in Florida and the region
- providing prestige to NSU and the Health Professions Division by reinforcing that the institution is on the cutting edge of new technology in the health care community
- facilitating the establishment of the institution as a leader in managed care and in other emerging changes in the delivery and financing of health care
- providing consultants (faculty members) who would be available to industry and health care organizations

Those who are part of the medical informatics community have the potential to seriously confront many issues that need to be addressed in health care. These issues include:

- predicting who will become sick
- preventing health complications or problems in individuals
- making effective interventions with large populations
- reducing adverse complications in health care
- overcoming physician resistance to intricate systems and information technology
- having the potential to get maximum impact from resources that are constrained

Course of Study
The MI Program is designed to prepare students for careers in information management, teaching, and research in academic health centers, other health care institutions and organizations, and the health care computing industry. Courses are offered through NSU-COM and the Graduate School of Computer and Information Sciences (GSCIS). It has become almost axiomatic that the organization and retrieval of information is essential for the development of new knowledge. The quality of a medical school's computing and information technology environment will profoundly affect its ability to compete in both education and research. In the same way, the quality of the medical informatics program will influence a school's opportunities to collaborate with health organizations such as hospitals, health departments, medical societies, and physicians in remote areas. The major areas that the MI educational program includes are biomedical systems technology, health information systems, medical decision support systems, image and signal analysis, statistical techniques and modeling, education and training, health care management, and human-machine interface.

The program provides a course of study leading to a master's degree that will lead to the

- use of informatics to improve the performance of health providers and the health care system
- use of information science to enhance clinical performance
- use of information science to improve patient safety (e.g., reduce medical errors)

- acquisition of a position in medical informatics in a health care environment

At the end of the course of study leading to the degree of master of science in medical informatics, the graduate will be able to

- layout and design of information system
- understand the fundamentals of a telecommunication network design and the Internet
- have in-depth knowledge of data base systems and structures
- evaluate medical information technology to determine what should be integrated into clinical medicine
- employ the knowledge, skills, and concepts of medical informatics in evidence-based medicine
- understand documentation requirements for medical records, including risk management and patient safety
- have knowledge in information security and policy formation
- be current about existing and emerging technology in medical informatics and related areas
- have a basic understanding of biostatistics and epidemiology and their application to medical informatics
- use and apply interface design principles to medical informatics systems

Admission to the Master of Science in Medical Informatics
The MI Program evaluates the overall quality of its applicants, looking at academic achievement, personal motivation, knowledge of health care, life experience, and recommendations. Priority will be given to those individuals already holding clinical degrees in the health professions. All applicants for admission must

- hold a bachelor's, master's, or doctoral degree from an accredited institution of higher education
- demonstrate a background in the language of the biomedical sciences by credentials or work experience
- possess a cumulative grade point average of 3.0 or above on a 4.0 scale
- demonstrate competency in the use of computers by credentials or work experience

A health professions degree is desirable, but not required. All application material must be received in a timely manner to enable the Office of Admissions and the Admissions Committee to process the application promptly.

Application Procedures
The Office of Admissions processes applications on a year-round basis. Applicants may apply for matriculation into any one of the four semesters (fall, winter, spring, summer) and may contact the Office of Admissions at (954) 262-1100 or access the MI Program Web site (www.medicine.nova.edu) for the exact deadline and start dates. All application materials should be sent to

Nova Southeastern University
Enrollment Processing Services (EPS)
College of Osteopathic Medicine
MI Admissions
3301 College Avenue
PO. Box 299000
Fort Lauderdale, Florida
33329-9905

Tuition and Fees
Tuition is $425 per credit hour at the College of Osteopathic Medicine. Students are subject to tuition based on whether a course is being offered at NSU-COM or GSCIS. Tuition
and fees are subject to change without notice. An NSU student services fee of $750 is required annually.

Transfer of Credits
Applicants must petition for transfer of credit hours of core or elective courses from an accredited graduate program to their M.S.MI degree. All courses considered for transfer into the program must have been successfully completed with a grade of B (80 percent) or better. The curriculum committee will review the documents provided on the petitioned courses for all applications for transfer of credits and will submit recommendations to the program director. The program director makes the final decision. The program does not give course credit for prior work experience. A student must enroll in no less than 50 percent of total credits in the program to be eligible for graduation.

The course transfer applicant must submit a written request to the program director along with the appropriate verification documents (i.e., official transcripts, syllabi, and catalogs).

In order to transfer credit for courses taken at another academic program or institution to meet the requirements while enrolled in NSU’s MI Program, students must have the prior approval of this MI program’s director. Transfer course grades are not calculated towards the student’s grade point average.

Graduation Requirements
To be eligible for the MI degree, the students must fulfill the following requirements:

- satisfactorily complete, within five years of matriculation, the course of study required for the MI degree—minimum of 43 semester hours of courses (39 hours of required core courses and 4 elective credits).
- have taken no less than 50 percent of total credits in M.S.MI program
- complete an exit interview
- satisfactorily meet all financial and library obligations

Upon satisfactory completion of degree requirements, the student is expected to attend the rehearsal and commencement program, at which time the degree is conferred. Students who do not plan to attend the commencement ceremony must notify the program office before the established deadline.

Curriculum Requirements
To develop a comprehensive medical informatics program at NSU-COM, a curriculum has been developed that includes teaching, clinical care, research, and development.

The didactic courses will be offered predominantly online, using WebCT or some similar format. All courses provided by the Graduate School of Computer and Information Sciences will be delivered completely online. Those provided by the College of Osteopathic Medicine will be online, but will have a face-to-face session for the initial meeting and one at the end of the course. These face-to-face sessions will be three hours in duration. However, matriculants will be required to complete their practicum within the environment in which it is being conducted. Each didactic course will have a final written examination, and each practicum will require the submission of a completed project or report.

Medical Informatics Program Curriculum Outline
Graduate School of Computer and Information Sciences (GSCIS)

<table>
<thead>
<tr>
<th>Required Courses</th>
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<tr>
<td>MI 120 (same as MMIS 620) Management Information Systems</td>
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<td>MI 121 (same as MMIS 621) Information Systems Project Management</td>
<td>3</td>
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<tr>
<td>MI 130 (same as MMIS 630) Database Systems</td>
<td>3</td>
</tr>
<tr>
<td>MI 152 (same as MMIS 652) Information Security</td>
<td>3</td>
</tr>
<tr>
<td>MI 153 (same as MMIS 653) Telecommunications and Computer Networking</td>
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</tr>
<tr>
<td>MI 160 (same as MMIS 660) System Analysis and Design</td>
<td>3</td>
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<td>MI 171 (same as MMIS 671) Decision Support Systems</td>
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</tr>
<tr>
<td>MI 180 (same as MMIS 680) Human-Computer Interaction</td>
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GSCIS Required Credits 24

Medical Informatics (NSU-COM)

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<td>MI 2300 Survey of Medical Informatics</td>
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<td>MI 2301 (same as PUH 5301) Biostatistics</td>
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<td>MI 2430 (same as PUH 5430) Epidemiology</td>
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<tr>
<td>MI 2501 Medical Informatics Project/Practicum</td>
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<td>MI 2502 Patient Safety, HIPPA, and Related Areas</td>
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NSU-COM Required Credits 15

Electives (4 credits required)

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<tr>
<td>Any course offered by the Graduate School of Computer and Information Sciences in the M.S. in Management Information Program</td>
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<tr>
<td>MI 301 Outcomes Research</td>
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<td>MI 302 Ethics and Medical Informatics</td>
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<td>MI 303 Medical Informatics Applications to Health Services</td>
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<tr>
<td>MI 304 Special Topics in Medical Informatics</td>
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</table>

Minimum Elective Credits 4

Total Credits 43
Master of Science in Medical Informatics Program
Core Courses

MI 120—Management Information Systems
The application of information system concepts to the collection, retention, and dissemination of information for management planning and decision making. Issues such as personnel selection, budgeting, policy development, and organizational interfacing are discussed. Conceptual foundations and planning and development of management information systems, the role of MIS in an organization, and the fit between the system and the organization are also discussed. (3 credits)

MI 121—Information Systems Project Management
Practical examination of how projects can be managed from start to finish. Life-cycle models/paradigms. Life-cycle phases. Project planning and risk analysis. Project control including work breakdown structures, project scheduling, activities, and milestones. Software cost estimation techniques and models. Software quality assurance and metrics for software productivity and quality. Inspections, walkthroughs, and reviews. Documentation and configuration management. Automated project management tools. Software maintenance. Procurement of software services and systems and development of IS project specifications. Project management skills including leadership, team building, planning, time management, resource allocation, conflict management, and using IS project management in strategic planning. Ethics in project management. (3 credits)

Case studies are used throughout the course to support concepts, principles, and problem solving. (3 credits)

MI 130—Database Systems
The application of database concepts to management information systems. Design objectives, methods, costs, and benefits associated with the use of a database management system. Tools and techniques for the management of large amounts of data. Database design, performance, and administration. File organization and access methods. The architectures of database systems, data models for database systems (network, hierarchical, relational, and object-oriented model), client-server database applications, distributed databases, and object-oriented databases. (3 credits)

MI 152—Information Security
Concepts and principles of system and data security. Risk assessment, evaluation of vulnerabilities, policy formation, control, and protection methods. Review and evaluation of security models. Issues in physical, system, network, database, and application security. Protection methods of encryption, authentication technologies, and access control are used to examine host-based and network-based security issues. Management of security, policy formulation, security personnel, and issues of law and legal protection of privacy. System design and network design for security and techniques for combating security breaches. (3 credits)

MI 153—Telecommunications and Computer Networking
This course provides a framework for understanding telecommunication fundamentals and computer network functionality, characteristics, and configurations. Topics include wire-free and wire-based communications; network topologies, protocols, and architectures; emerging trends in network technologies and services; and the role of ISDN (Integrated Services Digital Network) and ATM (Asynchronous Transfer Mode) in the corporate environment. Strategies for network planning, implementation, and management are introduced. Recent advances in standardization, internetworking, and deployment of LANs (local area networks), MANs (metropolitan area networks), and WANs (wide area networks) are examined. (3 credits)

MI 160—Systems Analysis and Design

MI 171—Decision Support Systems
This course examines concepts of decision support in both automated and nonautomated environments. The focus is on application of decision theory, analytical modeling, and simulation techniques to solve organizational problems. Group Decision Support Systems, Executive Information Systems, and Expert Systems are also discussed. Case studies of existing systems are used to reinforce concepts discussed in class. A major component of the course is a project entailing the design, implementation, and evaluation of a Decision Support System. (3 credits)

MI 180—Human-Computer Interaction
The dynamics of human-computer interaction (HCI). Provides a broad overview and offers specific background relating to user-centered design approaches in information systems applications. Areas to be addressed include the user interface and software design strategies, user experience levels, interaction styles, usability engineering, and collaborative systems technology. Students will perform formal software evaluations and usability tests. (3 credits)

MI 2300—Survey of Medical Informatics
This course provides an examination of the broad spectrum of medical informatics including its basic concepts. Data representation is discussed along with data acquisition and man-made machine interfaces, communication and networking, knowledge engineering, genetic epidemiology, medical imaging, introduction to information systems, quality improvement, and signal processing. Upon completion of this course, students will be able to use the basic concepts of medical
informatics in a variety of health care and related settings. (2 credits)

MI 2301—Biostatistics
This course focuses on the principles and reasoning underlying modern biostatistics and on specific inferential techniques commonly used in public health research. At course completion, students will be able to apply basic inferential methods in research endeavors, and improve their abilities to understand the data analysis of health-related research articles. (3 credits)

MI 2430—Epidemiology
Examines basic principles and methods of modern epidemiology used to assess disease causation and distribution. Students develop conceptual and analytical skills to measure association and risk, conduct epidemiological surveillance, evaluate screening and diagnostic tests, and investigate disease outbreaks and epidemics. (3 credits)

MI 2501—Medical Informatics Project/Practicum
This practicum provides an opportunity for participation in selected health care environments (e.g., hospital, clinic, other health care institution) using computers in such activities as the creation of medical-decision logic and the evaluation of existing medical computer services. This course can be in one environment over a one-year period or at two locations for a period of six months each. The practicum or project must obtain the approval of the program director or his or her designee. (3 credits)

MI 2502—Patient Safety, HIPPA, and Related Areas
A series of discussions focus on issues associated with patient safety including HIPPA. This includes defining patient safety issues in the United States today, the elements of the patient record, and the patient safety issues associated with it, as well as how safety concerns may be overcome. Paperless record systems and what their impact is, and can be, in preventing harm to patients are discussed. The impact of HIPPA is analyzed including issues about patient privacy, how it affects health care, and its impact on the growing field of medical informatics. (2 credits)

Elective Courses
Please refer to courses offered by the Graduate School of Computer and Information Sciences in the M.S. in Management Information Program at www.scis.nova.edu/Masters/Director/course_descriptions/mmis.html for additional course listings.

MI 301—Outcomes Research
Students will learn to engage in research that incorporates outcome measurements into medical informatics activities and processes, using valid and reliable techniques. (2 credits)

MI 302—Ethics in Medical Informatics
Through discussion and review of the literature, the various ethical issues that impact on medical informatics are analyzed and discussed (2 credits)

MI 303—Medical Informatics—Applications to Health Services
Students working with the instructor will select one or more health care environments and determine the way applications of medical informatics can be used to improve various aspects of health care services. (2 credits)

MI 304—Special Topics
Upon approval of the instructor, students may select any topic related to medical informatics and explore it in depth. The instructor will provide students with a format to systematically engage in this activity. (2-4 credits)
Mission Statement
To educate professionals who will address the pharmacy-related needs of society.

Vision Statement
Through our programs of innovative teaching, service, research, and scholarship, we will achieve the distinction of being a premier college of pharmacy.

Values
- entrepreneurship
- excellence
- innovation
- integrity
- professionalism
- respect for diversity
- service
- teamwork

Administration
Andrés Malavé, M.S., Ph.D.
Dean

Lisa Deziel-Evans,
B.S., Pharm.D., Ph.D.
Executive Associate Dean, Professional Program

H. John Baldwin,
B.Sc. (Pharm), M.S., Ph.D.
Associate Dean, Graduate Education and Research

William D. Hardigan,
B.S., M.S., Ph.D.
Dean Emeritus

Gary M. Levin, Pharm.D.
Chair, Pharmacy Practice

Appu Rathinavelu,
B.S., M.S., Ph.D.
Chair, Pharmaceutical and Administrative Sciences

Mark L. Glover, B.S., Pharm.D.
Director, West Palm Beach Program

John Reyes, R.Ph., B.S. (Pharm)
Administrative Director, Puerto Rico Program

Leanne Lai, B.S., Ph.D.
Director, International Program

Carsten Evans,
B.S. (Pharm), M.S., Ph.D.
Assistant Dean, Continuing Education and Professional Affairs

Goar Alvarez, B.S., Pharm.D.
Director, Pharmacy Services

Margaret Brown, B.A., M.S.
Director, Student Affairs

Pharmacy
With the nation struggling to deliver high quality, affordable health care, there has come a greater appreciation of the importance of pharmacists as members of today's health care team. The pharmacist's role has expanded rapidly from drug compounding and distribution to a more patient-oriented role. The College of Pharmacy is educating its students...
in procedures vital to meeting the challenges facing the profession and important to improving health and reducing health care costs.

The College of Pharmacy admitted its first class in 1987 to become the first College of Pharmacy in South Florida. Since then, it has graduated more than 2,000 pharmacy professionals. The college offers only the doctor of pharmacy (Pharm.D.) degree program.

Pharmacists are experts on drugs and therapeutic goals, their biological action and uses, formulation, adverse effects, and potential for drug interactions. However, pharmacists are not just drug-oriented; they must also be people-oriented. They consider both the medication and the patient to ensure the patient has the right drug, in the right amount, for the right length of time, and with minimal adverse effects. The result is improved health care.

Most pharmacists practice in patient-oriented settings: in community pharmacies, hospitals, extended care facilities, or public health clinics. In addition, pharmacists are employed by the pharmaceutical industry in research and development, in manufacturing, or as medical service representatives. They work in academic institutions, government, health maintenance organizations, and home health care programs.

It is because of these challenges and opportunities that pharmacy has assumed a wider role and become an increasingly rewarding profession involving patient counseling, compliance, and education. The shortage of pharmacists has become so critical that colleges of pharmacy would have to double their enrollments to meet the projected needs of the health care system.

Accreditation
The Accreditation Council on Pharmacy Education, 20 North Clark Street, Suite 2500, Chicago, IL 60602-5109, (312) 664-3575, 800-533-3606; Fax (312) 664-4652, Web site: www.acpe-accred.org, has accredited the Doctor of Pharmacy Program of the College of Pharmacy, Nova Southeastern University. The College of Pharmacy is a member of the American Association of Colleges of Pharmacy.

Facilities
The College of Pharmacy is headquarter on the third floor of the Health Professions Division Administration Building. Pharmacy practice and research laboratories are located on the third floor of the Library/Laboratories Building, near the Health Professions Division’s research laboratories. Experiential sites are primarily located throughout Central and South Florida.

In the fall of 2000, the NSU College of Pharmacy opened a West Palm Beach program on RCA Boulevard near I-95 and PGA Boulevard. In the fall of 2001, a full-time program on the campus of Pontificia Universidad Catolica de Puerto Rico in Ponce, Puerto Rico, was opened. The only distinction between the Fort Lauderdale campus-based degree and the distance degree is geography. Each location has a program director, administrators, and faculty and staff members. Interactive video technology is used to provide lectures among the three sites simultaneously. This provides for live interaction between lecturer and students regardless of location. Identical handouts, tests, and texts are used. Communication through telephone, fax, online technologies, and email are available, just as with the Fort Lauderdale-based students. All students have access to the Health Professions Division Library, computer labs, online learning resources, and the vast technological innovations provided by NSU, which has been a leader in distance education programs for many years.

The pharmaceutical care center and pharmacy is adjacent to the clinic in Fort Lauderdale. This is a community pharmacy with disease management services for diabetes, hypertension, hyperlipidemia, osteoporosis, and anticoagulation. It also manages pharmacy services, including drug regimen review, consultation, and teaching. The College of Pharmacy’s Drug Information Centers meet a pressing demand among health care professionals for accurate, up-to-date information on medications, their adverse effects, incompatibilities, and potential for interactions.

Financial Aid
The purpose of the Student Financial Assistance Program at Nova Southeastern University is to help as many qualified students as possible to complete their pharmacy education. Various loans, scholarships, and grants are available to qualified students to help ease the high cost of a health professions education. Approximately 90 percent of College of Pharmacy students receive some form of financial assistance. These financial assistance programs are described in a separate university publication: A Guide to Student Financial Assistance. First-year pharmacy students will be classified as graduate students for financial aid purposes. Students who matriculate with fewer than 90 semester hours and students in the dual-admission program will be classified as undergraduates for the first year in the College of Pharmacy.

Transfer Credits
Requests for transfer credit must be submitted in writing to the executive associate dean. The request must include a copy of the transcript (containing the course title and final grade) and a course syllabus. Transfer credit will only be considered for courses taken at pharmacy schools accredited by ACPE or for those courses given prior approval by the executive associate dean. An official transcript from the institution attended must be provided before transfer credit will be awarded. All transfer credit requests must be received prior to August 1 of the first year of pharmacy school.

The dean’s office will evaluate the courses and determine appropriate credits. A minimum of 16 credit hours of didactic coursework and a minimum of five advanced practice experiences (four for postbaccalaureate students) must be completed at Nova Southeastern University.

Class Cancellation Policy
The university reserves the right to cancel any class. If a class is cancelled and a replacement is not offered, students will receive a full refund of
tuition paid for the cancelled class. If the student registered for only one class, then other fees will be refunded as well.

Entry-Level Program
Doctor of Pharmacy Degree

Requirements for Admission
The College of Pharmacy selects students based on pre-pharmacy academic performance, Pharmacy College Admission Test (PCAT) scores, personal interviews, written applications, and letters of evaluation.

Pre-Pharmacy Studies
1. Prior to matriculation, College of Pharmacy applicants must complete a minimum of 62 semester hours of coursework at a regionally accredited college or university, including the following required courses:
   - anatomy and physiology—three semester hours
   - general biology—three semester hours
   - general chemistry, including laboratory—eight semester hours
   - organic chemistry, including laboratory—eight semester hours
   - calculus (for science majors)—three semester hours
   - English—six semester hours
   - statistics—three semester hours (Course must be taken in the math department in order to be considered.)
   - speech—three semester hours
   - macroeconomics—three semester hours
   - microeconomics—three semester hours

   - social/behavioral sciences and humanities—15 semester hours. Students must have at least three semester hours of social/behavioral sciences and at least three semester hours of humanities. The remaining nine semester hours can be in either discipline. It is strongly recommended that courses taken outside of these requirements be in biochemistry, microbiology, and/or physiology.

2. Students must have a GPA of 2.75 or higher on a 4.0 scale. To ensure a well-rounded background for professional studies and adequate preparation in mathematics and sciences, the college requires students to earn a grade of 2.0 or better in each required pre-pharmacy course and a minimum grade of 2.0 in all biology, chemistry, and mathematics courses.

3. Applicants are required to submit official scores from the Pharmacy College Admission Test (PCAT). A national, standardized examination, the PCAT is designed to measure verbal ability, quantitative ability, reading comprehension, and knowledge of biology and chemistry. PCAT scores must be no more than five years old at the time of interview. Applicants should take the PCAT no later than October or January prior to the expected date of matriculation.

Candidates should schedule pre-pharmacy coursework so they complete biology and some chemistry courses before taking the PCAT. The half-day test is offered in October, January, and June at locations throughout the United States and Canada. Application brochures for the PCAT may be available at your college. You can also receive the brochure from the Office of Admissions, NSU College of Pharmacy, by visiting www.pcatweb.info, or by forwarding a written request to Pharmacy College Admission Test.

The Psychological Corporation
555 Academic Court
San Antonio, Texas 78204
800-622-3231

Foreign Coursework
Undergraduate coursework taken at a foreign institution must be evaluated for U.S. institution equivalence. Foreign coursework must be evaluated by one of the three services listed below. When possible, an equivalent GPA should be requested as part of evaluation.

- World Education Services
  P.O. Box 745
  Watertown, Massachusetts 02472
  (617) 994-5150
  info@jsilny.com

- Josef Silny & Associates
  7101 SW 102nd Avenue
  Miami, Florida 33173
  (305) 273-1616
  (305) 273-1338 fax
  www.jsilny.com

- Educational Credential Evaluators
  P.O. Box 51070
  Milwaukee, Wisconsin 53203-3470
  (414) 289-3400
  www.ece.org

It is the applicant's responsibility to have foreign coursework evaluated, and an official course-by-course evaluation must be sent to the Office of Admissions directly from the evaluating service.

Application Procedure
Primary Application Process
The college participates in the Pharmacy College Application Service (PharmCAS) for the receipt and processing of all applications. PharmCAS takes no part in the selection of students.

Applicants may submit applications electronically through PharmCAS Online, an interactive Web-based application that can be accessed through www.pharmcas.org. Applicants choosing to submit a paper application may contact PharmCAS directly for an application packet at

PharmCAS
19 Main Street
Watertown, Massachusetts 02472
(617) 994-5150

Listed below are the steps necessary to complete the primary application process.

The applicant should submit the following materials to PharmCAS:

- a completed PharmCAS application
- an official transcript from the registrar of all colleges and universities attended (This must be mailed directly to PharmCAS by the college or university.)
- PCAT scores that are no more than five years old

The PharmCAS application process takes four to six weeks.
The deadline for submitting a PharmCAS application for NSU-COP is January 1.

Applicants for the Ponce, Puerto Rico, site must contact the Office of Student Affairs in Ponce, Puerto Rico, for application information by calling (787) 841-2000, ext. 2431, or via email to pwendy@nsu.nova.edu.

Secondary Application Process
Nova Southeastern University requires the completion of a secondary application. Upon receipt of the PharmCAS application, NSU-COP will forward a secondary application.

Listed below are the steps necessary to complete the secondary application process.

The applicant should submit the following materials to Nova Southeastern University:

- a completed secondary application
- a nonrefundable application fee of $50
- a letter of evaluation from a pharmacist (if such a committee does not exist, letters of evaluation from two science professors and a liberal arts professor are necessary)
- a letter of evaluation from a professional committee, (if such a committee does not exist, letters of evaluation from two science professors and a liberal arts professor are necessary)
- a letter of evaluation from a professional committee, (if such a committee does not exist, letters of evaluation from two science professors and a liberal arts professor are necessary)
- a letter of evaluation from a professional committee, (if such a committee does not exist, letters of evaluation from two science professors and a liberal arts professor are necessary)

The deadline date for submitting the secondary application for NSU-COP is March 1.

All admission materials sent to Nova Southeastern University should be sent to:

Nova Southeastern University
Enrollment Processing Services (EPS)

College of Pharmacy
Office of Admissions
3301 College Avenue
P.O. Box 299000
Fort Lauderdale, Florida
33329-9805

Interview Process
Upon receipt of the completed application and the required credentials, the most-qualified applicants will be selected for an interview. Those selected will be notified in writing of the time and place. All applicants who are admitted by the college must be interviewed, but an invitation to appear for an interview should not be construed as evidence of acceptance.

Notice of Acceptance
Notice of acceptance or other action by the committee on admissions will be on a “rolling” or periodic schedule.

Early completion of the application process is in the best interest of the applicant.

Transcripts
After acceptance, final and official transcripts from all colleges and universities attended, and/or final and official documents must be received within 90 calendar days from the start of the term. If these final and official transcripts and/or documents are not received by that time, the student will not be allowed to continue class attendance. In addition, financial aid will not be disbursed to a student until he or she provides all the necessary documents required to be fully admitted as a regular student.

Program Requirements
All students are required to have ongoing access to a computer and an active account with an Internet service provider. Nova Southeastern University will provide access to email, online databases, and library resources.

Students must also provide their own transportation to experiential sites. Puerto Rico students should anticipate completion of experiential education at sites outside of the Commonwealth of Puerto Rico. During the final month, all students—including those studying in Puerto Rico and West Palm Beach—return to their respective sites for updates on new and changing drug therapy, presentations, and board exam preparation.

Tuition and Fees

- Tuition—Fort Lauderdale and West Palm Beach, Florida
  Anticipated tuition for 2007–2008 (subject to change by the board of trustees without notice) is $18,985 for Florida residents and $22,365 for out-of-state students.

Eligible students must request in-state tuition on the application. For tuition purposes, students' Florida residency status (in-state or out-of-state) will be determined at initial matriculation and will remain the same throughout the entire enrollment of the student at NSU. Accordingly, tuition will not be adjusted as a result of any change in residency status after initial enrollment registration.

- Tuition—Ponce, Puerto Rico
  Anticipated tuition for 2007–2008 (subject to change by the board of trustees without notice) is $18,985 (U.S.) with a College of Pharmacy contract and $22,365 (U.S.) for noncontract pharmacy students.

Students must be a citizen of the Commonwealth of Puerto Rico in order to be eligible for the contract rate.

- A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

- Acceptance fee is $250.
  This fee is required to reserve the accepted applicant's place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in the event of a withdrawal. It is payable within two weeks of an applicant's acceptance.

- Deposit is $250.
  This is due February 15, under the same terms as the acceptance fee.

- Preregistration fee is $500.
  This is due March 15, under the same terms as the acceptance fee.

The first semester's tuition and fees, less the $1,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be permitted to register until their financial obligations have been met. The financial ability of applicants to complete their training at the college is important because of the limited number of positions available in each class. Applicants should have specific plans for financing four years of professional education. This should
include tuition, living expenses, books, equipment, and miscellaneous expenses.

Undergraduate/Pharm.D. Dual-Admission Program

Nova Southeastern University Health Professions Division has established a dual-admission program with the Nova Southeastern University Farquhar College of Arts and Sciences, Pontificia Universidad Catolica de Puerto Rico, and International College in Naples, Florida, for a select number of highly motivated, qualified students interested in pursuing both an undergraduate education and professional studies in pharmacy. This allows students to receive their undergraduate bachelor of science degree and a doctor of pharmacy degree in a six-to-eight-year period.

Candidates must maintain a specified GPA and achieve acceptable scores on the Pharmacy College Admissions Test (PCAT). Students will spend two to three years in the undergraduate school and then will be awarded a B.S. degree upon successful completion of the second/third year at Nova Southeastern University College of Pharmacy. Students will receive the doctor of pharmacy degree after successfully completing the four-year Pharm.D. program at Nova Southeastern University College of Pharmacy.

For information and requirements, contact one of the following:

- Office of Admissions
  Farquhar College of Arts and Sciences
  Nova Southeastern University
  3301 College Avenue

  Fort Lauderdale, Florida
  33314-7796

- Office of Admissions
  Pontificia Universidad Catolica de Puerto Rico
  2250 Avenida Las Americas
  Suite 584
  Ponce, Puerto Rico 00717-0777

- Office of Admissions
  International College
  2655 Northbrooke Drive
  Naples, Florida 34119

Internship

An internship is a requirement for licensure. The internship must be completed within the guidelines of the Florida board of pharmacy as set forth in the Rule, Chapter 61F11, or by the Board of Pharmacy in the state in which the student plans to fulfill the requirements for internship. A Social Security number may be necessary in order to obtain an intern license from the state of Florida. It is the responsibility of any student who does not have U.S. citizenship or permanent resident status to ensure that his or her visa status allows for the issue of a Social Security number. A Social Security number is mandatory in order to receive an intern license, which is a requirement for placement on practice experiences. Without practice experiences, a student cannot complete the curriculum or the requirements of the Pharm.D. degree program. Any student who has concerns regarding visa or Social Security status should contact the Office of International Students by phone at (954) 262-7241 or 800-541-6682, extension 7241, or by email at irstudents@nova.edu. The college’s director of experiential programs provides assistance and guidance to students regarding internships.

Course of Study

The doctor of pharmacy degree is awarded after successful completion of four years of professional study in the College of Pharmacy. The curriculum stresses innovative teaching delivery and assessment methods. Students are provided an initial orientation during which they are exposed to library and online resources, professionalism, and academic expectations.

The curriculum is designed so courses integrate information and build on one another in order to provide students with the knowledge and skills necessary to be successful in the profession. The didactic component of the curriculum builds a foundation in the medical and pharmaceutical sciences. Traditional courses in anatomy and physiology, biochemistry, and microbiology are provided in order to develop a solid foundation. Pharmaceutical sciences courses including Pharmacaceutics, Pharmacokinetics, and Nonprescription Therapies are designed to provide students with a strong understanding of the principles of drug therapy. The innovative curriculum also includes the integration of medicinal chemistry and pharmacology into one course titled Pharmacodynamics, which runs four semesters. Insight into the business, human relations, communication, marketing, and legal aspects of pharmacy and the health care system are also provided.

The third year of the curriculum includes courses that focus on application of material learned during the first two years. Therapeutics is integrated with pathophysiology to address the use of drugs in the disease process and physical assessment provides the students with hands-on opportunities to develop skills essential to monitoring drug therapy. Students hone their analytical skills with courses in research design and statistics, pharmacoepidemiology, pharmacoeconomics, and drug literature evaluation. All students must also complete 10 semester hours of elective credit.

Unique aspects of the first three years of the curriculum include an early experience program and an integrated laboratory. Opportunities for the student to experience pharmacy practice firsthand are provided beginning with the first semester. In the first year, students spend four hours per week in a service learning experience. In the second year of the curriculum, students spend four hours per week in a community pharmacy setting. Practice experiences in the third year involve eight hours per week in hospital and pharmacy service settings. Patient Care Management Lab is initiated during the third year. This provides an opportunity for students to integrate information learned in all courses of the curriculum in order to facilitate application of the material in real-life practice settings.

During the fourth year, the experiential component includes 8 160-hour experiences, 4 in required practice areas and 4 elective experiences in specialty areas. At this point of the curriculum, it is expected that the students practice drug therapy monitoring with more independence. In the last month of the curriculum, all students will return to campus for updates on new and changing drug therapy, for presentations, and for board exam preparation.
Note: The advanced practice experiences are full-time commitments for the students (a minimum of 40 hours per week). Students are assigned to approved off-campus facilities and must arrange their own transportation. Experiences may be taken in any sequence, however students may not enroll in advanced practice experiences until all didactic work has been satisfactorily completed. There are currently few pharmacy practice sites in Puerto Rico for the entry-level students. Students must expect to use Florida sites for most experiences until all didactic work has been satisfactorily completed. There may lead to a delay in graduation.

Graduation Requirements
To receive a degree, every student must fulfill the following requirements:

- be of good moral character
- pass all required examinations
- complete a minimum of 139 semester hours of coursework in the College of Pharmacy within seven years for the entry-level program
- satisfactorily complete the assigned curriculum requirements for the degree, including all assignments, with a GPA of 2.0 on a four-point scale or a numerical average of 70 percent or above
- satisfactorily complete the capstone examination
- satisfactorily meet all financial and library obligations
- if transferring, the student must complete a minimum of 16 credit hours of didactic coursework in addition to five advanced experiences (or four for postbaccalaureate students)
- submit to the registrar's office an application for degree/diploma by March 15. Applications received after March 15 will not be considered for that year's commencement, unless approved by the dean
- all entry-level Pharm.D. candidates must attend the special eighth semester
- entry-level and international students must attend the rehearsal and commencement program in person

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### Entry-Level Curriculum Outline

<table>
<thead>
<tr>
<th>FIRST YEAR—Fall Semester</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Orientation</td>
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<tr>
<td>BCH 5200 Biochemistry</td>
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<td>PHA 4100 Pharmaceutics I</td>
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<td>PHA 4120 Pharmacy Calculations</td>
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<td>PHA 4200 Pharmacodynamics I</td>
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<tr>
<td>PHA 4300 Pharmacy and the Health Care System</td>
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<tr>
<td>PHA 4400 Dean's Hour I</td>
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<tr>
<td>PHA 4580 Early Practice Experience: Service Learning</td>
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<tr>
<td>PHA 5211 Pharmacy Anatomy and Physiology I</td>
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<table>
<thead>
<tr>
<th>FIRST YEAR—Winter Semester</th>
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<tbody>
<tr>
<td>PHA 4110 Pharmaceutics II</td>
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<tr>
<td>PHA 4110L Pharmaceutics II Lab</td>
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<tr>
<td>PHA 4130 Pharmacokinetics</td>
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<tr>
<td>PHA 4210 Pharmacodynamics II</td>
<td>3</td>
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<tr>
<td>PHA 4310 Pharmaceutical Marketing</td>
<td>2</td>
</tr>
<tr>
<td>PHA 4410 Dean's Hour II</td>
<td>0</td>
</tr>
<tr>
<td>PHA 4550 Drug Information Resources</td>
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<tr>
<td>PHA 4580 Early Practice Experience: Service Learning</td>
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<tr>
<td>PHA 5221 Pharmacy Anatomy and Physiology II</td>
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<tr>
<td>MIC 5200 Microbiology</td>
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<tr>
<td>PHA 5100 Clinical Pharmacokinetics</td>
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<td>PHA 5220 Pharmacodynamics III</td>
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<td>PHA 5300 Social and Behavioral Pharmacy</td>
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<tr>
<td>PHA 5380 Pharmacy Law</td>
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<td>PHA 5580 Early Practice Experience: Community</td>
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<tr>
<td>Suggested Electives</td>
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<th>SECOND YEAR—Winter Semester</th>
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<tr>
<td>PHA 5150 Nonprescription Therapies</td>
<td>3</td>
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<td>PHA 5230 Pharmacodynamics IV</td>
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<tr>
<td>PHA 5330 Communication Skills</td>
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<td>PHA 5330L Communication Skills Lab</td>
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<tr>
<td>PHA 5580 Early Practice Experience: Community</td>
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<tr>
<td>PHA 5610 Therapeutics/Pathophysiology I</td>
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<tr>
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### Third Year—Fall Semester

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<th>Course</th>
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<tr>
<td>PHA 6300 Research Design and Statistics</td>
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<tr>
<td>PHA 6440 Pharmacy Management</td>
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<tr>
<td>PHA 6580 Early Practice Experience: Health System</td>
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<tr>
<td>PHA 6620 Therapeutics/Pathophysiology II</td>
<td>5</td>
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<tr>
<td>PHA 6710 Patient Care Management I</td>
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<td>PHA 6710L Patient Care Management I Lab</td>
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### Third Year—Winter Semester

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<tr>
<td>PHA 6410 Pharmacoepidemiology and Pharmacoeconomics</td>
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<tr>
<td>PHA 6560 Physical Assessment*</td>
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<tr>
<td>PHA 6610 Drug Literature Evaluation</td>
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<tr>
<td>PHA 6630 Therapeutics/Pathophysiology III</td>
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<tr>
<td>PHA 6680 Early Practice Experience: Pharmacy Service</td>
<td>2</td>
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<tr>
<td>PHA 6720 Patient Care Management II</td>
<td>1</td>
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<tr>
<td>PHA 6720L Patient Care Management II Lab</td>
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<td><strong>Suggested Electives</strong></td>
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### Fourth Year—Fall Semester

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<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>PHA 7620 Advanced Practice Experience: Acute Care Medicine</td>
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</tr>
<tr>
<td>PHA 7640 Advanced Practice Experience: Ambulatory Medicine</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7660 Advanced Practice Experience: Select Community</td>
<td>4</td>
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<tr>
<td>PHA 7680 Advanced Practice Experience: Select Hospital</td>
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<td><strong>Total:</strong></td>
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### Fourth Year—Winter Semester

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHA 7610 Advanced Practice Experience: Elective I</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7630 Advanced Practice Experience: Elective II</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7650 Advanced Practice Experience: Elective III</td>
<td>4</td>
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<tr>
<td>PHA 7670 Advanced Practice Experience: Elective IV</td>
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<tr>
<td>PHA 7690 Advanced Practice Experience Ninth Course Option</td>
<td>4**</td>
</tr>
<tr>
<td>PHA 7800 Eighth Semester</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

The curriculum is frequently being revised and modified to meet the demands of the profession. These courses are representative of the overall requirements of the program at the time of publication.

* PHA 6560 is taught as an institute, schedule to be announced.

** Optional elective for students needing additional elective credits

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### Postbaccalaureate Program

#### Doctor of Pharmacy Degree

Nova Southeastern University College of Pharmacy offers a nontraditional program for baccalaureate-level pharmacists seeking a Pharm.D. degree. This program offers many distinct advantages over other external degree programs. Courses are taught by the same highly qualified faculty members who teach the entry-level Pharm.D. degree curriculum. Students have access to the Health Professions Division Library, computers, online library, other learning resources, and the vast technological resources provided by Nova Southeastern University, which has been a leader in distance education programs for many years.

The Postbaccalaureate Pharm.D. Degree Program educates students to achieve the same outcomes as the Entry-level Pharm.D. Program but is designed to meet the needs of working pharmacists. Didactic courses are scheduled in the evenings, Tuesdays and Thursdays, 6:00–10:00 p.m., in Fort Lauderdale and broadcast live by interactive video to Bayamon, Carolina, and Ponce, Puerto Rico. Students vary course loads according to their work schedules. Coordinators at each distance site provide guidance and assistance to students, ensuring communication among students and faculty members at all sites. Additional communications are provided through online technologies including email, bulletin boards, and live online classrooms. The curriculum stresses innovative teaching, delivery, and assessment methods. This approach provides some flexibility for the students. The emphasis of all courses is on problem solving and case study management. The doctor of pharmacy degree is awarded after successful completion of the required professional curriculum.

Students are given an initial orientation during which they are exposed to library and online resources and academic expectations. An average part-time student takes two to three courses a semester. At that rate, the didactic portion of the curriculum would be completed in 18 months. Students must then be prepared to complete experiential experiences on a full-time basis. The curriculum requires completion of four, four-week advanced practice experiences. Licensure as a Florida pharmacist is required for advanced experiences.

All coursework must be completed within five years of the initiation of the program. At least 16 semester hours of didactic coursework and all experiential education coursework must be completed at the NSU College of Pharmacy, regardless of the number of hours that may be transferred from another Pharm.D. program.

#### Application Procedure

To be considered for admission to the Nova Southeastern University College of Pharmacy Postbaccalaureate Pharm.D. Program, an applicant must have earned a bachelor's degree in pharmacy from a school or college of pharmacy accredited by the American Council on Pharmaceutical Education. Graduates of international pharmacy programs must have a current valid state license. Foreign coursework must be evaluated by a university-approved service and sent...
to the Office of Admissions along with an official transcript. Applicants must be licensed and in good standing with a U.S. board of pharmacy.

Candidates for admission must submit a completed application form, all supporting documents (college transcripts and a copy of a pharmacists license), and a nonrefundable fee of $60. The deadline for the fall semester is July 1 and the deadline for the winter semester is November 1.

Official transcripts of all work completed at all colleges and universities must be forwarded, by the institutions attended, to

Nova Southeastern University
Enrollment Processing Services (EPS)
College of Pharmacy
Office of Admissions
3301 College Avenue
P.O. Box 299000
Fort Lauderdale, Florida 33329-9905.

It is the responsibility of the applicant to ensure that arrangements are made for these transcripts to be sent.

Students must also submit copies of their pharmacist license(s).

Program Requirements
All students are required to have ongoing access to a computer and an active account with an Internet service provider (ISP). Nova Southeastern University will provide access to email, online databases, and library resources, but the student must provide the ISP account.

Students must also provide their own transportation to clinical sites.

Tuition and Fees
The board of trustees has established the following tuition and fees for 2007-2008, which is subject to change at any time at the board’s discretion:

- Application fee is $50 and is nonrefundable.
- Tuition is $450 per credit hour.
- Acceptance fee is $100.

This fee is required to reserve the accepted applicant’s place in the class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal. It is payable within two weeks of the applicant’s acceptance.

- Preregistration fee is $150, due within 30 days of the applicant’s acceptance under the same terms as the acceptance fee.

- A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

The first session’s tuition and fees, less the $250 previously paid, are due on or before registration day. Tuition for each subsequent didactic session is due on or before registration day of that session. Students will not be permitted to register until their financial obligations have been met.

Students will be required to preregister for classes. A $50 late fee will be charged for any student registering one week after classes are scheduled to begin.

Curriculum
The entering student is required to attend an orientation program.

During orientation, detailed hands-on instruction in the use of online technology and library resources is provided. Students will be provided student ID cards and will have an opportunity to meet with financial aid officers and pharmacy faculty and staff members.

Orientation and Physical Assessment are the only on-campus requirements for the program, with the exception of students in the Puerto Rico program, who must complete most advanced practice experiences in Florida.

The emphasis of all courses is problem solving and case study management. Upon completion of the required coursework (except PHA 7790—Research Project), students are eligible to pursue the advanced practice experience component of the curriculum. Licensure as a pharmacist or intern is required for practice experiences. A project of publishable quality is also required.

Institutes
Certain courses will be provided in an institute format. Essentially this means the coursework will be provided in a more flexible, compressed format although course expectations and outcomes will be similar to those established in the more traditional weekly lectures. The format of the institute, including delivery times and delivery methods, will be dependent on the course. Institutes will be provided at the discretion of the college. The use of the institute format has been very successful and increases flexibility for the postbaccalaureate student.

Advanced Practice Experiences
The College of Pharmacy provides innovative practice experiences to its students through the use of off-campus pharmacy practices. Most affiliated practice sites are based in South Florida with several in the Tampa Bay, Fort Myers, and Orlando areas, as well as very limited areas in Puerto Rico. Hospital, community, and chain pharmacies, plus nursing homes and other specialty practices, provide students with opportunities to interact with patients and health care providers. The emphasis is on the application of didactic knowledge and skills in a nonlaboratory, patient care setting under the supervision of college practice faculty members. Four advanced experiences are required, including acute and chronic care as well as two electives that allow students flexibility in directing their individual educational experience.

Graduation Requirements
Graduation requirements for the postbaccalaureate program are the same as for the entry-level program, except postbaccalaureate students must complete a minimum of 46 credit hours of coursework in the College of Pharmacy within five years.

The following curriculum outline is an example of a postbaccalaureate student’s course schedule. Individual curricula will vary based on course schedules.
**Postbaccalaureate Curriculum Outline**

**Orientation**

<table>
<thead>
<tr>
<th>FIRST YEAR—Fall Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHA 7700 Research Design and Statistics</td>
<td>2</td>
</tr>
<tr>
<td>PHA 7740 Drug Literature Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>PHA 7750 Disease Management II</td>
<td>4</td>
</tr>
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<td><strong>Total:</strong> 8</td>
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<table>
<thead>
<tr>
<th>FIRST YEAR—Winter Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHA 7710 Pharmacoeconomics</td>
<td>2</td>
</tr>
<tr>
<td>PHA 7720 Physical Assessment*</td>
<td>2</td>
</tr>
<tr>
<td>PHA 7760 Disease Management I</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7780 Management and the U.S. Health Care System</td>
<td>2</td>
</tr>
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<td><strong>Total:</strong> 10</td>
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<table>
<thead>
<tr>
<th>SECOND YEAR—Fall Semester</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHA 7730 Clinical Pharmacokinetics</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7770 Disease Management III</td>
<td>4</td>
</tr>
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<td><strong>Total:</strong> 8</td>
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<table>
<thead>
<tr>
<th>SECOND YEAR—Winter Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHA 7790 Research Project (alternate options may be available)</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7820 APE: Acute Care Medicine</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7840 APE: Chronic Care Medicine</td>
<td>4</td>
</tr>
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<td><strong>Total:</strong> 12</td>
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<table>
<thead>
<tr>
<th>SECOND YEAR—Summer Semester</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHA 7860 Advanced Practice Experience Elective I</td>
<td>4</td>
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<tr>
<td>PHA 7880 Advanced Practice Experience Elective II</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total:</strong> 8</td>
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</tbody>
</table>

* PHA 7720 is taught as an institute, schedule to be announced.

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**International Program**

**Doctor of Pharmacy Degree**

In an effort to meet the growing demands of the pharmacy profession, the Nova Southeastern University College of Pharmacy has developed a program of study leading to the doctor of pharmacy (Pharm.D.) degree for international pharmacy graduates. The program was designed exclusively for graduates of pharmacy degree programs outside of the United States jurisdiction, allowing them to build upon their pharmacy education and prepare them for clinical pharmacy practice.

The International Program educates students to achieve the same outcomes as the Entry-level Pharm.D. Degree Program. Courses integrate information and build on one another to provide students with the knowledge and skills necessary to be successful in the profession. Pharmaceutics, Pharmacokinetics, and Nonprescription Therapies courses provide a strong understanding of the principles of drug therapy. The business, human relations, communication, marketing, and legal aspects of pharmacy and the health care system are also studied. Courses focus on application of material learned, the use of drugs in the disease process, and developing skills essential to monitoring drug therapy. Students hone their analytical skills with courses in Research Design and Statistics, Pharmacoepidemiology, and Pharmacoeconomics and Drug Literature Evaluation.

Practice experiences in community, hospital, and other traditional pharmacy settings facilitate real-life application of the material and provide opportunities to integrate information learned. Full-time practice experiences facilitate application of drug therapy monitoring with more independence.

The curriculum stresses innovative delivery and assessment methods. Courses will be on campus and will be taught by interactive video; the college’s experiential sites will be used extensively. All lectures, handouts, reading materials, and exams will be in English so as to prepare students for the national practice of pharmacy.

**Admission Requirements**

The College of Pharmacy selects students based on previous academic performance, TOEFL scores (if applicable), written applications, and letters of evaluation.

Prior to matriculation, College of Pharmacy applicants must complete and receive a bachelor of science degree in pharmacy from a program accredited by the country of residence.

The Test of English as a Foreign Language (TOEFL) is required of all applicants whose native language is not English. The TOEFL, administered worldwide, measures the ability of non-native speakers to understand and use North American English. Preference will be given to students with scores of at least 550 on the paper-based exam and 213 on the computer-based exam. TOEFL scores must be no more than two years old at the time of application.

You can receive the TOEFL brochure from the Office of Admissions, by visiting TOEFL’s Web site (www.toefl.org), or by forwarding a written request to...
Application Procedures
Candidates for admission are responsible for submitting an application form, application fee, a complete set of official transcripts, official foreign coursework evaluation if applicable, official TOEFL scores if applicable, and letters of evaluation.

A completed international application form along with a $50 (U.S.) nonrefundable application fee must be submitted to the Office of Admissions no later than February 1 of the year of anticipated entry. An application is available on our Web site (www.nova.edu) or by contacting the Office of Admissions.

In order to complete an application, a candidate must arrange to have his or her transcripts, test scores, and letters of evaluation forwarded to the Office of Admissions no later than March 1 of the year of anticipated entry.

Transcripts
Official college transcripts from all undergraduate and graduate institutions attended in the United States or U.S. territories must be forwarded directly from the institutions to Nova Southeastern University, Enrollment Processing Services (EPS), College of Pharmacy, Office of Admissions, 3301 College Avenue, P.O. Box 299000, Fort Lauderdale, Florida 33329-9905. It is the applicant's responsibility to ensure that arrangements are made for these to be sent. Final transcripts of all of the applicant's work must be forwarded to the Office of Admissions prior to matriculation. Photocopies and facsimiles will not be accepted. A transcript is required for each college or university even though transfer credit from one institution may appear on another institution's transcript.

Foreign Coursework
Undergraduate coursework taken at a foreign institution must be evaluated for U.S. institution equivalency. Foreign coursework must be evaluated by one of the services listed below.

- World Education Services
  P.O. Box 745
  Old Chelsea Station
  New York, New York 10113-0745
  (212) 966-6311
  www.wes.org

- Josef Silny & Associates
  7101 SW 102nd Avenue
  Miami, Florida 33173
  (305) 273-1616
  (305) 273-1338 fax
  www.jsilny.com
  info@jsilny.com

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

It is the applicant's responsibility to have this coursework evaluated, and an official evaluation must be sent to Nova Southeastern University, Enrollment Processing Services (EPS), College of Pharmacy, Office of Admissions, 3301 College Avenue, P.O. Box 299000, Fort Lauderdale, Florida 33329-9905. Undergraduate coursework taken at a foreign institution must be evaluated for U.S. institution equivalency. Foreign coursework must be evaluated by one of the services listed above.

Letters of Evaluation
Three letters of recommendation/evaluation are required. One should be from the dean/director of a pharmacy program. In addition, a letter of reference from a registered pharmacist is recommended. Forms for letters of evaluation are available on our Web site (www.nova.edu) or by contacting the Office of Admissions.

Note: All documents submitted to the Office of Admissions become the property of Nova Southeastern University. Originals or copies of originals will not be returned to the applicant or forwarded to another institution, agency, or person.

Inquiries should be directed to
Nova Southeastern University
Attention: Pharmacy Admissions
3200 South University Drive
Fort Lauderdale, Florida 33328-2018
(954) 262-1101
800-356-0026, ext. 1101
www.nova.edu

Program Requirements
All students are required to have ongoing access to a computer and an active account with an Internet service provider (ISP).

This is a full-time program requiring a student's full effort. Students are responsible for their own transportation to the experiential sites.

Tuition and Fees
The board of trustees has established the following tuition for 2007-2008, which is subject to change at any time at the board's discretion:

- Anticipated tuition is $22,355 (U.S.) for noncontract students
- Anticipated tuition is $18,985 (U.S.) for contract students

In addition, there is a $450 per credit hour charge for the first-year summer semester PHA 6590 class. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

- Preregistration fee is $1,100.

This fee is due May 15, and is required to reserve the accepted applicant's place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in the event of a withdrawal.

The first semester's tuition and fees, less the $1,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be permitted to register until their financial obligations have been met.

Graduation Requirements
Graduation requirements for the International Program are the same as the Entry-level Pharm.D. Program, except international students must complete a minimum of 95 credit hours.
hours of coursework at the College of Pharmacy within five years.

International/Immigration Information

It is the responsibility of the applicant to contact the Office of International Students for information on immigration regulations and student visa requirements. Inquiries can be directed to:

Nova Southeastern University
Attention: Office of International Students
3301 College Avenue
Fort Lauderdale, Florida
33314-7796
(954) 262-7241
800-541-6682, ext. 7241
Fax: (954) 262-7265
Email: intl@nsu.nova.edu
www.nova.edu/cwis/registrar/iss

It is the responsibility of any student who does not have U.S. citizenship or permanent resident status to ensure that his or her visa status allows for the issue of a Social Security number. A Social Security number is mandatory in order to receive an intern license, which is a requirement for placement on practice experiences. Without practice experiences, a student cannot complete the curriculum or the requirements of the Pharm.D. degree program. Any student who has concerns regarding visa or Social Security status should contact the Office of International Students by phone at (954) 262-7241 or 800-541-6682, ext. 7241, or by email at intl@nsu.nova.edu.

International Curriculum Outline

FIRST YEAR—Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>PHA 4300</td>
<td>Pharmacy and the Health Care System</td>
<td>2</td>
</tr>
<tr>
<td>PHA 5300</td>
<td>Social and Behavioral Pharmacy</td>
<td>2</td>
</tr>
<tr>
<td>PHA 5380</td>
<td>Pharmacy Law</td>
<td>2</td>
</tr>
<tr>
<td>PHA 5580</td>
<td>Early Practice Experience: Community</td>
<td>0</td>
</tr>
<tr>
<td>PHA 6101</td>
<td>Clinical Pharmacology</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7730</td>
<td>Clinical Pharmacokinetics</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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FIRST YEAR—Winter Semester

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHA 5330</td>
<td>Communication Skills</td>
<td>2</td>
</tr>
<tr>
<td>PHA 5330L</td>
<td>Communication Skills Lab</td>
<td>0</td>
</tr>
<tr>
<td>PHA 5580</td>
<td>Early Practice Experience: Community (Continued from first semester)</td>
<td>2</td>
</tr>
<tr>
<td>PHA 5610</td>
<td>Therapeutics/Pathophysiology I</td>
<td>5</td>
</tr>
<tr>
<td>PHA 6410</td>
<td>Pharmacoeconomics and Pharmacoeconomics</td>
<td>3</td>
</tr>
<tr>
<td>PHA 6560</td>
<td>Physical Assessment*</td>
<td>2</td>
</tr>
<tr>
<td>PHA 6610</td>
<td>Drug Literature Evaluation</td>
<td>2</td>
</tr>
<tr>
<td>PHA 6630</td>
<td>Therapeutics/Pathophysiology III</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>20</strong></td>
</tr>
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FIRST YEAR—Summer Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHA 6590</td>
<td>Advanced Practice Experience: Community</td>
<td>4</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>4</strong></td>
</tr>
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* PHA 6560 is taught as an institute, schedule to be announced.
### SECOND YEAR—Fall Semester

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHA 5150</td>
<td>Nonprescription Therapies</td>
<td>3</td>
</tr>
<tr>
<td>PHA 6300</td>
<td>Research Design and Statistics</td>
<td>3</td>
</tr>
<tr>
<td>PHA 6440</td>
<td>Pharmacy Management</td>
<td>3</td>
</tr>
<tr>
<td>PHA 6620</td>
<td>Therapeutics/Pathophysiology II</td>
<td>5</td>
</tr>
<tr>
<td>PPS 4180</td>
<td>Prescription Practice</td>
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</tr>
<tr>
<td>PPS 4180L</td>
<td>Prescription Practice Lab</td>
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Total: 17

### SECOND YEAR—Winter Semester

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>PHA 6690</td>
<td>Advanced Practice Experience: Hospital</td>
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</tr>
<tr>
<td>PHA 6790</td>
<td>Advanced Practice Experience: General Clinical</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7620</td>
<td>Advanced Practice Experience: Acute Care Medicine</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7640</td>
<td>Advanced Practice Experience: Ambulatory Medicine</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7800</td>
<td>Eighth Semester</td>
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Total: 16

### THIRD YEAR—Summer/Fall Semester

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHA 7610</td>
<td>Advanced Practice Experience: Elective I</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7630</td>
<td>Advanced Practice Experience: Elective II</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7650</td>
<td>Advanced Practice Experience: Elective III</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7660</td>
<td>Advanced Practice Experience: Select Community</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7670</td>
<td>Advanced Practice Experience: Elective IV</td>
<td>4</td>
</tr>
<tr>
<td>PHA 7680</td>
<td>Advanced Practice Experience: Select Hospital</td>
<td>4</td>
</tr>
</tbody>
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Total: 24

The curriculum is revised and modified frequently to meet the demands of the profession. These courses are representative of the overall requirements of the program at the time of publication.

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**College of Pharmacy Course Descriptions**

**Note:** Listed at the end of each entry are lecture clock hours, laboratory clock hours, and credit hours.

### Basic Medical Sciences

**BCH 5200—Biochemistry**
Includes the structures, functions, and metabolism of lipids, proteins, carbohydrates, nucleic acids, and body systems. Includes pharmaceutical application of material. (64-0-4)

**MIC 5200—Microbiology**
Covers the underlying nature of infectious microorganisms. Emphasizes causative agents, and control of infectious diseases; immunology; mycology; parasitology; bacteriology; virology. (48-0-3)

**PHA 5211—Pharmacy Anatomy and Physiology I**
Study of the structure and function of cells, tissues, organ systems, and the organism. Physiology covers function and biological processes and their integration and control. This course interrelates the study of structure and function with special attention given to the fundamental physiological principles. (64-0-4)

**PHA 5221—Pharmacy Anatomy and Physiology II**
Continuation of Pharmacy Anatomy and Physiology I. (64-0-4)

### Pharmacology—Required Courses

**PHA 4100—Pharmaceutics I**
Theory of physiochemical principles that apply to pharmaceutical systems and a study of liquid and dispersion systems. Prerequisite: PI standing (48-0-3)

**PHA 4110—Pharmaceutics II**
Continuation of the study of traditional pharmaceutical dosage forms with emphasis on solid and semisolid systems and an introduction to the novel drug delivery systems. Preparation and dispensing of pharmaceutical solution, emulsion, suspension, semisolid, and solid dosage forms are studied in laboratory. Prerequisites: Pharmaceutics I and Pharmacy Calculations (32-48-3)

**PHA 4110L—Pharmaceutics II Lab**
Lab section for PHA 4110. Student must be registered for PHA 4110 and PHA 4110L concurrently.

**PHA 4120—Pharmacy Calculations**
Different methods used by the pharmacist in the process of solving the mathematical problems typically found in the practice of the profession of pharmacy. Emphasizes metric and common systems conversions, fundamentals of measurements, percentages, dose calculation, specific gravity, dilution, concentration, and dosage adjustment. (16-0-1)

**PHA 4130—Pharmacokinetics**
Mechanisms and rates of absorption and disposition of drugs. Examines how the fate of drugs in the body is influenced by physiologic and biochemical processes. The principles involved in drug absorption, distribution, metabolism, and elimination are discussed. (64-0-4)
PPS 4180—Prescription Practice
Applies scientific, legal, and ethical principles to the compounding and dispensing of medicinal agents in modern medical practice. Analysis, interpretation, and evaluation of prescription products in various forms. (16-48-3)

PPS 4180L—Prescription Practice Lab
Students must be registered for PHA 4180 and 4180L concurrently.

PHA 4200—Pharmacodynamics I
Applies the principles of organic chemistry in order to understand the drug action at the molecular level, with special emphasis on determinants of drug absorption and distribution, physiological receptors and drug receptor interactions, and drug metabolism and elimination. (48-0-3)

PHA 4210—Pharmacodynamics II
Applies the principles of biochemistry, physiology, and pathophysiology to understand the drug actions at the receptor, cellular, and system levels under normal physiological and pathological conditions. Focuses on the drugs that act on the autonomic nervous system, cardiovascular system, and blood components. (48-0-3)

PHA 4300—Pharmacy and the Health Care System
Covers major concepts related to the structure and functioning of the U.S. health care system. Emphasizes analyzing issues associated with health care, personnel, and the way that health care is organized, financed, and regulated. Examines the provision of drugs and pharmacy services in the context of the health care enterprise. (32-0-2)

PHA 4310—Pharmaceutical Marketing
Overview of the drug and pharmaceutical care development and distribution system. (32-0-2)

PHA 4400—Dean's Hour I
Introduction to the pharmacy profession and professionalism. (16-0-0)

PHA 4410—Dean's Hour II
Continuation of Dean's Hour I. (16-0-0)

PHA 4550—Drug Information Resources
Detailed review of the various drug information resources available. Students learn the strengths and weaknesses of the various references and how to apply their use in practice. An experiential portion will provide practice in locating drug information and preparing written and verbal responses. (16-0-1)

PHA 4580—Early Practice Experience: Service Learning
On-site experience is intended to foster a sense of community involvement. Students learn to be team members, develop listening and observation skills, strengthen professional demeanor, and reflect on their impact in the community. (13-70-2)

PHA 5100—Clinical Pharmacokinetics
Applies the concepts and techniques of biopharmaceutics and pharmacokinetics to the rational design of the individualized drug dosage regimens, taking into consideration factors such as hepatic and renal impairment, effects of other diseases, and drug interactions. Prerequisite: Pharmacokinetics (48-0-3)

PHA 5150—Nonprescription Therapies
The use of nonprescription therapies including drug and nondrug treatments. Discusses patient education, information, potential drug interactions, and recommended treatments. (48-0-3)

PHA 5220—Pharmacodynamics III
Continuation of Pharmacodynamics I and II. Covers drugs that are used in the treatment of pain and inflammation, CNS related disorders, and endocrine-mediated disorders. Prerequisite: Pharmacodynamics I (80-0-5)

PHA 5230—Pharmacodynamics IV
Continuation of Pharmacodynamics I, II, and III. Covers anti-infective agents, cancer, and anti-cancer drugs. Emphasizes the mechanism of action, pharmacodynamics, and therapeutic uses of drug categories. Identifies adverse effects, contraindications, and clinically significant interactions with drugs and/or food. Prerequisite: Pharmacodynamics I (64-0-4)

PHA 5300—Social and Behavioral Pharmacy
Background in the sociological, psychological, and behavioral aspects of pharmacy practice to help students understand the patients' experience of health and illness. Variability in morbidity and mortality, health seeking and patient behavior is explored. (32-0-2)

PHA 5330—Communication Skills
Focuses on the tools necessary to conduct effective and efficient patient interactions. Systematic interviewing, patient assessment, and education techniques are emphasized. Specific communication tools to help foster caring therapeutic relationships with patients are incorporated. (32-0-2)

PHA 5330L—Communication Skills Lab
Discussion Section for PHA 5330 (Communication Skills). Student must be registered for PHA 5330 and PHA 5330L concurrently.

PHA 5380—Pharmacy Law
This course covers federal and state statutes, rules, and regulations that affect pharmacy practice and selected aspects of general law and ethics. Emphasizes the interpretation of those laws affecting the practice of community and institutional pharmacy. Ethical situations are also presented. Prerequisite: P2 standing (32-0-2)

PHA 5580—Early Practice Experience: Community
Students are exposed to the role and responsibilities of the professionally oriented community pharmacist and the importance of effective communication between pharmacist, patient, and other health care providers. On-site experience provides basic knowledge of the drug distribution process in a community pharmacy. Legal, ethical, and practice issues in pharmacy are discussed during classroom activities. (16-120-3)
PHA 5610—Therapeutics and Pathophysiology I
The therapeutics/pathophysiology curricular components are divided into three courses. Courses need not be taken in sequence. Therapeutics/pathophysiology combines pathophysiology of disease with rational pharmacotherapy. Courses are divided into disease-state modules and focus on the therapeutic decision-making process. Concepts include physical findings, laboratory values, adverse drug effects, drug interactions, and patient education. Application of previous course materials, including pharmacodynamics and pharmacokinetics, is required. The disease categories presented in this course include the following: introduction to therapeutic concepts, cardiovascular disease, renal diseases, nutritional issues, and gastrointestinal disorders. Prerequisites: Pharmacodynamics I, II, and III (80-0-5)

PHA 6101—Clinical Pharmacology
This course is designed to provide the student with the background necessary for the clinical sciences and to help students acquire a body of knowledge about the drugs that will provide the foundation by which pharmacists will practice pharmaceutical care. The objective of this course is to review all of the major classes of cardiovascular drugs and those of the central nervous system. The course will address the rationale for their use as therapeutic agents; their effects on cells, tissues, organ systems, and patients; the mechanisms underlying these effects; the therapeutic value of specific drug effects; and the adverse effects of drugs. (64-0-4)

PHA 6300—Research Design and Statistics
Research methodology and statistics. Basic statistical concepts are covered and students are expected to understand, evaluate, and generate clinical, biomedical, and health care services research. (48-0-3)

PHA 6410—Pharmacoepidemiology and Pharmacoeconomics
Overview of pharmacoepidemiology and pharmacoeconomics. Identifies principles, methodologies of pharmacoepidemiology/pharmaceconomic analyses—the strengths and weaknesses of specific methods. Practical examples for successful implementation of these concepts are discussed. (48-0-3)

PHA 6440—Pharmacy Management
Overview of management, theory, human resources, and financial management applied to pharmacy operations. (48-0-3)

PHA 6560—Physical Assessment
Patient assessment for pharmacists in both ambulatory and inpatient settings. Demonstrates and explains clinical interview and physical examination techniques. Students practice techniques on one another under supervision. Charting, interpretation of findings, and evaluation of common clinical entities will be integrated into these activities. (15-48-2)

PHA 6580—Early Practice Experience: Health System
Students are exposed to various aspects of institutional pharmacy practice including drug storage, drug security, and policies and procedures. On-site experience provides basic knowledge of the drug distribution process in a hospital setting. Activities will include prescription preparation, using a unit dose system, use of references, and inventory management. Prerequisite: P3 standing (0-120-2)

PHA 6590—Advanced Practice Experience: Community
This advanced practice experience promotes expertise in outpatient care and enables a student to develop skills as a clinical practitioner in a community setting. Students will be exposed to the role and responsibilities of the pharmacist in the community setting, as well as the importance of appropriate and effective communication in the process for developing appropriate individualized treatment plans and of the follow-up evaluation to determine actual outcomes. Under supervision, students will be required to fill prescriptions and counsel patients according to federal, state, and local laws. Students will be assigned projects, topics, and activities that will expand the foundation of didactic coursework and enhance the experience. (0-160-4)

PHA 6610—Drug Literature Evaluation
Provides a framework to guide the student through the thought processes necessary to evaluate different types of medical information. The student is able to apply learned techniques in information retrieval, evaluation, and communication by conducting actual literature evaluations on relevant therapeutic topics. Prerequisites: Drug Information Resources and Research Design and Statistics (32-0-2)

PH 6620—Therapeutics and Pathophysiology II
This is the second of three courses in therapeutics/pathophysiology. Courses need not be taken in sequence. Therapeutics/pathophysiology combines pathophysiology of disease with rational pharmacotherapy. Courses are divided into disease-state modules and focus on the therapeutic decision-making process. Concepts include physical findings, laboratory values, adverse drug effects, drug interactions, and patient education. Application of previous course materials, including pharmacodynamics and pharmacokinetics is required. The disease categories presented in this course include the following: endocrine and other hormonal disorders, smoking cessation, neurological and psychiatric disorders, and clinical toxicology. Prerequisites: Pharmacodynamics I, II, and III (80-0-5)

PHA 6630—Therapeutics and Pathophysiology III
This is the third of three courses in therapeutics/pathophysiology. Courses need not be taken in sequence. Therapeutics/pathophysiology combines pathophysiology of disease with rational pharmacotherapy. Courses are divided into disease-state modules and focus on the therapeutic decision-making process. Concepts include physical findings, laboratory values, adverse drug effects, drug interactions, and patient education. Application of previous course materials, including pharmacodynamics and pharmacokinetics is required. The disease categories presented in this course include the following: Infectious diseases/HIV/AIDS, transplant, immunology, and oncology.
Prerequisites: Pharmacodynamics I, II, and III (64-0-4)

PHA 6680—Early Practice Experience: Pharmacy Service Introduction to the application of skills, concepts, and knowledge acquired in the didactic component of the curriculum in institutional pharmacy settings. This course promotes the development of pharmacy practice skills and furthers the development of communication skills. On-site experience enables students to prepare for advanced practice experiences. Prerequisite: F3 standing (0-120-2)

PHA 6690—Advanced Practice Experience: Hospital This advanced practice experience enhances student awareness of the various aspects of hospital pharmacy practice and the role and responsibilities of the hospital pharmacist. Students will expand their knowledge and practice skills by participating in prescription, clinical activities, and administrative activities. Active decision making and continued development of problem-solving skills are activities in this advanced practice experience. Prerequisite: Successful completion of all didactic coursework. (0-160-4)

PHA 6710—Patient Care Management I Sequence of laboratory-based courses use a case study method to draw on knowledge acquired from all other courses in the curriculum. Cases present patients with conditions that reflect real-life situations. The course is divided by disease states and problems may range from therapeutic to social behavioral issues. Emphasizes decision-making processes and integrating knowledge and skills from all courses in the curriculum. Prerequisites: Clinical Pharmacokinetics; Pharmacodynamics I, II, and III; Therapeutics I

PHA 6710L—Patient Care Management I Lab Lab section for PHA 6710 (Patient Care Management I). Student must be registered for PHA 6710 concurrently.

PHA 6720—Patient Care Management II Continuation of Patient Care Management I. Prerequisites: Pharmacodynamics II and III, Therapeutics I, Pathophysiology I and II, and Clinical Pharmacokinetics. (8-24-1)

PHA 6720L—Patient Care Management II Lab Lab section for PHA 6720 (PCMIi). Student must be registered for PHA 6720 and PHA 6720L concurrently.

PHA 6790—Advanced Practice Experience: General Clinical This advanced practice experience promotes competence in the basic skills and knowledge required to practice as a general clinical pharmacist in a hospital setting. Students will be exposed to the everyday management of a hospital pharmacy and the patient care and administrative responsibilities of a clinical coordinator or director of pharmacy. Prerequisite: Successful completion of all didactic coursework. (0-160-4)

PHA 7610/7630/7650/7670—Advanced Practice Experience: Electives Four supervised elective experiences that each consist of a four-week, full-time (40 hours per week), off-campus experience in a pharmacy practice specialty area that will allow students to obtain broader experiences. At least one of these electives must involve direct patient care. Elective experiences include, but are not limited to, administration, geriatrics, pharmacokinetics, infectious disease, nutritional support, psychiatry, pediatrics, critical care, cardiology, neonatology, immunology, and clinical research. Prerequisite: Successful completion of all didactic coursework. (0-160-4)

PHA 7620/7640/7660/7680—Required Advanced Practice Experiences Each required advanced practice experience consists of a four-week, full-time (40 hours per week), off-campus experience in a supervised pharmacy practice environment. In these settings, students apply didactic instruction, develop competencies, and enhance their knowledge of patient care management. These required experiences include Advanced Practice Experience: Internal Medicine, Advanced Practice Experience: Ambulatory Care, Advanced Practice Experience: Required Select Community, and Advanced Practice Experience: Required Select Hospital. Prerequisite: Successful completion of all didactic coursework. (0-160-4)

PHA 7620—Advanced Practice Experience: Acute Care Medicine In this advanced practice experience, students will refine skills in pharmacokinetics, drug information retrieval, and evaluation, verbal and written communication, patient monitoring, and case presentation. Students will apply knowledge, develop competency in pharmacy practice, and enhance knowledge of therapeutic management of common diseases such as hypertension, congestive heart failure, diabetes, and renal failure. Prerequisite: Successful completion of all didactic coursework. (0-160-4)

PHA 7640—Advanced Practice Experience: Ambulatory Medicine In this advanced practice experience, students will participate in matters pertaining to drug therapy as members of a health care team. This will be done through extensive patient monitoring and obtaining medical and drug information directly from patients during interviews. Students will apply and synthesize didactic information to the activities of a pharmacist as they develop their professional maturity and judgment skills. Prerequisite: Successful completion of all didactic coursework. (0-160-4)

PHA 7660—Advanced Practice Experience: Select Community In this advanced practice experience, students will develop and apply didactic information in outpatient setting. Students will select one specialty from multiple offerings to complete this requirement. Students will be exposed to the role of a clinically oriented pharmacist in a community setting.
The course focuses on technical skills in the distribution of prescriptions and the practice of pharmaceutical care. **Prerequisite:** Successful completion of all didactic coursework. (0-160-4)

**PHA 7680—Advanced Practice Experience: Select Hospital**
In this advanced practice experience, students will develop skills and apply didactic knowledge in hospital settings. Students select one specialty from multiple offerings to complete this requirement. Students will be exposed to the role and responsibilities of a professionally oriented pharmacist. Students participate as active members of a health care team. **Prerequisite:** Successful completion of all didactic coursework. (0-160-4)

**PHA 7700—Research Design and Statistics**
Research methodology and statistics. Basic statistical concepts are covered and students are expected to understand, evaluate, and generate clinical, biomedical, and health care services research. (32-0-2)

**PHA 7710—Pharmacoeconomics**
Basic concepts and definitions involved in the fields of pharmacoeconomics and pharmacoeconomics. Emphasizes identifying the principles and methodologies of pharmacoeconomics analysis and the strengths and weaknesses of specific methods. Stresses application of relevant principles within critical pathways. Discusses practical examples for successful implementation of these concepts and methods for accessing data. This course will run half a semester. (32-0-2)

**PHA 7720—Physical Assessment**
Teaches patient assessment for pharmacists in both ambulatory and in-patient settings. Clinical interview and physical examination techniques will be explained and demonstrated. Students practice techniques on one another under supervision. Charting, interpretation of findings, and evaluation of common clinical entities will be integrated into these activities. (15-48-2)

**PHA 7730—Clinical Pharmacokinetics**
Applies the concepts and techniques of biopharmaceutics and pharmacokinetics to the rational design of individualized drug dosage regimens, taking into consideration factors such as hepatic and renal impairment, effects of other diseases, and drug interactions. (64-0-4)

**PHA 7740—Drug Literature Evaluation**
Provides a framework to guide the student through the thought processes necessary to evaluate different types of medical information. The student is able to apply learned techniques in information retrieval, evaluation, and communication by conducting actual literature evaluations on relevant therapeutic topics. This course will run half a semester. (32-0-2)

**PHA 7750—Disease Management I**
The disease management courses will provide students with an overview of disease processes and treatment. Students will integrate information from discussion into their prior experience and knowledge base to expand their views and ideals and further the profession of pharmacy. This course incorporates the concepts of therapeutics and disease-state management. Emphasis is placed on developing patient-based problem-solving skills that include appropriate patient assessment, drug selection, and monitoring of drug therapy. Pharmacoeconomic and administrative concerns, development of clinical services, and controversial issues related to these disease states are also discussed. This course is taught via WebCT and compressed video technology using live lectures, integrated case studies, and exams. Topics covered in this course include the following: women's health, endocrinology, cardiovascular diseases, renal disorders, and toxicology. (64-0-4)

**PHA 7760—Disease Management II**
This course is a continuation of Disease Management I. The disease management courses will provide students with an overview of disease processes and treatment. Students will integrate information from discussion into their prior experience and knowledge base to expand their views and ideals and further the profession of pharmacy. This course incorporates the concepts of therapeutics and disease-state management. Emphasis is placed on developing patient-based problem-solving skills that include appropriate patient assessment, drug selection, and monitoring of drug therapy. Pharmacoeconomic and administrative concerns, development of clinical services, and controversial issues related to these disease states are also discussed. This course is taught using WebCT and compressed video technology using live lectures, integrated case studies, and exams. Topics covered in this course include the following: infectious diseases/HIV/AIDS, transplant and immunology, and oncology. (64-0-4)

**PHA 7770—Management and the U.S. Health Care System**
Covers major concepts related to the structure and functioning of the U.S. health care system. Emphasizes analyzing issues associated with health care personnel, and the way health care is organized, financed, and regulated. Examines the provision of drugs and pharmacy services in the context of
the health care enterprises. Then, the course focuses on the necessary supervisory skills needed to function as a manager within the health care system. (32-0-2)

PHA 7790—Research Project
Students are required to complete a research project that integrates principles learned in such courses as Research Design and Statistics, Drug Literature Evaluation, and Pharmacoeconomics. Limited lectures may be provided to guide the students as a group. Each student will work with a faculty member who will serve as the primary mentor for the project. All projects must be accepted for publication or presented at a peer-reviewed session of a state or national professional meeting. Prerequisite: Research Design and Statistics and Drug Literature Evaluation (16-96-4)

PHA 7800—Eighth Semester
During the last month of the curriculum, students return to campus. Opportunities will be given for student presentations, new drug and drug therapy updates, law review, and Pharmacy Board examination review. Prerequisite: P4 Standing (20-20-0)

PHA 7820/7840—Required Advanced Practice Experiences
Each of the four required Advanced Practice Experiences consist of four-week, full-time (40 hours per week), off-campus experiences in a supervised pharmacy practice environment. In these clinical settings, students participate as members of a health care team to develop optimum drug therapy regimens. Required experiences include both acute care and chronic care. Prerequisite: Successful completion of all didactic coursework (0-160-4)

PHA 7820—Advanced Practice Experience: Acute Care
In this advanced practice experience, students will have the accessibility to interact with patients and other health care practitioners in matters pertaining to drug therapy, monitoring, evaluation, and education. Students select one specialty from multiple offerings to complete this requirement. The student will participate in the successful clinical management of acutely ill patients. Prerequisite: Successful completion of all didactic coursework (0-160-4)

PHA 7840—Advanced Practice Experience: Chronic Care
Interaction with patients in chronic or long-term care settings including nursing homes and ambulatory care settings. Students follow patients over time and participate as members of a health care team to encourage drug therapy through extensive patient monitoring and obtaining medical and drug information directly from patients during interviews. Prerequisite: Successful completion of all didactic coursework (0-160-4)

PHA 7860/7880—Elective Advanced Practice Experiences
Two elective rotations that consist of four-week, full-time (40 hours per week), off-campus experiences in a supervised pharmacy practice emphasizing nondistributive, chronic aspects of pharmacy practice in a specialty area, allowing students to specialize and obtain greater practice experience. At least one of these elective rotations must be in a direct patient care setting. Specialty rotations may include, but are not limited to, informatics, administration, critical care, geriatrics, pharmacoeconomics, pharmacokinetics, infectious disease, nutritional support, psychopharmacy, pediatrics, rheumatology, surgery, cardiology, neonatology, immunology, and clinical research where available. Prerequisite: Successful completion of all didactic coursework (0-160-4)

Elective Courses

PHA 4221—Introduction to Molecular Medicine
Gene defects and diseases that originate at the molecular level, basic principles of gene expression, recombinant DNA derived pharmaceuticals, and modern diagnostic and therapeutic approaches that are currently used to fight genetically determined diseases. Prerequisite: Biochemistry (16-0-2)

PHA 4241—Advances in Central Nervous System Pharmacology
Extensive review of recent developments in the understanding of CNS neurotransmitter/neuropeptide receptor systems with particular emphasis on their relevance to the actions of psychopharmacological agents. Focuses on the neuroanatomy, neurophysiology and pathophysiology of specific neurotransmitter/neuropeptide systems; examines the interaction of these systems in the expression of CNS effects. Prerequisites: Pharmacodynamics I, II, and III (32-0-2)

PHA 5101—Pharmaceutical Technology
This course is designed to provide a more advanced understanding of pharmaceutical industry product and process development technology than that offered in Pharmaceutics I and II. Particular emphasis is placed on the physiochemical principles and formulation rationale used in the development and manufacturing of solid dosage forms. (32-0-2)

PHA 5103—Introduction to Chinese Herbal Medicine
This course is an introduction to Chinese herbal medicine, with an emphasis on Chinese herbs, materia medica, and food therapy. (32-0-2)

PHA 5105—Overview of Consultant Pharmacy Practice
This course is intended to provide an overview of geriatric consulting services that regulate the activity of the consultant pharmacist, the HCFA survey guidelines, and facilities required to have a consultant pharmacist, and monitoring of patient's medication. (48-0-3)

PHA 5107—Current Topics in Pharmaceutical Science
Special topics will be covered by faculty members and visiting scientists. The goal of each topic is to provide the student with an understanding of, and appreciation for, current problems and procedures underlying the pharmaceutical sciences disciplines. (16-32-0-1-2)

PHA 5111—Applied Pharmaceutical Kinetics
Provides comprehensive coverage of current applications of chemical kinetic theory in drug research, product development, quality control, and manufacturing activities of the pharmaceutical industry in the United States. (32-0-2)
PHA 5135—Current Topics in Pharmaceutical Sciences
Special topics are covered by faculty members and visiting scientists. The goal of each topic is to provide the student with an understanding of and appreciation for current problems and procedures underlying the pharmaceutical sciences discipline. Prerequisite: Topic dependent—see course coordinator for details (16.0.1)

PHA 5115—Advances in Drug Delivery
Current information on the science and technology of novel drug delivery systems. Emphasizes the development of controlled release formulations based on physiochemical properties of the therapeutic agent, polymer and biomaterials, and the mathematical relationships of drug disposition. (20-25 hours)

PHA 5119—Current Advances in Pharmaceutical Sciences
The focus of this course is on an array of pharmaceutical science topics recently highlighted by the media. Working in groups, students will prepare and give oral presentations and written reports on groundbreaking changes in the discovery, development, manufacture, and dispensing of pharmaceuticals that will directly affect the practice of pharmacy. Topics selected by the instructor will be those that have recently appeared in scientific journals that may also have received attention from new media. Active participation in class discussion is expected. (32.0.2)

PHA 5201—Biochemistry for Pharmaceutical Sciences
The focus of the first part of the course will be on structure, function, and metabolism of carbohydrates, amino acids, lipids, and nucleotides. The course will also cover the transcription and translation of the genetic information and the control of these processes, digestion, absorption and nutrition, and advanced control topics. (64.0.4)

PHA 5215—Advanced Pharmaceutical Compounding
The course will provide advanced training in the art, science and technology of pharmaceutical compounding. The course has two components: an online component that contains 20-25 hours of didactic work, and a laboratory experience that contains four-hour laboratory exercises. Note: A special fee is required. Taught at the P*Ceutics Institute. Prerequisite: PHA 4110 (24.0.2)

PHA 5219—Veterinary Pharmacotherapy
Designed to equip pharmacy students with an appropriate knowledge base and skill level to facilitate competence in practicing veterinary compounding pharmacy. The course has two components: an online component that contains ten modules of 20-25 hours of didactic work, and two modules that contain 16 contact hours on compound veterinary dosage forms. Note: A special fee is required. Taught at the P*Ceutics Institute. Prerequisite: PHA 4110 (24.16.02)

PHA 5223—Drugs of Abuse
This course covers types of substances abused, methods and routes of administration, the pertinent pharmacokinetics, the pharmacological/toxicological mechanisms and the clinical manifestations of drug abuse. Treatment of intoxication and withdrawal, societal impact of drug abuse, legal implications, and current trends of substance abuse. Prerequisites: Pharmacodynamics I and II (32.0.2)

PHA 5225—Principles of Neuropharmacology
Principles of membrane support and bioelectricity, synaptic transmission and recent molecular biological approaches and techniques that have revolutionized the understanding of membrane channels. (32.0.2)

PHA 5381—Ethical Issues in Pharmacy
Due to changing nature of the practice of pharmacy, pharmacists are faced with an ever-increasing number of ethical issues. This course will introduce students to these issues for discussion and evaluation. Students will also be exposed to decision-making processes to help determine the best course of action in different ethical situations. Business ethics and social responsibilities are also incorporated. Prerequisite: P1 standing (32.0.2)

PHA 5383—Essentials of Managed Health Care
Pharmacy is an essential component in managed health care systems. Pharmacy practitioners are currently influential in more ways by managed care payers. This course introduces the concepts and skills needed by clinical practitioners or pharmacy administrators to function effectively in or with managed care organizations. Prerequisite: P2 standing (32.0.2)

PHA 5385—International Health Care Systems
This course will cover the structure and financing of several international health care systems. Emphasis will be placed on discussions of the differences between each country's system and the U.S. system. (32.0.2)

PHA 5387—Pharmacy Case Law
The course will consist of students presenting in-depth reviews of pharmacy law cases. The students will be required to research a pharmacy law case. The student will present the case as a live lecture to the class and be graded using criteria specified in the course syllabus. Prerequisite: Pharmacy Law (32.0-2)

PHA 5389—Pharmacy Law of Puerto Rico
The course covers the laws, regulation, and administrative ordinance that regulate the practice of the pharmacy profession and the manufacturing, distribution, and dispensing of medicine in Puerto Rico. (32.0-2)

PHA 5391—The Nuclear Pharmacy Experience
This course covers and explains what a nuclear pharmacist is and the responsibilities, activities, and knowledge required in order to function as a nuclear pharmacist. The course places emphasis on radiopharmaceuticals (radioactive medication), their mechanisms of action, dose range, method of compounding, and ultimate role in diagnosis of disease and/or therapy. Prerequisite: P2 standing (32.0-2)

PHA 5395—Pharmacy Administrative Research
Students, under the guidance and supervision of one or more pharmacy administration faculty members, will perform individual research projects. Students will be involved in both the planning and execution of the research project. (0.96-2)

PHA 5511—Survey of Complementary Therapies
Course provides students with information about complementary therapies, which are frequently seen or could be recommended, for various disease states. Nutritional supplements, herbal remedies, homeopathic
remedies, etc; proper dosing, side effects, drug and disease state interactions; considerations in recommending complementary therapies. (32-0-2)

PHA 5513—Dietary Supplements in Complementary and Alternative Medicine: An Evidence-Based Approach
Course familiarizes the student with the most commonly used dietary supplements. The context of dietary supplement use from economic, psychosocial, and regulatory perspectives is used to build the foundation for decision-making processes. The course uses problem-based learning and case studies to evaluate the safety and efficacy of individual dietary supplements. In the first half of the course, individual dietary supplements are used to illustrate important general concepts. In the second half, the most popular dietary supplements are presented by the body system used to treat. (32-0-2)

PHA 5611—Advanced Oncology Therapeutics
Builds on the knowledge gained in Therapeutics/Pathophysiology and provides in-depth coverage of additional malignancies. Emphasis will be placed on appropriate chemotherapy-induced side effects and supportive care issues. (32-0-2)

PHA 5613—Advanced Pediatric Pharmacotherapy
Introduces the student to pharmacotherapy of common pediatric diseases. The course will expand on topics addressed in Therapeutics/Pathophysiology II and present more complex pharmacotherapy issues relating to pediatrics. Prerequisite: Therapeutics/Pathophysiology II (32-0-2)

PHA 5615—Women’s Health
This course covers topics of importance in women’s health and examines issues that affect women of all ages, from the early reproductive years to the late postmenopausal years. The subject matter encompasses a variety of topics including contraception, infertility, health in pregnancy, menopausal health, and eating disorders. The role of the pharmacist in the optimal provision of drug therapy and preventive health is emphasized. (32-0-2)

PHA 5617—Landmark Clinical Trials and Their Impact on Practice
The course will cover pivotal clinical trials that have influenced the way medications are used in clinical practice. Emphasis is placed on literature evaluation and interpretation. Students will have the opportunity to communicate this information through open discussions and formal presentations. Prerequisite: Therapeutics/Pathophysiology I Corequisite: Therapeutics/Pathophysiology II (32-0-2)

PHA 5619—Introduction to Geriatric Issues in Pharmacy
Students taking this course will become familiar with the changing demographics of the elderly population and the impact this will have on health care. Students will experience the challenges of the elderly by participating in various exercises such as interviewing an elderly patient, preparing a living will, and sharing stereotypes of the elderly. (32-0-2)

PHA 5621—Medical Mission-Based Pharmacy Practice Experience
Provides students the opportunity for application of didactic instruction while serving as an active participant on an interdisciplinary health care team. The student is initially presented with didactic instruction regarding public health, physical assessment, pharmacy calculations, and commonly encountered disease states, followed by laboratory sessions prior to application of knowledge attained by visiting various Jamaican communities. (15-80-3)

PHA 5623—Hispanic Health
Course examines the health status and the cultural, social, economic, and environmental factors that affect the health and delivery of health care to Hispanics in the United States. The health status and diseases of Hispanic populations are compared to other ethnic groups. The factors associated with differences in disease frequency and specific barriers affecting access to health care are examined. Resources available to improve health and pharmaceutical care delivery to Hispanic patients are addressed. (32-0-2)

PHA 5627—Adult Acute Care Medicine
Adult Acute Care Medicine will expand the student’s knowledge base on selected topics covered in Therapeutics and Pathophysiology I, as well as other related topics. The course will improve the student’s understanding of acute care medicine in the adult population, while focusing on frequent complications of common disease states and the unique way they are managed in the acute care setting. In addition, it will include a review of common procedures and devices used in the inpatient setting. Requires P3 standing. Prerequisite: PHA 5610 Therapeutics and Pathophysiology I (32-0-2)

PHA 5629—Current Topics in Ambulatory Care Practice
This course provides students with the ability to appreciate and understand the role of the pharmacist in the medication selection and use process to optimize patient outcomes in the ambulatory care setting. Basic understanding of therapeutic assessment and planning with collaborative drug therapy management of selected chronic diseases is emphasized. Prerequisite: Therapeutics/Pathophysiology I Corequisite: Therapeutics/Pathophysiology II (32-0-2)

PHA 5631—Implementation of Pharmaceutical Care
This course will be a seminar and discussion-based format designed to introduce participants to concepts in pharmaceutical care and allow faculty members to present opportunities for pharmacist-run services within various therapeutic specialties. A student group project/presentation will also be incorporated. (32-0-2)

PHA 5633—Introduction to Health Education Promotion
This course provides an introduction to the field of health education/promotion. It will guide participants through multiple steps in the development of health education/promotion that can be implemented in their worksites or communities. (32-0-2)

PHA 5635—Applied Medicinal Chemistry
The course describes the principles of structure activity relationships for several pharmacological classes of drugs. Students evaluate several case scenarios and select the most appropriate therapeutic option, relying heavily on the chemical structures of available drug products. (32-0-2)
PHA 5637—History of Pharmacy
This course reveals the proud heritage of the profession of pharmacy and its service to humanity. Significant drug discoveries will be examined as well as individuals who contributed to the evolution of pharmacy. Selected drugs and plants of historical value will be described. Evolution of pharmacy education and pharmaceutical manufacturing will be presented. (32-0-2)

PHA 5639—Clinical Neuro Psycopharmacology
This course will incorporate lecture, classroom discussion, student presentations, and clinical monitoring of a patient with a neurological or a psychiatric disorder. The course is designed to introduce students to advanced concepts in the pharmaceutical care of the mentally ill patient. Prerequisite: P3 standing. (48-0-3)

PHA 5641—Controversies in Therapeutic Drug Monitoring
This course is a survey of current controversies in therapeutic drug monitoring. Class format will consist of discussion and debate with the participants taking sides of an issue. Topics will include issues dealing with all aspects of the therapeutic drug monitoring. Application of previous course material including pharmacokinetics and statistics is required. (32-0-2)

PHA 5693—Clinical Neuropsychopharmacology
This course will incorporate lecture, classroom discussion, student presentations, and clinical monitoring of a patient with a neurological or a psychiatric disorder. The course is designed to introduce students to advanced concepts in the pharmaceutical sciences. Three or four semester credits are awarded on the basis of 48 laboratory hours per credit. Individual work by undergraduate students under the direction and supervision of one or more faculty members. With the professor, students are involved in planning and executing an approved research project using basic techniques of scientific research. (0-[144-160]-[3-4])

PHA 6441—Health Care Entrepreneurship
This course will prepare students to compete as entrepreneurs in the health care sector. The goal of the course is to equip students with the background needed to evaluate business opportunities, form management teams, raise capital, compete in markets, and manage a new venture. This course will build on the concepts presented in Pharmaceutical Marketing and Pharmacy Management. Prerequisites: Pharmaceutical Marketing and Pharmacy Management (32-0-2)

PHA 7690—Advanced Practice Experience: Ninth Course Option
An additional, optional advanced practice experience, this course provides additional depth or breadth of practice knowledge and skills. It may also be used to meet the college elective requirements. Prerequisite: Successful completion of all didactic coursework. (0-160-4)

PHA 7890—Advanced Practice Experience: Fifth Course Option
An additional, optional advanced practice experience for postbaccalaureate students, this course provides additional depth or breadth of practice knowledge and skills. It may also be used to meet the college elective requirements. Prerequisite: Successful completion of all didactic coursework. (0-160-4)
Student Organizations

Student Council
Student Council is the official voice of all students. The organization is open to all students and welcomes proposals and participation from the entire student body. Its responsibilities include collecting and expressing student opinion, dispensing funds for student activities, acting as liaison for the student body, promoting pharmacy, supporting club and class activities, and working to improve the quality of life for students at the College of Pharmacy.

Other Organizations
Many student organizations addressing various professional and practice-related interests are also open for student membership including:
- Academy of Managed Care Pharmacy
- Academy of Students of Pharmacy/American Pharmaceutical Association
- Alpha Omega Christian Fellowship International
- Alpha Zeta Omega
- American Association of Pharmaceutical Scientists
- American Society of Consultant Pharmacists
- Florida Society of Health-System Pharmacists—Student Chapter
- International Pharmacy Student Association
- Kappa Psi
- National Community Pharmacists Association—Student Chapter
- Phi Delta Chi
- Phi Lambda Sigma
- Rho Chi

College of Pharmacy Faculty

Biochemistry
Chairman and Professor: R. E. Block
| Professor: E. E. Groseclose, K. V. Venkatachalam | Associate Professor: W. G. Campbell

Microbiology
Chairman and Professor: H. Hada
| Professor: D. Burris, H. E. Laubach | Associate Professor: J. Coffman | Assistant Professor: K. Davis

Anatomy and Physiology
Acting Chairman and Professor: H. E. Laubach | Professors: H. Mayrovitz, S. Taraskевич | Associate Professors: W. Schreier, Y. Zagyazdin | Assistant Professor: D. King

Pharmaceutical and Administrative Sciences

Pharmacy Practice

Experiential Sites
The following institutions are affiliated with the College of Pharmacy for experiential education:
- A.G. Holley State Hospital
- Alberque La Providencia Ponce, Puerto Rico
- Albertsons #327 Plantation, Florida
- Albertsons #328 Lake Worth, Florida
- Albertsons #345 West Palm Beach, Florida
- Albertsons #362 Port St. Lucie, Florida
- Albertsons #371 Boca Raton, Florida
- Albertsons #383 Delray Beach, Florida
- Albertsons #440 Cooper City, Florida
- Albertsons #445 Tampa, Florida
- Albertsons #446 Jupiter, Florida
- Albertsons #454 Palm Beach Gardens, Florida
- Albertsons #466 Port St. Lucie, Florida
- Albertsons’ Inc. General Offices Boise, Idaho
- Allen’s Drugs South Miami, Florida
- American Pharmaceutical Services Longwood, Florida
- American Pharmacists Association Washington, D.C.
- Apecor Corporation West Palm Beach, Florida
- Arecoho, PR VA Arecoho, Puerto Rico
- Arnold Palmer Hospital for Women and Children Orlando, Florida

Arthurs Original Pharmacy Tamarac, Florida
- ASCP Alexandria, Virginia
- Aventura Hospital and Medical Center Aventura, Florida
- AvMed Health Plans Gainesville, Florida
- Baptist Hospital Miami, Florida
- Bascom Palmer Eye Institute Miami, Florida
- Bay Medical Center Panama City, Florida
- Bay Pines VAMC Bay Pines, Florida
- Bennett Elementary School Fort Lauderdale, Florida
- Bethesda Memorial Hospital Boynton Beach, Florida
- Bethune Elementary Hollywood, Florida
- Blake Medical Center Bradenton, Florida
- Boca Pharmacy & Home Health Center Boca Raton, Florida
- Boca Raton Community Hospital Boca Raton, Florida
- Broward County Health Department Fort Lauderdale, Florida
- Broward County Public Schools Youth Mentoring Programs Fort Lauderdale, Florida
- Broward General Medical Center Fort Lauderdale, Florida
- Brownsville Medical Center Brownsville, Texas
- Cape Coral Hospital Cape Coral, Florida
- CC City Pharmacy Fort Lauderdale, Florida
- Center Pharmacy II Cape Coral, Florida
- Center for Disease Control
  Atlanta, Georgia
- Cedars Medical Center
  Miami, Florida
- Center Pharmacy
  Cape Coral, Florida
- Center Pharmacy
  St. Petersburg, Florida
- Central Florida
  Family Health Center
  Orlando, Florida
- Central Florida
  Family Health Center
  Sanford, Florida
- Central Florida Family
  Health Center—Hoffner
  Orlando, Florida
- Charlotte Regional Medical Center
  Punta Gorda, Florida
- Children’s Diagnostic &
  Treatment Center
  Fort Lauderdale, Florida
- Circles of Care
  Melbourne, Florida
- Cleveland Clinic Hospital
  Fort Lauderdale, Florida
- Cleveland Clinic Outpatient Pharmacy
  Weston, Florida
- Clinical Pharmacology Services
  Tampa, Florida
- Colonial HealthCare
  Pompano Beach, Florida
- Columbia Hospital
  West Palm Beach, Florida
- Community Pharmacy
  Fort Lauderdale, Florida
- Compounding Docs, Inc.
  Boca Raton, Florida
- Comprehensive Care Center
  Fort Lauderdale, Florida
- Conexus Health
  Tampa, Florida
- Consultant Pharmacy Services, Inc.
  St. Petersburg, Florida
- Cooperative Feeding Program
  Fort Lauderdale, Florida
- Coral Springs Medical Center
  Coral Springs, Florida
- Corrections Health Services
  Miami, Florida
- Covenant Hospice, Inc.
  Pensacola, Florida
- Cruz Espada
  Ponce, Puerto Rico
- Cullen Home Health Pharmacy
  Sunrise, Florida
- Curascript Pharmacy
  Orlando, Florida
- CVS #5864
  Palm Springs, Florida
- CVS #1277
  Miami Lakes, Florida
- CVS #2752
  North Miami, Florida
- CVS #2804
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- CVS #3964
  Lakeworth, Florida
- CVS #5109
  Juno Beach, Florida
- CVS #5930
  Coral Springs, Florida
- Delray Medical Center
  Delray Beach, Florida
- Doctors Hospital
  Coral Gables, Florida
- Dr. G’s Pharmacy by the Sea
  Lauderdale-by-the-Sea, Florida
- Drug Topics
  Montvale, New Jersey
- Express Care Pharmacy
  Boynton Beach, Florida
- Express Care Pharmacy
  Boca Raton, Florida
- Express RX
  Greenacres, Florida
- Fairway Elementary
  Miramar, Florida
- Family Health Center East
  Orlando, Florida
- Family Health Center
  of Southwest Florida
  Fort Myers, Florida
- Family Physicians of Tampa Bay
  Tampa, Florida
- Farmacia El Apotecario
  Ponce, Puerto Rico
- Farmacia El Tiempo
  Ponce, Puerto Rico
- Farmacia La Aurora
  Yauco, Puerto Rico
- Farmacia La Concepcion
  Yauco, Puerto Rico
- Farmacia La Fe #2
  Ponce, Puerto Rico
- Farmacia La Fe #3
  Santa Isabel, Puerto Rico
- Farmacia Lorraine
  Ponce, Puerto Rico
- Farmacia Lourdes
  Ponce, Puerto Rico
- First Call for Help of Broward Inc.
  Fort Lauderdale, Florida
- Florida Hospital—
  Celebration Health
  Celebration, Florida
- Florida Hospital Outpatient Clinic
  Orlando, Florida
- Florida Hospital—South Campus
  Orlando, Florida
- Florida J.V. Services
  Davie, Florida
- Florida Medical Center
  Fort Lauderdale, Florida
- Florida Pharmacy Association
  Tallahassee, Florida
- Florida Poison Info Center
  Tampa, Florida
- Florida Poison Information Center—Miami
  Miami, Florida
- Food and Drug Administration—CDER—
  Office of Information Management
  Rockville, Maryland
- Food and Drug Administration—Division
  of Communications Management
  Rockville, Maryland
- Food and Drug Administration—Office of Generic Drugs
  Rockville, Maryland
- Food and Drug Administration—Office of Special Health Issues
  Rockville, Maryland
- Fort Myers VA Outpatient Clinic
  Fort Myers, Florida
- FSHP
  Tallahassee, Florida
- Gainesville VAMC
  Gainesville, Florida
- Garden Drugs
  Palm Beach Gardens, Florida
- Good Samaritan Medical Center
  West Palm Beach, Florida
- H. Lee Moffitt Cancer Center
  Tampa, Florida
- Hallandale Adult Community Center
  Hallandale, Florida
- Harrington’s Professional Arts Pharmacy
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- Health Care District of Palm Beach County—Delray
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**College of Pharmacy**
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• Miami Beach Community
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• Miami Children's Hospital
  Miami, Florida
• Miami Heart Institute
  Miami Beach, Florida
• Miami VA Oakland Park
  Outpatient Clinic:
  Fort Lauderdale, Florida
• Miami VAMC
  Miami, Florida
• Milton Medical Drug Co.
  Miami Beach, Florida
• Morton Plant Hospital
  Clearwater, Florida
• Mount Sinai Medical Center
  Miami Beach, Florida
• NACDS
  Alexandria, Virginia
• Naples Community Hospital
  Naples, Florida
• Navarro's #6
  Miami, Florida
• Navarro's #7
  Miami, Florida
• Navarro's #8
  Hialeah, Florida
• Navarro's #9
  Miami, Florida
• Navarro's #10
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• Neighborhood Care Pharmacies
  Deerfield Beach, Florida
• North Broward Medical Center
  Pompano Beach, Florida
• North Broward Medical Center
  Gainesville, Florida
• North Coast Medical Center
  Fort Lauderdale, Florida
• North Shore Medical Center
  Miami, Florida
• Northside Medical Center Pharmacy
  Miami, Florida
• Northwest Medical Center
  Margate, Florida
• Nova Infusion & Compounding
  Pharmacy Corp.
  Bayamon, Puerto Rico
• NSU Clinic Pharmacy
  Fort Lauderdale, Florida
• NSU—College of Pharmacy
  Fort Lauderdale, Florida
• NSU—Ponce, Puerto Rico
  Ponce, Puerto Rico
• NSU—WBP
  Palm Beach Gardens, Florida
• Option Care—Miami
  Miramar, Florida
• Option Care—Fort Myers
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• Orange County Medical Clinic
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• Orlando Regional Medical Center
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• Orlando Regional South
  Seminole Hospital
  Longwood, Florida
• Orlando Regional St. Cloud Hospital
  St. Cloud, Florida
• Orlando VA Outpatient Clinic
  Orlando, Florida
• Oseola Regional Medical Center
  Kissimmee, Florida
• Palm Beach Gardens Medical Center
  Palm Beach Gardens, Florida
• Palmetto General Hospital—Pharmacy
  Hialeah, Florida
• Park Shore Pharmacy
  Miami Shores, Florida
• Parkway Regional Medical Center
  North Miami Beach, Florida
• Penalver Clinic
  Miami, Florida
• Petmed Express, Inc.
  Pompano Beach, Florida
• Pfizer
  Coral Springs, Florida
• Pharmacy Insurance
  Corporation of America
  San Juan, Puerto Rico
• PharMerica
  Pompano Beach, Florida
• Pill Box Pharmacy & Surgical
  Pembroke Pines, Florida
• Pill Box Pharmacy—Weston
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• Pine Island Drugs, Inc.
  Davie, Florida
• Plantation General Hospital
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• Raulerson Hospital
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College of Optometry
College of Optometry

David Loshin, O.D., Ph.D., FAAO
Dean

Mission Statement
The mission of the College of Optometry is to educate and train optometric physicians to practice at the highest level of proficiency, integrity, and professionalism and to provide a multidisciplinary environment that encourages and supports scholarship, community service, and lifelong learning.

Administration
David Loshin, O.D., Ph.D., FAAO
Dean
Paul Abplanalp, Ph.D., O.D.
Associate Dean for Academic Affairs
Lewis Reich, O.D., Ph.D., FAAO
Assistant Dean for Student Affairs
Linda Rouse, O.D., FAAO
Chief Operations Officer,
The Eye Institute
Heidi Wagner, O.D., M.P.H., FAAO
Chair, Clinical Education
Rachel Coulter, O.D., FAAO
Chair, Didactic Education
Josephine Shallo-Hoffmann, Ph.D., FAAO
Chair, Graduate Programs

Optometry
Sight is one of our most precious gifts and the optometric physician is dedicated to the preservation and enhancement of this gift. The optometric physician, through academic and clinical training, is able to examine, diagnose, treat, and manage disorders and diseases of the visual system and associated structures. Optometry is constantly evolving as a profession to enable optometric physicians to broaden their scope as the primary eye-care practitioner.

The profession of optometry offers many challenges and rewards to those willing to devote themselves to serving others through a lifetime of study and dedication to excellence.

Today's optometrists practice in urban and rural communities throughout the nation, in individual or group practices, hospital settings, centers for vision research, and in the public health service. They also take part in teaching, research, and public health. Nova Southeastern University College of Optometry stands alone as the only optometric academic institution in the state of Florida.

Furthermore, the college benefits from the integrated multidisciplinary health care programs of the university's Health Professions Division, represented by optometry, osteopathic medicine, dental medicine, pharmacy, and allied health and nursing. Nova Southeastern University takes pride in the optometry degree program, which provides a strong didactic and clinical education.
Accreditation
The Doctor of Optometry Program at the Nova Southeastern University College of Optometry is fully accredited by The Accreditation Council on Optometric Education (ACOE). The ACOE (243 North Lindbergh Avenue, St. Louis, Missouri; telephone number 800-365-2219) is the accrediting body for professional degree programs offered by all optometric institutions in the United States.

Requirements for Admission
The College of Optometry selects students based on preprofessional academic performance, Optometry Admission Test (OAT) scores, a personal interview, a written application and letters of evaluation. The requirements are summarized below.

1. Minimum of 90 semester credit hours
Prior to matriculation, applicants must have completed a minimum of 90 semester hours of specified coursework at a regionally accredited college or university with a minimum 2.8 cumulative grade point average (GPA) on a four-point scale. At least 30 of these semester hours must be taken at a four-year institution of higher education. It is strongly recommended that these include the upper-level science courses.

2. Prerequisite course requirements
The college requires the students to earn a grade of 2.0 or better in each of the following required subjects:
- calculus—three semester hours
- physics, including laboratory—eight semester hours
- biology, including laboratory—eight semester hours
- general chemistry, including laboratory—eight semester hours
- organic chemistry, including laboratory—eight semester hours
- social sciences and humanities courses, in any combination—15 semester hours
- English (composition, literature)—six semester hours

Select at least two of the following (with appropriate laboratory):
- microbiology—four semester hours
- biochemistry—four semester hours
- anatomy—four semester hours
- physiology—four semester hours

Note: Upon review of a student's individual case, the committee on admissions may require additional coursework and testing as a condition of acceptance.

3. Optometry Admission Test
All applicants are required to submit official Optometry Admission Test scores.

Preference will be given to students with a cumulative GPA of 3.0 or higher. Special consideration will be given to students with a baccalaureate degree or who have completed at least 90 semester credit hours at a four-year university or college. There is no requirement that a student must have majored in a specific area; however, a background in biological sciences is recommended. The dean is empowered to evaluate the total qualifications of every student and to consider any unusual circumstances.

Application Procedures
The Office of Admissions processes applications as they are received. The application form and a nonrefundable fee of $50 should be returned as soon as possible, but no later than April 1 in order to be considered for admission in August.

A complete application is required before an applicant can be considered. This includes the application form, application fee, a complete set of official transcripts, Optometry Admission Test (OAT) scores, and letters of evaluation.

Transcripts—Official transcripts of all work attempted at all colleges and universities must be forwarded, by the institutions attended, to Nova Southeastern University Enrollment Processing Services (EPS) College of Optometry Office of Admissions 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905

It is the responsibility of the applicant to ensure that arrangements are made for these transcripts to be sent. A final transcript, covering all of the applicant's work, must be forwarded to the EPS office prior to matriculation.

Letters of Evaluation
An evaluation by a preprofessional health adviser or committee is required from the applicant's undergraduate institution. If this evaluation cannot be provided, two individual letters of evaluation are required from undergraduate instructors (at least one must be from a science instructor). If possible, these letters should be from faculty members who know the applicant's scholastic abilities and personal characteristics. A site visit to an optometrist's office and a letter of evaluation from the optometrist is also required.

Interview
A personal interview will be an integral part of the admission process; however, being granted an interview is not a guarantee of admission. It should also be clearly understood that not all applicants will be granted an interview. Those selected for an interview will be notified of the date and time of such interview by the Office of Admissions.

Tuition and Fees
- Tuition—Anticipated tuition for 2007-2008 (subject to change by the board of trustees without notice) is $17,985 for Florida residents and $22,850 for out-of-state residents. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

Eligible students must request in-state tuition on their application. For tuition purposes, a student's Florida residency status (in-state or out-of-state) will be determined at initial matriculation and will remain the same throughout the entire enrollment of the student at NSU. Accordingly, tuition will not be adjusted as a result of any change in residency status after initial enrollment registration.

- Acceptance fee is $250. This fee is required to reserve the accepted applicant's place in the entering first-year class. This advance pay-
ment will be deducted from the first tuition payment, but is not refundable in case of withdrawal. It is payable within two weeks of the applicant's acceptance.

- Deposit is $750, due April 15, under the same terms as the acceptance fee.
- Optometry clinic equipment repair/replacement fee is $50 per year, due at time of registration.

The financial ability of applicants to complete their training is important because of the limited number of positions available. Applicants should have specific plans for financing four years of professional education. This should include provision for tuition, living expenses, books and equipment, travel, and miscellaneous expenses.

Financial Aid
The function of the Student Financial Assistance Program at Nova Southeastern University is to help as many qualified students as possible to complete their optometric education. Various loans, scholarships, and grants are available to qualified students to help ease the high cost of an optometric education. These financial assistance programs are described in a separate university publication: A Guide to Student Financial Assistance.

Undergraduate/O.D. Dual-Admissions Program
Nova Southeastern University Health Professions Division has established a dual-admissions program with the NSU Farquhar College of Arts and Sciences for a select number of highly motivated, qualified students interested in pursuing both undergraduate and professional studies in optometry. This allows students to receive their doctoral degree in optometry in seven years.

Students must maintain a 3.0 GPA and achieve acceptable scores on the Optometry Admission Test (OAT). Students will spend three years in the undergraduate school and will be awarded a B.S. degree from the Farquhar College of Arts and Sciences upon completion of the first year of professional education at the NSU College of Optometry. Students will receive the O.D. (doctor of optometry) degree after four years of training at NSU College of Optometry.

For information and requirements, contact
 Nova Southeastern University Farquhar College of Arts and Sciences Office of Admissions 3301 College Avenue Fort Lauderdale, Florida 33314-7796

Transfer Students
Circumstances may warrant that a student enrolled in one optometric college seeks to transfer to another institution. Any individual wishing to transfer to Nova Southeastern University College of Optometry must meet the following criteria.

The applicant must
1. make a formal application to the NSU College of Optometry Office of Admissions by April 1
2. meet all admissions requirements to NSU College of Optometry, which include submitting official transcripts of all college courses taken, NBEO scores (if taken), and letters of evaluation
3. be in good standing at the transferring institution as documented by a letter from the dean of the transferring institution
4. supply a written statement outlining reasons for request for transfer
5. complete a personal interview

Upon approval of a transfer request, the students will be notified in writing of their standing at NSU and the requirements that they must complete. Before being permitted to enter clinical rotations at NSU, the transferring student will have to complete and pass the clinical proficiency examination administered by the NSU College of Optometry.

Decisions on transfer applications are made by the dean's office. The decision will be based on factors that include, but are not limited to, academic record, circumstances leading to the transfer request, available space, and admissions standards. The College of Optometry will evaluate such credit and grant that which is appropriate. Send application and documentation to
 Nova Southeastern University Enrollment Processing Services (EPS) College of Optometry Office of Admissions 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905

Promotion, Suspension, Dismissal, and Readmission
The policies for promotion, suspension, dismissal, and readmission are outlined in the College of Optometry Student Handbook, which is revised, updated, and distributed annually to all optometry students.

Requirements for Graduation
In order to be eligible for the degree of doctor of optometry, each student shall
1. have satisfactorily completed the program of study required for the degree, including all assignments, as outlined in this catalog
2. have satisfactorily met all financial and library obligations
3. have passed Part I and taken Part II of the National Board Examination, documented by sending a copy of test scores, certified by the NBEO, to the dean or his designee
4. have obtained a baccalaureate degree

Note: The College of Optometry awards a baccalaureate degree to those who do not possess a baccalaureate degree and who complete 90 credit hours of undergraduate work, plus two years of optometric study at NSU.
5. attend in person commencement rehearsal and the commencement program, at which time the degree is conferred

The college reserves the right, and the student, by his or her act of matriculation, concedes to the college the right to require withdrawal at any time the college deems it necessary to safeguard its standards of scholarship, professional behavior, and compliance with regulations or for other reasons as are reasonably appropriate.
Course of Study

The doctor of optometry degree is awarded after successful completion of four years of professional study. The didactic focus of the first two years is in the basic sciences, including biochemistry, microbiology, anatomy, physiology, pharmacology, optics, and the vision sciences. Some of the basic science courses are taught in combined classes with other health care students. Concurrently, students initiate the study of general optometric theory and methods; general pathology; and the diagnosis, treatment, and management of binocular vision anomalies and ocular disease in preparation for direct patient care in our primary care clinic.

In the third academic year, students study contact lenses, pediatric, geriatric, and rehabilitative optometry and develop a deeper understanding and ability to diagnose, treat, and manage increasingly complex conditions concerning anomalies of vision development and ocular disease. Additionally, students begin training in the primary care clinic by providing direct patient eye care.

The fourth year of the academic program is entirely clinical with intensive training in university-based or affiliated primary, secondary, and tertiary care facilities. These include clinics dealing with contact lenses, pediatric, binocular vision, low vision, and geriatric issues. Students also receive training in medical/surgical tertiary care settings. By the completion of the program, our students have been trained to be optometric physicians capable of providing quality eye care.

Extended (Five-Year)
Doctor of Optometry Degree

The College of Optometry has instituted an extended program leading to the doctor of optometry (O.D.) degree. The extended program is designed for individuals who are returning to school after an absence, are changing professional fields, or who require a lighter course load initially because of family or other obligations. Students in the extended program take courses with the full time students but with a reduced course load. Coursework covered in the first two years of the traditional full-time program is covered in three years in the extended program. The last two years of both programs are identical. The curriculum and graduation requirements for the extended and full-time programs are the same. The enrollment for the extended program is limited. The dean of the College of Optometry will make the final determination on eligibility for the extended program.

Tuition for 2007-2008 (subject to change by the board of trustees) is $14,845 for Florida residents and $18,585 for out-of-state residents for the first three years. Tuition reverts to the regular rate for the fourth and fifth years.

Student Organizations

Student Government Association

The College of Optometry Student Government Association (OSGA) is the official voice of all students. The organization is open to all students and welcomes proposals and participation from the entire student body. Its responsibilities include collecting and expressing student opinion, dispensing funds for student activities, acting as liaison for the student body, promoting optometry, supporting club and class activities, and working to improve the quality of life for students at the College of Optometry.

Other Organizations—Many other student organizations addressing various professional and practice-related interests are open for student membership, including the following:

- American Optometric Student Association
- Beta Sigma Kappa
- College of Optometrists in Vision Development
- National Optometric Student Association
- Student Florida Optometric Association
- Student Volunteers in Optometric Services to Humanity

Master of Science in Clinical Vision Research Graduate Program

NSU College of Optometry has a two-year, 45-credit, all-online Master of Science Program in Clinical Vision Research (CVR). This program is designed to help optometrists, optometric educators, optometric students, and other professionals enhance their ability to perform clinical research. This innovative program includes curricula leading to a master of science in CVR. The program requirements may be completed at home or office at times convenient to the student.

Core Courses

- CVR 7200—Clinical Research Ethics
- CVR 7300—Fundamentals of Biostatistics
- CVR 7310—Principle of Statistical Inference
- CVR 7400—Clinical Research Design
- CVR 7500—Information Science for Clinical Research
- CVR 7600—Introduction to Research Funding and Proposal Development
- CVR 7700—Presentation, Evaluation, and Publication of Clinical Vision Research
- CVR 8220—Epidemiology

To be admitted to the Master of Science program in Clinical Vision Research, applicants must have completed one of the following:

- earned a previous clinical (e.g., O.D., D.O., M.D.) or graduate degree
- earned a baccalaureate degree with a minimum grade point average of 3.0

Applicants whose grade point average is below 3.0 must achieve a minimum average score of 1100 on the Graduate Record Examination (GRE). An average score in the 50th percentile or higher on either the OAT or MCAT may be substituted.

Applicants from countries in which English is not the official language are required to submit scores from the Test of English as a Foreign Language (TOEFL) with a minimum computer score of 213.

For further information regarding the program, call (954) 262-1132 or 800-356-0026, ext. 1132, or access our Web site at http://optometry.nova.edu/cvr, where an application can be downloaded.
Applications should be sent to
Nova Southeastern University
Enrollment Processing Services (EPS)
College of Optometry
Graduate Program Admissions
3301 College Avenue
P.O. Box 299000
Fort Lauderdale, Florida
33329-9905

Tuition for 2007–2008 (subject to change by the board of trustees without notice) is $375 per credit hour.

Traditional Four-Year Program Curriculum Outline

The curriculum is revised and modified frequently to meet the demands of the profession. These courses are representative of the overall requirements of the program at the time of publication.

FIRST YEAR—Fall Term

<table>
<thead>
<tr>
<th>Course</th>
<th>Lecture</th>
<th>Laboratory</th>
<th>Semester Hours</th>
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FIRST YEAR—Winter Term

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SECOND YEAR—Summer Term

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SECOND YEAR—Fall Term

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### SECOND YEAR—Winter Term

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**Total Semester Hours:** 19.5

### THIRD YEAR—Winter Term

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**Total Semester Hours:** 19.5

### THIRD YEAR—Summer Term

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**Total Semester Hours:** 5.0

### THIRD YEAR—Fall Term

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<th>Lecture</th>
<th>Laboratory</th>
<th>Semester Hours</th>
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<tr>
<td>OPT 4722</td>
<td>Health Care Systems, Agencies, and Financing</td>
<td>36</td>
<td>0</td>
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<tr>
<td>OPT 5022</td>
<td>Anomalies of Binocular Vision II</td>
<td>36</td>
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<td>OPT 5122</td>
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<tr>
<td>OPT 5322</td>
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<td>Physical Diagnosis Laboratory</td>
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<td>OPT 5411</td>
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**Total Semester Hours:** 19.5

### FOURTH YEAR—Summer, Fall, Winter, and Spring Terms

<table>
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<tr>
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<tbody>
<tr>
<td>OPT 7146</td>
<td>Primary Care Clinical Externship</td>
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<td>OPT 7214</td>
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<td>OPT 7224</td>
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<td>OPT 7308</td>
<td>Medical and Surgical Care Clinical Externship</td>
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**Fourth Year Total Semester Hours:** 32.0
### Extended Program Curriculum Outline

**FIRST YEAR—Fall Term**  
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>OPT 1011</td>
<td>Histology/Embryology</td>
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<tr>
<td>OPTC 1134</td>
<td>Gross Anatomy</td>
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<tr>
<td>OPTC 1233</td>
<td>Biochemistry</td>
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<tr>
<td>OPT 1323</td>
<td>Microbiology</td>
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<tr>
<td>OPT 1821</td>
<td>Strategies for Success</td>
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<tr>
<td>OPT 1511</td>
<td>Psychophysical Methodology</td>
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**Total Semester Hours: 13.0**

**FIRST YEAR—Winter Term**  
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<tbody>
<tr>
<td>OPT 1721</td>
<td>Clinical Optometric Procedures</td>
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<tr>
<td>OPTC 2023</td>
<td>General Neuroanatomy</td>
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<tr>
<td>OPTC 2144</td>
<td>General Physiology</td>
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<tr>
<td>OPT 2422</td>
<td>Ocular Anatomy</td>
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<tr>
<td>OPT 2522</td>
<td>Visual Neurophysiology</td>
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</tr>
<tr>
<td>OPT 2622</td>
<td>Ocular Motility</td>
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**Total Semester Hours: 13.5**

**SECOND YEAR—Fall Term**  
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<th>Course Title</th>
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<tbody>
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<td>OPTC 3244</td>
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<td>OPT 1443</td>
<td>Theoretical Optics I</td>
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<td>OPT 1724</td>
<td>Optometric Theory and Methods I</td>
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<tr>
<td>OPTC 3033</td>
<td>General Pathology</td>
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**Total Semester Hours: 15.0**

**SECOND YEAR—Winter Term**  
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<tbody>
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<tr>
<td>OPT 2323</td>
<td>Visual Optics</td>
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<tr>
<td>OPT 4811</td>
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**Total Semester Hours: 13.5**

**THIRD YEAR—Summer Term**  
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<tr>
<td>OPT 3122</td>
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<tr>
<td>OPT 3344A</td>
<td>Psychophysics/Monocular Sensory Processes I</td>
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**Total Semester Hours: 4.0**

**THIRD YEAR—Fall Term**  
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<td>OPT 3533</td>
<td>Ocular Disease I: Anterior Segment</td>
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<td>OPT 3434</td>
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<td>OPT 3344B</td>
<td>Psychophysics/Monocular Sensory Processes II</td>
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<tr>
<td>OPT 3741</td>
<td>Vision Screening I</td>
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<tr>
<td>OPT 4322</td>
<td>Introduction to Binocular Vision</td>
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**Total Semester Hours: 15.5**

**THIRD YEAR—Winter Term**  
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<td>OPT 4633</td>
<td>Ocular Disease II: Posterior Segment</td>
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<td>OPT 4433</td>
<td>Anomalies of Binocular Vision I</td>
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<td>Anomalies of Binocular Vision I Lab</td>
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<tr>
<td>OPT 4941</td>
<td>Vision Screening II</td>
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**Total Semester Hours: 15.5**

See traditional program for last two years of the curriculum.
College of Optometry Course Descriptions

Note: Listed at the end of each entry are lecture hours, laboratory hours, and semester hours.

Medical Sciences
Courses listed are taught by College of Medical Sciences faculty members.

OPT 1011—
Histology and Embryology
General principles of human histology and embryology with detailed histologic view of each tissue of the body. (18-0-1)

OPTC 1134—Gross Anatomy: Head and Neck
Presentation of human body structure. Discusses each body system from a cellular, tissue, and organ perspective. Detailed examination of head and neck regions of the body. Intensive laboratory work studying prosected cadaver material. (54-36-4)

OPTC 1233—Biochemistry
Biochemistry of metabolic pathways; visual, digestive, muscular, respiratory, endocrine systems. Protein structure and chemistry, lipids, nucleic acids, carbohydrates, more complex molecules. Clinical correlations illustrate the basic biochemical mechanisms. (54-0-3)

OPT 1323—Microbiology
Immunology, bacteriology, mycology, parasitology, virology. Underlying systematics and genetics of parasites, host-parasite interactions. Etiology, demography, and clinical characteristics of disease manifestations that an optometrist may encounter. (54-0-3)

OPTC 2023—
General Neuroanatomy
Lecture and laboratory study of gross structures of the brain and spinal cord and the functional relationships among their parts. Emphasizes the major motor and sensory pathways and integrative mechanisms of the central nervous system. (36-18-2.5)

OPTC 2144—General Physiology
General human physiology from a molecular, cellular, tissue, organ systems approach. Basic principles are discussed and applied to the blood, cardiovascular, pulmonary, renal and gastrointestinal systems, nerve and muscle physiology, and tissue function. Discusses clinical implications. (72-0-4)

OPTC 3033—General Pathology
Introduces pathogenic processes in each organ system; molecular, cellular, tissue, and organ changes. Emphasizes how disease manifests in the eye; signs and symptoms. (54-0-3)

OPTC 3244—
General Pharmacology I
Covers drug action, examines classes of drugs used in clinical practice. Emphasizes structure and activity, mode of action, side effects, and toxicity of drug interactions. Stresses pharmacological intervention of pathophysiological processes and standard clinical application of each drug class. (72-0-4)

OPTC 4022—
General Pharmacology II
Continuation of General Pharmacology I. (27-0-1.5)

Optometric Basic Sciences

OPT 1443—Theoretical Optics I
Principles of geometric optics, examples, and optometric applications. Linear propagation, reflection, refraction, prisms, thin lenses, and thick lens systems. (54-0-3)

OPTL 1443—
Theoretical Optics I Lab
Applications and demonstration of concepts and material presented in the Theoretical Optics I lecture OPT 1443. (0-36-1)

OPT 1511—
Psychophysical Methodology
Principles of classical psychophysical methodologies, including demonstrations and exercises performed by the students. The fundamentals of signal detection and Fourier analysis are introduced in terms of their application to the clinical practice of optometry. (18-0-1)

OPT 1724—Optometric Theory and Methods I
Concepts of refractive disorders, binocularity, and ocular diseases. Performing an eye examination, patient histories, use of terminology, and data collection. (36-0-2)

OPTL 1724—Optometric Theory and Methods I Lab
Application and skills necessary to perform ocular examinations stressed in OPT 1724. (0-72-2)

OPT 1821—Strategies for Success
This course is designed to present first-year optometry students with an overview and insights into such topics as critical thinking and problem solving, learning styles and strategies, time management and planning, communication skills, test-taking skills, professionalism, ethics, and the history of optometry. (18-0-1)

OPT 2223—Theoretical Optics II
Continuation of Theoretical Optics I. Advanced topics in geometric optics and physical optics including lens aberrations, ophthalmic instruments, and stops and pupils. Physical Optics will include wave and quantum optics, applications, principles, examples, wave equations, interference, diffraction, coherence, polarization, dispersion, photometry, spectroscopy, lasers and holograms. (54-0-3)

OPTL 2223—
Theoretical Optics II Lab
Applications and demonstration of concepts and material presented in the Theoretical Optics II lecture OPT 2223. (0-18-1)

OPT 2323—Visual Optics
The eye as optical system: optical and physical components of the eye. Schematic eye models, refractive error correction, diopters of the eye, stimulus to accommodation, retinal image size and quality, pupillary images, entoptic phenomena, presbyopia, aphakia, intraocular implants, and ocular radiation effects. (36-18-2)

OPT 2422—Ocular Anatomy
Gross and microscopic anatomy of the eye and adnexa. Relationships between tissues; the vascular supply to the eye; the anatomy of the visual pathway; and the embryonic origin of ocular tissues. Eye dissections teach the functional relations between ocular tissues. (36-0-2)
OPT 2522—Visual Neurophysiology
Concepts of visual neurophysiology needed to understand normal visual perception, probable source of visual symptoms associated with various eye and CNS disorders, underlying principles of new clinical diagnostic tests for eye and CNS disease, and current neurophysiological research as it relates to the clinical practice of optometry. (36-0-2)

OPT 2622—Ocular Motility
The ocular motor systems and the laws relating to them are detailed in terms of normal neurophysiology and neuroanatomy. The aim of this course is to provide a strong theoretical competency in normal eye movement physiology and the ability to differentiate it from pathology in order to lead the student to adapt and confident clinical performance. (36-0-2)

OPT 2724—Optometric Theory and Methods II
This course continues the optometric theory and methods sequence with emphasis on intermediate clinical procedures. Topics covered include tonometry, near refraction and presbyopia, objective and subjective refraction, phorias and vergences, and introductory case analysis. (36-0-2)

OPTL 2724—Optometric Theory and Methods II Lab
Application and skills necessary to perform ocular examinations stressed in OPT 2724. (0.54-1.5)

OPT 3122—Ocular Physiology
General physiological principles and processes. Typical physiologic function of ocular tissues are discussed and contrasted with the outcomes of abnormal physiology as well as the physiological relationship of ocular tissues and the mechanisms of ocular functions. (0-36-1)

OPT 3344A—Psychophysics/Monocular Sensory Processes I
A survey of spatial and temporal aspects of monocular visual performance, including theories of brightness perception, color vision, contrast sensitivity, spatial and temporal resolution, recognition of pattern and form, and the perception of flicker and motion. Normal development and perceptual phenomena, testing techniques, and frequently encountered abnormalities are discussed in the context of common experience and optometric practice. (36-0-2)

OPT 3344B—Psychophysics/Monocular Sensory Processes II
Continuation of the principles of Psychophysics/Monocular Sensory Processes I. (72-0-2)

OPT 3434—Ophthalmic Optics I
Theoretical and practical aspects of corrective lens design in the optical correction of ametropia: physical and optical characteristics of ophthalmic lens materials, aberrations, specifications of lens powers, ophthalmic prism, lens decentration, and multifocal lens design. Selection of lenses and frames. (54.0-3)

OPTL 3434—Ophthalmic Optics I Lab
Hands-on training and experience in the neutralization of single vision and conventional multifocal spectacle lenses and the selection, ordering, fitting, and dispensing of spectacles. (0.36-1)

OPT 3533—Ocular Disease I: Anterior Segment
Diseases and disorders of anterior segment: anomalies of eyelids, cornea, conjunctiva, anterior chamber, and crystalline lens. Discusses management of these conditions. (54.0-3)

OPT 3624—Optometric Theory and Methods III
This course continues the optometric theory and methods sequence with emphasis on intermediate clinical procedures. Topics covered include fundus biomicroscopy and binocular indirect ophthalmoscope, examination sequence, gonioscopy, exophthalmometry, punctal plugs, dilation and irrigation, pressure patching, foreign body removal, presbyopia, case analysis, and prescribing for refractive errors. (36-0-2)

OPTL 3624—Optometric Theory and Methods III Lab
Hands-on training and experience in the selection, fabrication, fitting, adjustment, neutralization, and dispensing of spectacles; specification and neutralization of progressive addition multifocal lenses. (0.36-1)

OPT 4122—Ocular Pharmacology
Drugs used in the eye or capable of exerting a pharmacological or toxicological effect on the eye; routes of administration, pathophysiological processes, and treatment regimens. (27.0-1.5)

OPT 4234—Ophthalmic Optics II
Theoretical and practical aspects of corrective lens design in the optical correction of ametropia: absorptive lenses and lens tints/coatings, anisometropia and aniseikonia, corrections for high refractive errors and aphakia, the use and optical design of low vision aids, and the optical and physical characteristics of contact lenses. (54.0-3)

OPTL 4234—Ophthalmic Optics II Lab
Hands-on training and experience in the selection, fabrication, fitting, adjustment, neutralization, and dispensing of spectacles; specification and neutralization of progressive addition multifocal lenses. (0.36-1)

OPT 4322—Introduction to Binocular Vision
Sensory aspects of binocular vision, neurophysiological foundations. Visual direction, the horopter, binocular fusion, rivalry, stereopsis, aniseikonia, motion in depth, binocular visual neurophysiology, normal development of binocular vision, strabismus and anisometropic amblyopia, and normal and anomalous retinal correspondence. Clinical,
research-oriented tests and treatments for abnormal binocular visual function. (36-0-2)

OPT 4433—Anomalies of Binocular Vision I
Covers the diagnosis and management of accommodative, heterophoric, and eye-movement disorders. The topics discussed include vision development, accommodation, ocular motility, and accommodative-convergence mechanisms. Also presented is a logical approach to the treatment of certain non-strabismic disorders including lens prescribing and visual training. (54-0-3)

OPTL 4433—Anomalies of Binocular Vision I Lab
Application of concepts and material presented in Anomalies of Binocular Vision I lecture OPT 4433. (0-36-1)

OPT 4524—Optometric Theory and Methods IV
Advanced testing procedures, indications for their application: three-mirror fundus evaluation, ultrasound techniques, four-mirror gonioscopy, automated visual field theory, posterior segment photography, and procedure and diagnostic coding. (36-0-2)

OPTL 4524—Optometric Theory and Methods IV Lab
Practical experience with advanced optometric testing procedures and indications for their application. Procedures stressed include advanced case history, three-mirror fundus lens evaluation, scleral indentation, alternative tonometry techniques (Perkins and tonopen), blood pressure measurement, cycloplegic refraction, trial-frame refraction, A/B-scan ultrasonography, automated visual fields, patient management problems, and anterior and posterior segment photography. (0-54-1.5)

OPT 4633—Ocular Disease II: Posterior Segment
Diseases, disorders of posterior segment. Advanced diagnostic modalities: fluorescein angiography, ultrasonography, therapeutic modalities such as lasers. (54-0-3)

OPT 4722—Health Care Systems, Agencies, and Financing
Reviews the health care system and delivery of care; current public health issues; and the role of local, state, and federal regulatory agencies and their policies. Covers prospective and retrospective financing, single-payer systems, and distribution of health care practitioners. (36-0-2)

OPT 4811—Epidemiology
A study of basic principles of epidemiology with emphasis on the epidemiology of vision disorders. Topics include disease models, rates and indices, descriptive and analytic studies, screening concepts, major eye studies, control of infectious disease, investigation of an outbreak, epidemiology of vision disorders, and the use of epidemiology in clinical decision making. (18-0-1)

OPT 4941—Vision Screening II
Continuation of Vision Screening I. (0-16-1)

OPT 5022—Anomalies of Binocular Vision II
Etiology and visual effects of strabismus and amblyopia. Covers testing, analysis; diagnosis; management of strabismus and amblyopia; and use of lenses, prisms, and vision therapy to ameliorate strabismus and amblyopia. (36-0-2)

OPTL 5022—Anomalies of Binocular Vision II Lab
Application of concepts and material presented in Anomalies of Binocular Vision II lecture OPT 5022. (0-36-1)

OPT 5122—Contact Lenses I
Introduces contact lenses: explores historical, technical, and clinical aspects of lens materials; terminology; care systems; lens design; fitting; and problem solving. (36-0-2)

OPT 5122—Contact Lenses I Lab
Application of concepts and materials presented in Contact Lenses I lecture OPT 5122. (0-36-1)

OPT 5233—Ocular Disease III: Ocular/Systemic Eye Disease
Covers range of systemic diseases, their ocular manifestations. Presents spectrum of treatment modalities, interdisciplinary management of patient care. (5-0-3)

OPT 5322—Clinical Medicine
Clinical overview of pathophysiologic process of various systemic diseases and their diagnosis and management. (36-0-2)

OPT 5322—Physical Diagnosis Laboratory
Laboratory testing, physical diagnosis, neurological screening, and injection techniques. (0-18-0.5)

OPT 5411—Clinical Gerontology
Discusses aging from sociological, psychological, and biophysiological perspectives; reviews diagnosis, management of visual conditions, ocular diseases of older adults, and role of optometrists as members of multidisciplinary health care team providing services to community-based, institutionalized geriatric patients. (18-0-1)

OPT 5522—Practice Management I
Explores career path decisions: economics, practice management, location, financing methods, office design, policies, and billing procedures. Marketing, use of assistants, and patient management from first phone call to placement in inactive file. (36-0-2)

OPT 6122—Contact Lenses II
Advanced lens applications in specialty cornea and contact lens practice. Options for presbyopia, astigmatism, anterior segment disease, myopia, corneal thinning disorders, keratoconus, and corneal surgery. (36-0-2)

OPTL 6122—Contact Lenses II Lab
Application and demonstration of concepts and material presented in Contact Lenses II lecture. (0-36-1)

OPT 6233—Ocular Disease IV: Neuro-Optometry
Clinical diagnosis, treatment, and management of ocular neuropathology. Discuss diagnostic processes, methodology: nuclear magnetic imaging, computerized tomography, and vascular imaging. (54-0-3)
Etiology, demography, and clinical characteristics of low vision needed to understand functional implications of visual impairment. Systematic approach to diagnosis, and management of visual disorders emphasizes improving life quality, functional capacity of the visually impaired by magnification, illumination control, and visual field enhancement. (36-0-2)

Optometry: Low Vision Lab
Application and demonstration of concepts and material presented in Rehabilitative Optometry lecture. (18-0-1)

Environmental Optometry
Covers industrial (occupational) vision and protection in the work place from flying objects, radiation, sparks, etc. Sports vision, protective eyewear for recreational activities, and the environmental effects of lasers and computers in the work place and at home. (18-0-1)

Practice Management II
Employment opportunities; third-party billing; competing for managed care contracts; and selecting a lawyer, accountant, and financial adviser. Analyze balance sheets, negotiate bank loans, and calculate capitalization fees. (36-0-2)

Pediatric Optometry and Learning-Related Vision Problems
An introduction to the theory and methods of examining, diagnosing, and managing children and individuals suffering from learning-related vision problems. (54-0-3)

Pediatric Optometry and Learning-Related Vision Problems Lab
Provides hands-on experience in examination and testing techniques of young children and vision perceptual testing. (0-36-0.5)

Board Review (18-0-1)

Optometry Clinical Education
Primary Care Clinic I
Patient examinations in a primary care setting under supervision of residents, faculty members: refractive conditions, visual system disorders. Grand rounds, journal reviews, case reports, and advanced ophthalmic techniques. Also included in this course is a review and discussion of patient data leading to proper clinical diagnosis and patient management. Emphasizes integration of knowledge gained in didactic courses with clinical examples. (0-36-0.5)

Optical Service Rotation I
In this introductory rotation in the clinic's optical service, the third-year student begins to apply ophthalmic dispensing procedures learned during the second year Ophthalmic Optics lecture and laboratory to the day-to-day workings of the optical service. The purpose of the student's presence in the optical service is to expand and reinforce his or her knowledge of ophthalmic optics and its application and significance in patient care. (0-36-0.5)

Optical Service Rotation II
Continued application of the principles and procedures of ophthalmic dispensing integrated into practice in the optical service. (0-36-0.5)

Optical Service Rotation III
Enhancement and expansion of the principles and procedures learned in Rotations I and II. (0-16-0.5)

Contact Lens Externship
Exposure to various contact lens modalities and associated anterior segment diseases to enhance cognitive and clinical skills. Specialty lens design and therapeutic management of corneal complications. (0-240-4)

Pediatric and Binocular Vision Externship
Exposure to various binocular vision disorders and pediatric anomalies. Students develop treatment plans for functional vision disorders and carry out therapy methodologies to enhance cognitive and clinical skills. (0-240-4)

Vision Rehabilitation and Geriatrics Externship
Low vision rehabilitation and geriatric vision care in traditional and elderly care settings. Vision enhancing devices. (0-160-2.5)

Medical/Surgical Clinical Externship
Diagnosis, management, and treatment of patients in a medical/surgical setting. Pre- and post-operative care, evaluation and comangement of patients with systemic health anomalies and medical conditions such as glaucoma. Observation of medical eye care. (0-480-8)

Clinic Elective Rotation
An opportunity for the student to gain additional clinic experience from a choice of primary care, secondary care, or tertiary care clinic sites. (0-480-8)
College of Allied Health and Nursing
Mission Statement
In the spirit of improving and maintaining optimum health conditions in the community, the College of Allied Health and Nursing prepares professionals with essential skills. These skills are necessary for the diagnosis, treatment, and prevention of diseases; for the support of the populace in maintaining proper health and safety; for the management of rehabilitative processes; and for the education of the community. The College of Allied Health and Nursing endeavors to train both graduate and undergraduate professionals in the arts of improving the quality of life in the community.

Administration
Richard E. Davis, PA-C, Ed.D.
Dean

Jodie Berman, B.A., M.S.
Director of Student Affairs

Sandra Dunbar, D.P.A., OTR/L
Chair, Occupational Therapy Department

Barry A. Freeman, B.S., M.S., Ph.D.
Chair, Audiology Department

Julie Keena, PA-C, M.M.S.
Chair, Physician Assistant Department—Naples Campus

William Marquardt, M.A., PA-C
Chair, Physician Assistant Department—Fort Lauderdale Campus

Diane Whitehead, R.N., M.S.N., Ed.D.
Chair, Nursing Department

Mary Blackinton, PT, Ed.D.
Director, Transition Doctor of Physical Therapy Program

Terrence Case, M.Ed., RVT
Director, Bachelor of Health Science—Vascular Sonography Specialization

Jean Davis, Ed.D., A.R.N.P.
Director, Master of Science in Nursing Program

Sandrine Gaillard-Kenney, M.A.
Director, Master of Health Science Program

Madeleine Hellman, MHM, Ed.D., PT
Director, Physical Therapy Doctor of Philosophy Program

Max Ito, Ph.D., OTR/L
Director, Occupational Therapy Doctoral Programs

Patricia E. Kelly, PA-C, Ed.D.
Director, Doctor of Health Science Program

College of Allied Health and Nursing
The College of Allied Health and Nursing is committed to providing the highest quality education to students in a variety of health care disciplines. The College of Allied Health and Nursing offers the following programs and degree options:

**Audiology**
- Audiology Assistant Program
- Doctor of Audiology

**Health Science**
- Bachelor of Health Science
- Bachelor of Health Science - Vascular Sonography
- Master of Health Science
- Master of Health Science - Anesthesiologist Assistant
- Doctor of Health Science

**Nursing**
- Entry-level Bachelor of Science in Nursing
- Bachelor of Science in Nursing for R.N.s

- Master of Science in Nursing

**Occupational Therapy**
- Master of Occupational Therapy
- Doctor of Occupational Therapy
- Doctor of Philosophy in Occupational Therapy

**Physician Assistant**
- Master of Medical Science
- Master of Medical Science in Physician Assistant (beginning entering class 2006)

**Physical Therapy**
- Entry-level Doctor of Physical Therapy
- Transition Doctor of Physical Therapy
- Doctor of Philosophy in Physical Therapy

**Expenses and Financial Aid**
Students should anticipate spending approximately $3,000 for books and $19,000 per academic year for living expenses. The primary financial responsibility for a student’s education rests with the student and his or her family, but economic circumstances for some families may make it necessary for the student to obtain assistance from other sources. The purpose of the Student Financial Assistance Program at Nova Southeastern University is to help as many qualified students as possible to complete their health professions education. Various loans, scholarships, and grants are available to qualified students to help ease the high cost of a health professions education. These assistance programs are described in a separate university publication: A Guide to Student Financial Assistance.

The demands of these programs limit the number of hours a student can work at an outside job. During the months of clinical rotations, it is difficult or impossible for the students to work.

**Transfer Credits**
Any students wishing to transfer from another university into a College of Allied Health and Nursing program must provide the following:

- official transcripts from all colleges or universities previously attended, sent directly to Nova Southeastern University College of Allied Health and Nursing Office of Admissions
- a letter of recommendation to the department chair or program director of the program in which the applicant is currently enrolled

Transfer credits, if awarded, will be given pending transcript evaluation and for courses that are directly applicable to outlines curriculum courses in the specific allied health department or program in which the student is applying. All transfer credit decisions will be made at the discretion of the department chair or program director.

**Promotion, Suspension, Dismissal, and Readmission**
The policies for promotion, suspension, dismissal, and readmission are outlined in the College of Allied Health and Nursing Student Handbook, which is revised, updated, and distributed annually to all students.
Audiology Department

Program Overview
The Audiology Department offers a Doctor of Audiology (Au.D.) Degree Program. The postbachelor's, on-campus Au.D. degree program is a 119-credit, rigorous academic curriculum, which combines basic science and professional coursework with applied clinical training. Students acquire their clinical competencies from experiences in diverse practice settings. Faculty members and clinical preceptors mentor students and model professional excellence. After receiving a doctoral degree in audiology, graduates are prepared for all aspects of clinical practice as well as for positions of professional leadership.

The doctoral degree in audiology (Au.D.) establishes audiologists in a clearly defined and prominent role within the hearing health care delivery system and strengthens their position as autonomous practitioners. The degree provides the academic foundation and diverse clinical experiences necessary to enter professional practice today and in the future. Audiologists specialize in the evaluation, diagnosis, management, and treatment of children and adults of all ages with auditory and vestibular disorders. At Nova Southeastern University, the Audiology Department benefits from the integrated multidisciplinary health care programs of the university's Health Professions Division. Doctor of audiology students experience a clinically focused professional doctoral program where students complete a rigorous academic curriculum coupled with extensive clinical experiences.

Accreditation
The Audiology Department is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA). Graduates will have completed the academic and clinical requirements necessary to be eligible to apply for a license as an audiologist, pursue board certification in audiology from the American Board of Audiology, and the Certificate of Clinical Competence from the ASHA.

Requirements for Admission
Postbaccalaureate Degree
Prospective doctor of audiology students are selected by an admissions committee based on preprofessional academic performance, written application, letters of recommendation, and a personal interview. Preference will be given to students with a cumulative grade point average (GPA) of 3.2 or higher. The Audiology Department requires that:

- prior to matriculation, applicants must have completed a bachelor's degree from a regionally accredited college or university
- applicants are encouraged to complete the following courses prior to enrollment, which are required prerequisites for doctoral courses in audiology:  
  - hearing science  
  - neuroanatomy  
  - normal language development
- 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.

The university reserves the right to modify any requirements on an individual basis as deemed necessary by the dean of the College of Allied Health and Nursing. The college reserves the right, and the student, by his or her act of matriculation, concedes to the college the right to require his or her withdrawal at any time the college deems it necessary to safeguard its standards of scholarship, conduct, and compliance with regulations or for such other reasons as are deemed appropriate. The dean and the chair of the Audiology Department reserve the right to require the student's withdrawal at any time for the above-mentioned reasons.

United Kingdom Program
The NSU Audiology Department offers programs in the United Kingdom for audiologists with master's degrees, as well as, the new dual degree for individuals with bachelor's degrees. Both programs provide an opportunity to earn the Doctor of Audiology (Au.D.) degree. The dual-degree program is for practitioners with bachelor's degrees and requires students to complete the Master of Health Science degree program online prior to earning the Au.D. degree. Applicants who already have master's degrees may enroll directly in the Au.D. program. The post-master's doctor of audiology (Au.D.) is a clinically focused professional degree. The United Kingdom programs are designed for the working professional. The content is designed to augment and expand the academic and professional experience that the working professional has achieved.

- Applicants for programs in the United Kingdom must have completed a master's degree in audiology or health science from a regionally accredited college or university. Students are selected by a committee on admissions based on previous academic performance, written application, letters of recommendation, and a personal interview.
- 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.
- Further information on the programs in the United Kingdom is available at www.nova.edu/maud.

Transfer Students
Individuals seeking to transfer to the NSU on-campus, entry-level Doctor of Audiology Program must submit an application and follow the application and admissions process. The Department of Audiology will consider the transfer of up to nine graduate credits from another academic institution. Eligibility for course transfer requires a grade of B or better and must be accompanied by an official course description. Credits must be earned within six years prior to program admission.

Computer Requirements
All students are required to have a computer with the following recommended minimum specifications:

- Pentium; 800MHz minimum processor
- 128 MB RAM
• video capable of 1024 x 768 resolution or better
• CD-ROM capability
• full duplex sound card and speakers
• 56.6 baud modem (DSL or cable preferred)
• Internet connection with private Internet service provider (ISP) for access from home to the Internet
• Windows 2000, ME, XP, or NT
• Microsoft Office 2000 with PowerPoint, Word, and Excel minimum
• surge suppressor electrical outlet
• suggested option: zip drive

Application Procedures
Applicants for admission must submit or be responsible for submission of

1. a completed application form along with a $50 nonrefundable application fee
2. three letters of recommendation from instructors, supervisors, and/or coworkers
3. official transcripts sent directly from all previously attended undergraduate, professional, and graduate institutions to the following address in its entirety:
   Nova Southeastern University
   Enrollment Processing Services (EPS)
   College of Allied Health and Nursing Audiology Department Admissions
   3301 College Avenue
   P.O. Box 299000
   Fort Lauderdale-Davie, Florida 33328-2018
   Phone: (954) 262-1114
   800-356-0026, ext. 1114
   Fax: (954) 262-1181
   www.nova.edu/aud

   Tuition and Fees
   Payment of tuition and fees is expected at the time of registration. Students receiving financial aid are responsible for making sure that they have completed all applications for financial aid and that it has been granted.
   • The annual tuition for 2007-2008 postbachelor's on-campus doctor of audiology program is $17,500 (subject to change by the board of trustees without notice).
   Tuition for the United Kingdom Au.D. program is $450 per credit hour.
   • A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.
   • Upon acceptance, students planning to enroll are required to complete an "Intent to Enroll" form with a nonrefundable deposit of $500. This advance payment will be deducted from the tuition payment due at registration.
   The financial ability of applicants to complete their training is important because of the limited number of positions available. Applicants should have specific plans for financing four years of professional education. This should include provision for tuition, living expenses, books, and related expenses.

Requirements for Graduation
In order to be eligible for the postbachelor's on-campus doctor of audiology degree, each student must

1. satisfactorily complete the 119-credit hour program of study and related clinical placements required for the degree
2. meet all financial and library obligations
3. ensure that all incomplete grades have been removed and passing grades are on file in the registrar's office
4. attend in person the rehearsal and commencement program at which the degree is conferred

The United Kingdom post-master's degree program is 39 credit hours.

Students must successfully complete these credit hour requirements and meet all financial and library obligations.

Course of Study: Postbachelor's Program
The doctor of audiology degree is awarded after successful completion of four years of professional study. Beginning in the first semester, students are given clinical assignments and experiences. There will be increased clinical involvement throughout the program as students prepare for direct patient care at our clinics and at locations throughout the community.

The fourth year is designed to be a full-time externship work experience that prepares the graduate to enter the profession at graduation. Successful completion of the Doctor of Audiology Program coupled with a passing score on the Praxis Series Examination for Audiology will enable graduates to be licensed and be eligible for professional certification. Additional information can be obtained on our Web site at www.nova.edu/aud.
Curriculum Outline: Postbachelor's Program

Typical Plan of Study

YEAR 1—Semester 1: Fall
AUD 6302 Acoustics and Instrumentation 2
AUD 6304 Anatomy and Physiology Audiology of the Auditory and Vestibular Mechanisms 3
AUD 6401 Diagnostics I: Audiological Diagnosis Across the Life Span 4
AUD 6601 Multisite Observation 1

YEAR 1—Semester 2: Winter
AUD 6070 Research Methods I: Introduction 3
AUD 6402 Diagnostics II: Site of Lesion 3
AUD 6405 Overview of Amplification I 3
AUD 6405L Amplification I Lab 1
AUD 6602 Clinic I 3

YEAR 1—Semester 3: Spring
AUD 6303 Psychoacoustics and Speech Perception 3
AUD 6403 Introduction to Electrophysiology 3
AUD 6403L Introduction to Electrophysiology Lab 1
AUD 6404 Auditory and Vestibular Pathologies 3
AUD 6603 Clinic II 3

YEAR 2—Semester 1: Fall
AUD 6406 Overview of Amplification II 3
AUD 6406L Amplification II Lab 1
AUD 6604 Clinic III 3
AUD 7030 Geriatric Audiology 2
AUD 7160 Electrophysiology: Vestibular 3

YEAR 2—Semester 2: Winter
AUD 6605 Clinic IV 3
AUD 7100 Advanced Seminar in Amplification 3
AUD 7130 Pediatric Audiology 3

YEAR 2—Semester 3: Spring
AUD 6606 Clinic V 3
AUD 7080 Business Management and Leadership 3
AUD 7120 Electrophysiology: Auditory 4
AUD 7180 Diagnostics III: Integration of Audiologic Test Results 3

YEAR 3—Semester 1: Fall
AUD 6607 Internship I 3
AUD 7050 Research Methods II: Applications 3
AUD 7075 Counseling in Audiology 3

YEAR 3—Semester 2: Winter
AUD 6310 Auditory Intervention 3
AUD 6310L Auditory Intervention Lab 1
AUD 6608 Internship II 3
AUD 7060 Genetics of Hearing Impairment 2
AUD 7070 Pharmacology for Audiologists 2

YEAR 3—Semester 3: Spring
AUD 6502 Hearing Conservation 3
AUD 6503 Topics in Audiology 3
AUD 6503L Topics in Audiology Lab 1
AUD 6609 Internship III 3

YEAR 4—Semester 1: Fall
AUD 6075 Seminar in Ethics and Professionalism 1
AUD 6610 Externship I 6

YEAR 4—Semester 2: Winter
AUD 6611 Externship II 6

YEAR 4—Semester 3: Spring
AUD 6612 Externship III 6

Postbachelor's Program Total Credit Hours: 119
Curriculum Outline: UK Program

Typical plan of study for UK degree program

**AUD 7050**—Research Methods II: Applications
**AUD 7070**—Pharmacology for Audiologists
**AUD 7060**—Genetics for Audiologists
**AUD 7075**—Counseling in Audiology
**AUD 7030**—Geriatric Audiology
**AUD 7100**—Advanced Seminar in Amplification
**AUD 7130**—Pediatric Audiology
**AUD 7120**—Electrophysiology: Auditory
**AUD 7160**—Electrophysiology: Vestibular
**AUD 7180**—Diagnostics III: Integration of Audiologic Test Results
**AUD 7080**—Business Management and Leadership

Audiology Course Descriptions

**AUD 5003**—Neuroanatomy of the Central and Peripheral Nervous System
This course will provide an introduction to the gross structure of the brain and spinal cord. Functional relationship of their parts with emphasis on the auditory and vestibular peripheral and central nervous systems will be discussed. (3 credits)

**AUD 5300**—Introduction to Audiology
Students will be able to interpret audiometric, tympanometric, and screening results. Students will review acoustics, learn anatomy and physiology, and will recognize the symptoms and typical test results of the major pathologies of the auditory and vestibular systems. (3 credits)

**AUD 6010**—Research Methods I: Introduction
This course will provide students the opportunity to learn about and discuss the critical importance of outcomes measurement and clinical research in audiology. Students locate information and evaluate the rigor of the source and document and synthesize the professional literature on a topic of their choosing. (3 credits)

**AUD 6075**—Seminar in Ethics and Professionalism
The students in this seminar will discuss emerging professional issues related to the profession of audiology. (1 credit)

**AUD 6302**—Acoustics and Instrumentation
Students will study properties of sound and conduct sound analyses. They will also learn about and conduct audiometric calibration procedures. (2 credits)

**AUD 6303**—Psychoacoustics and Speech Perception
Students will study normal human auditory sensation and perception. Changes in auditory sensation and perception that occur as a function of sensorineural hearing loss, and their implications for hearing aid processing, audiologic evaluation, and treatment will be discussed. (3 credits)

**AUD 6304**—Anatomy and Physiology of the Auditory and Vestibular Mechanisms
This course will provide detailed study of the anatomy and physiology of the outer ear, middle ear, inner ear, and central auditory pathways. The vestibular peripheral system and the vestibular CNS pathways are described. (3 credits)

**AUD 6310**—Auditory Intervention
This course focuses on intervention and remediation strategies for people with auditory communication handicaps. (3 credits)

**AUD 6310L**—Auditory Intervention Lab
This lab supplements AUD 6310, providing students with practical assignments. (1 credit)

**AUD 6401**—Diagnostics I: Audiologic Diagnosis Across the Life Span
Students will study components of the basic audiologic examination, including, but not limited to, case history, otoscopy, pure tone threshold evaluation, speech threshold evaluation, speech recognition evaluation, signal detection testing, and test battery interpretation. Students will demonstrate performance of these procedures. Audiologic screening and procedural modifications for special populations including pediatrics will also be discussed. Hypothetical cases will be presented. (4 credits)

**AUD 6402**—Diagnostics II: Site of Lesion
Students will learn to conduct and interpret basic immittance, multifrequency/multicomponent immittance, otoacoustic emissions testing, and behavioral auditory processing measures to determine auditory site of lesion. (3 credits)

**AUD 6403**—Introduction to Electrophysiology
Basic procedures for acquiring and interpreting auditory electrophysiologic tests are discussed. The student will have knowledge of the use of auditory brain stem evoked response testing for threshold and neurologic diagnosis. Students are familiarized with procedures and interpretation for basic vestibular
AVO This lab supplements AUD 6403, providing students with practical assignments. (3 credits)

AUD 6404—Auditory and Vestibular Pathologies
Students will study pathologies affecting the conductive, sensory, neural, and balance mechanisms. Methods for their differential diagnosis will be discussed. Case studies will be reviewed. (3 credits)

AUD 6405—Overview of Amplification I
This course is designed to provide an introduction to amplification. The content of this course includes historical perspectives on amplification; functions and features of amplification systems and their components; and methods of fitting, verification, and analyses of these systems. The course also includes basic concepts in counseling. (3 credits)

AUD 6405L—Amplification I Lab
This lab supplements AUD 6405, providing students with practical assignments. (1 credit)

AUD 6406—Overview of Amplification II
In this course, the student begins to integrate theoretical and practical concepts of fitting and verification. Components and features available on contemporary hearing instruments are presented. (3 credits)

AUD 6406L—Amplification II Lab
This lab supplements AUD 6406, providing students with practical assignments. (1 credit)

AUD 6502—Hearing Conservation
Students will study the impact of noise from a physiological perspective. Students will study, conduct, and interpret noise surveys. Various service delivery models from industry, schools, military, and other sites will be discussed. The basic elements of an effective hearing conservation program will be discussed. The relevant legislation mandating such programs will be presented. (3 credits)

AUD 6503—Topics in Audiology
Current topics in assessment, management, and treatment of hearing and balance are examined. (3 credits)

AUD 6503L—Topics in Audiology Lab
This lab supplements AUD 6503, providing students with practical assignments. (1 credit)

AUD 6601—Multisite Observation
This course is designed to provide an introduction to clinical practice. Students observe patient evaluation, management, and treatment. (1 credit)

AUD 6602—Clinic I
Participation in supervised, basic audiological evaluations of patients and other clinical activities as assigned. Weekly meetings with supervisors and/or report writing are required. (3 credits)

AUD 6603—Clinic II
Participation in supervised auditory and vestibular evaluation, management, and treatment. Weekly meetings with supervisors and/or report writing are required. (3 credits)

AUD 6604—Clinic III
Participation in supervised auditory and vestibular evaluation, management, and treatment. Weekly meetings with supervisors and/or report writing are required. (3 credits)

AUD 6605—Clinic IV
Participation in supervised auditory and vestibular evaluation, management, and treatment. Weekly meetings with supervisors and/or report writing are required. (3 credits)

AUD 6606—Clinic V
Participation in supervised auditory and vestibular evaluation, management, and treatment. Weekly meetings with supervisors and/or report writing are required. (3 credits)

AUD 6607—Internship I
Off-campus placement in hospital, agency, or private practice setting(s). Students must meet the schedule required by the facility to which he or she is assigned. Supervisory meetings are scheduled periodically. (3 credits)

AUD 6608—Internship II
Off-campus placement in hospital, agency, or private practice setting(s). Students must meet the schedule required by the facility to which he or she is assigned. Supervisory meetings are scheduled periodically. (3 credits)

AUD 6609—Internship III
Off-campus placement in hospital, agency, or private practice setting(s). Students must meet the schedule required by the facility to which he or she is assigned. Supervisory meetings are scheduled periodically. (3 credits)

AUD 6610—Externship I
Full-time placement in an audiology externship position. (6 credits)

AUD 6611—Externship II
Full-time placement in an audiology externship position. (6 credits)

AUD 6612—Externship III
Full-time placement in an audiology externship position. (6 credits)

AUD 7030—Geriatric Audiology
Students will be provided with an overview of gerontology with emphasis given to differentiation between the normal aging process and pathological changes related to auditory and vestibular disorders. (2 credits)

AUD 7050—Research Methods II: Applications
Students will study research design, data collection, analysis, and evaluation. The ability to comprehend, analyze, and critically evaluate professional literature will be emphasized. Students will design clinically based research to test a clinical hypothesis or document treatment effectiveness. (3 credits)

AUD 7060—Genetics of Hearing Impairment
The purpose of this course is to review the present knowledge of genetics of hearing impairment and to discuss the potential for gene-based approaches to treatment. (2 credits)

AUD 7070—Pharmacology for Audiologists
In this course students are presented with the classes of drugs used in clinical practice with emphasis on activity, mode of action, side effects, toxicity, and drug interactions as they relate to auditory and vestibular function. (2 credits)
AUD 7075—
Counseling in Audiology
This course is designed to explore theories of counseling related to the management of persons with auditory and vestibular disorders. Different approaches for interacting with patients and their families individually and in groups will be addressed. (3 credits)

AUD 7080—
Business Management and Leadership
In this course, students examine basic principles involved in the development and management of audiology practice within the framework of different models of health care delivery. (3 credits)

AUD 7100—
Advanced Seminar in Amplification
This course is designed to provide advanced information on the theoretical and practical concepts of fitting, verification, and analyses of amplification systems. Counseling techniques are discussed. (3 credits)

AUD 7120—
Electrophysiology: Auditory
Students will study the anatomy and physiology of the peripheral and central vestibular mechanisms and the integration of the human equilibrium system. Disorders of vestibular function will be studied. Vestibular evaluation procedures will be presented. Vestibular rehabilitation and balance therapy programming and therapy techniques will be discussed and evaluated. (3 credits)

AUD 7160—
Electrophysiology: Vestibular
Students will study the anatomy and physiology of the peripheral and central vestibular mechanisms and the integration of the human equilibrium system. Disorders of vestibular function will be studied. Vestibular evaluation procedures will be presented. Vestibular rehabilitation and balance therapy programming and therapy techniques will be discussed. (3 credits)

AUD 7180—
Diagnostics III: Integration of Audiologic Test Results
Students will study advanced auditory evaluation with an emphasis on integration of audiologic test results leading to management and treatment strategies. (3 credits)

AUD 7130—
Pediatric Audiology
This course is designed to provide a review of normal and abnormal auditory development in children. Audiologic assessment, management, and treatment of neonates, infants, and young children will be discussed. Evaluation procedures for the difficult-to-test patient will be explored. (3 credits)

AUD 7140—
Electrophysiology: Vestibular
Students will study the anatomy and physiology of the peripheral and central vestibular mechanisms and the integration of the human equilibrium system. Disorders of vestibular function will be studied. Vestibular evaluation procedures will be presented. Vestibular rehabilitation and balance therapy programming and therapy techniques will be discussed and evaluated. (3 credits)

Occupational Therapy Department

Occupational therapists provide services to enhance the function and life satisfaction of people whose daily life performance has been interrupted or jeopardized by disease, injury, disability, life stress, or other factors. Therapy consists of clients' planned involvement in occupation—purposeful activities—that positively influences their life adaptation. This involvement in occupation may be facilitated by supportive training, specialized equipment, environmental modification, and/or problem solving to accomplish life tasks. The therapeutic process is founded upon the belief that individuals are the principal agents of their own adaptation, and through active involvement in occupation can have a significant impact on their health status, recovery from illness, and adjustment to disability.

The occupational therapist must be an expert in the knowledge of occupation, its role in health and adaptation, and its use in therapy. Occupational therapy practice requires the therapist to exercise increasingly complex, autonomous decision-making and problem-solving skills in multifactorial situations. The therapist must, therefore, be a critical thinker, capable of evaluating and synthesizing information from a variety of sources about a wide range of phenomena. Finally, the therapist should be a reflective practitioner able to evaluate his or her own clinical reasoning.

The NSU Occupational Therapy Department offers three degrees: a master of occupational therapy (M.O.T.), a doctor of occupational therapy (Dr.OT), and a doctor of philosophy (Ph.D.). The M.O.T. is designed so that a student may enter after completing an undergraduate or graduate degree or after completing 90 semester hours of undergraduate work from a regionally accredited college or university (with a minimum of 30 semester hours of upper division.) The M.O.T. program is a campus-based entry-level program.

The Occupational Therapy Department at NSU offers two avenues for doctoral study: the practice doctorate (Dr.OT) and the research doctorate (Ph.D.). These programs are offered using a distance-learning format. Individuals who have graduated from another school with a bachelor's or master's degree in occupational therapy are encouraged to apply for either of these doctoral programs. Those who are admitted but are not yet certified occupational therapists will first complete the on-campus entry-level M.O.T. program. Students who have completed the NSU M.O.T. program with a minimum GPA of 90 percent are eligible to apply for direct admission to the Dr.OT program.

Accreditation
The Occupational Therapy Department is fully accredited by the Accreditation Council for Occupational Therapy Education (ACOTE), 4720 Montgomery Lane, Bethesda, Maryland 20814, (301) 652-2682.

Master of Occupational Therapy Admission Requirements
The Master of Occupational Therapy Program selects students based on grade point average (GPA), Graduate...
Record Examination (GRE) scores, interviews, personal statements, and letters of evaluation. The program is designed so that a student may enter after completing an undergraduate or graduate degree or after completing 90 credits of undergraduate work (including 30 semester hours of upper division). Interested applicants should have a demonstrated ability to easily develop positive relationships with people in a caring, helping, or therapeutic role.

1. Prior to matriculation, applicants with an undergraduate or graduate degree in another field from a regionally accredited college or university must complete the following prerequisites with a grade of 2.0 or better in each course:
   - psychology—six semester hours, three upper division
   - anatomy and physiology, including laboratory—four semester hours
   - human growth and development or developmental psychology (must cover infancy through aging)—three semester hours
   - statistics—three semester hours
   - humanities (art, music appreciation, literature, foreign language, history, philosophy, religion, linguistics, critical theory, classics)—nine semester hours
   - English composition—six semester hours
   - social science (anthropology, sociology, geography, political science, government, economics, culture studies, gerontology, communications, recreation and leisure studies)—three semester hours
   - must demonstrate basic computer and word processing competency

Recommended Courses for All Applicants
- ethics—three semester hours
- public speaking—three semester hours
- physics—four semester hours including laboratory
- theories of personality—three semester hours
- socioloc!/anthropology—three semester hours
- logic—three semester hours
- physiology—three semester hours
- kinesiology—three semester hours

2. Prior to matriculation, applicants who possess a minimum of 90 semester hours of baccalaureate study from a regionally accredited college or university with a minimum of 30 semester hours of upper division work, but who do not hold a baccalaureate degree, must complete the following prerequisites with a grade of 2.0 or better in each course:
   - psychology—six semester hours, three upper division
   - anatomy/physiology, including laboratory—four semester hours
   - human growth and development or developmental psychology (must cover infancy through aging)—three semester hours
   - statistics—three semester hours
   - humanities (art, music appreciation, literature, foreign language, history, philosophy, religion, linguistics, critical theory, classics)—nine semester hours
   - English composition—six semester hours
   - social science (anthropology, sociology, geography, political science, government, economics, culture studies, gerontology, communications, recreation and leisure studies)—three semester hours
   - must demonstrate basic computer and word processing competency

3. Applicants are required to submit official scores from all three areas of the Graduate Record Examination (GRE). These test scores must be less than five years old.

4. A minimum GRE combined verbal and quantitative score of 800, and 3.5 on analytical writing are strongly recommended.

5. Foreign students must take the Test of English as a Foreign Language (TOEFL) scores if a foreign student.

All these materials must be sent directly to:
Nova Southeastern University
Admissions Office—M.O.T.
3301 College Avenue
P.O. Box 29900
Fort Lauderdale-Davie, Florida 33339-9905

All foreign coursework must be evaluated by World Education Services, Inc. (www.wes.org), Josef Silny & Associates (www.jsilny.com), or Educational Credential Evaluators (www.ece.org).

Upon receipt of the completed application and required transcripts, the committee on admissions will select applicants to be interviewed. Those selected will be notified in writing of the time and place. No applicant will be admitted to the Occupational Therapy Department without an interview, but an invitation to appear for an interview should not be construed by the applicant as evidence of final acceptance. Notice of acceptance or other action by the committee on admissions will be on a “rolling” or periodic schedule. Early completion of the application is, therefore, in the best interest of the student.

Undergraduate/Occupational Therapy Department Dual Admissions Program
Nova Southeastern University Health Professions Division has established a dual-admissions program with
the Nova Southeastern University Farquhar College of Arts and Sciences for a select number of highly motivated, qualified students interested in pursuing both undergraduate and professional studies in occupational therapy. This allows candidates to receive their master's degree in occupational therapy in five and a half years.

Candidates must maintain a specified grade point average. Students will spend three years in the undergraduate school and will be awarded a bachelor's degree from the Farquhar College upon completion of the first year of education at Nova Southeastern University's College of Allied Health and Nursing. Students will receive the master of occupational therapy degree after completion of the Master of Occupational Therapy Program.

For information and requirements, contact the Office of Admissions, Farquhar College of Arts and Sciences, Nova Southeastern University, 3301 College Avenue, Fort Lauderdale-Davie, Florida 33314-7796.

Tuition and Fees
1. Anticipated tuition for 2007-2008 (subject to change by the board of trustees without notice) is $17,735 for Florida students and $19,880 for out-of-state residents. Eligible students must request in-state tuition on application. For tuition purposes, a student's Florida residency status (in-state or out-of-state) will be determined at initial matriculation and will remain the same throughout the entire enrollment of the student at NSU. Accordingly, tuition will not be adjusted as a result of any change in residency status after initial enrollment registration.

2. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

3. Acceptance fee is $100. This fee is required to reserve the accepted applicant's place in the entering first year class. This advance payment will be deducted from the tuition paid on registration day, but is not refundable in the event of a withdrawal. It is payable within two weeks of an applicant's acceptance.

4. Deposit is $400, due February 15, under the same terms as the acceptance fee.

5. Preregistration fee is $500, due April 15, under the same terms as the acceptance fee.

The summer and fall semesters' tuition fees, less the $1,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met.

The financial ability of applicants to complete their training at the university is important because of the limited number of positions available in each class. Applicants should have specific plans for financing two and a half years of professional education. This should include tuition, living expenses, books, equipment, internship, travel, and miscellaneous expenses.

It is required that each student carry adequate personal medical and hospital insurance. Students may avail themselves of the hospitalization insurance plan obtainable through the university.

Computer Requirements
All students are required to have a computer with the following recommended minimum specifications:
- Pentium; 800MHz
- 128 MB RAM
- video capable of 1024 x 768 resolution or better
- CD-ROM capability
- full duplex sound card and speakers
- 56.6 baud modem (DSL or cable modem preferred)
- Internet connection with private Internet service provider (ISP) for access from home to the Internet
- Windows 98, 2000, ME, XP, or NT
- Microsoft Office 2000 with PowerPoint, Word, and Excel minimum
- surge suppressor electrical outlet
- suggested option: zip drive or CD/DVD, USB
- suggested option: laptop computer with wireless Internet capability

Requirements for Graduation
In order to be eligible for the M.O.T. degree, students shall
- be of good moral character
- have satisfactorily completed the program of study required for the degree (112 semester hours) with a minimum grade of 70 percent in each course
- have satisfactorily met all financial and library obligations
- successfully complete the clinical internships within 24 months of completion of didactic courses
- attend in person the rehearsal and commencement program in the year that the diploma will be conferred

A felony conviction may affect a graduate's ability to sit for the National Board for Certification in Occupational Therapy, Inc. (NBCOT) certification examination or attain state licensure.

Master of Occupational Therapy Course of Study
The academic discipline of occupational therapy draws upon and integrates a wide range of interdisciplinary topics. Theories that illuminate the understanding of occupation in human life, the role of occupation in health and adaptation, and the art and science of using activities as therapeutic agents create the foundation for the discipline.

As part of the regular curriculum, occupational therapy students are placed in school settings during OCT 5243—Occupational Therapy with Children and Adolescents. To be eligible for this placement, all students must be fingerprinted and subject to a background check in accordance with regulations of the Child Care, Licensing and Enforcement Section, Bureau of Children's Services, Broward County, Florida. Additionally, some other placement facilities may also require criminal background checks.

Students may, under supervision, provide occupational therapy services to patients seen in the university clinics as part of the regular course of study.
## Curriculum Outline for Master of Occupational Therapy Program

### FIRST YEAR

#### Summer Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Lecture</th>
<th>Laboratory</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCT 5101</td>
<td>Historical and Theoretical Foundations of Occupational Therapy Practice</td>
<td>32</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>OCT 5110</td>
<td>Medical Terminology</td>
<td>16</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>OCT 5420</td>
<td>Anatomy</td>
<td>55</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>103</strong></td>
<td><strong>35</strong></td>
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#### Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Lecture</th>
<th>Laboratory</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCT 5011</td>
<td>Human Occupations Across the Life Span</td>
<td>48</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td>OCT 5013</td>
<td>Creative Occupations</td>
<td>16</td>
<td>32</td>
<td>2</td>
</tr>
<tr>
<td>OCT 5121</td>
<td>Human Disorders Across the Life Span I</td>
<td>64</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>OCT 5822</td>
<td>Occupational Evaluation I</td>
<td>64</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>192</strong></td>
<td><strong>96</strong></td>
<td><strong>15</strong></td>
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</table>

#### Winter Semester

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Laboratory</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>ANA 5533</td>
<td>Neuroanatomy</td>
<td>36</td>
<td>18</td>
<td>3</td>
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<tr>
<td>OCT 5015</td>
<td>Applied Occupations</td>
<td>16</td>
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<tr>
<td>OCT 5123</td>
<td>Human Disorders Across the Life Span II</td>
<td>64</td>
<td>0</td>
<td>4</td>
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<tr>
<td>OCT 5395</td>
<td>Psychiatry</td>
<td>32</td>
<td>0</td>
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<td>OCT 5824</td>
<td>Occupational Evaluation II</td>
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<tr>
<td><strong>Total Hours</strong></td>
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<td><strong>196</strong></td>
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### SECOND YEAR

#### Summer/Fall Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Lecture</th>
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<th>Fieldwork</th>
<th>Semester Hours</th>
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<tr>
<td>OCT 5132</td>
<td>Current Issues in Occupational Therapy I</td>
<td>48</td>
<td>0</td>
<td>0</td>
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<tr>
<td>OCT 5174</td>
<td>Research Methods for Occupational Therapy I</td>
<td>48</td>
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<td>0</td>
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<tr>
<td>OCT 5343</td>
<td>Occupational Therapy Mental Health Practice</td>
<td>80</td>
<td>32</td>
<td>120</td>
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</tr>
<tr>
<td>OCT 5243</td>
<td>Occupational Therapy with Children and Adolescents</td>
<td>80</td>
<td>32</td>
<td>120</td>
<td>9</td>
</tr>
<tr>
<td>OCT 5963</td>
<td>Fieldwork Issues I</td>
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<tr>
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<td><strong>272</strong></td>
<td><strong>64</strong></td>
<td><strong>240</strong></td>
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#### Winter Semester

<table>
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<th>Laboratory</th>
<th>Fieldwork</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCT 5133</td>
<td>Current Issues in Occupational Therapy II</td>
<td>48</td>
<td>0</td>
<td>0</td>
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<tr>
<td>OCT 5175</td>
<td>Research Methods for Occupational Therapy II</td>
<td>48</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>OCT 5343</td>
<td>Occupational Therapy Physical Dysfunction/Work Practice</td>
<td>80</td>
<td>32</td>
<td>80</td>
<td>8</td>
</tr>
<tr>
<td>OCT 5964</td>
<td>Fieldwork Issues II</td>
<td>16</td>
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### THIRD YEAR

#### Summer/Fall Semester

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<tr>
<th>Course Code</th>
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<th>Fieldwork</th>
<th>Semester Hours</th>
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<td>OCT 5981</td>
<td>Fieldwork Experience II (40 hours/week for 12 weeks)</td>
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<td>0</td>
<td>480</td>
<td>12</td>
</tr>
<tr>
<td>OCT 5982</td>
<td>Fieldwork Experience II (40 hours/week for 12 weeks)</td>
<td>0</td>
<td>0</td>
<td>480</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>960</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td><strong>Total Semester Hours</strong></td>
<td></td>
<td><strong>1,035</strong></td>
<td><strong>341</strong></td>
<td><strong>1,360</strong></td>
<td><strong>110</strong></td>
</tr>
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176 College of Allied Health and Nursing—Occupational Therapy Department

177 College of Allied Health and Nursing—Occupational Therapy Department
Doctoral Programs in Occupational Therapy

The Occupational Therapy Department at NSU offers two avenues for doctoral study: the practice doctorate, the doctor of occupational therapy (Dr. OT), and the research doctorate, the doctor of philosophy (Ph.D.).

Both of these doctoral programs are taught primarily by distance education. Applicants with a bachelor's or master's degree may be accepted for the Dr. OT program. Any admitted student who is not a certified occupational therapist must first complete the professional entry program, the master of occupational therapy (M.O.T.). Graduates of Nova Southeastern University's M.O.T. Program with a GPA above 90 percent are assured of consideration for admission to the Dr. OT program.

Doctor of Occupational Therapy (Dr. OT)

The doctor of occupational therapy degree (Dr. OT) is conferred when students demonstrate an advanced breadth and depth of knowledge in practice issues and techniques. This program joins practice concerns with applications and knowledge required for independent or entrepreneurial occupational therapy practice, community centered program development, management, and creative leadership. The 72-credit program is offered by distance format.

A maximum of 30 credits may be transferred. Courses accepted must be:
- graduate level from an accredited university
- less than 12 years old
- with a grade of B or better

Admission Requirements

1. Applicants must have either a bachelor's or a master's degree in occupational therapy from a regionally accredited university or college and be eligible for a Florida occupational therapy license.
2. Applicants without occupational therapy certification must first complete the M.O.T. program on campus.
3. Admission requirements include a GPA of 3.0 on a 4.0 scale, and preference will be given to applicants with combined verbal and quantitative GRE scores of 900 and an analytical writing score of 4.5 or better.
4. Foreign applicants must also take the Test of English as a Foreign Language (TOEFL) and obtain a score of 550 or higher.
5. All applicants must have taken OCT 5174 and 5175 or equivalent as prerequisites.

The dean is empowered to evaluate the total qualifications of every student and to modify requirements in unusual circumstances.

All applicants must be certified occupational therapists.

The following courses are required to complete the program:
- OCT 6005—Evidence-Based Practice and Critical Thinking in OT (3 semester hours)
- OCT 6006—Research: Process of Discovery (3 semester hours)
- OCT 6007—Evidence and Outcomes (3 semester hours)
- OCT 6010—Theory Development for Models of Practice (3 semester hours)
- OCT 6103—Occupation-Centered Practice (3 semester hours)
- OCT 6132—Advanced Legal and Ethical Issues in Practice for Health Professionals (3 semester hours)
- OCT 6152—Advanced Policy Issues (3 semester hours)
- OCT 6680—Creative Leadership (3 semester hours)
- electives—selected with doctoral program director approval to complement student's practice focus

A certified occupational therapy applicant with a master's degree in occupational therapy or a related discipline may transfer up to 30 credit hours. Courses to be considered for transfer must have grades of B or better, be from an accredited institution, and be less than 12 years old.

Requirements for Graduation (Dr. OT)

In order to be eligible for the Dr. OT degree, students shall
- be ethical and professional
- complete a minimum of 72 credits of graduate coursework (at least 42 credits of which are from NSU and meet NSU doctoral program requirements) within six years
- have satisfactorily completed the program of study with a minimum overall GPA of 80 percent, and a minimum grade of 80 percent in all required coursework
- have satisfactorily met all financial and library obligations
- have successfully completed the capstone course (OCT 6007), including a capstone paper and research residency

Doctor of Philosophy (Ph.D.)

The doctor of philosophy (Ph.D.) in Occupational Therapy is conferred in recognition of a demonstrated ability to master a specific field of knowledge and to conduct significant independent research. A minimum of 90 semester credits of graduate work beyond the baccalaureate is required including a research residency and a dissertation. A maximum of 30 credits may be transferred from another related graduate program. These courses must be:
- 1) less than 12 years old;
- 2) graduate level from an accredited university;
- 3) a grade of B or better.

A majority of the coursework can be completed by distance format except for two, four-week summer research institutes and three, four-day weekends a year at the beginning/end of each semester.

Admission requirements include a GPA of 3.5 on a 4.0 scale and a combined verbal and quantitative GRE score of 900. Preference will be given to those with GRE analytical writing scores of 4.5 or better. All applicants must have taken a graduate-level research methods course.

Course of Study

The following courses are required:
- OCT 6005—Evidence-Based Practice and Critical Thinking in OT (3 semester hours)

College of Allied Health and Nursing—Occupational Therapy Department
A certified occupational therapy applicant with a master's degree in occupational therapy or a related discipline may transfer up to 30 credit hours. Courses to be considered for transfer must have grades of B or better, be from an accredited institution, and be less than 12 years old.

4. Graduates of the NSU Occupational Therapy Dr. OT Program may be admitted to the Ph.D. program on a space-available, competitive basis. Admissions requirements must be met. These students must complete

- OCT 6170—Research Methods I (3 semester hours)

Requirements for Graduation (Ph.D.)

- successfully defend the dissertation, in person or by face-to-face technology, within five years of passing the qualifying examination
- submit documented evidence that dissertation research will be, or has been, presented or published in a peer-reviewed venue at the national or international level
- present dissertation research and findings at pregraduation symposium
- provide four copies of dissertation, bound in accordance with program requirements
- submit dissertation to the University of Michigan's Dissertation Abstracts International
- satisfactorily meet all financial and library obligations

Application Procedure

Candidates for admission must submit or be responsible for submission of

1. a completed application form along with a $50 nonrefundable application fee
2. three letters from those who can evaluate the applicant's capability for doctoral study
3. a letter of application stating goals and reasons for wanting to pursue doctoral work
4. official GRE scores from all three areas less than five years old; international students must also submit TOEFL scores, if appropriate
5. official college transcripts from all undergraduate and graduate institutions attended, sent directly to Nova Southeastern University Enrollment Processing Services (EPS) College of Allied Health and Nursing Occupational Therapy Department Office of Admissions 3301 College Avenue P.O. Box 299000 Fort Lauderdale-Davie, Florida 33329-9005

All foreign coursework must be evaluated by World Education Services, Inc. (www.wes.org), Josef Silny & Associates (www.jsilny.com), or Educational Credential Evaluators (www.ece.org).

6. confirmation of initial certification by the National Board for Certification in Occupational Therapy. Foreign students who intend to do their dissertation research abroad may petition to be released from this requirement. Upon receipt of the completed application and required credentials, the committee on admissions will notify, in writing, applicants who are selected for interview. No applicant will be admitted to the Occupational Therapy Department without an interview, but an invitation for an interview should not be construed by the applicant as evidence of acceptance. Notice of acceptance or other action by the committee on admissions will be on a “rolling” or periodic schedule. Early completion of the application is therefore in the best interest of the student.

Doctoral Tuition and Fees

1. Anticipated tuition for 2007-2008 (subject to change by the board of trustees without notice) is $5,575 each semester for full-time students (7 to 12 credit hours) and $3,000 each semester for part-time students (6 credit hours or less). Annual full-time students pay $16,500.

2. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

3. Acceptance fee is $100. This fee is required to reserve the accepted applicant's place in the entering class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of a
withdrawal. It is payable within two weeks of an applicant's acceptance.

4. Deposit is $400, due 60 days prior to registration, under the same terms as the acceptance fee.

5. Preregistration fee is $500, due thirty days prior to registration, under the same terms as the acceptance fee.

6. A fee of $50 will be charged for late registration. Registration occurs several weeks before classes begin.

The first term's tuition and fees, less the $1,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met.

The financial ability of applicants to complete their training at the college is important because of the limited number of positions available in each class. Applicants should have specific plans for financing their professional education. This should include provision for tuition, living expenses, books and equipment, computer, travel, and miscellaneous expenses.

It is required that each student carry adequate personal medical and hospital insurance. Students may avail themselves of the hospitalization insurance plan obtainable through the university.

**NSU's International Institute for Leadership in Occupational Therapy**

The mission of the International Institute for Leadership in Occupational Therapy (IILOT) is to link occupational therapists worldwide and to bring together international occupational therapists for intellectual exchange and scholarship. The institute uses a variety of means to prepare advanced occupational therapy clinicians to take leadership roles in public policy, program development, service provision, and research from the local to the global arena.

**Computer Requirements**

All students are required to have a computer with the following recommended minimum specifications:

- Pentium; 800MHz minimum processor
- 128 MB RAM
- video capable of 1024 x 768 resolution or better
- CD-ROM capability
- full duplex sound card and speakers
- 56.6 baud modem (DSL or cable modem preferred)
- Internet connection with private Internet service provider (ISP) for access from home to the Internet
- Windows 98, 2000, ME, XP, or NT
- Microsoft Office 2000 with PowerPoint, Word, and Excel minimum
- surge suppressor electrical outlet
- suggested option: zip drive or CD/RW, USB
- suggested option: laptop computer with wireless Internet capability

**Nonmatriculating Students**

Nonmatriculating students may take up to two courses (six credits). An application for nonmatriculating students and relevant transcripts are required as well as approval of the director of doctoral programs in occupational therapy.

**Occupational Therapy Course Descriptions**

Note: Listed at the end of each entry are lecture clock hours, laboratory clock hours, and semester hours.

**ANA 5533—Neuroanatomy**

Anatomy of central and peripheral nervous systems. Laboratory activities consist of student teams studying selected cadavers, sections, radiographs, and models. (36-18-3)

**OCT 5011—Human Occupations Across the Life Span**

Introduces spectrum of occupations that influence health and independence of individuals from infancy to old age through observation, communication, analytical, and reflective skills. Involves exploration of the impact of culture, environment, gender and age upon human behavior. (48-32-4)

**OCT 5013—Creative Occupations**

Course focuses on the creative process and problem solving. Through engagement in selected creative projects students learn to analyze activity demands. The meaning and significance of challenge, success, and competence in occupations are explored. Students learn to structure, adapt, plan, present, and assess activities for therapeutic use. (16-32-2)

**OCT 5015—Applied Occupations**

Course examines the interplay of human performance and environmental context in routine daily activities. Focus placed on physical, social, and cultural factors that enhance human function. Assesses environmental adaptations, assistive devices, social networks, and cultural influences for occupational therapy intervention. (32-0-2)

**OCT 5101—Historical and Theoretical Foundations of Occupational Therapy Practice**

Social-cultural heritage of occupational therapy, the people who formulated the ideas and concepts on which the profession is based. Students explore relationship between philosophical and theoretical knowledge bases of occupational therapy. (32-0-2)

**OCT 5110—Medical Terminology**

Students learn use of medical terminology as a basis of understanding the human body and for communicating with other health care professionals. Course focuses on origin, basic structure, meaning, and interpretation of medical language related to body structures and function, disorders, diagnostic procedures, medical interventions, and medical fields. (16-0-1)

**OCT 5121—Human Disorders Across the Life Span I**

Pathophysiological dysfunctions that interfere with participation are examined with regard to deficits in occupational performance, performance skills, and client factors that occupational therapists may see with their clients. (64-0-4)

**OCT 5123—Human Disorders Across the Life Span II**

Nonpsychiatric disorders, conditions and pathophysiology are examined with problems presented in the context of occupational performance areas, performance skills, and client factors. Prerequisite: OCT 5121 (64-0-4)
OCT 5132—Current Issues in Occupational Therapy I
Focus on occupational therapist as administrator of clinical services. Includes systems theory, management theory, and strategies. This course also covers current sociopolitical factors that influence the practice of occupational therapy. (48-0-0-3)

OCT 5133—Current Issues in Occupational Therapy II
This course continues the basic themes of Current Issues I and expands on program development, grant writing, and payment sources. Prerequisite: OCT 5132 (48-0-0-3)

OCT 5174—Research Methods for Occupational Therapy I
Examines quantitative and qualitative research designs, methodologies, the research process, and products, and their application to evidence-based practice. Develops critical consumers of research and research skills needed to develop, conduct, analyze, and write up a study. Includes students' research papers and presentations. (48-0-0-3)

OCT 5175—Research Methods for Occupational Therapy II
This course is a continuation of Research Methods for Occupational Therapy I. (48-0-0-3)

OCT 5243—Occupational Therapy with Children and Adolescents
This course covers the practice of occupational therapy for children and adolescents, including the application of pediatric frames of reference. This course includes occupation-based, client-centered treatment planning; intervention; safety; documentation; discharge planning; and strategies for collaboration with families designed to empower client participation in his/her context. Lecture, laboratory, level-1 fieldwork. (80-32-80-9)

OCT 5343—Occupational Therapy Mental Health Practice
This course focuses upon the practice of occupational therapy in psychiatric facilities and community settings when mental health is of concern. Class emphasizes occupation-based, client-centered treatment applying theory-based evaluation techniques, treatment interventions, safety, documentation, and discharge planning designed to empower client participation in his/her context. Lecture, laboratory, level-1 fieldwork. (64-48-120-10)

OCT 5395—Psychiatry
Uses DSM IV-TR criteria as a base for identification and discussion of psychopathology. Analyzes the effects of psychopathology on occupational performance areas, skills, patterns, and client factors. Includes the mediating effects of context and activity demands on participation. This course serves as a basis for the subsequent course in mental health theory and practice. (32-0-2)

OCT 5420—Anatomy
Details human anatomy. Laboratory activities consist of student teams studying dissected cadavers, sections, bone sets, videotapes, radiographs, and models. (55-35-5)

OCT 5443—Occupational Therapy Physical Dysfunction/Work Practice
This course covers the application of clinical reasoning through the study of various models of practice to common adult physical disorders and conditions affecting occupational performance. Emphasis is on occupation-based, client-centered interventions and current practice designed to empower client participation in his/her context. Treatment approaches and techniques, planning, safety, documentation and discharge planning. Lecture, laboratory, level-1 fieldwork. (80-32-120-10)

OCT 5643—Occupational Therapy with Older Adults
Occupational therapy practice related to the aged and their families. Involves evaluation, clinical reasoning, treatment planning, documentation, and discharge planning to meet unique needs of aging individuals. Course emphasizes occupation-based, client-centered interventions with focus on relationship between personal capabilities and contextual influences on health and participation in occupations. Lecture, laboratory, level-1 fieldwork. (80-32-80-9)

OCT 5822—Occupational Evaluation I
Occupational evaluation and assessment of occupational profile and analysis of occupational performance including performance areas in areas of occupation, performance skills, performance patterns, contexts, client factors, and activity demands. (64-32-5)

OCT 5824—Occupational Evaluation II
A continuation of Occupational Evaluation I. Prerequisite: OCT 5822 (48-32-4)

OCT 5963—Fieldwork Issues I
This course is designed to address fieldwork placement policies, professional behaviors and issues of professional practice. Requirements to participate in level I and level II fieldwork placements will be covered. (16-0-0-1)

OCT 5964—Fieldwork Issues II
This course is a continuation of OCT 5963. (16-0-0-1)

OCT 5981—Fieldwork Experience I
Twelve-week supervised internship in approved practice setting. Prerequisite: Completion of M.O.T. formal coursework (0-0-480-12)

OCT 5982—Fieldwork Experience II
Twelve-week supervised internship in approved practice setting. Prerequisite: Completion of M.O.T. coursework (0-0-480-12)

OCT 6005—Evidence-Based Practice and Critical Thinking in OT
Through reading and assignments requiring use of the computer, students develop skills in critical thinking, analysis and synthesis of literature, doctoral-level writing, and use of the Internet as a learning resource. (45-0-3)

OCT 6006—Research: Process of Discovery
Exploration of the research methods applicable to the evidence-based practice of occupational therapy. (45-0-3)

OCT 6007—Evidence and Outcomes
This is a culminating required course for students in the Dr.O.T. program. Students integrate and apply knowledge in evidence-based practice and outcomes research in capstone paper. A research residency of a minimum of 75 hours is also required as part of the course. Prerequisite: OCT 6007 (10-2-3)
OCT 6101—The Health Professional as Academic Educator
Examination of the academic role from the perspectives of the individual, the institution, and professional organizations. (45-0-3) Elective

OCT 6102—The Role of Educator in Everyday Practice
Principles of education for practice and community needs in a variety of roles with patients, families, students, employers, and others. Students learn theory, instructional techniques, and forefront educational media. (45-0-3) Elective

OCT 6103—Occupation-Centered Practice
Exploration and further development of the student's knowledge and practice with core concepts of meaningful occupations and health and well-being. Students will examine meaningful occupation and health and well-being from historical roots through present day works in occupational therapy and occupational science literature. (45-0-3)

OCT 6104—Occupational Science
The course presents an overview of conceptual frameworks, literature, taxonomies, and research strategies of occupational science. Topics will be examined from multidisciplinary perspectives on work, play, leisure, occupation, and contexts for occupation. Students will select an area for in-depth study. (45-0-3) Elective

OCT 6109—The Health Professional and Cultural Diversity
Examination of varying cultures and their related health tradition. Practical application of intervention strategies appropriate for members of varying ethnic, cultural groups. Emphasizes African American, Hispanic, Asian traditions. (45-0-3) Elective

OCT 6110—The Health Professional and Disability Laws
Analysis of the impact of the Americans with Disabilities, Fair Housing Act and other disability rights legislation on health care in various settings. Students explore new challenges health professionals face as disability rights legislation influences goals and changes roles for health professionals. (45-0-3) Elective

OCT 6130—Genetics: Issues for Occupational Therapy
This course will address the principles and practice of genetics. It will then examine the ethical, legal, and social implications of genetics in occupational therapy practice. (45-0-3) Elective

OCT 6132—Advanced Legal and Ethical Issues in Practice for Health Professionals
Legal and ethical issues affecting health care delivery, issues of confidentiality, reimbursement, right-to-die, advanced directives, ethical dilemmas, OBRA, worker's compensation, Public Law 94-142, documentation, employer-employee independent contractor relationship, malpractice issues, and expert witness testimony. (45-0-3)

OCT 6133—Advanced Policy Issues
In this course students will look at occupational therapists as key players in policy making. Students may be required to participate in a class trip to Washington, D.C., to lobby on Capitol Hill and meet with AOTA's Policy and Government Affairs Department. The course focus will be on the theory and hands on practice of policy making and its impact on occupational therapy. (45-0-3)

OCT 6140—Media Relations for the Health Professional
Integrates theories and research of media and public relations with the application of professional promotions. Students develop media plans with a focus on persuasive writing and oral presentation. Students combine theory and practice techniques to effectively promote professional activities and service to the public, the professional community, and the media. (45-0-3) Elective

OCT 6160—Special Topics in Occupational Therapy
This seminar for doctoral students only investigates timely topics of critical interest to health care providers. (45-0-3) Elective

OCT 6170—Research Methods I
This course presents an overview of qualitative and quantitative research methodologies and their application to occupational therapy research and practice. Theoretical and philosophical perspectives, data gathering techniques, data storage and retrieval, data analysis, and interpretation and presentation of data are addressed. Students explore proposal development through practice. Implications for preparation of research proposals for institutional review board and institutional approval are discussed and practiced. (45-0-3) Elective

OCT 6171—Research Methods II Continuation of OCT 6170. (45-0-3)

OCT 6173—Statistical Measures
Statistical presentation and interpretation, sampling, probability, significance, and statistical inference. Includes computer analysis of statistical data. (45-0-3)

OCT 6180—Neurosciences Foundations of Occupational Performance
Focuses on the link between neuroscience and human occupational behavior. Current neuroscience research and hypotheses are compared and contrasted with current theoretical work in occupational therapy. Presents material from the clinical practice viewpoint so students learn to use the knowledge gained to enhance their clinical reasoning and occupation-centered practice. (45-0-4) Elective

OCT 6211—Sensory Processing Basis of Occupational Performance
Examination of the theory and practice of sensory processing in occupational therapy through the original literature, and current information from neuroscience and evidence-based practice found in articles, on the Internet, and through interaction with classmates. Students will apply this knowledge to a specific group of individuals or to a curriculum plan. It is anticipated that
The course will provide framework for students will have some prior knowledge and experience in this area of practice. (45-0-3) Elective

OCT 6241—Infant and Child Mental Health
The course will provide framework for understanding the complex processes involved in mental health for infants and children, and how this relates to occupational performance. Clinical application of theoretical approaches and contextual influences will be considered for specific diagnostic classifications. (45-0-3) Elective

OCT 6242—Occupational Therapy Practice with Autistic Spectrum Disorders
This course focuses on current findings regarding autistic spectrum disorders and how they affect occupational performance. Includes a review of relevant research and readings from multiple related fields. Specific programs for working with children and adolescents with autism will be examined. (45-0-3) Elective

OCT 6244—Low Vision Across the Life Span
The course focuses on vision deficits throughout the life span and their impact on the occupations of individuals and caregivers. Students will review relevant anatomy, neuroanatomy, and various visual disorders. They will then explore and learn about evaluation of vision deficits and treatment implications through current practice and research findings. (45-0-3) Elective

OCT 6302—Contextual Analysis of Occupational Performance
Study of context as related to occupational performance. Advanced practice theory assessment and use of context as an enabler of participation. (45-0-3) Elective

OCT 6331—Cognition and Occupation
Course presents a multidimensional perspective of cognitive rehabilitation necessary to provide effective occupational therapy intervention. Emphasizes enhancing functional capabilities and community adaptation in addition to a more traditional approach that focuses on ameliorating cognitive deficits. Students will analyze different theoretical models for their application to various clinical populations. (45-0-3) Elective

OCT 6767—Community Program Development
Evaluation and application of community organization and development theories to create occupational therapy interventions with underserved and/or nontraditional populations. Emphasizes outcome evaluation of both theory and practice. (45-0-3) Elective

OCT 6789—Small Business Practice: Developing and Marketing a Business
This course gives students an in-depth knowledge of developing a business plan and marketing their product to enable students to become entrepreneurial health care practitioners. (45-0-3) Elective

OCT 6790—Business Operations
In this course students learn the skills necessary to operate a business. Students learn current management techniques and principles of organizational behavior as well as legal and ethical principles necessary to operate a business. (45-0-3) Elective

Advanced Applications
Investigates evaluative procedures appropriate for specialized areas of practice, and the development of new evaluative procedures for specific target populations. (45-0-3) Elective

OCT 6791—Grant Practicum: Finding and Developing Funding Sources
In this course students develop skills necessary to seek and acquire funding sources for new and innovative programs in occupational therapy. Using a hands-on approach, students write grants and business plans to turn out a finished, usable product to complement a creative and innovative occupational therapy practice idea. (45-0-3) Elective

OCT 6792—Wellness and Health Promotion
This course examines the relationship between occupational therapy's role in wellness and health promotion, disability postponement, and prevention in general. Students critically examine various models of wellness and their relevance to their own roles in these practice areas. (45-0-3) Elective

OCT 6820—Applying Measurement Theory to Evaluation
Provides students with a general background in measurement theory and assists students to actively apply this information to the evaluation process in occupational therapy. The application component of the course addresses evaluation at both the individual and program levels. At the completion of this course, students can critically examine and select the most appropriate evaluation tools for various practice situations using the theory and principles of measurements. (15-30-2)

OCT 6821—Measurement Theory and Evaluation:

Advanced Applications
Investigates evaluative procedures appropriate for specialized areas of practice, and the development of new evaluative procedures for specific target populations. (45-0-3) Elective

OCT 6831—The Occupational Therapy Consultant
Investigates theories, practice, and principles of occupational therapy consultation in various practice areas. Students address system diagnosis, assessment, team building, and decision making. (45-0-3) Elective

OCT 6860—Creative Leadership
Course examines leadership as a critical component to one's future as an occupational therapy practitioner in a global, ever-changing environment. Students look at areas of need in the profession as well as leadership opportunities in their own careers. (45-0-3)

OCT 6890—Independent Study
Individualized study under the supervision of assigned instructor. Requires permission of graduate coordinator. (0-0-1-3) Elective

OCT 6911—Chronicity, Occupation, and Health
Explores the relationships among chronic disease and disability, occupational performance, occupational satisfaction, and personal wellness when living with a disability from the standpoint of the individual and of society. Students examine clinical, ethical and advocate roles in the context of occupational therapy theory and professional practice standards. (45-0-3) Elective
OCT 7930—Research Seminar
Presentation and discussion of current topics in research. (15-0-1)

OCT 7940—Proposal Seminar
Students are guided in development of proposals for dissertation research. Proposals in progress are presented for critique, feedback, and discussion. (30-0-2)

OCT 7945—Studies for the Qualifying Examination
For Ph.D. students who are preparing for, and taking, the Ph.D. qualification exam. (15-0-1)

OCT 7950—Research Residency
Supervised research activity in a setting approved by the student's dissertation committee. Prerequisite: admission to candidacy (0-0-[3-6])

OCT 7970—Doctoral Dissertation
Supervised original study of occupational therapy evaluation and intervention. Prerequisite: admission to candidacy (0-0-[6-12])

Physical Therapy Department

Physical therapists are health care professionals who diagnose and treat movement dysfunction that results in physical impairment and disability. In addition to providing direct patient care services, physical therapists serve as administrators of physical therapy services, educators, and consultants. They screen people for potential risk for movement dysfunction in order to prevent impairment and disability and engage in critical inquiry to conduct and review research.

Physical therapists work in a range of settings including acute and subacute care hospitals, rehabilitation centers, outpatient clinics, home health, skilled nursing facilities, school systems, and industrial settings. Physical therapists may work as employees of health care systems, may independently contract their services, or own and manage a private practice. In any setting, for every patient, physical therapists perform a history and physical examination; conduct assessments to determine a diagnosis; select, perform, and supervise appropriate physical therapy interventions; and monitor the effectiveness of treatment.

Physical therapists are licensed in all states and may practice without physician referral in most of them. They are integral members of health care teams in a variety of service systems who serve to improve and maintain the quality of life for millions of people. More than 900,000 people a day are helped by physical therapists to restore health, alleviate pain, and prevent the onset of disease.

The mission of the Nova Southeastern University Physical Therapy Department is to prepare and advance physical therapists as primary care providers who stand beside other health care providers, in any setting, in the prevention, diagnosis, and treatment of movement-related dysfunction. In addition, the Physical Therapy Department fosters critical inquiry, research, lifelong learning, and service to the profession and the community.

Physical Therapy Student Organizations

Student Council
The Physical Therapy Student Council is the official voice of all students. The organization is open to all students and welcomes proposals and participation from the entire student body. Its responsibilities include collecting and expressing student opinion, dispensing funds for student activities, acting as liaison for the student body, promoting physical therapy, supporting club and class activities, and working to improve the quality of life for physical therapy students.

Other Student Organizations
Many student organizations addressing various professional interests are open for student membership, including:
- American Physical Therapy Association
- The Student Assembly of the American Physical Therapy Association
- The Student Special Interest Group of the Florida Physical Therapy Association
- campus-based student clubs
Entry-Level Doctor of Physical Therapy (D.P.T)  

Course of Study  
The entry-level Doctor of Physical Therapy (D.P.T.) Program at Nova Southeastern University is offered as a full-time or part-time program. The full-time program is completed in 36-39 months. The part-time program is completed in 60-63 months. Students are admitted in the summer semester. The programs include approximately 40 total weeks of clinical practice. While on campus, student learning experiences occur in a combination of traditional instruction, case-based and interactive learning, and clinical lab skills training. Faculty supervised TIER I clinical education training begins in the winter term of year one for full-time students and the winter term of year three for part-time students. Students experience direct patient care in a variety of health care settings and facilities that serve a variety of populations, including the underserved in Broward County. Depending on the term that TIER I training begins, clinical experiences are one full day every other week or daily for three weeks. The programs culminate in approximately eight months of full-time TIER II clinical education.

Students may elect to enter the Doctor of Philosophy in Physical Therapy (Ph.D.) Degree Program in the year following completion of the entry-level D.P.T. program.

Accreditation Status  
The entry-level Doctor of Physical Therapy Program was granted its initial full accreditation by the Commission on Accreditation of Physical Therapy Education (CAPTE), of the American Physical Therapy Association in October 1996. In April 2002, the program received an additional 10-year accreditation.

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, Telephone number: 404-679-4501) to award associate's, bachelor's, master's, educational specialist, and doctoral degrees.

Requirements for Admission  
The entry-level Doctor of Physical Therapy Program selects students based on prior academic performance, education, work experience, references, interview score, written application, and letters of evaluation. Selection is also based on the following factors:

1. A bachelor's degree from a regionally accredited college or university is preferred. A minimum of 90 semester hours of accepted coursework will be considered for admission. At least 30 semester credit hours must be upper division work.

2. Applicants must achieve a minimum 2.75 cumulative and prerequisite grade point average (GPA) on a 4.0 scale. No grade lower than a C is acceptable.

3. Students must complete all of the following prerequisite courses prior to admission:
   - English composition or writing (one semester)
   - Introduction to statistics (one semester)
   - Psychology/sociology—two semesters (one general psychology and an additional psychology or sociology)

The following sciences must be taken in their respective departments. No applied or modified science courses will be accepted.

- biology, anatomy, and physiology (three semesters with at least two in anatomy and physiology—may be separate or combined)
- physics with laboratory (two semesters)
- chemistry with laboratory (two semesters)

4. All applicants are required to submit official scores from the Graduate Record Exam (GRE). These test scores must be less than five years old.

5. All prerequisite courses must be completed before the first day of class. No exceptions will be made.

Applicants must demonstrate evidence of computer skills. Upon review of a student's individual record, the committee on admissions may require additional coursework and testing as a condition of acceptance.

The dean is empowered to evaluate the total qualification of every applicant and to modify requirements in unusual circumstances.

Computer Requirements  
All students are required to have and provide the department or program office with the address to an active email account.

All students are required to have a computer with the following minimum specifications:

- Pentium, 1.8GHz minimum processor
- 256 MB RAM minimum
- Video capable of 800 x 600 screen display or better
- CD-ROM capability
- Full duplex sound card and speakers
- 56.6 baud modem
- Internet connection with private Internet service provider (ISP) for access from home to the Internet. DSL or cable Internet access is recommended.
- Windows 2000 Professional or Windows XP
- Microsoft Office 2000 Professional with PowerPoint, Word, and Excel minimum
- Surge suppressor electrical outlet
- Suggested option: zip drive
- Suggested option: laptop computer with wireless Internet capability for use on campus

The cost of meeting this requirement shall be borne by the student and may be included in financial aid considerations.

The college advises all students to verify minimum configuration before purchasing any hardware or software.

Application Procedure  
Candidates for admission must submit:

1. a completed application form with a $50 nonrefundable application fee (Applicant must indicate the appropriate program—full-time or part-time—on the application form.)
2. three letters of evaluation (on required forms) from individuals, other than relatives, such as academic instructors and professors, health professionals, work supervisors, or volunteer supervisors. At least one
completed evaluation form must be from a physical therapist.

3. official scores from the Graduate Record Examination (GRE) submitted to the Office of Admissions. These test scores must be less than five years old.

4. a Physical Therapy Experience form, completed as applicable.

5. official transcripts from all undergraduate, professional, and graduate institutions attended, sent directly to Nova Southeastern University Enrollment Processing Services (EPS) College of Allied Health and Nursing Physical Therapy Department Office of Admissions 3301 College Avenue PO Box 299000 Fort Lauderdale, Florida 33329-9905.

6. copies of all professional certifications, registrations, licenses, or other relevant credentials.

7. international students must also submit TOEFL scores, if appropriate.

Upon receipt of the completed application and required credentials, the committee on admissions will select applicants to be interviewed. Interviews may be by phone or in person. When the committee feels an interview should be conducted in person, it will be required. Those selected for interviews will be notified by phone, email, or in writing of the date, time, and place (for interviews in person). All applicants who are eventually accepted into the program must be interviewed. An invitation for an interview or completion of an interview should not be construed by the applicant as evidence of acceptance. (Note: applicants will be notified in writing of acceptance)

Applications may be submitted at any time; however, except for special circumstances, only applicants who have submitted all application credentials (all transcripts, evaluation forms, physical therapy experience forms, etc.) prior to February 1, will be considered first for admission into the summer class of the same year. Notice of acceptance or other action by the committee on admissions will be on a "rolling" or periodic basis when the interview is completed. Early completion of the application is, therefore, in the best interest of the student because of the limited number of positions available in the class.

Entering students may be required to undergo background checks based on clinical education site requirements.

The Alternative Admissions Model Program in Entry-Level Physical Therapy Education (AAMPTE)

The Alternative Admissions Model in the Entry-level Doctor of Physical Therapy Education (AAMPTE) Program will permit applicants who, otherwise, would not be granted admission with the opportunity to compete for admission. For the full-time program, the applicant must take and complete the three required summer courses between June and August of the first summer semester. For the part-time program, the applicant must take and complete the two required summer courses between June and August of the first summer semester. The courses are the standard required courses that all entry-level PT students are required to take. Participants in the AAMPTE program will be admitted in the fall with matriculated students status, based on successful completion of all required first summer courses and all prerequisite coursework by the end of the first summer semester (no exceptions).

The PTCOA will consider applicants for the AAMPTE Program who meet any of the following criteria or at the discretion of PTCOA based application and academic history.

Criteria A:

- All requirements are met, however the cumulative GPA is below 2.75, but at or above 2.5.

- The prerequisite GPA is below 2.75, but at or above 2.5.

Criteria B:

The applicant has not completed prerequisite requirements before the start of the program. The following stipulations apply:

- This does not apply to Anatomy and Physiology, which must be completed prior to the NSU PT summer semester.

- No more than two prerequisite courses may be incomplete at the start of NSU PT summer semester.

- Students may not be registered for more than one prerequisite course at a time and must successfully complete the course with a C or better by the end of the NSU PT program summer semester.

Undergraduate/Entry-Level Doctor of Physical Therapy Dual-Admissions Program

Nova Southeastern University Health Professions Division has established a dual-admissions program with Nova Southeastern University's Farquhar College of Arts and Sciences for a select number of highly motivated, qualified students seeking to pursue both an undergraduate degree and professional studies in physical therapy. Candidates must maintain a specified GPA and achieve acceptable scores on the Graduate Record Examination (GRE).

Students will be awarded a bachelor's degree from the College of Arts and Sciences upon completion of degree requirements. Students will receive an entry-level doctor of physical therapy degree upon completion of the 3.25 year D.P.T. curriculum.

For complete information and requirements, contact the Office of Admissions, Farquhar College of Arts and Sciences, Nova Southeastern University, 3301 College Avenue, Fort Lauderdale, Florida 33314-7796.

Tuition and Fees

- For full-time students, tuition for 2007-2008 (subject to change by the Board of Trustees without notice) is $19,825 for Florida residents and $21,770 for out-of-state students per year (academic year as determined by registrar, three-year program).

- For part-time students, tuition for 2007-2008 and beyond, (subject to change by the Board of Trustees without notice) is $11,331 for Florida residents, and $12,585 for out-of-state students per year (five-year program). Tuition is approximate and subject to change by the board of trustees.

- Eligible students must request in-state tuition on the application. For tuition purposes, a student's Florida residency status (in-state or out-of-state) will be determined at initial matriculation and will...
remain the same throughout the entire enrollment of the student at NSU. Accordingly, tuition will not be adjusted as a result of any change in residency status after initial enrollment registration.

- Acceptance Fee is $100. This fee is required to reserve the accepted applicant's place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is nonrefundable in the event of a withdrawal. It is payable within two weeks of an applicant's acceptance.

- Deposit is $400. This is due March 1, under the same terms as the acceptance fee.

- Preregistration fee is $500. This is due April 15, under the same terms as the acceptance fee.

- A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

The first semester's tuition and fees, less the $1,000 previously paid, are due on or before the appropriate registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met.

The financial ability of applicants to complete their training is important because of the limited number of positions available in each class. Applicants should have specific plans for financing 3.25 years of professional education. This should include tuition, living expenses, books, equipment, and miscellaneous expenses.

It is required that each student carry adequate personal medical and hospital insurance throughout the program. Students may avail themselves of the hospitalization insurance plan obtainable through the university.

**Requirements for Graduation**

In order to be eligible for the D.P.T. degree, students must:

- be of good moral character and uphold professional ethics and behavior
- complete all academic requirements, semester hours, and coursework including self-assessment
- satisfactorily complete the program of study required, in sequence in prescribed time, with a minimum grade of 75 percent in all courses
- have satisfactorily met all financial and library obligations
- successfully complete the Tier I and Tier II clinical internships
- successfully complete and present the findings of a critical inquiry research project
- successfully pass a comprehensive examination at the end of the didactic component of the program
- fulfill all professional activity requirements including professional association membership
- fulfill all community service requirements
- have satisfactorily complied with all university, Health Professions Division, College of Allied Health and Nursing, and Department of Physical Therapy policies and procedures

- attend in person the rehearsal and commencement program at which time the degree is conferred
- demonstrate professional behavior and required attendance throughout the program
- compliance with other requirements as advised
Full-Time Entry-Level Doctor of Physical Therapy Curriculum Outline

**FIRST YEAR—Summer Semester**

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>PHY 5400</td>
<td>Physiology</td>
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<tr>
<td>ANA 5420</td>
<td>Anatomy</td>
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<tr>
<td>PHT 5611</td>
<td>Introduction to Physical Therapy</td>
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<tr>
<td>PHT 5610</td>
<td>Clinical Application for Anatomy</td>
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**FIRST YEAR—Fall Semester**

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<td>PCO 6714</td>
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<tr>
<td>PHT 6715</td>
<td>Kinesiology</td>
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<td>PHY 6716</td>
<td>Medical Pathology for Physical Therapists</td>
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<td>PHT 6705</td>
<td>Essentials of Exercise Physiology for Physical Therapists</td>
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**FIRST YEAR—Winter Semester**

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<td>PHT 6720</td>
<td>Clinical Skills II</td>
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<td>PHT 6725</td>
<td>Cardiovascular and Pulmonary PT</td>
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<td>PHT 6722</td>
<td>Integumentary PT</td>
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<td>PHT 6701</td>
<td>Professional Development: Communication and Cultural Competence</td>
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<td>ANA 5423</td>
<td>Neuroanatomy</td>
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<td>PHT 6706</td>
<td>Tier IA Clinical Education</td>
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<td>PHT 6700</td>
<td>Research: Introduction to Research Methods and Data Analysis</td>
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**SECOND YEAR—Summer Semester**

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<td>Musculoskeletal I</td>
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<td>PHT 6815</td>
<td>Physical Agents</td>
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<td>PHT 6818</td>
<td>Topics in Gerontology</td>
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<td>PHT 6822</td>
<td>Teaching and Learning in Physical Therapy</td>
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**SECOND YEAR—Fall Semester**

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<td>PHT 6816</td>
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<td>PHT 6817</td>
<td>Pediatrics</td>
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<td>PHT 6802</td>
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**SECOND YEAR—Winter Semester**

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<td>Musculoskeletal III Lab</td>
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<td>Neuromuscular I</td>
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<td>PHT 6835</td>
<td>Medical Diagnostics for Physical Therapists</td>
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<td>PHT 6823</td>
<td>Professional Development: The Business of Physical Therapy</td>
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<td>PHT 6831</td>
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**THIRD YEAR—Fall Semester**

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**THIRD YEAR—Winter/Summer Semester**

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College of Allied Health and Nursing—Physical Therapy Department
Part-Time Entry-Level Doctor of Physical Therapy
Curriculum Outline

Note: course numbers, names, and sequence may vary

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<thead>
<tr>
<th>FIRST YEAR—Summer Semester</th>
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<td>ANA 5415 Anatomy</td>
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<td>PCO 6714 Pharmacology</td>
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<td>PHY 6716 Medical Pathology for Physical Therapists</td>
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<tr>
<td>PHT 6705 Exercise Physiology</td>
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<td>PHT 6700 Research: Introduction to Research Methods</td>
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<td>PHT 6815 Physical Agents</td>
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<td>PHT 6817 Pediatrics</td>
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<td>PHT 6802 Research II: Evidence-Based Practice</td>
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This foundational science course presents the normal physiology of all major body systems, with emphasis on the musculoskeletal, neuromuscular, cardiopulmonary, and integumentary systems. (3 credits)

ANA 5415—Anatomy
This foundational science course develops the knowledge of human anatomy necessary for the practice of the profession. It presents the anatomy of the human body in both lecture and cadaver lab format. It addresses gross structures of the human body and integrates topographic and radiographic anatomy, stressing the importance to clinical practice. (5 credits)

PHY 5400—Physiology
This foundational science course presents the normal physiology of all major body systems, with emphasis on the musculoskeletal, neuromuscular, cardiopulmonary, and integumentary systems. (3 credits)

FIFTH YEAR—Fall Semester

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<td>PHT 6931 Tier IIC Clinical Education Internship</td>
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<tbody>
<tr>
<td>PHT 6910 Independent Study</td>
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Entry-Level Doctor of Physical Therapy Course Descriptions

PHY 5400—Physiology
This foundational science course presents the normal physiology of all major body systems, with emphasis on the musculoskeletal, neuromuscular, cardiopulmonary, and integumentary systems. (3 credits)

ANA 5415—Anatomy
This foundational science course develops the knowledge of human anatomy necessary for the practice of the profession. It presents the anatomy of the human body in both lecture and cadaver lab format. It addresses gross structures of the human body and integrates topographic and radiographic anatomy, stressing the importance to clinical practice. (5 credits)

PHT 5611—Introduction to Physical Therapy
Introduces the new PT student to the program and the PT profession.

PHT 5609—Clinical Applications of Anatomy for Physical Therapists
This course addresses anatomical knowledge specific to the practice of physical therapy. It is an in-depth study of joint anatomy including muscular attachments, ligamentous structures, innervations, and contribution to movement. Palpation of key bony and soft-tissue structures will be introduced. Prerequisite: ANA 5420 (1 credit)

PHT 6710—Clinical Skills I
Introduces students to basic PT examination and interventions in accordance with the patient management model found in the Guide to Physical Therapy Practice. Students will safely interact and communicate with patients including history taking and producing documentation of patient status. Safe performance of psychomotor skills such as patient postural assessments, positioning and draping, palpation addressing surface anatomy of the head, trunk and extremities, bed mobility, transfers, the use of assistive gait devices, vital signs monitoring, and patient guarding and handling techniques will be emphasized. An overview of the terms related to CPT-coding and reimbursement will be provided. (3 credits)

PCO 6714—Pharmacology
The goal of this course is to provide the physical therapy student with the basic principles required to understand the selection, mechanisms, and therapeutic applications of classes of drugs used in medicine. This course will define terminology; discuss receptor theory and basic pharmacokinetics of drug classes commonly used in clinical practice. Students will identify adverse effects of selected drugs based on signs and symptoms. The implications for physical therapy related to medications and exercise, cognition, and function will be addressed. (2 credits)

PHT 6715—Essentials of Biomechanics and Kinesiology
This is a basic science course to introduce physical therapy students to the study of kinesiology. The students will integrate their anatomy knowledge of muscle and joint structures into the study of joint motion and functional movements. The course introduces the student to basic principles of biomechanics, which serves as the foundation for understanding kinesiology. This includes kinetics, kinematics, and tissue biomechanics. The course will be structured by body parts: the upper extremity, the lower extremity, and the spine. Once the regional knowledge of kinesiology is understood, the final outcome of the course will be to learn and comprehend complex kinesiologic analysis: gait, posture, and functional movements. (3 credits)
PHT 6716—Medical Pathology for Physical Therapists
This course provides a discussion of selected pathological processes across the life span. An overview of medical and surgical management of these dysfunctions will be presented. Use of the Nagi Disablement Model complements the medical model for a more in-depth focus on the functional consequences of these dysfunctions. The Disablement Model allows assessment of the impact of acute and chronic conditions on the functioning of specific body systems (impairments) and basic human performance (functional limitations). (3 credits)

PHT 6725—Cardiovascular and Pulmonary PT
Provides an overview of the related pathological and diagnostic and medical-surgical procedures of the cardiovascular and pulmonary systems. Physiological principles of exercise will be applied to cardiopulmonary examination and intervention for given pathologies. The effects of exercise and health promotion to prevent coronary heart disease and respiratory dysfunction as well as the specific effects of exercise on risk factors related to these systems will be addressed. Students will demonstrate cardiopulmonary PT examination procedures, treatment planning and documentation across all clinical settings, and explore interventions related to exercise and airway clearance. The relevance of clinical laboratory values associated with these dysfunctions will also be addressed. Case studies are used in conjunction with lecture, and interactive teaching and learning to assist students in integrating didactic knowledge into simulated and real-life scenarios including laboratory skills. (2 credits)

PHT 6722—Integumentary PT
The structure and function of the integument and lymphatic systems are presented. Students will safely perform physical therapy assessment and interventions for wounds and edema based on the current literature such as dressings, therapeutic massage, compression, and hydro and electrotherapeutic modalities. Assistive, adaptive supportive devices and equipment to prevent or relieve skin trauma will be explored. (2 credits)

ANA 5423—Neuroanatomy
Provides a study of the gross structure of the brain and spinal cord and the functional relationship among their parts. Emphasizes major motor and sensory pathways and integrative mechanisms of the central nervous system. Neurophysiological basis of movement and motor control will be addressed. Motor programming, motor learning principles, central pattern generators, postural control, plasticity, and the role of various motor centers in regulation of movement will be emphasized. (3 credits)

PHT 6701—Communication and Cultural Competence
Students will explore the concepts of interprofessional and interpersonal communication, group processes, and organizational skills needed to function effectively as part of a team in the health care environment. Communication (written, verbal, and nonverbal) methods with the patient/client, their families, and other members of the health care team will be explored. The concepts of cultural competence related to health care will also be explored. Discussions will include epidemiology and health care access issues as they relate to cultural barriers. (2 credits)

PHT 6706—Tier IA Clinical Education
This is a self-contained clinical education model where students are directly supervised in the clinic by academic faculty members. Students concurrently practice the evaluation and treatment skills learned in the curriculum. Students see patients/clients one day every other week to apply learned evaluation and treatment skills in underserved populations. Emphasis is on developing skills in professional behavior, clinical safety, communication, therapeutic presence, assessment, examination, screening, treatment planning, and performance of basic skill intervention. (1 credit)

PHT 6810—Musculoskeletal I
Emphasizes the musculoskeletal system by addressing relevant Guide to Physical Therapy practice patterns as they relate to the upper extremity/upper quarter including diagnostic classifications,
ICD-9 codes, examination, evaluation, diagnosis, prognosis, and interventions related to these patterns. Case studies are used in conjunction with lecture and interactive teaching and learning to assist students in integrating the didactic knowledge into simulated and real-life scenarios relevant to musculoskeletal conditions. The course combines knowledge of physiological characteristics of movement with the neurophysiological mechanisms that produce movement. (2 credits)

PHT 6810L—Musculoskeletal I Lab
Emphasizes the psychomotor and affective skills required when providing the associated musculoskeletal interventions of manual exercise, fitness training, and functional mobility training addressed in Musculoskeletal I. Case studies are used in conjunction with lecture and interactive teaching and learning to assist students in integrating the didactic knowledge into simulated and real-life scenarios relevant to musculoskeletal conditions. Must be taken in conjunction with PHT 6810. (2 credits)

PHT 6815—Physical Agents
This course will emphasize both cognitive and psychomotor knowledge related to electro- and thermo-modalities. Basic science information related to physiological effects, indications, and contraindications will be discussed. Lecture, interactive teaching, and lab practice will be used to assist students in integrating the didactic knowledge into simulated and real-life scenarios. (3 credits)

PHT 6818—Topics in Gerontology
Theories and issues related to aging and geriatric physical therapy will be explored relative to current health care trends and predictions. Students will get a global perspective on interdisciplinary and multidisciplinary roles in the aging adult. From a client-management perspective, students will be able to apply their knowledge of the older adult. Lecture, case study, and Web CT will be used to integrate comprehensive planning and development of team strategies in order to address the needs of the older adult in a variety of settings. (1 credit)

PHT 6820—Musculoskeletal II Lab
Includes the psychomotor and affective skills required when providing the associated musculoskeletal interventions addressed in PHT 6815—Musculoskeletal I. Students will acquire the skills needed to manage and prevent movement-related musculoskeletal problems of the musculoskeletal system by addressing relevant practice patterns as they relate to the lower extremity/lower quarter, and pelvic floor dysfunction. Diagnostic classifications, ICD-9 codes, examination, evaluation, diagnosis, prognosis, and interventions related to these patterns. Case studies are used in conjunction with lecture and interactive teaching and learning to assist students in integrating the didactic knowledge into simulated and real-life scenarios relevant to musculoskeletal conditions. Must be taken in conjunction with PHT 6820. (2 credits)

PHT 6817—Neuroscience
Neuroscience provides the foundational knowledge necessary for patient/client management of patients with neuromuscular conditions through two modules: neurophysiology and motor control/motor learning. Students review the structure and function of the nervous system, emphasizing neurophysiological processes that relate to physical therapy and movement dysfunction. Principles of motor control and motor learning are discussed as they relate to normal human movement and movement dysfunction that results from neurologic disorders. Concepts of neuroplasticity and the recovery of function are also addressed. Classroom activities include case studies, group discussions, literature reviews, simulations, and lectures. (3 credits)

PHT 6802—Evidence-Based Practice
This course is based on Sackett's model of evidence-based practice, which is defined as "the explicit, judicious, and conscientious use of the current best evidence from health care research in making decisions about the health care of individuals..." It is the integration of research evidence, clinical expertise, and patient values in making the best clinical decisions. Students...
A variety of patient types will be observed during a two-week full-time immersion in a clinical setting. Students will see patients/clients at assigned clinical sites to apply examination, evaluation and treatment skills. Students will integrate the didactic information from the first year and be exposed to professional roles and issues in an authentic context. Licensed physical therapists or academic faculty members will provide direct supervision of students. (1 credit)

**PHT 6811—Tier IB Clinical Education**

A variety of patient types will be observed during a two-week full-time immersion in a clinical setting. Students will see patients/clients at assigned clinical sites to apply examination, evaluation and treatment skills. Students will integrate the didactic information from the first year and be exposed to professional roles and issues in an authentic context. Licensed physical therapists or academic faculty members will provide direct supervision of students. (1 credit)

**PHT 6821—Musculoskeletal III**

This course will emphasize the musculoskeletal system by addressing relevant practice patterns as they relate to the lower extremity/lower quarter including diagnostic classifications, ICD-9 codes, examination, evaluation, diagnosis, prognosis, and interventions related to these patterns. Case studies are used in conjunction with lecture and interactive teaching and learning to assist students in integrating the didactic knowledge into simulated and real-life scenarios. Must be taken in conjunction with PHT 6821. (2 credits)

**PHT 6830—Neuromuscular I**

This course introduces common neurological/neuromuscular and related disorders encountered by physical therapy practitioners working with the pediatric/early life span patient to the adult population. It addresses relevant practice patterns of the neuromuscular system in accordance with the Guide to Physical Therapy Practice. This includes diagnostic classifications, and ICD 9 codes. It facilitates the integration of pathophysiology and clinical medicine to develop and refine cognitive and psychomotor skills of examination, evaluation, diagnosis, prognosis, goal setting, treatment planning, and interventions for the early life span patient. The impact of assistive and adaptive equipment such as orthotics, casts, splints, wheelchair seating and mobility, and gait devices in comprehensive care planning for early life span through adult populations with neurological/neuromuscular disorders is integrated with education, prevention/wellness and ongoing therapeutic strategies. Must be taken in conjunction with PHT 6830. (2 credits)

**PHT 6835—Medical Diagnostics for Physical Therapists**

This course provides the student a thorough understanding of medical diagnostics commonly used to identify and diagnose dysfunctions and diseases of all body systems relevant to physical therapy. Emphasis will be placed on basic principles, basic terminology, significance of findings, and appropriate use. (3 credits)

**PHT 6831—Tier IC Clinical Education**

This is a continuation of Tier IA during which academic faculty members accompany students into clinical settings every other week for the practical skills being learned in the curriculum. Under the direct supervision of faculty members, students see patients/clients one day every other week to apply learned evaluation and treatment skills in underserved populations. Emphasis is on advancing skills in professional behavior, clinical safety, communication, therapeutic presence and skills, assessment, examination, screening, treatment planning and performance of skills intervention, with emphasis placed on knowledge based on content from previous and concurrent semesters. It is the final Tier I rotation. (1 credit)

**PHT 6914—Neuromuscular II**

Neuromuscular II continues to address the adult population as in Neuro I. It integrates the foundational and clinical knowledge from prior courses. In accordance with the Guide to Physical Therapy Practice, this course introduces common neurological/neuromuscular and related disorders encountered by physical therapy practitioners, and addresses relevant practice patterns of the neuromuscular system, including diagnostic classifications, and ICD 9 codes in the adult population. It facilitates the integration of
pathophysiology and clinical medicine to develop and refine cognitive and psychomotor skills of examination, evaluation, diagnosis, prognosis, goal setting, treatment planning, and interventions for the adult patient. The impact of assistive and adaptive equipment such as orthotics, casts, splints, wheelchair seating and mobility, and gait devices in comprehensive care planning for adult neuromuscular involved individuals, is integrated with education, prevention/wellness and ongoing therapeutic strategies.

Evidence-based research studies related to the adult—through the adult life span, will be analyzed for efficacy and outcomes with respect to therapeutic interventions used with this population.

Case studies are used in conjunction with lecture, and interactive teaching and learning to assist students in integrating didactic knowledge into simulated and real-life scenarios, including laboratory skills. (3 credits)

**PHT 6914—Neuromuscular II Lab**

This course is the laboratory component of Neuromuscular II, which addresses common neurological/neuromuscular and related disorders encountered by physical therapy practitioners working with the adult population.

Case studies and simulated and real-life scenarios will be used to assist students in integrating didactic knowledge, including documentation and laboratory skills. Specific laboratory skills relate to assistive and adaptive equipment such as orthotics, casts, splints, wheelchair seating and mobility, and gait devices in comprehensive care planning for early life span through adult populations with neurological/neuromuscular disorders. This is integrated with education, prevention/wellness and ongoing therapeutic strategies. **Must be taken in conjunction with PHT 6911. (2 credits)**

**PHT 6915—Prosthetics and Orthotics**

Students will acquire the skills needed to manage movement-related problems in patients with amputations because of diabetes, burns, trauma, oncological problems, and genetic conditions. Orthotic needs associated with neurological problems, wounds, obesity, arthritis, pain, etc., will be further addressed. (3 credits)

**PHT 6823—The Business of Physical Therapy**

This course is devoted to understanding the structure and function of the United States health care delivery system. It explores the regulatory, economic and financial responsibilities of the physical therapy manager in the use of human and material resources within a variety of health care environments. Students will develop knowledge and skills to effectively manage in various health care settings. (3 credits)

**PHT 6920—Applied Clinical Decision Making**

This course prepares students to engage in advanced differential diagnosis and patient/client management based on the preferred practice patterns defined in the *Guide to Physical Therapist Practice: Musculoskeletal, Neuromuscular, Cardiopulmonary, and Integumentary/Systems*. It integrates

the foundational medical and clinical sciences with clinical signs and symptoms in the cognitive, affective, and psychomotor domains for appropriate examination, evaluation, prognosis determination, establishment of progressive plans of care across all settings, interventions, referral, and determination of discharge disposition for complex, multisystem cases through the life span.

Evidence-based research will be applied to justification of therapeutic interventions and patient/client management decisions.

Case studies will be used in conjunction with lecture, and interactive teaching and learning to assist students in integrating didactic knowledge into simulated and real-life scenarios, including laboratory skills. **Prerequisites: All previously learned courses (4 credits)**

**PHT 6903—Health Promotion, Disease Prevention, and Wellness**

Addresses the critical role of the physical therapist in health promotion, disease prevention, fitness, and wellness for both individuals and communities. Using the Healthy People 2010 Initiative as a framework, students will identify health/wellness and prevention issues relevant to physical therapy practice. Concepts of modeling healthy behavior are discussed, and students are encouraged to assess their own health and wellness profiles. Students explore and apply theories of behavior change, motivation, locus of control, and methods to facilitate behavior change across the life span. Previously learned concepts of teaching and consultation are applied in the context of developing and evaluating health promotion and wellness programs. Students will continue to expand on their knowledge of reimbursement systems and its practical application to this population. (2 credits)

**PHT 6904—Research Capstone Project**

The student will complete a comprehensive literature review. The topic area may be chosen by the student, but must be approved by the student's faculty adviser at the end of the prior semester (summer semester).

The quality of the written assignment must be such that it is publication ready for a peer-reviewed journal before the end of the course. All assignments must therefore follow the format of the journal in which the student intends to publish. (1 credit)

**PHT 6911—Tier IIA Clinical Education Internship**

This is the first of two senior full-time, clinical affiliation courses. The course begins with an orientation to clinical education and other issues needed to prepare students for the clinical internship. Students then complete an internship in a primary care setting. (4 credits)

**PHT 6921—Tier IIB Clinical Education Internship**

This is the second full-time, clinical affiliation course. Students will complete an extended internship in multifaceted health care organizations with the goal of bringing their skills to entry-level for both inpatient and outpatient care. Students will also have
the opportunity to choose a specialty area in physical therapy practice and complete a portion of the internship in that specialty area. (13 credits)

PHT 6931—Tier III
Clinical Education Internship
This is the continuation of the second full-time clinical affiliation course. Students will complete an extended internship in multifaceted health care organizations with the goal of bringing their skills to entry-level for both inpatient and outpatient care. Students will also have the opportunity to choose a specialty area in physical therapy practice and complete a portion of the internship in that specialty area. (7 credits)

PHT 6930—Wrap-up
This course provides a conclusion to TIER II as well as the didactic portion of the curriculum. A comprehensive examination covering all topics addressed in the curriculum will be administered. Additionally, the management of the graduation process and commencement exercises will occur. (0 credits)

PHT 6910—Independent Study
Individualized study completed under the supervision of an instructor. Requires permission of the Physical Therapy Department chair or the program director (1–6 credits)

Postprofessional Doctoral Programs in Physical Therapy

The Physical Therapy Department at Nova Southeastern University offers two postgraduate programs for practicing physical therapists: the clinical doctorate—or transition doctor of physical therapy (T-D.P.T), and the research doctorate—the doctor of philosophy in physical therapy (Ph.D., P.T). These two distinct programs are designed to meet the diverse needs of physical therapists who are seeking to advance their education and skills from an accredited institution. Applicants with a baccalaureate or master's degree may be accepted for either of these doctoral programs. Both programs are offered in an online format to meet the needs of working professionals. Nova Southeastern University is a recognized leader of distance education and has a well-respected history of innovation and leadership in the health professions.

Transition Doctor of Physical Therapy Program (T-D.P.T.)

Given the increasingly complex health care environment and the growing body of knowledge in the physical therapy profession, entry-level education in physical therapy is rapidly shifting toward the clinical doctoral degree. The vision of the American Physical Therapy Association (APTA) is that by the year 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy. In support of this vision, the Physical Therapy Department at Nova Southeastern University offers the Transition Doctor of Physical Therapy (T-D.P.T.) Program. The Transition D.P.T. Program is a postprofessional curriculum designed to advance the knowledge, attitudes, and skills of practicing physical therapists to those commensurate with the current entry-level doctorate in physical therapy. This program focuses on the professional roles of the D.P.T., clinical reasoning and differential diagnosis, evidence-based practice, and patient/client management related to optimizing movement, function, and health. The degree awarded upon completion of the program is the doctor of physical therapy degree.

Program Outcomes

The postprofessional D.P.T. program will prepare physical therapists who will

- provide services to patients/clients who have impairments, functional limitations, disabilities, or changes in physical function and health status resulting from disease, injury, congenital, or other causes
- interact and practice in collaboration with a variety of professionals
- promote health, wellness, fitness in the provision of primary, secondary, and tertiary preventive care services
- consult, educate, administer, and engage in critical inquiry
- direct and supervise physical therapy service, including support personnel
- practice autonomously in environments that promote direct access for consumers to physical therapy services.
- integrate the five elements of patient management, including examination, evaluation, diagnosis, prognosis, and interventions in order to maximize patient outcomes
The following are requirements for Accreditation of Physical Therapy Agencies.

Requirements for Admission
The following are requirements for admission:

1. Graduation from an entry-level physical therapy (P.T.) program that is accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE), or a current physical therapy license in the United States. Graduates from physical therapy schools in other countries are also eligible after review of academic credentials by an appropriate agency and a review of the Test of English as a Foreign Language (TOEFL) scores.

2. Students who are within two months (60 days) of graduation from an entry-level P.T. program are also eligible for admission. These individuals must provide proof of graduation by the 61st day of their first D.P.T. semester or they will have to withdraw from classes until the subsequent semester.

3. A grade point average of 75 percent or higher from the entry-level physical therapy coursework. If the GPA is lower than 75 percent, applicants must achieve a minimum score of 500 on both the verbal and quantitative portions of the Graduate Record Examination (GRE). The GRE is only required for students whose GPA is below 75 percent.

4. Selection of students for the transition D.P.T. program is based on a review of the application, prior academic performance, and three letters of recommendation. We seek students who are motivated and self-directed learners, with strong oral and written communication and critical thinking skills.

The dean is empowered to evaluate the total qualifications of every student and to modify requirements in unusual circumstances.

Application Procedures
Applicants must submit:

- A completed application form along with a nonrefundable application fee of $50
- Official transcripts from all undergraduate, professional, and graduate institutions attended, sent directly to Nova Southeastern University Enrollment Processing Services (EPS), College of Allied Health and Nursing, Physical Therapy Department
- Three letters of evaluation from interprofessional colleagues
- Three letters of recommendation from former instructors
- A personal statement
- Three letters of recommendation from former instructors
- A completed project

The required coursework and total number of semester hours required vary depending on the previous educational background of each applicant. Applicants with a baccalaureate degree must complete 15 semester hours (45 credit hours), including 8 core courses and 6 elective courses. Applicants with a master's degree from another university must complete 12 core courses and 6 elective courses.

Curriculum Overview
The Transition D.P.T. Program offers two, five-month semesters per year. Applications are accepted year round. The curriculum is designed for working physical therapists, where students can elect to enroll part-time (3–7 credit hours) or full time (8–12 credit hours). All courses are taught using an online format, with on-campus time halfway through each semester. Students spend two days on our Fort Lauderdale campus for each four-credit course. This provides opportunities for students to clarify any muddy points, present completed projects, and/or to practice hands-on skills that are inherent in the physical therapy profession. There is no on-campus requirement for elective courses in the T-D.P.T. program.

The required coursework and total number of semester hours required vary depending on the previous educational background of each applicant. Applicants with a baccalaureate degree must complete 14 classes (48 credit hours), including 8 core courses and 6 elective courses. Applicants with a master's degree from another university must complete 8 classes (30 credit hours). Graduates with an M.P.T. from Nova Southeastern University must complete 6 core courses (24 credit hours). Graduates with a doctoral degree must complete 6 core courses.

Requirements for Graduation
In order to graduate from the Transition D.P.T. Program, students must:

- Be of good moral character
- Complete the required number of semester hours as outlined
- Satisfactorily complete all program requirements for the degree within six years from the first date of classes
have a minimum GPA of 80 percent for all D.P.T. coursework
satisfactorily meet all financial and library obligations
complete a self-assessment and program evaluation

Course of Study
Applicants with bachelor's degree in physical therapy:

Core Courses 14 classes (48 credits)
- PHT 7215 — Introduction to Clinical Reasoning, Differential Diagnosis, and Disablement Models (3 credits)
- PHT 7405 — Professional Roles of the Doctor of Physical Therapy (4 credits)
- PHT 7415 — Radiology and Pharmacology (4 credits)
- PHT 7605 — Advanced Differential Diagnosis (4 credits)
- PHT 7815 — Contemporary Theories of Movement, Exercise, and Motor Learning (4 credits)
- PHT 7815-75 — Patient/Client Management (4 credits)

Elective Courses (18 credits)
- PHT 7005 — Payor Systems (3 credits)
- PHT 7015 — The Therapist and Cultural Diversity (3 credits)
- PHT 7235 — Practicing in an Evolving Health Care System (3 credits)
- PHT 7025 — The Health Care Educator (3 credits)
- PHT 7035 — Computer Applications in Health Care (3 credits)
- PHT 7045 — Professional Writing (3 credits)
- PHT 7055 — Ethical and Legal Issues in Health Care I (3 credits)
- PHT 7065 — Independent Study: Case Report (3 credits)
- PHT 7075 — Independent Study (2–3 credits)
- PHT 7905 — Clinical Internship (4 credits)
- PHT 7915 — Joint and Skeletal Muscles: Structure and Function (3 credits)
- PHT 7925 — Survey of Alternative and Complementary Therapies (3 credits)
- PHT 7935 — Exercise, Wellness, and Conditioning (3 credits)
- PHT 7945 — Group Processes and Conflict Strategies (3 credits)
- PHT 7955 — The D.P.T. in Private Practice (3 credits)
- PHT 7965 — Quantitative Analysis of Human Movement (3 credits)

T-D.P.T. students may select electives from other doctoral programs within the College of Allied Health and Nursing upon approval of the T-D.P.T. program director.

Applicants with a master's degree: 8 classes (30 credits)
- PHT 7215 — Introduction to Clinical Reasoning, Differential Diagnosis, and Disablement Models (3 credits)
- PHT 7405 — Professional Roles of the Doctor of Physical Therapy (4 credits)
- PHT 7415 — Radiology and Pharmacology (4 credits)
- PHT 7605 — Evidence-Based Practice and Outcome Measurement (4 credits)
- PHT 7615 — Advanced Differential Diagnosis (4 credits)
- PHT 7805 — Contemporary Theories of Movement, Exercise, and Motor Learning (4 credits)
- PHT 7815-75 — Patient/Client Management (4 credits)

Transition D.P.T. Course Descriptions

Core Courses
PHT 7215 — Introduction to Clinical Reasoning, Differential Diagnosis, and Disablement Models
Students explore the conceptual basis for effective clinical reasoning and differential diagnosis using the disablement model, clinical decision-making model, elements of patient/client management, and reflective practice theories. This course is a prerequisite for PHT 7615 — Advanced Differential Diagnosis. (3 credits)

PHT 7405 — Professional Roles of the Doctor of Physical Therapy
This course explores the emerging roles of the physical therapist as a doctor of physical therapy (D.P.T.). Emphasis is on the role of the D.P.T. in patient/community education; prevention and health promotion; and managing services through administration, consultation, and supervision. The class is organized into two modules: Module 1 — Teaching/Learning and Health Promotion/Disease Prevention and Module 2 — Managing Services
This course provides an overview of current medical diagnostic tests and medical interventions so that physical therapists can recognize the indication and implication for medical treatment. Students will learn diagnostic imaging; augment information obtained from the physical therapy examination with information provided by the physician or physical assistant; and communicate effectively with other health care providers regarding medical diagnosis and treatment. Course content is organized throughout the semester based in three subsections: diagnostic imaging, radiology, and laboratory tests. Students will synthesize information from three key areas of medical management, including laboratory tests, radiological imaging exams, and clinical pharmacology. (4 credits)

**PHT 7605—Evidence-Based Practice and Outcome Measurement**
This course is divided into three parts. First, participants learn to use Sackett’s model of evidence-based practice in order to locate/access sources of evidence, evaluate levels of evidence, and apply evidence to clinical practice. Second, students are exposed to the PEDro scale, the work of the Philadelphia Panel, and APTA’s Hooked on Evidence. Third, participants will learn to incorporate outcome measurement into practice by choosing valid, reliable, and responsive outcome measures related to impairments, functional limitations, health status, and/or quality of life. (4 credits)

**PHT 7615—Advanced Differential Diagnosis**
This course is designed to offer students the skills to make clinical decisions and screen medical diseases independently from a physician, dentist, or psychologist. It is not the intent of this course to instruct students in becoming medical diagnosticians, but rather to give students the tools to rule out medical problems in which physical therapy is contraindicated or that may require additional medical or psychological evaluation or treatment. Course content includes subjective and physical exam of the cardiovascular, pulmonary, gastrointestinal, urogenital, integumentary, and endocrine systems, among others. **Prerequisite:** PHT 7215—Introduction to Clinical Reasoning, Differential Diagnosis, and Disablement Models (4 credits)

**PHT 7805—Contemporary Theories of Movement, Exercise, and Motor Learning**
This course addresses current theories of motor function (motor control and motor learning), exercise training (therapeutic exercise and aerobic conditioning), and movement science to enhance the practiced student’s ability to choose and apply appropriate examinations and interventions for patients with movement-related dysfunction. Students will apply contemporary theories to develop treatment strategies related to their current practice environment or patient population. (4 credits)

**PHT 7825—Patient/Client Management: Family Practice and Women’s Health**
This course enhances the clinician’s understanding of the rapidly changing health care system by addressing concepts of cost containment and managed care, legal and ethical issues of patient management, patient/client advocacy, and conflict resolution. (3 credits)

**PHT 7835—Patient/Client Management: Neuromuscular**

**PHT 7845—Patient/Client Management: Pediatric Practice**

**PHT 7855—Patient/Client Management: Geriatric Practice**

**PHT 7865—Patient/Client Management: Sports Medicine**

**PHT 7905—Musculoskeletal Manual Therapy: Lower Quadrant (5 credits)**

**PHT 7985—Musculoskeletal Manual Therapy: Upper Quadrant (5 credits)**

**PHT 7005—Payer Systems**
This course explores how multi-cultural issues impact the physical therapy profession. Students will develop awareness of cultural issues and beliefs, form an understanding regarding cultural diversity, develop a tolerance toward other belief systems, and appreciate the differences that each ethnic and cultural belief system embraces. (3 credits)

**PHT 7015—The Therapist and Cultural Diversity**

**PHT 7235—Practicing in an Evolving Health Care System**
This course enhances the clinician’s understanding of the rapidly changing health care system by addressing concepts of cost containment and managed care, legal and ethical issues of patient management, patient/client advocacy, and conflict resolution. (3 credits)
PHT 7025—
The Health Care Educator
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 a 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 students will examine. (3 credits)

PHT 7035—Computer Applications in Health Care
Concepts and techniques in computer technology related to both education and patient/client management are explored. Students become proficient in developing a Web site, creating patient education and tracking systems, and using multimedia computer courseware to enhance practice. (3 credits)

PHT 7045—Professional Writing
Upon completion of this course, students will be able to write grammatically sound papers for both the academic and work environments. The course reviews basic grammar, punctuation, and syntax rules. Students then engage in writing six different types of papers: autobiography, expository, descriptive, persuasive, humorous, and writing on topics. (3 credits)

PHT 7055—Ethical and Legal Issues in Health Care I
This course covers ethical, moral, and legal issues affecting patient care delivery, including confidentiality, consent, reimbursement, patient rights, abuse, and risk management. In addition students will review organizational control laws, codes, and standards affecting physical therapy practice. Each student will complete a written project on a self-selected topic or question pertinent to his or her practice area. (3 credits)

PHT 7065—
Independent Study: Case Report
Students engage in an individualized program of study to develop and write a case report, based on a case in his or her own practice, using the guidelines from the American Physical Therapy Association. The process of writing a case report includes identification of an appropriate case, a review of the literature, identification of valid and reliable outcome measures, and documentation of the elements of patient/client management: examination, evaluation, diagnosis, prognosis and plan of care, and interventions. (3 credits)

PHT 7075—Independent Study
This class allows the student to pursue an area of interest in physical therapy that is not offered elsewhere in the curriculum. This class is supervised by a faculty member, but directed by the student's goals and objectives. The student is responsible for a) designing his or her objectives and submitting them to the faculty member for feedback/approval; b) developing an action plan for work that will be completed and submitting this plan for approval to the course instructor; and c) completing a minimum of three graded assignments. Examples of independent study topics include: developing an educational course, developing a unique area of interest, or developing ideas for future research after conducting a thorough review of current literature. (2-3 credits)

PHT 7095—Clinical Internship
Supervised, on-site clinical experiences are offered as an elective course for practitioners who identified clinical mentoring as a personal learning need. In addition, clinical residencies are recommended for individuals returning to practice after an extended absence, or for individuals wishing to shift into a different practice environment. Students will be involved in the development of potential clinical sites suited to their educational, geographic, and learning needs. A minimum of four weeks of full-time hours (or equivalent hours part-time) is required. (4 credits)

PHT 7915—Joint and Skeletal Muscles: Structure and Function
This is a two-part course. Part I addresses the embryological development of joints, histology of joint structures, reaction of joint tissue to injury, changes in joints through the life cycle, and pathological changes in joint structure. Part II addresses the structure of skeletal muscles and its relation to function. It also includes development from the cellular to the gross level from embryology through the life cycle, as well as the physiological processes that occur during muscle work and repair. (3 credits)

PHT 7925—Survey of Alternative and Complementary Therapies
Synthesize information from various alternative and/or complementary therapies in order to help clients make informed choices. The course includes a survey of alternative health care practices in different cultures and a comparison between eastern and western practices. (3 credits)

PHT 7935—Exercise, Wellness, and Conditioning
This is an interactive course that examines the physiological basis of exercise and fitness programs. Students will compare and contrast forms of therapeutic exercise and fitness programs and their effect on the musculoskeletal and cardiopulmonary systems. Upon completion of the program, students will present an exercise or fitness program developed for a client that includes a plan to assess client outcomes. (3 credits)

PHT 7945—Group Processes and Conflict Strategies
This course is designed to facilitate interactive group processes by introducing students to communication and conflict management skills that can be used on a daily basis. Interactive experiences allow students to self-assess their own behavior and conflict styles and apply newly acquired skills to the health care environment. (3 credits)

PHT 7955—
The D.P.T. in Private Practice
This course is designed to help health professionals gain an overview of the theoretical framework and practical skills needed to develop and/or grow a private physical therapy practice. Upon completion of the course, students will have investigated all aspects of developing a private practice, including practice identity (mission/vision), marketing, reimbursement issues, financing, and development of a tangible business plan. (3 credits)

PHT 7965—Quantitative Analysis of Human Movement
This course is designed to help health professionals gain an overview of theory and methods on quantitative measurement and analysis of human movement. It will focus on kinematic, kinetic, and electromyographic analysis in the clinical setting and on carrying the information into clinical practice. Knowledge gained in this course will help in developing quantitative measurements that can be implemented in the clinic for documentation and for clinical research. (3 credits)
Doctor of Philosophy in Physical Therapy (Ph.D.)

As our health care delivery systems change and our knowledge base broadens, it becomes important for licensed physical therapists to continue their formal education to assume roles as consultants, educators, researchers, advanced clinicians, and health care leaders.

The Physical Therapy Department at NSU offers the Doctor of Philosophy Program to address these needs by offering a curriculum that will prepare its students to become leaders of the profession.

Curriculum Overview

The Doctor of Philosophy in Physical Therapy (Ph.D.) Degree Program is taught in a distance education format. Sixty semester hours are required beyond the entry-level master's degree in physical therapy or beyond an advanced master's degree (in which the undergraduate or master's degree was in physical therapy). It requires 75 semester hours beyond the undergraduate professional physical therapy degree.

Requirements include satisfactory completion of all courses, seminars, independent study, and research.

Coursework is divided into required core, specialty, and elective courses. The elective courses are offered in education, administration, computer technology in education, clinical tracks, and public health.

Program Outcomes

Graduates of the program will be able to

• practice with advanced competencies in any practice setting
• serve as change agents in organizations
• negotiate and advocate for patients, self, and others for the provision of health care services
• address health care issues of patients through the life cycle
• educate patients, students, peers and other health care providers in order to accomplish treatment goals and the goals of the program
• consult with organizations for the development of health care services
• contribute to physical therapy practice through clinical research

Accreditation

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, Telephone number: 404-679-4501) to award associate's, bachelor's, master's, educational specialist, and doctoral degrees.

Requirements for Admission

1. Applicants must be licensed physical therapists who are graduates of schools accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). Graduates of physical therapy schools in other countries are also eligible with review of academic credentials by an appropriate agency and a review of TOEFL scores, when appropriate.

2. Selection of students for the physical therapy doctoral (Ph.D.) program is based on prior academic performance, clinical experience, and references. We seek students who have qualities such as assertiveness, initiative, leadership, self-understanding, openness, strong communication skills, and who are critical thinkers. Students must also be motivated and self-directed.

3. Applicants must hold either a bachelor's degree in physical therapy or a master's degree, entry-level master's degree (e.g., M.S.P.T., M.P.T.), or entry-level doctoral degree (D.P.T.) in physical therapy.

4. Completion of the Graduate Record Examination (GRE) or equivalent standardized test for applicants entering the program with a bachelor's degree is required. The dean is empowered to evaluate the total qualifications of every student and to modify requirements in unusual circumstances.

Computer Requirements

All students are required to have a computer with the following recommended minimum specifications:

• Pentium; 1.6GHz minimum processor
• 256 MB RAM
• video capable of 800 x 600 screen display or better
• CD-ROM capability
• full duplex sound card and speakers
• 56.6 baud modem
• Internet connection with private Internet service provider (ISP) for access from home to the Internet
• Windows 2000 or XP
• Microsoft Office 2000 Professional with PowerPoint, Word, and Excel minimum
• surge suppressor electrical outlet
• suggested option: zip drive
• suggested option: laptop computer with wireless Internet capability for use during on-campus classes

Application Procedures

Applicants must submit

1. a completed application form along with a nonrefundable application fee of $50
2. official transcripts from all undergraduate, professional, and graduate institutions attended, sent directly to Nova Southeastern University Enrollment Processing Services (EPS) College of Allied Health and Nursing Physical Therapy Department Office of Admissions 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905.

3. three letters of evaluation from persons who can evaluate the applicant's performance as a physical therapist and/or the applicant's capability for doctoral studies

4. copies of all professional certifications, registrations, and other relevant credentials.

5. official GRE scores or equivalent standardized test scores for applicants entering the program with a bachelor's degree in physical therapy and TOEFL scores, if appropriate. After an evaluation of credentials, qualified applicants may be interviewed.

Foreign Coursework

If applicant attended or is a graduate of a foreign institution(s), all coursework from the foreign institution(s) must be evaluated for U.S. institutional equivalence. The official evaluation must be sent directly from the evaluation service. You should contact one of the following for evaluations:

• World Education Services
  P.O. Box 745
The first term's tuition and fees are due on registration day. Tuition for the appropriate registration day.

Doctoral Tuition and Fees
Anticipated tuition for 2007-2008 (subject to change by the board of trustees without notice) is $485 per credit hour. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 maximum is also required annually. The first term's tuition and fees are due on registration day. Tuition for each subsequent semester is due on the appropriate registration day.

Requirements for Graduation
In order to be eligible for the Ph.D. degree, students shall

- be of good moral character
- complete a minimum of 60 semester hours of coursework beyond a master's degree or up to 75 semester hours beyond the professional undergraduate degree
- satisfactorily complete the program requirements for the degree with a minimum overall GPA of 80 percent, and at least 80 percent in each course
- satisfactorily meet all financial and library obligations
- successfully complete and defend their dissertation and have it approved. The dissertation will be done under the direction of a member of the Dissertation Committee. The committee must approve all aspects of the project. Students will have up to seven years to complete the degree requirements. They may take 12 semester hours each term to complete the degree program in 6.5 to 7.5 terms (2.5 to 3.5 years).

Course of Study
For students holding a master's or entry-level master's degree in physical therapy with transferable credits:

- orientation
- required core courses (31 semester hours)
- specialty and elective courses (9 semester hours)
- dissertation (20 semester hours)

Students may transfer up to nine credits from an accredited postprofessional or advanced degree program. Final determination of acceptable transfer credits will be at the discretion of the program director.

Courses will be conducted in an institute format and as independent study under faculty supervision. The distance education format enables students to continue their practice as physical therapists while earning the degree. The distance education program does require students to be in residence on campus twice per year for up to six days each time (for full-time students). Graduates will be awarded the Ph.D. degree upon satisfactory completion of all degree requirements.

Doctor of Philosophy in Physical Therapy Course Descriptions

Note: Listed to the right of each entry are semester credits.

**Required core course

**PHT 7500 or PHT 7510 is a required course.

May be required for students who enter the program with an undergraduate degree in physical therapy

PHT 6000—Professional and Business Communication
Covers several aspects of communication: therapeutic communication, business communications, and oral presentation skills. (3 credits)

PHT 6010—Organizational Behavior
This course will introduce a broad range of behavioral science theory and applications for managers and subordinates in modern organizations, focusing on managing and developing organizations constructively to deal with change. Emphasis is on the integration of managerial psychology and managerial activity. This course will formulate a dynamic approach to the concept of systems for managing organizations to achieve organization and personal objectives. The course will rely heavily on participants' own background and skills to produce an effective learning experience leading to the development of a successful managerial strategy for the future. (2 credits)

PHT 6020—Ethical and Legal Issues in Health Care I
Covers ethical, moral, and legal issues affecting health care delivery: confidentiality, consent, reimbursement, patient rights, abuse, risk management. Covers organizational control laws, codes, and standards affecting health care delivery. (3 credits)

PHT 6030—Health Care Policy and History
Explores the history of health care delivery and policy development in the United States and globally. Students will analyze, from a historical perspective, the impact of history on policy development, both present and future. References include works on history and policy as well as analysis of the works of health care analysts. (3 credits)

PHT 6140—Ethnocultural Issues in Health Care
This course is a survey of ethnic and cultural issues, focusing on the insight and skills necessary to effectively deliver health care services to individuals in minority ethnic groups and cultures. Attention will be directed...
at individual communication and assessment skills necessary to positively effect the practitioner-patient interaction and enhance patient compliance. (3 credits)*

PHT 7010—Professional Issues in Physical Therapy and Health Care
Current issues facing the physical therapy profession. Students participate in group discussions and complete a written project on a selected topic. (3 credits)*

PHT 7020—Ethical and Legal Issues in Health Care II
Students explore more global and controversial bioethical topics in the health care arena. Legal and ethical issues related to topics including animal and human research, genetic engineering, cloning, alternative medicine, life support, organ donation, and telemedicine are analyzed. Students will participate in group discussions, conduct interviews of local legal authorities, and complete written assignments on highly controversial health care practices. (3 credits)*

PHT 7030—Health Care Policy and Health Care Reform
Covers global issues of health care reform, examining the theories, methodologies of reform, the impact of each on physical therapy, and how practitioners can affect change. (4 credits)*

PHT 7100—Research Methods I: Biostatistics
Develops an understanding of statistics and preparation for PHT 7110—Research II: Methods and Design. Emphasis is placed on estimation, hypothesis testing, sampling, regression analysis, ANOVA, and other techniques. SPSS should be used to solve problems when applicable. (4 credits)*

PHT 7110—Research II: Methods and Design
The course builds on statistical techniques presented in PHT 7100. It includes the following topics: research design, measurement, and statistical analysis. Emphasis is placed on the selection of appropriate methodologies for a variety of problem solving situations. Prerequisites: PHT 7100—Research Methods I (or proof of competence in topics covered in that course) and competence in statistical application software (SPSS, Minitab, etc.) (4 credits)*

PHT 7111—Qualitative Research Methods
The focus of this course is to introduce students to qualitative research methods of inquiry. Phenomenological inquiry, grounded theory, ethnography, and other approaches to qualitative research will be examined. Students will gain understanding of the history of qualitative research, the philosophies that drive the various methodologies, strategies for data collection and analysis, ethical considerations, applications and implications of using qualitative research methods in physical therapy. Students will have the opportunity to experience qualitative data collection and analysis. (3 credits)

The course is designed for the health professionals to gain an overview of measurement theory and methods. It will focus on problems and challenges of validity and reliability of measurement, and emphasize development, testing, and refinement of norms and criteria-referenced data collection instruments. It will help the student in the development of an analytical view of measurement issues. (3 credits)*

PHT 7120—Critical Inquiry
Students are required to evaluate research literature in a scientific and systematic way. Knowledge gained in this course will help in developing research proposals using different designs. This course is required for students entering with a bachelor's degree. Prerequisites: PHT 7100 and PHT 7110 (3 credits)*

PHT 7130—Research V: Scientific Writing
Students learn how to write for scientific journals and practice proposal and grant writing. Students may collect and analyze data using various statistical techniques. Students will have the opportunity to develop research proposals using different designs. (4 credits)*

PHT 7140—The Therapist and Cultural Diversity
In this course, the impact of ethnocultural issues, policies, and procedures on the therapist will be assessed and analyzed. The complex issues of policy implementation and planning in dealing with ethnocultural issues will be explored. Continuation of PHT 6140. No prerequisite. (3 credits)

PHT 7200—Teaching and Learning in Physical Therapy
Examines the complexity of learning and behavioral change. Students explore their own learning styles as well as a variety of learning theories, including computer-based learning. (3 credits)

PHT 7210—Patient Education
Applies teaching-learning theories to patient education issues. Students will complete a project related to teaching and learning for patient groups or for individual patient care. Offered as independent study as needed. Prerequisite: PHT 7200 (3 credits)

PHT 7300—Consulting Skills
The roles and skills of consultants. Students complete a paper on selected topics in consultation. (3 credits)

PHT 7310—Consulting as a Physical Therapist
Independent study course. Students apply consulting concepts to prepare a report on a hypothetical or actual consulting situation in physical therapy. (3 credits)
PHT 7400—Independent Study
Individualized study under the supervision of assigned instructor. Requires permission of graduate coordinator. (1-10 credits)

PHT 7401—Independent Study
Individualized study under the supervision of assigned instructor. Requires permission of graduate coordinator. (1-4 credits)

PHT 7420—Health Care Delivery Systems
Addresses issues in various health care systems where physical therapists work. Students discuss and complete a report on management of physical therapy services in selected delivery systems. (3 credits)

PHT 7430—Physical Therapy Management
Addresses management of fiscal and human resources. Students take part in discussions and complete a case study. (3 credits)

PHT 7500—Computing Technology in Education
Students are initially exposed to concepts and principles underlying the design and development of courseware. Then students apply teaching and learning theories to the creation of courseware, on the topic of their choice, saved to a zip disk or CD. The goal of the course is for students to become proficient in the analysis, design, development, implementation, and evaluation of effective courseware. (3 credits) **

PHT 7510—Designing for the Web
This course explores current concepts and principles of designing educational material for the Web. Through "discovery learning," students develop principles of multimedia design for the Web, identify best and worst Web sites based on those principles, apply the newly acquired design principles to the development of individual homepages, and create a Web-based course using WebCT. (3 credits)**

PHT 7610—Neuroscience
Individual study course designed to meet the needs of the individual student. (3 credits)

PHT 7620—Joint and Skeletal Muscles: Structure and Function
Individual study course designed to meet the needs of the individual student. (3 credits)

PHT 7700—Advanced Clinical Competency I
Students will enroll in an advanced clinical course of their choice. The course may be offered by the physical therapy program or in the form of a clinical certificate that is approved by the Doctoral Committee. (4 credits)

PHT 7710—Advanced Clinical Competency II
A project in the area of chosen clinical competency will be completed under the direction or agreement of the assigned mentor. (4 credits)

PHT 7720—Leadership
This online course explores leadership methods and theories in health care and physical therapy in a rapidly changing environment. The student is expected to gain knowledge to be able to critically analyze leadership styles and compare and contrast leadership skills and management skills. (3 credits)

PHT 7740—Comprehensive Examination
Students in the Ph.D. program in physical therapy must take the comprehensive examination (pass/fail) to be eligible to start the dissertation phase. To be eligible to take the examination, all core courses must be completed. The examination includes questions related to research, ethical and legal issues, health care policies, and professional issues. The student has six hours to complete the examination without using any resources. (0 credits)

PHT 7800—Dissertation
Supervised, original project on a physical therapy-related topic will be completed under the supervision of the Dissertation Committee. (20 credits)*
Physician Assistant Department—Fort Lauderdale Campus

Physician assistants (PAs) serve as essential components of the medical system that continues to struggle to provide quality, affordable health care for all Americans. Their roles in the system will continue to grow as changes in health care indicate. Today, more than 60,000 individuals are eligible to practice as PAs under physician supervision. PAs provide care that would otherwise be provided by physicians. PAs take medical histories, perform physical examinations, order and interpret tests, diagnose and treat illnesses, perform medical/surgical procedures, assist in surgery, and can write prescriptions in almost all states. PAs work in most medical specialties and in all types of communities. Many PAs practice family and internal medicine, and more than one-third are in towns with fewer than 50,000 residents. The PA profession is one of the fastest growing health care professions. The U.S. Department of Labor projects that the number of jobs for PAs will increase by 50 percent through the year 2014, while the total number of jobs overall will only grow by 13 percent over the same period.

It is the obligation of each physician/PA team to ensure that the PAs' scope of practice is identified; that delegation of medical tasks is appropriate to the PAs' level of competence; that the relationship of, and access to, the supervisory physician is defined; and that a process of performance evaluation is established. Adequate responsible supervision of the PA contributes to both high-quality patient care and professional growth.

The Physician Assistant Department offers an innovative program that lasts 27 months. Upon successful completion of study, students who entered the program in June 2005 will be awarded the bachelor of science in physician assistant studies and the master of medical science degrees. Students who entered after June 2005 will receive, upon successful completion, the master of medical science in physician assistant degree. The curriculum includes rigorous instruction in basic science subjects, followed by clinical medicine, physical diagnosis, clinical laboratory medicine, clinical pathophysiology, clinical procedures and surgical skills, electrocardiography, pharmacology, radiology, and others. Students also take courses that include health care law and ethics, epidemiology and biostatistics, research methodology, and cultural issues in health care.

During the clinical year of study, the student participates in clinical rotations throughout the state of Florida. These rotations include family medicine, internal medicine, pediatrics, gynecology and prenatal care, emergency medicine, and surgery, all complemented by three elective rotations. NSU graduates are prepared to work in many clinical areas, both in primary care and specialty medicine.

Accreditation

The NSU Physician Assistant Department is accredited by the Accreditation Review Commission for Physician Assistants, Inc. (ARC-PA). The NSU Physician Assistant Program has enjoyed continuing accreditation since its inception. The department is a member of the Physician Assistant Education Association (PAEA).

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, Telephone number: 404-679-4501) to award associate's, bachelor's, master's, educational specialist, and doctoral degrees.

Mission Statement

To provide a primary care training program designed for, and dedicated to, producing competent physician assistants who will provide quality health care in rural, urban, underserved, and culturally diverse communities; to increase the accessibility of quality health care in the primary care setting; to prepare students for lifelong learning and leadership roles; and to promote the physician assistant profession.

Admission Requirements

Prospective students are selected by the committee on admissions (COA), which considers the overall qualities of the applicant. Areas of consideration include interpersonal skills, personal motivation, knowledge and understanding of the PA profession, academic performance and level of achievement, life experiences, quality and length of prior health care experience, and recommendations/evaluations. Personal interviews are offered to the most qualified applicants to assess interpersonal and communication skills, maturity, integrity, altruistic attitude, and commitment to a PA career.

1. Applicants must have a minimum cumulative GPA of 2.7 and a minimum science GPA of 2.7 on a 4.0 grading scale.

Successful applicants in the past have typically had both cumulative and science GPAs of 3.0 or higher, an average composite GRE score (verbal, quantitative, and analytical) in the 40th percentile or higher, and letters of recommendation from individuals with whom the applicant has had a professional working relationship in the health care field.

2. Prior to matriculation, applicants must have completed a minimum of 90 semester hours (or equivalent quarter hours) of specified coursework from a regionally accredited college or university. Of these 90 semester hours, 30 semester hours (or equivalent quarter hours) must be upper division courses (typically defined as a course number preceded by a 3 or a 4). Upper division courses can be courses from any department other than physical education. These courses are of the applicant's choosing, however, upper division science courses are recommended. The program requires the students to earn a grade of C (2.0) or better in all courses. Successful completion of a bachelor's degree meets the requirement of the 30 upper division credits.

3. The college requires the students to earn a grade of C (2.0) or better in each of the following required courses:
   • college math (3 semester hours)
   • English (6 semester hours, including 3 of English composition)
   • humanities/arts (3 semester hours)
   • social sciences (9 semester hours)
   • general biology (or zoology), including laboratory (4 semester hours)
   • microbiology, including laboratory
The following courses are recommended:

- General chemistry I and II, including laboratory (8 semester hours)
- Human anatomy and human physiology (6 semester hours)
- Biochemistry or organic chemistry (3 semester hours)
- Electives (44 semester hours)

Applicants are encouraged to complete their elective coursework in the areas of behavioral, physical, and social sciences or in the humanities.

The remaining 9 semester hours can be in general chemistry I and II, including laboratory (4 semester hours)

5. Prior health care experience is highly recommended and is considered for admission. Those applicants who have prior health care experience must submit verifiable information about their experience.

6. All applicants are required to submit official scores from the Graduate Record Examination (GRE) general test to the Office of Admissions. Our school code is 5522. The test must have been taken within the past five years and must be taken early enough for official scores to be received in the admissions office by the supplemental application due date of February 15. Applications will not be considered complete without GRE scores. Testing information for the GRE may be obtained from www.gre.org or by telephone at (609) 921-9000.

Computer Requirements
Throughout the curriculum, students are required to access various instructional materials and information from the Internet. All students are required, therefore, to have a computer with minimum suggested specifications:
- PC computer
- Internet connection with private Internet service provider (ISP) for access from home to the Internet (If a laptop computer is utilized, a wireless modem will allow access to the campus-wide NSU wireless network.)
- Sound card and speakers
- CD-ROM
- Windows XP or NT operating system
- Microsoft Office 2000 or later, with PowerPoint, Word, and Excel

Convenient access to a printer

Application Procedures
1. Apply to CASPA
The Physician Assistant Program participates in the Centralized Application Service for Physician Assistants (CASPA) for the receipt and processing of all applications. CASPA takes no part in the selection of students. CASPA applications are submitted online at www.caspaonline.org or by writing
CASPAP.O. Box 9108
Watertown, MA 02471

The CASPA application deadline is December 1 in order to be considered for admission in June.

2. Send transcripts and letters of recommendation/evaluation to CASPA
All official college transcripts from all undergraduate, graduate, and professional institutions attended must be sent directly from the institutions.

Three letters of recommendation/evaluation must be sent to CASPA. One letter of recommendation/evaluation must be from a physician or coworker, or supervisor. Two letters of recommendation/evaluation must be from health care professionals, one of which must be from a physician or PA with whom you have worked, shadowed, or volunteered.

3. Send GRE scores to NSU PA Office of Admissions
Official Graduate Record Exam (GRE) scores must be submitted directly to Nova Southeastern University Enrollment Processing Services (EPS) College of Allied Health and Nursing Physician Assistant Department Office of Admissions 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905

The NSU code number is 5522. Your GRE test scores must be less than five years old and must be taken early enough for official scores to be received by the supplemental application deadline of January 31.

4. Complete Supplemental Application
Once the CASPA application has been received by Nova Southeastern University, a supplemental application will be made available online.

Your complete supplemental application must be received no later than January 31 in order to be considered for admission for the June entering class. Once we receive your GRE scores, supplemental application, and $50 fee, your file will be reviewed.

The applicant will not be considered for a possible interview until all of these requirements have been received by the EPS.

Personal Interviews
Once your application is complete, the committee on admissions will decide whether or not your application is strong enough to warrant an invitation for a personal interview. Interviews are conducted on the Nova Southeastern University, Fort Lauderdale, Florida, campus and are by invitation only. Interviews will be held from September through May. An invitation to inter-
All prerequisite coursework must be completed by the end of May in order to be considered for the June entering class. If, at the time of application, coursework is in progress or not completed by the end of May in order to be considered for the June entering class. This allows candidates to receive final transcripts prior to matriculation. It is the responsibility of the applicant to ensure that arrangements are made for these transcripts to be sent.

Transcripts
All applicants who are accepted must submit official transcripts from all schools attended to the NSU EPS Physician Assistant Admissions Office prior to matriculation. The view is not a guarantee of admission.

Current College Coursework
All prerequisite coursework must be completed by the end of May in order to be considered for the June entering class. If, at the time of application, coursework is in progress or anticipated, please identify these courses on the supplemental application.

Accepted applicants who are accepted must submit official transcripts from all schools attended to the NSU EPS Physician Assistant Admissions Office prior to matriculation. It is the responsibility of the applicant to ensure that arrangements are made for these transcripts to be sent.

Undergraduate/Physician Assistant Dual-Admission Program—Fort Lauderdale Campus
Nova Southeastern University Health Professions Division has established a dual admission program with the Nova Southeastern University Farquhar College of Arts and Sciences (FCAS) for a select number of highly motivated, qualified students interested in pursuing professional studies in the Physician Assistant Program. This allows candidates to receive their bachelor of science and master of medical science (B.S./M.M.S.) degrees in the Physician Assistant Program in a five-year period.

Students who matriculate into the Farquhar College of Arts and Sciences must maintain a specified grade point average during the undergraduate years and achieve acceptable scores on the Graduate Record Examination (GRE). Students will be awarded a B.S. degree from FCAS at the end of the first academic year of the PA program and an M.M.S. degree upon completion of the PA program.

For information and requirements, contact Office of Admissions Farquhar College of Arts and Sciences Nova Southeastern University 3301 College Avenue Fort Lauderdale, Florida 33314-7796.

Tuition and Fees
- Anticipated tuition for 2007–2008 (subject to change by the board of trustees without notice) is $21,785 for Florida residents and $22,495 for out-of-state residents.
- Acceptance fee is $500. This fee is required to reserve the accepted applicant’s place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in the event of a withdrawal. It is payable within two weeks of an applicant’s acceptance.
- Deposit is $250. This is due February 15, under the same terms as the acceptance fee.
- Preregistration fee is $250. This is due April 15th, under the same terms as the acceptance fee.
- A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually. The first semester’s tuition and fees, less the $1,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met.

Applicants should have specific plans for financing 27 months of professional education. This should include tuition, living expenses, books, equipment, and miscellaneous expenses. Each student is required to carry adequate health insurance. Students may avail themselves of the insurance plan obtainable through the university.

There are a limited number of part-time work-study assignments available. Due to the demands of the PA curriculum, the program discourages any outside employment.

Requirements for Graduation
In order to be eligible to graduate from the Physician Assistant Program, students shall
- successfully complete all academic and clinical courses and degree requirements
- have satisfactorily met all financial and library obligations
- attend in person the rehearsal and commencement program, at which time the degree is conferred

Academic Dismissal in the Physician Assistant Program
See the suspension/dismissal section of the Student Handbook.

Readmission Policy in the Physician Assistant Program
In selected cases, and only with the approval of the department chair and college dean, a student may be allowed to be noncompetitively matriculated with the next first-year class. It is emphasized that this only refers to those few students with special academic or personal issues.

Course of Study
The Physician Assistant Program curriculum is completed following a minimum of 90 semester hours of undergraduate coursework, of which 30 semester hours (or equivalent quarter hours) must be upper division. The comprehensive curriculum, completed in a consecutive manner, is oriented to primary care and prepares the student to practice in a wide variety of clinical settings. The first 14 months of study consist of basic sciences and clinically related didactic courses. All courses are required and must be successfully completed before advancing to the clinical year. During this time frame, students are generally in class from Monday through Friday, 8:00 a.m. to 5:00 p.m., although there are occasional evening and/or weekend hours. Because of its highly integrated and compact curriculum, the PA department requires matriculants to complete the entire curriculum at NSU. However, individual requests for advanced placement, transfer of credit, and credit for experiential learning will be reviewed in line with college policies.

The clinical year is devoted to 13 months of clinical training with required clinical rotations in family medicine, emergency medicine, pediatrics, prenatal care/gynecology, surgery, and internal medicine. The students also complete three elective rotations, for a total of nine clinical rotations.
The required rotations and two of the elective rotations are six weeks in length. The remaining elective rotation is four weeks in length.

Each required rotation has assigned readings and learning objectives. At the end of each required rotation, a written comprehensive subject examination is administered and must be passed. During rotations, students will be supervised by licensed practitioners and will actively participate in patient assessments, perform common laboratory procedures, interpret common diagnostic examinations, and help manage common medical problems. The work hours during clinical rotations are set by the preceptor and can include evening and weekend hours. Students are required to work a minimum of 40 hours per week, however many rotation sites require students to work substantially more hours per week.

Upon completion of the course of study, students who entered the program in June 2005 will be awarded the bachelor of science in physician assistant studies and the master of medical science degrees. Students who entered after June 2005 will receive, upon successful completion, the master of medical science in physician assistant degree. Graduates will be eligible to take the Physician Assistant National Certification Examination (PANCE) administered by the National Commission on Certification of Physician Assistants. The role of the physician assistant requires a high level of expertise and responsibility. The applicant must possess the ability and desire to complete a rigorous academic and clinical program and make a commitment to continued learning.

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**Curriculum Outline for the Master of Medical Science (M.M.S.) in Physician Assistant Program—Fort Lauderdale Campus**

**Start Date:** June 2006  
**Length:** 27 months  
**Degree:** Master of Medical Science (M.M.S.) in Physician Assistant  
**Didactic:** 14 months  
**Clinical:** 13 months

**First Semester—Summer I**  
(June–August 2006)  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Lecture</th>
<th>Laboratory</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ANA 5420</td>
<td>Anatomy</td>
<td>55</td>
<td>38</td>
<td>5</td>
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<td>PHS 5400</td>
<td>Physiology</td>
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<td>PAC 5400</td>
<td>Clinical Pathophysiology</td>
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<td>PAC 5000</td>
<td>Physical Diagnosis I</td>
<td>28</td>
<td>38</td>
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<tr>
<td>PAC 5002</td>
<td>Medical Terminology</td>
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<tr>
<td>PCO 5300</td>
<td>Biomedical Principles</td>
<td>18</td>
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<td>PAC 5003</td>
<td>Fundamentals of Medical Imaging</td>
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<tr>
<td>PAC 5001</td>
<td>Introduction to the PA Profession</td>
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**Total Hours:** 241  

**Second Semester—Fall**  
(September–December 2006)  

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<tr>
<td>MIC 5400</td>
<td>Microbiology</td>
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<tr>
<td>MMS 5404</td>
<td>Legal and Ethical Issues in Health Care</td>
<td>30</td>
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<tr>
<td>PAC 5100</td>
<td>Physical Diagnosis II</td>
<td>20</td>
<td>36</td>
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<td>PCO 5400</td>
<td>Pharmacology I</td>
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<td>PAC 5110</td>
<td>Clinical Medicine and Surgery I</td>
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<td>PAC 5130</td>
<td>Clinical Laboratory Medicine I</td>
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<td>AHN 5000</td>
<td>Introduction to Health Care Research</td>
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<td>PAC 5229</td>
<td>Electrocardiography</td>
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**Total Hours:** 347  

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Third Semester—Winter (January–May 2007)

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<tr>
<td>PAC 5200</td>
<td>Physical Diagnosis III</td>
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<td>PAC 5210</td>
<td>Clinical Medicine and Surgery II</td>
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<td>PAC 5311</td>
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<td>PCO 5410</td>
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<td>MMS 5406</td>
<td>Cultural Issues in Health Care</td>
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<td>PAC 5311</td>
<td>Clinical Psychiatry</td>
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<td>AHN 5500</td>
<td>Statistical Methods for Health Care Research</td>
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Total Hours: 504

Fourth Semester—Summer II Advanced Didactic (June–July 2007)

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<td>MMS 5460</td>
<td>Life Support Procedures and Skills</td>
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<tr>
<td>PAC 5510</td>
<td>Clinical Procedures and Surgical Skills</td>
<td>46</td>
<td>24</td>
<td>3</td>
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<tr>
<td>PAC 5129</td>
<td>Health Promotion and Disease Prevention</td>
<td>22</td>
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<tr>
<td>PAC 5006</td>
<td>PA and Health Care Dynamics</td>
<td>12</td>
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<tr>
<td>PAC 5010</td>
<td>Core Competencies</td>
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<tr>
<td>MMS 5410</td>
<td>Complementary Medicine and Nutrition</td>
<td>30</td>
<td>0</td>
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<tr>
<td>MMS 5407</td>
<td>Clinical Pharmacology</td>
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Total Hours: 179

Clinical Curriculum—Second Year (August 2007–August 2008)

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Weeks</th>
<th>Contact Hours</th>
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<tr>
<td>PAC 6304</td>
<td>Prenatal Care and Gynecology</td>
<td>6</td>
<td>270</td>
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<tr>
<td>PAC 6311</td>
<td>Internal Medicine</td>
<td>6</td>
<td>270</td>
<td>6</td>
</tr>
<tr>
<td>PAC 6313</td>
<td>Surgery</td>
<td>6</td>
<td>300</td>
<td>6</td>
</tr>
<tr>
<td>PAC 6315</td>
<td>Emergency Medicine</td>
<td>6</td>
<td>270</td>
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<tr>
<td>PAC 6317</td>
<td>Pediatrics</td>
<td>6</td>
<td>270</td>
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</tr>
<tr>
<td>PAC 6318</td>
<td>Family Medicine</td>
<td>6</td>
<td>250</td>
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<tr>
<td>MMS 6401</td>
<td>Clinical Elective I</td>
<td>6</td>
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<td>MMS 6402</td>
<td>Clinical Elective II</td>
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<td>PAC 6308</td>
<td>Clinical Elective III</td>
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<td>MMS 6500</td>
<td>Graduate Project</td>
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Total Hours: 2,330

Curriculum is subject to change as directed by the department.

Physician Assistant—Fort Lauderdale Course Descriptions

Note: Listed at the end of each entry are lecture clock hours, laboratory clock hours, and semester hours.

*Core competency course

ANA 5420—Anatomy
Gross structures of the human body. Integrates topographic and radiographic anatomy to stress the application and importance of clinical anatomy. Develops the knowledge of the human anatomy necessary for the practice of the profession. (55-38-5)

MIC 5400—Microbiology
Relationship of microbes to human disease and the host-immune response. Characteristics and properties of clinically significant bacteria, viruses, fungi, and selected parasites as well as the prevention, control, and diagnostic laboratory tests of their associated specific infectious diseases. (52-2-3)

MMS 5404—Legal and Ethical Issues in Health Care
Introduces the role that ethics and the law play in the practice of health care.
Principles and concepts in determining correct actions both legally and ethically are reviewed. Topics include solving an ethical dilemma, ethical implications involved in genetic engineering, the impaired clinician, conflicts between providers, conflicts between clinician and patient, euthanasia, risk management, confidentiality, informed consent, patients' directives, and documentation. (30-0-2)

MMS 5406—Cultural Issues in Health Care
Introduction to the skills and insights necessary in promoting health and dealing with illness in diverse populations. Issues discussed include the need for effective communication with an understanding of societal and cultural factors and how they impact on health care efforts and use of the health care system. (30-0-2)

MMS 5407—Clinical Pharmacology
This course will advance the clinical skills of the student as they relate to the pharmacologic treatment of the patient. Specific topics will include the indicated medications in the treatment of common illnesses; their adverse effects; and drug interactions, dosage, and monitoring. (45-0-3)

MMS 5410—Complementary Medicine and Nutrition
Survey of human nutrition in health care, and the principles for maintaining good health through nutrition. Addresses health hazards associated with dietary deficiencies, obesity, fad dieting, food contamination, diet management of selected diseases, and functional roles of vitamins and minerals. Additionally, this course will address introductory concepts, procedures, education, and licensing in alternative and complementary medicine. (30-0-2)

AHN 5000—Introduction to Health Care Research
This course is designed to provide tools for evaluating scientific research and gaining an appreciation of quantitative and qualitative research as important ways of knowing. Students will receive practical training in the essentials of research, such as framing the problem, developing a knowledge base, formulating research questions, approaching and analyzing research designs, and sharing research knowledge. (45-0-3)

AHN 5500—Statistical Methods for Health Care Research
This course is designed to continue research projects begun in Introduction to Health Care Research. Students will learn to apply statistical methods to the research questions posed in their literature reviews. Students will see how computer programs like SPSS can be used to address various quantitative and qualitative research questions. (45-0-3)

MMS 5460—Life Support Procedures and Skills
Introduction to the principles of advanced life support used in medical and surgical emergencies. Includes a review of the most common emergency situations encountered and provides hands-on practical training that will assist the student in developing the skills required to stabilize patients with life-threatening conditions. Includes certification in basic (BLS) and Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS). (24-40-3)

MMS 6401—Clinical Elective I
Elective, full-time, clinical rotation that provides an opportunity to investigate a clinical, medical, or surgical subspecialty area or gain more experience in primary care. Each six-week elective may be taken sequentially at the same site or separately. (270-0-6)

MMS 6402—Clinical Elective II
Elective, full-time, clinical rotation that provides an opportunity to investigate a clinical, medical, or surgical subspecialty area or gain more experience in primary care. Each six-week elective may be taken sequentially at the same site or separately. (270-0-6)

MMS 6500—Graduate Project
With the guidance of a faculty advisor, students will use the skills acquired in Publication Skills and Research (MMS 5412) to create a graduate project. The project features topics in clinical or administrative medicine and consists of a comprehensive literature review and evaluation completion of a publishable research paper. The project allows the student to demonstrate his or her ability to research and compile information and to present that information in a clear, written form. (0-0-3)

PAC 5000—Physical Diagnosis I
Principles and skills required to perform a complete medical history and physical examination. Emphasizes normal physical findings. Prerequisite for PAC 5100 (28-38-3)

PAC 5001—Introduction to the Physician Assistant Profession
Introduces key concepts regarding the PA profession: an overview of the profession, the history of the development of the profession, the current status of the profession, physician assistant education, and current and future roles of the physician assistant. (16-0-1)

PAC 5002—Medical Terminology
Use of medical language for appropriate and accurate communication in patient care. Students acquire a medical vocabulary, knowledge of medical terminology, and terminology reference material. (4-14-1)

PAC 5003—Fundamentals of Medical Imaging
Introduces key concepts for the understanding of normal medical diagnostic imaging. Emphasis is placed on images of normal human body structures and organs. (18-0-1)

PAC 5006—PA and Health Care Dynamics
This course focuses on the current status and issues regarding the physician assistant profession within the context of the U.S. medical system and today's health care workforce. The course discusses the structures and administrative principles in health care organizations, the role of the practicing PA in unique environments with an emphasis on rural and underserved medicine, reimbursement for services rendered, quality assurance, federal health care programs, and other issues involving patient care. (12-0-1)

PAC 5010—Core Competencies
This course serves as a cumulative evaluation of the student's knowledge after completion of the first 12 months of the didactic curriculum. Student competency will be evaluated by a comprehensive written examination and
This course is a prerequisite for clinical viewing. Students will have supervised practice of skills using simulated patient encounters. Integrating previously learned interviewing skills with principles from the clinical sciences, students perform a focused patient encounter. Students are expected to continue to progress in recording information in written form and presenting the information orally to colleagues. (20-36-2)

PAC 5100—Physical Diagnosis II*
Upon successful completion of the prerequisite PAC 5000, the students will build upon skills learned in Physical Diagnosis I. The student will have supervised practice of skills using simulated patient encounters. Integrating previously learned interviewing skills with principles from the clinical sciences, students perform a focused patient encounter. Students are expected to continue to progress in recording information in written form and presenting the information orally to colleagues. (20-30-1)

PAC 5131—Clinical Laboratory Medicine II
Continuation of Clinical Laboratory Medicine I. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAC 5200—Physical Diagnosis III*
Upon successful completion of the prerequisite PAC 5100, the student will continue to systematically learn abnormalities in the physical examination and specialty examination techniques. The student will have supervised practice of skills using simulated patient encounters. Integrating previously learned interviewing skills with principles from the clinical sciences, students perform a focused patient encounter. Students are expected to continue to progress in recording information in written form and presenting the information orally to colleagues. (48-0-3)

PAC 5129—Health Promotion and Disease Prevention
Focus on wellness through preventive interventions and services. Emphasizes responsibility for one's own health, the community's efforts to protect against disease, and environmental hazards. Epidemiology, risk factors, screening tests, and community resources are identified with each health issue presented. (22-0-1)

PAC 5130—Clinical Laboratory Medicine I
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAC 5210—Clinical Medicine and Surgery II
Continuation of Clinical Medicine and Surgery I. Common disease entities of major organ systems and primary care aspects of disease evaluation and treatment. (120-0-8)

PAC 5229—Electrocardiography
Provides the basics for learning to interpret normal ECG tracings and applying those principles to interpret the ECG tracings of common cardiac disease. (30-6-2)

PAC 5310—Clinical Medicine and Surgery III
Continuation of Clinical Medicine and Surgery II. Disease entities of major organ systems. Lectures in primary care aspects of disease evaluation and treatment. (112-0-7)

PAC 5311—Clinical Psychiatry
Common psychosocial problems and disorders encountered by health care professionals. Emphasizes the diagnosis and understanding of development of these behaviors, including the patient-clinician relationship, varieties of psychotherapy, communication skills, and appropriate intervention and treatment regimens. (45-0-3)

PAC 5400—Clinical Pathophysiology
Pathological changes seen in disease states. Uses a major body system/organ approach. Etiology and progression from the normal physiological state to the diseased state with resultant clinical signs and symptoms. (48-0-3)

PAC 5510—Clinical Procedures and Surgical Skills
Lectures and laboratory practicum introducing the clinical procedures and surgical skills used in the clinical setting: aseptic technique, operating room protocol, injections, knot tying and suturing techniques, venipuncture, arterial puncture, intravenous catheterization, nasogastric intubation, and urinary catheterization. This course is a prerequisite for clinical rotations. (46-24-3)

PAC 6304—Prenatal Care and Gynecology
This required six-week rotation in outpatient and/or inpatient settings teaches perinatal care and treatment and gynecological diagnosis and management. Emphasizes primary care of the female patient including obstetrics. (270-0-6)

PAC 6308—Clinical Elective III
This is a four-week elective course rotation that will be completed at the end of the clinical year. Elective rotations provide opportunities to investigate a clinical subspecialty area or gain more experience in a required discipline. (160-0-4)

PAC 6311—Internal Medicine
Required six-week rotation in outpatient and/or inpatient settings. Diagnosis, treatment, and management of acute and chronic medical problems seen in the internal medicine practice. Emphasizes the adult nonsurgical patient. (270-0-6)

PAC 6313—Surgery
Required six-week rotation in outpatient and inpatient settings. Students learn to diagnose, treat, and manage the surgical patient. Emphasizes surgical entities commonly encountered in the primary care setting. (300-0-5)

PAC 6315—Emergency Medicine
Required six-week rotation in hospital emergency department teaches students to recognize, assess, and treat acute and life threatening clinical problems. Emphasizes common primary care emergencies. (270-0-6)

PAC 6317—Pediatrics
Required six-week rotation in outpatient and/or inpatient settings teaches normal and abnormal growth and development, disease prevention, and basic health care in neonates through adolescence. Emphasizes primary care of the pediatric patient. (270-0-6)
PAC 6318—Family Medicine
Required six-week rotation in outpatient settings. Comprehensive primary care of the individual patient within the family unit. Emphasizes the primary care needs of patients in rural, or inner-city communities. (250-0-6)

PCO 5300—Biomedical Principles
Physiologic and biochemical basis for drug action. Basic biochemical pathways in which drugs intervene: metabolism, protein synthesis, and coagulation. Principles of pharmacokinetics: drug absorption, distribution, and metabolism are studied and applied to designing dosage regimens. (18-0-1)

PCO 5400—Pharmacology I
Understanding the basis for pharmacologic intervention in patient care is the foundation for treatment of disease. Course begins an in-depth study of the pharmacodynamics of drugs used in the automatic nervous, renal, and cardiovascular systems. Mechanisms of drug action, clinical uses, side effects, contraindications and drug interactions, pharmacokinetic considerations for special patient populations. (38-0-2)

PCO 5410—Pharmacology II
Mechanisms of action, clinical uses, side effects, contraindications, drug interactions, and pharmacokinetics of drugs utilized in the treatment of diseases of the major organ systems. Treatment of HIV, geriatric and neonatal pharmacology, the pharmacological principles of nutrition, over-the-counter agents, toxicology, drugs of abuse, prescription writing, and evaluation of drug literature. (72-0-4)

PHS 5400—Physiology
Clinically relevant physiologic principles of the major organ systems covered in Clinical Anatomy. Pathological changes that occur in human physiology in the disease process. (54-0-4)

Physician Assistant Department—Naples
Physician assistants (PAs) serve as essential components of a medical system that continues to struggle to provide quality, affordable health care for all Americans. Their roles in the system will continue to grow as changes in health care indicate. Today, more than 60,000 individuals are eligible to practice as PAs under physician supervision. PAs provide care that would otherwise be provided by physicians. PAs take medical histories, perform physical examinations, order and interpret tests, diagnose and treat illnesses, perform medical/surgical procedures, assist in surgery, and can write prescriptions in most states. PAs work in most medical specialties and in all types of communities. Many practice family and internal medicine, and more than one-third are in towns with fewer than 50,000 residents. The PA profession is one of the fastest growing health care professions. The U.S. Department of Labor projects that the number of jobs for PAs will increase by 50 percent through the year 2014.

It is the obligation of each physician/PA team to ensure that the PA's scope of practice is identified; that delegation of medical tasks is appropriate to the PA's level of competence; that the relationship with, and access to, the supervisory physician is defined; and that a process of performance evaluation is established. Adequate responsible supervision of the PA contributes to both high-quality patient care and professional growth.

The Physician Assistant Department—Naples campus offers an innovative program that lasts 27 months. Upon successful completion of study, students in the class of 2007 are awarded a bachelor of science in physician assistant studies and a master of medical science degree. Students in the class of 2008 and thereafter will earn a master of medical science (M.M.S.) in physician assistant degree. The dual-degree curriculum includes rigorous instruction in the basic sciences, clinical medicine, physical diagnosis, clinical laboratory medicine, clinical pathophysiology, clinical procedures and surgical skills, electrocardiography, radiology, and psychiatry. The first-year student also takes courses in the M.M.S. program including health care law and ethics, epidemiology and biostatistics, research methodology, cultural issues in health care, publication skills, and rural and underserved population.

During the clinical year of study, the student participates in clinical rotations throughout the state of Florida. These rotations include family medicine, internal medicine, pediatrics, gynecology and prenatal care, emergency medicine, and surgery, all complemented by three elective rotations. With a sound foundation in medical training, NSU graduates are prepared to work in many clinical areas, both in primary care and specialty medicine.

Accreditation
The NSU Physician Assistant Program—Naples has been awarded provisional accreditation from the Accreditation Review Commission on Education for Physician Assistants, Inc. (ARC-PA). The department is a member of the Physician Assistant Education Association (PAEA).
Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, Telephone number: 404-679-4501) to award associate's, bachelor's, master's, educational specialist, and doctoral degrees.

Mission Statement
- to provide an exemplary educational experience that emphasizes primary medical care, yet enables graduates to demonstrate competency and skill in a variety of clinical environments
- to inspire graduates to pursue lifelong learning
- to foster leadership qualities that will enable graduates to improve access to quality, affordable health care
- to heighten the stature of the physician assistant profession

Admission Requirements
Prospective students are selected by the committee on admissions (COA), which considers the overall qualities of the applicant. Areas of consideration include interpersonal skills, personal motivation, knowledge and understanding of the PA profession, academic performance and level of achievement, life experiences, quality and length of prior health care experience, and recommendations/evaluations. Personal interviews are offered to the most qualified applicants to assess interpersonal and communication skills, maturity, altruistic attitude, and commitment to a PA career.

1. Prior to matriculation, applicants must have completed a minimum of 90 semester hours (or equivalent quarter hours) of specified coursework from a regionally accredited college or university. Of these 90 semester hours, 30 semester hours (or equivalent quarter hours) must be upper division courses (typically defined as a course number preceded by a 3 or a 4). Upper division courses can be courses from any department other than physical education. These courses are of the applicant’s choosing, however, upper division science courses are recommended. The program requires the students to earn a grade of C (2.0) or better in each of the upper division courses. Applicants must have a minimum cumulative GPA of 2.70 and a minimum science GPA of 2.70 on a 4.0 grading scale.

2. The college requires the students to earn a grade of C (2.0) or better in each of the following required courses:
   - college algebra or higher (3 semester hours)
   - English (6 semester hours)
   - humanities/arts (3 semester hours)
   - social sciences (9 semester hours)
   - general biology (or zoology), including laboratory (4 semester hours)
   - microbiology, including laboratory (4 semester hours)
   - general chemistry I and II, including laboratory (8 semester hours)
   - human anatomy and human physiology (6 semester hours)
   - biochemistry or human physiology (3 semester hours)
   - electives (44 semester hours)

Applicants are encouraged to complete their elective coursework in the areas of behavioral, physical and social sciences, or the humanities.

The following courses are recommended:
   - biochemistry or organic chemistry laboratory (1 semester hour)
   - anatomy laboratory (1 semester hour)
   - physiology laboratory (1 semester hour)
   - medical terminology (1 semester hour)

Upon review of a student’s record, the committee on admissions may require additional coursework and testing as a condition of acceptance.

3. Graduates of foreign institutions where English is not the primary language of instruction must present transcripts showing at least 18 semester hours (or equivalent quarter hours) of study from a regionally accredited college or university in the United States. Of these 18 semester hours,
   - 3 semester hours must be in English composition (courses do not include ESOL)
   - 3 semester hours must be in English literature (courses do not include ESOL)
   - 3 semester hours must be in public speaking (courses do not include ESOL)

The remaining 9 semester hours can be any courses of the applicant’s choosing.

4. Prior health care experience is highly recommended and is considered for admission. Those applicants who have prior health care experience must submit verifiable information about their experience.

5. All applicants are required to submit official scores from the Graduate Record Examination (GRE) general test to the Office of Admissions. Our school code is 5522. The test must have been taken within the past five years and must be taken early enough for official scores to be received in the admissions office by the supplemental application due date of April 15. Applications will not be considered complete without GRE scores. Testing information for the GRE may be obtained from www.gre.org or by telephone at (609) 921-9000.

Computer Requirements
All students are required to have a computer with the following minimum specifications:
   - Pentium III, 800MHz minimum processor
   - 512 MB RAM
   - CD-ROM capability
   - sound capability and speakers
   - Internet connection with private Internet service provider (ISP) for access from home to the Internet
   - printer

The following are recommended features:
   - video capable of 800 x 600 screen display or better
   - Windows 2000, ME, XP, or NT
   - Microsoft Office 2000 with PowerPoint, Word, and Excel minimum
   - surge suppressor electrical outlet
   - zip drive

Students will be required to have a handheld device (PDA) with Palm OS
operating system with a minimum of 8 MB of memory prior to the start of the advanced didactic component of the curriculum. The PDA will be essential to completing all required documentation for clinical rotations.

**Application Procedures**

**1. Apply to CASPA**

The Physician Assistant Program participates in the Centralized Application Service for Physician Assistants (CASPA) for the receipt and processing of all applications. CASPA takes no part in the selection of students. CASPA application packets may be obtained and submitted online at www.caspaonline.org or by writing:

CASPA
P.O. Box 9108
Watertown, MA 02471

Questions regarding completion of the online application may be directed to CASPA’s email address, caspainfo@caspaonline.org, or by telephone at (617) 612-2080 or (617) 926-3571.

The CASPA application may be submitted as early as April 15, the year prior to the admission cycle. The CASPA application deadline is March 1 to be considered for admission in June.

**2. Send transcripts and letters of recommendation/evaluation to CASPA**

All official college transcripts from all undergraduate, graduate, and professional institutions attended must be sent directly from the institutions to CASPA.

Three letters of recommendation/evaluation must be sent to CASPA. One letter of recommendation/evaluation must be sent from an individual (other than a relative or friend) such as an academic adviser, professor, coworker, or supervisor. Two letters of recommendation/evaluation must be from health care professionals (neither of which can be a relative or friend), one of which must be from a physician or PA.

**3. Send GRE scores to NSU PA Office of Admissions**

Official Graduate Record Exam (GRE) scores must be submitted directly to Nova Southeastern University Enrollment Processing Services (EPS) College of Allied Health and Nursing Physician Assistant Department Office of Admissions 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905

The NSU code number is 5522. Your GRE test scores must be less than five years old and must be taken early enough for official scores to be received by the supplemental application deadline of March 31.

**4. Complete Supplemental Application**

Once the CASPA application has been received by Nova Southeastern University, a supplemental application will be mailed to the applicant.

**5. Send Supplemental Application**

Send the completed supplemental application to EPS.

Nova Southeastern University Enrollment Processing Services (EPS) College of Allied Health and Nursing PA Admissions Office 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905 Phone: (954) 262-1109 Fax: (954) 262-2282

Your completed supplemental application must be received no later than March 31 in order to be considered for admission for the June entering class. Once we receive your GRE scores; copies of all professional certifications, registrations, licenses, or relevant credentialing materials; supplemental application; and $50 fee, your file will be reviewed. Completed applications are reviewed on a “rolling” or periodic basis.

The applicant will not be considered for a possible interview until the application from CASPA, the supplemental application (signed and dated), the nonrefundable $50 supplemental application fee, and the Graduate Record Evaluation (GRE) test scores are received by the Nova Southeastern University Physician Assistant Office of Admissions.

**Personal Interviews**

Once your application is complete, the committee on admissions (COA) will decide whether or not your application is strong enough to warrant an interview for a personal interview. Interviews are conducted on a “rolling” or periodic schedule; therefore, early completion of the application is in the best interest of the student. Inquiries should be directed to Director of Student Services and Recruitment Nova Southeastern University Physician Assistant

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**Undergraduate/Physician Assistant Dual-Admission Program with International College—Naples Campus**

Nova Southeastern University’s College of Allied Health and Nursing has established an articulation agreement with International College for a select number of highly motivated, qualified students interested in pursuing professional studies in the Physician Assistant Program. This allows candidates to receive a bachelor of science (B.S.) degree from International College and a master of medical science (M.M.S.) degree from the Physician Assistant Program at NSU in a five-year period. Candidates must maintain a specified grade point average during the undergraduate year.
and achieve acceptable scores on the Graduate Record Examination (GRE). Students will be awarded a B.S. degree from International College at the end of the first academic year of the PA program and an M.M.S. degree upon completion of the PA program.

For information and requirements, contact Office of Admissions International College 2655 Northbrooke Drive Naples, Florida 34119 (239) 513-1122.

**Tuition and Fees**
- Anticipated tuition for 2007-2008 (subject to change by the board of trustees without notice) is $21,785 for Florida residents and $22,495 for out-of-state residents.
- Acceptance fee is $500. This fee is required to reserve the accepted applicant’s place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in the event of a withdrawal. It is payable within two weeks of an applicant’s acceptance.
- Deposit is $250. This is due February 15, under the same terms as the acceptance fee.
- Preregistration fee is $250. This is due April 15, under the same terms as the acceptance fee.
- A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

The first semester’s tuition and fees, less the $1,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met. The financial ability of applicants to complete their training at the college is important because of the limited number of positions available in each class.

Applicants should have specific plans for financing 27 months of professional education. This should include tuition, living expenses, books, equipment, and miscellaneous expenses. Each student is required to carry adequate personal medical and hospital insurance. Students may avail themselves of the hospitalization insurance plan obtainable through the university.

Opportunity for a limited number of part-time work-study assignments is available. Due to the demands of the PA curriculum, the program discourages any outside employment.

**Requirements for Graduation**
In order to be eligible to graduate from the Physician Assistant Program, students must:
- successfully complete all academic and clinical courses and degree requirements
- satisfactorily meet all financial and library obligations
- attend, in person, the rehearsal and commencement program, at which time the degree is conferred

**Academic Dismissal in the Physician Assistant Program**
See the suspension/dismissal section of the Student Handbook.

**Readmission Policy in the Physician Assistant Program**
In selected cases, and only with the approval of the department chair and college dean, a student may be allowed to be noncompetitively matriculated with the next first-year class. It is emphasized that this only refers to those few students with special academic or personal issues.

**Course of Study**
The Physician Assistant Program curriculum is completed following a minimum of 90 semester hours of undergraduate coursework of which 30 semester hours (or equivalent quarter hours) must be upper division. The comprehensive curriculum, completed in a consecutive manner, is oriented to primary care and prepares the student to practice in a wide variety of clinical settings. The first 14 months of study consist of basic sciences and clinically related didactic courses. All courses are required and must be successfully completed before advancing to the clinical year. During this time frame, students are generally in class from Monday through Friday, 8:00 a.m. to 5:00 p.m., although there are occasional evening and/or weekend hours. Because of its highly integrated and compact curriculum, the PA department requires matriculants to complete the entire curriculum at NSU Naples. However, individual requests for advanced placement, transfer of credit, and credit for experiential learning will be reviewed in line with college policies.

The clinical year is devoted to 13 months of clinical training with required clinical rotations in family medicine, emergency medicine, pediatrics, prenatal care/gynecology, surgery, and internal medicine. The students also complete three elective rotations, for a total of nine clinical rotations. The required subject rotations and two of the elective rotations are six weeks in length. The remaining elective rotation is four weeks in length. Each required rotation has assigned readings and learning objectives. At the end of each required rotation, a written comprehensive subject examination is administered and must be passed. During rotations, students will be supervised by licensed practitioners and will actively participate in patient assessments, perform common laboratory procedures, interpret common diagnostic examinations, and help manage common medical problems. The work hours during clinical rotations are set by the preceptor and can include evening and weekend hours. Students are required to work a minimum of 40 hours per week, although many rotation sites require a greater student participation.

Upon completion of the course of study, students in the graduating class of 2007 will have earned both a bachelor of science in physician assistant degree and a master of medical science degree. Students in the graduating class of 2008 and thereafter, upon program completion, will have earned a master of medical science (M.M.S.) in physician assistant degree. Graduates will be eligible to take the Physician Assistant National Certification Examination (PANCE) administered by the National Commission on Certification of Physician Assistants (NCCPA).

The role of the physician assistant requires a high level of expertise and responsibility. The applicant must possess the ability and desire to complete a rigorous academic and clinical program and make a commitment to continued learning.
Curriculum Outline for the Combined Bachelor of Science (B.S.) and Master of Medical Science (M.M.S.) Physician Assistant Program—Naples Campus

Start Date: June 2006  
Length: 27 months  
Degree: Bachelor of Science in Physician Assistant Studies (B.S.) and Master of Medical Science (M.M.S.)  
Didactic: 14 months  
Clinical: 13 months

First Semester—Summer (June–August 2006)

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<th>Lecture</th>
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<th>Credit Hours</th>
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<tr>
<td>PAN 5100</td>
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<td>PAN 5101</td>
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<td>PAN 5300</td>
<td>Physical Diagnosis I</td>
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<td>History Taking and Communication Skills</td>
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<td>PAN 5003</td>
<td>Fundamentals of Medical Imaging</td>
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Second Semester—Fall (September–December 2006)

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Third Semester—Winter (January–May 2007)

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<td>MMS 5461</td>
<td>Life Support Procedures and Skills</td>
<td>24</td>
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<td>3</td>
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<td>PAN 5560</td>
<td>Clinical Procedures and Surgical Skills</td>
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<td>PAN 5008</td>
<td>Health Promotion and Disease Prevention</td>
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<td>1</td>
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<td>PAN 5009</td>
<td>PA and Health Care Dynamics</td>
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<td>0</td>
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<tr>
<td>MMS 5413</td>
<td>Publication Skills and Medical Research</td>
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<td>60</td>
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<tr>
<td>MMS 5411</td>
<td>Complementary Medicine and Nutrition</td>
<td>30</td>
<td>0</td>
<td>2</td>
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<tr>
<td>MMS 5419</td>
<td>Clinical Pharmacology</td>
<td>16</td>
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<td><strong>Total Hours:</strong></td>
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<td><strong>200</strong></td>
<td><strong>124</strong></td>
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</table>
Clinical Curriculum—Second Year
(August 2007—August 2008)  Weeks  Contact Hours  Credit Hours
PAN 6530  Prenatal Care and Gynecology  6  270  6
PAN 6330  Internal Medicine  6  270  6
PAN 6360  Surgery  6  300  6
PAN 6310  Emergency Medicine  6  270  6
PAN 6340  Pediatrics  6  240  6
PAN 6320  Family Medicine  6  250  6
MMS 6411  Clinical Elective I  6  270  6
MMS 6421  Clinical Elective II  6  270  6
PAN 6380  Clinical Elective III  4  160  4
MMS 6601  Graduate Project  4  90  3

Total Hours:  56  2,390  55

Curriculum is subject to change as directed by the department.

Physician Assistant—Naples Campus
Course Descriptions
Note: Listed at the end of each entry are lecture clock hours, laboratory clock hours, and semester hours.
*Core competency course

MMS 5405—Legal and Ethical Issues in Health Care
Introduces the role that ethics and the law play in the practice of health care. Principles and concepts in determining correct actions both legally and ethically are reviewed. Topics include solving an ethical dilemma, ethical implications involved in genetic engineering, the impaired clinician, conflicts between providers, conflicts between clinician and patient, euthanasia, risk management, confidentiality, informed consent, patients' directives, and documentation. (45-0-3)

MMS 5409—Cultural Issues in Health Care
Introduction to the skills and insights necessary in promoting health and dealing with illness in diverse populations. Issues discussed include the need for effective communication with an understanding of societal and cultural factors and how they impact on health care efforts and use of the health care system. (30-0-2)

MMS 5419—Clinical Pharmacology
This course will advance the clinical skills of the student as they relate to the pharmacologic treatment of the patient. Specific topics will include the indicated medications in the treatment of common illnesses; their adverse effects; and drug interactions, dosage, and monitoring. (16-0-1)

MMS 5411—Complementary Medicine and Nutrition
Survey of human nutrition in healthcare, and the principles for maintaining good health through nutrition. Addresses health hazards associated with dietary deficiencies, obesity, fad dieting, food contamination, diet management of selected diseases, and functional roles of vitamins and minerals. Additionally, this course will address introductory concepts, procedures, education, and licensing in alternative and complementary medicine. (30-0-2)

MMS 5412—Publications and Research Methodology
Overview of the methods in epidemiology and biostatistics commonly used in clinical research and practice. Addresses the evaluation of diagnostic procedures and the methodology for clinical description and trials. Provides basic skills on critical reading of medical literature based on these concepts. (45-0-3)

MMS 5423—Research Methodology
Emphasis and overview of the importance of data collection, research methods, and application of scientific thought to research findings. Designed to enable participants to develop skill in reading and critically evaluating medical literature and research. The advantages and disadvantages of quantitative and qualitative research methods are compared and contrasted. (45-0-3)

MMS 5461—Life Support Procedures and Skills
Introduction to the principles of advanced life support used in medical and surgical emergencies. Includes a review of the most common emergency situations encountered and provides hands-on practical training that will assist the student in developing the skills required to stabilize patients with life-threatening conditions. Includes certification in basic (BLS) and Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS). (24-40-3)

MMS 5441—Clinical Elective I
Elective, full-time, clinical rotation that provides an opportunity to investigate a clinical, medical, or surgical subspecialty area or gain more experience in primary care. Each six-week
elective may be taken sequentially at the same site or separately. (270-0-6)

MMS 6421—Clinical Elective II
Elective, full-time, clinical rotation that provides an opportunity to investigate a clinical, medical, or surgical subspecialty area or gain more experience in primary care. Each six-week elective may be taken sequentially at the same site or separately. (270-0-6)

MMS 6601—Graduate Project
With the guidance of a faculty adviser, students will use the skills acquired in Publication Skills and Medical Research (MMS 5412) to create a graduate project. The project focuses on a comprehensive literature review and evaluation and completion of a publishable review paper. The project allows the student to demonstrate his or her ability to research and compile information and to present that information in a clear, written form. (4-90-3)

PAN 5000—Anatomy
Gross structures of the human body. Integrates topographic and radiographic anatomy to stress the application and importance of clinical anatomy. Develops the knowledge of the human anatomy necessary for the practice of the profession. (55-38-5)

PAN 5001—Medical Terminology
Use of medical language for appropriate and accurate communication in patient care. Students acquire a medical vocabulary, knowledge of medical terminology, and terminology reference material. (4-14-1)

PAN 5002—Introduction to the Physician Assistant Profession
Introduces key concepts regarding the PA profession: an overview of the profession, the history of the development of the profession, the current status of the profession, physician assistant education, current and future roles of the physician assistant. (16-0-1)

PAN 5003— Fundamentals of Medical Imaging
Introduces key concepts for the understanding of normal medical diagnostic imaging. Emphasis is placed on images of normal human body structures and organs. (18-0-1)

PAN 5006—Electrocardiography
Provides the basics for learning to interpret normal ECG tracings and applying those principles to interpret the ECG tracings of common cardiac disease. (18-4-1)

PAN 5008—Health Promotion and Disease Prevention
Focus on wellness through preventive interventions and services. Emphasizes responsibility for one's own health, the community's efforts to protect against disease, and environmental hazards. Epidemiology, risk factors, screening tests, and community resources are identified with each health issue presented. (22-0-1)

PAN 5009—PA and Health Care Dynamics
This course focuses on the current status and issues regarding the physician assistant profession within the context of the U.S. medical system and today's health care workforce. It discusses the structures and administrative principles in health care organizations, the role of the practicing PA in unique environments with an emphasis on rural and underserved medicine, reimbursement for services rendered, quality assurance, federal health care programs, and other issues involving patient care. (30-0-2)

PAN 5100—Physiology
Clinically relevant physiologic principles of the major organ systems covered in Clinical Anatomy. Pathological changes that occur in human physiology in the disease process. (54-0-3)

PAN 5101—Clinical Pathophysiology
Pathological changes seen in disease states. Uses a major body system/organ approach. Etiology and progression from the normal physiological state to the diseased state with resultant clinical signs and symptoms. (48-0-3)

PAN 5200—Microbiology
Relationship of microbes to human disease and the host-immune response. Characteristics and properties of clinically significant bacteria, viruses, fungi, and selected parasites as well as the prevention, control, and diagnostic laboratory tests of their associated specific infectious diseases. (48-0-3)

PAN 5300—Physical Diagnosis I*
Principles and skills required to perform a complete medical history and physical examination. Emphasizes normal physical findings. Prerequisite for PAC 5100 (42-20-3)

PAN 5310—Physical Diagnosis II*
Upon successful completion of the prerequisite PAC 5000, the students will build upon skills learned in Physical Diagnosis I. The student will have supervised practice of skills using simulated patient encounters. Integrating previously learned interviewing skills with principles from the clinical sciences, students elicit a comprehensive medical history, perform a complete physical examination, and formulate an initial diagnostic impression and diagnostic plan. Students are expected to continue to progress in recording information in written form and presenting the information orally to colleagues. (24-30-2)

PAN 5320—Physical Diagnosis III*
Upon successful completion of the prerequisite PAC 5100, the student will continue to systematically learn abnormalities in the physical examination and specialty examination techniques. The student will have supervised practice of skills using simulated patient encounters. Integrating previously learned interviewing skills with principles from the clinical sciences, students elicit a comprehensive medical history, perform a complete physical examination, and formulate an initial diagnostic impression and diagnostic plan. Students are expected to continue to progress in recording information in written form and presenting the information orally to colleagues. (60-40-5)

PAN 5400—History Taking and Communications Skills
This course prepares the student to perform a complete medical history, identifying appropriate communication skills needed for interaction with patients, families, and colleagues. (18-0-1)
PAN 5410—Pharmacology I
Understanding the basis for pharmacologic intervention in patient care is the foundation for treatment of disease. Course begins an in-depth study of the pharmacodynamics of drugs used in the automatic nervous, renal, and cardiovascular systems. Mechanisms of drug action, clinical uses, side effects, contraindications, and drug interactions, pharmacokinetic considerations for special patient populations. (38-0-2)

PAN 5420—Pharmacology II
Mechanisms of action, clinical uses, side effects, contraindications, drug interactions, and pharmacokinetics of drugs utilized in the treatment of diseases of the major organ systems. Treatment of HIV, geriatric and neonatal pharmacology, the pharmacological principles of nutrition, over-the-counter agents, toxicology, drugs of abuse, prescription writing, and evaluation of drug literature. (72-0-4)

PAN 5500—Clinical Medicine and Surgery I
Etiology, clinical manifestations, appropriate diagnostic evaluation, and the management of selected disease entities. (112-0-7)

PAN 5510—Clinical Medicine and Surgery II
Continuation of Clinical Medicine and Surgery I. Common disease entities of major organ systems and primary care aspects of disease evaluation and treatment. (120-0-8)

PAN 5520—Clinical Medicine and Surgery III
Continuation of Clinical Medicine and Surgery II. Disease entities of major organ systems. Lectures in primary care aspects of disease evaluation and treatment. (112-0-7)

PAN 5540—Clinical Psychiatry
Common psychosocial problems and disorders encountered by health care professionals. Emphasizes the diagnosis and understanding of development of these behaviors, including the patient-clinician relationship, varieties of psychotherapy, communication skills, and appropriate intervention and treatment regimens. (45-0-3)

PAN 5560—Clinical Procedures and Surgical Skills
Lectures and laboratory practicum introducing the clinical procedures and surgical skills used in the clinical setting: aseptic technique, operating room protocol, injections, knot tying and suturing techniques, venipuncture, arterial puncture, intravenous catheterization, nasogastric intubation, and urinary catheterization. This course is a prerequisite for clinical rotations. (46-24-3)

PAN 5600—Clinical Laboratory Medicine I
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5610—Clinical Laboratory Medicine II
Continuation of Clinical Laboratory Medicine I. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5630—Internal Medicine
Required six-week rotation in hospital medicine department. Emphasizes primary care of the female patient including obstetrics. (270-0-6)

PAN 5640—Pediatrics
Required six-week rotation in outpatient and inpatient settings teaches pediatric care of the individual patient within the family unit. Emphasizes the primary care needs of patients in rural, or inner-city communities. (250-0-6)

PAN 5660—Clinical Laboratory Medicine III
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5670—Clinical Laboratory Medicine IV
Continuation of Clinical Laboratory Medicine III. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5700—Clinical Laboratory Medicine V
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5710—Clinical Laboratory Medicine VI
Continuation of Clinical Laboratory Medicine V. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5720—Clinical Laboratory Medicine VII
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5730—Clinical Laboratory Medicine VIII
Continuation of Clinical Laboratory Medicine VII. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5740—Clinical Laboratory Medicine IX
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5750—Clinical Laboratory Medicine X
Continuation of Clinical Laboratory Medicine IX. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5760—Clinical Laboratory Medicine XI
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5770—Clinical Laboratory Medicine XII
Continuation of Clinical Laboratory Medicine XI. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5780—Clinical Laboratory Medicine XIII
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5790—Clinical Laboratory Medicine XIV
Continuation of Clinical Laboratory Medicine XIII. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5800—Clinical Laboratory Medicine XV
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5810—Clinical Laboratory Medicine XVI
Continuation of Clinical Laboratory Medicine XV. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5820—Clinical Laboratory Medicine XVII
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5830—Clinical Laboratory Medicine XVIII
Continuation of Clinical Laboratory Medicine XVII. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5840—Clinical Laboratory Medicine XIX
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5850—Clinical Laboratory Medicine XX
Continuation of Clinical Laboratory Medicine XIX. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5860—Clinical Laboratory Medicine XXI
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5870—Clinical Laboratory Medicine XXII
Continuation of Clinical Laboratory Medicine XXI. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5880—Clinical Laboratory Medicine XXIII
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5890—Clinical Laboratory Medicine XXIV
Continuation of Clinical Laboratory Medicine XXIII. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5900—Clinical Laboratory Medicine XXV
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5910—Clinical Laboratory Medicine XXVI
Continuation of Clinical Laboratory Medicine XXV. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5920—Clinical Laboratory Medicine XXVII
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5930—Clinical Laboratory Medicine XXVIII
Continuation of Clinical Laboratory Medicine XXVII. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5940—Clinical Laboratory Medicine XXIX
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5950—Clinical Laboratory Medicine XXX
Continuation of Clinical Laboratory Medicine XXIX. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5960—Clinical Laboratory Medicine XXXI
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5970—Clinical Laboratory Medicine XXXII
Continuation of Clinical Laboratory Medicine XXXI. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)

PAN 5980—Clinical Laboratory Medicine XXXIII
Clinical laboratory utilization, rationale for selecting common diagnostic tests, interpretation of results, correlation between results and disease processes, and tests not available in the primary care setting that are necessary for diagnosis, treatment, and patient care. (20-4-1)

PAN 5990—Clinical Laboratory Medicine XXXIV
Continuation of Clinical Laboratory Medicine XXXIII. Students will learn how to appropriately order and accurately interpret laboratory tests. These skills will help them diagnose common diseases related to major organ systems. (32-0-2)
Sources of Additional Information

Disclaimer: Links to non-NSU Internet sites are provided for your convenience and do not constitute an endorsement.

- For information on a career as a physician assistant, contact
  American Academy of Physician Assistants Information Center
  950 North Washington Street
  Alexandria, Virginia 22314-1552
  www.aapa.org

- For a list of accredited programs and a catalog of individual physician assistant training programs, contact
  Association of Physician Assistant Programs
  950 North Washington Street
  Alexandria, Virginia 22314-1552
  www.apap.org

- For eligibility requirements and a description of the Physician Assistant National Certifying Examination, contact
  National Commission on Certification of Physician Assistants, Inc.
  157 Technology Parkway, Suite 800
  Norcross, Georgia 30092-2913
  www.ncpa.net

- For information on employment, employment projections, and compensation statistics, contact
  U.S. Bureau of Labor Statistics
  Postal Square Building
  2 Massachusetts Avenue, NE
  Washington, D.C. 20212-0001
  www.bls.gov

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. Offering distance education from the undergraduate to the doctoral level is consistent with the university's and college's commitment to lifelong learning. The department offers the Bachelor of Health Science (B.H.Sc.) and Master of Health Science (M.H.Sc.) Programs in an exclusively online format. The department also offers an innovative Doctor of Health Science (D.H.Sc.) Program via online and intense compressed residential format. This is a postprofessional degree targeted at health professionals trained at the master's degree level. This program attracts active clinicians, clinician administrators, and health professions educators.

The department also houses two pre-eminent, on-campus, entry-level programs. The Bachelor of Health Science—Vascular Sonography is supported by a state-of-the-art vascular teaching laboratory. The unique, fully-accredited Master of Health Science—Anesthesiologist Assistant is one of four anesthesiologist assistant programs nationwide.

- Bachelor of Health Science (B.H.Sc.)—online degree completion
- Bachelor of Health Science—Vascular Sonography (B.H.Sc.)—entry-level, on-campus
- Master of Health Science (M.H.Sc.)—online
- Master of Health Science—Anesthesiologist Assistant (M.H.Sc.)—entry-level, on-campus
- Doctor of Health Science (D.H.Sc.)—Online with some residency requirements

Computer Requirements

All students in the department are required to have a computer meeting the minimum requirements listed below.

- Pentium or AMD at 800MHz minimum processor or equivalent Macintosh processor
- 128MB RAM
- video and monitor capable of 1024 x 768 screen display or better
- CD-ROM capability
- full duplex sound card and speakers
- 56.6 baud modem (DSL or cable modem preferred)
- Internet connection with private Internet service provider (ISP) for access from home to the Internet
- Windows 2000, ME, XP, or NT
- Microsoft Office 2000 or newer with PowerPoint, Word, and Excel minimum (the Office Student and Teacher Edition 2003 is a good choice for students.)
- surge suppressor is recommended
- suggested option: zip drive
- suggested option: laptop computer with wireless Internet capability for use during campus institutes
Bachelor of Health Science Online Degree Completion Program

The Bachelor of Health Science (B.H.Sc.) 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. course of study is interdisciplinary and is designed to provide career advancement for health care practitioners as well as deliver a well-rounded generalist curriculum. This cutting-edge program offers the opportunity for numerous health care occupations to complete their undergraduate degree coursework online, conveniently from their own home or office, without compromising career or other obligations.

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 online Bachelor in Health Science Program is offered via the College of Allied Health and Nursing's 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 Master of Health Science (M.H.Sc.) and later the Doctor of Health Science (D.H.Sc.) program.

Each of these programs is an online degree program, with the M.H.Sc. having no residency requirement and the D.H.Sc. having a requirement for students to complete two one-week summer institutes.

Description of Curriculum

The program requires that a minimum of 30 semester hours of coursework (including 21 semester hours of required core coursework) be completed through the NSU B.H.Sc. program. A minimum total of 120 semester hours, of which 30 semester hours must fulfill general education requirements, are required to graduate with the B.H.Sc. degree.

The B.H.Sc. 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.

Required Core Courses

- BHS 3110 — Health Care Ethics (3 semester hours)
- BHS 3120 — Introduction to Epidemiology (3 semester hours)
- BHS 3150 — Principles of Leadership (3 semester hours)
- BHS 3155 — Conflict Resolution in Health Care (3 semester hours)
- BHS 3160 — Health Policy (3 semester hours)
- BHS 4000 — Cultural Competency in Health Care (3 semester hours)
- BHS 4100 — Academic and Professional Writing (3 semester hours — must be taken during the first semester of enrollment in the program)

Total: 21 semester hours

Effective for new matriculants on or after January 2006, students will be required to obtain a grade of C or better (greater than or equal to 73 percent) in every required core course. Students receiving a C-, D+, D, or D- in a required core course will be required to retake the course at its next scheduled offering.

General Education Requirement

In order to be eligible to graduate with the B.H.Sc. degree, a student must have completed 30 semester hours of general education coursework in addition to the B.H.Sc. curriculum with a resulting minimum total of 120 semester hours. If all general education requirements are not met at the time of admission, they can be obtained concurrently while enrolled in the B.H.Sc. program. A student can obtain and transfer these courses through NSU's Farquhar College of Arts and Sciences or another regionally accredited college or university. Only courses with a minimum grade of a C (GPA of 2.0 on a 4.0 grading scale) will be accepted to fulfill general education courses. A limited number of D grades may be considered to meet elective requirements, depending on the total number of credits being transferred and where the D grades are being applied to the curriculum.

Effective January 1, 2006, prior to matriculation, all applicants must have completed a minimum of three semester hours (or the equivalent) of college-level written composition from a regionally accredited college or university, receiving a minimum grade of a C (GPA of 2.0 on a 4.0 scale).

Required General Education Coursework:

- written composition (3 semester hours — must be completed prior to matriculation into the program)
- oral communication (3 semester hours)
- mathematics (3 semester hours)
- humanities (6 semester hours)
- social and behavioral sciences (9 semester hours)
- natural and physical sciences (6 semester hours)

Total: 30 semester hours

General Education Program Mission Statement

Incorporating dynamic resources and methods in various settings, the general education curriculum in the Farquhar College of Arts and Sciences at NSU provides opportunities for learners to emerge as thoughtful and responsible citizens prepared for a competitive global environment.

Admission Requirements

Prospective B.H.Sc. students are selected by the Department of Health Science on admissions through consideration of the overall qualities of the applicant. The
Admission to the B.H.Sc. program requires the following:

1. 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).

Effective January 1, 2006

2. an associate's degree in a field of health from a regionally accredited college or university with a minimum cumulative GPA of 2.0 on a 4.0 grading scale.

or

3. a diploma or certificate of completion in a field of health care.

In order for this coursework and education to be considered for credit, an applicant must 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.

3. 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.

It should be noted that many criteria, in addition to academic credentials, play a role in the admission process for the B.H.Sc. program. While the program allows the student to demonstrate academic capability, it does not assure admission to any professional school. Admission to the B.H.Sc. program will not guarantee admission to any other program of Nova Southeastern University.

Effective January 1, 2006

Upon receipt of the completed application, fees, credentials and transcripts, the admissions officers and the College of Allied Health and Nursing will review all material for evidence of the proper education, training, and background to enter the B.H.Sc. program.

Transfer Credit Policy

Students who have earned college credits at other regionally accredited colleges or universities can transfer these credits into the B.H.Sc. program. Students should contact a B.H.Sc. admissions counselor to discuss how prior college credits can be used to obtain the B.H.Sc. degree.

An evaluation of transfer credit will be completed prior to the first semester of enrollment, and applicable credit will be transferred based on all final official transcripts received. Students will be advised to take courses based on the official evaluation in their file.

Transfer students must provide final official transcripts from all their previous colleges; their previous academic work will then be evaluated. The B.H.Sc. program will transfer a maximum of 90 eligible semester credits (grades of C or better, GPA of 2.0 on a four point grading scale), including credit for CLEP, proficiency exams, and prior experiential learning toward a degree.

General education courses must have a minimum grade of C to be accepted for transfer credit. A limited number of D grades may be considered, depending on the total number of credits being transferred and where the D grades are being applied to the curriculum.

Students must complete a minimum of 25 percent (30 semester hours) of their coursework within the B.H.Sc. program major.

Students with credits, health care or academic experiences, certificates, diplomas or degrees from nationally accredited colleges, military training or other educational training/experiences should refer to the section below titled: Assessment of Prior Experiences for Academic Credit in order to apply to convert these prior experiences into academic credit.

Assessment of Prior Experiences for Academic Credit

Nova Southeastern University has established four different mechanisms for students to convert their prior experiences into academic credit. Students must initiate all requests for experiential learning credit before they complete 24 credits at NSU. Credits will be transcripted after 12 credits are successfully earned at NSU.

For additional information, contact the B.H.Sc. Program or the Office of Prior Learning Assessment at (954) 262-8414 or 800-356-0026, ext. 8414, or via email at milletsky@nsu.nova.edu.

1. CLEP/DANTES/ACT-PEP/Computer Test-Out

Students can demonstrate their knowledge in a variety of areas by taking objective tests. The coordinator of experiential learning can provide further information about these tests as can the testing office in Academic Services.

2. Nationally Accredited School Portfolios

Students who have attended nationally accredited institutions have the opportunity to write school portfolios. The coordinator of experiential learning works with each student in reviewing the student's nationally accredited institutional transcript to identify courses that may be applied toward his or her academic goal.

3. Full Portfolio—Course Challenge

The full portfolio is the process for challenging a college-level course for credit. Through this mecha-
nism, a student presents his or her knowledge on a topic and has it evaluated by a faculty member. A maximum of 25 percent of a student's credits may be earned through the full portfolio process.

4. Standard Grant

Certain training courses, military experiences, or licenses may be converted into college credit. This can be done by supplying some very basic documentation. For military training programs the recommendations contained in the Guide to the Evaluation of Educational Experiences in the Armed Forces from the American Council on Education, will be used to evaluate such training for credit transfer. Examples include Combat Casualty and Flight Medicine Courses of training.

Distance Education Support

Distance education students in the B.H.Sc. Program are provided with NSU computer accounts including email. The student, however, must obtain their own Internet service providers (ISP) and use their own computer systems (IBM-compatible or Apple Macintosh and a modem). New students receive an orientation and extensive online technical support access, online tools and methods, and library resources.

Online interactive learning methods involve Web pages to access course materials, announcements, the electronic library, and other information, plus a range of online activities that facilitate frequent student-professor interaction. Faculty members and students interact via online forums using threaded bulletin boards, chat rooms, and email. Students are able to submit assignments as email attachments, through the use of online forms sent directly to program instructors, fax to fax, fax to email, and through WebCT. Some online courses may include electronic classroom sessions.

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.

Application Procedures

Candidates for admission are responsible for the submission of

- a completed application form along with a $50 nonrefundable application fee
- two letters of evaluation from individuals other than relatives such as academic advisers, professors, or clinical or nonclinical supervisors, or a community associate
- official college, certificate and/or diploma-based transcripts from all undergraduate and graduate institutions attended, sent directly from the institution
- 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.
- coursework taken at a foreign institution must be evaluated for U.S. institutional equivalence. Foreign coursework must be evaluated by one of the following services:
  - World Education Services
    P.O. Box 745
    Old Chelsea Station
    New York, New York 10113-0745
    (212) 966-6311
    www.wes.org
  - Josef Silny & Associates
    7101 SW 102nd Avenue
    Miami, Florida 33173
    (305) 273-1616
    (305) 273-1328 fax
    www.jsilny.com
    info@jsilny.com
  - Educational Credential Evaluators
    P.O. Box 514070
    Milwaukee, Wisconsin 53203-3470
    (414) 289-3400
    www.ece.org
- a complete resume or CV

The B.H.Sc. Office of Admissions works on a rolling admissions basis. Applications are accepted year-round. To ensure that your application receives prompt consideration, you should apply early. All admissions materials should be sent to:
Nova Southeastern University
Enrollment Processing Services (EPS)
Attn: College of Allied Health and Nursing—B.H.Sc. Program
3301 College Avenue
P.O. Box 299000
Fort Lauderdale, Florida 33329-9905

The Department of Health Science committee on admissions will not consider an application until all required fees, credentials, transcripts and test scores have been received by the Office of Admissions.

Tuition and Fees

- $50 nonrefundable application fee
- Tuition is $225 per credit hour.
- An NSU student services fee of $750 is required annually.
- Students are responsible for purchasing any required textbooks and/or classroom materials.
- $75 diploma only fee
- A graduation and diploma fee of $225 will be incurred by those students who elect to participate in the formal, on-campus graduation ceremony (not required).

Tuition waivers and discounts for NSU students, staff, and faculty members will be in accordance with published policy and administered through the dean of the College of Allied Health and Nursing. Tuition, fees, and payment schedules are subject to change without notice.
Requirements for Graduation
To be eligible to receive the B.H.Sc. degree, students shall
- satisfactorily complete the program of 30 semester hours (minimum) of study in the B.H.Sc. major required for the degree (not including CLEP, proficiency examinations, or experiential learning credits)
- complete general education, major, and elective requirements as specified by the program at time of admission
- attain a 2.0 cumulative grade point average
- attain a 2.25 grade point average in the major area
- submit a degree application form before completing registration for the last semester.
- fulfill all obligations to the library, the student's program, and the bursar's office
- receive recommendation by B.H.Sc. program director to the dean of the College of Allied Health and Nursing

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

Students who have earned fewer than 54 credits at NSU may petition for graduation with distinction if they have maintained at least a 3.8 GPA in all coursework accepted toward their degree program at NSU. Degree candidates must complete all of the requirements as specified above.

Nondegree-Seeking Students
A nondegree-seeking student is one who wishes to take a course/s in the Bachelor of Health Science Program, but does not intend to pursue the B.H.Sc. degree at the time of application.

The nondegree-seeking student must meet the following admission requirements in order to take classes in the B.H.Sc. program:
- 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)
- a minimum of an associate's degree or equivalent credit hours in a field of health, from a regionally accredited college or university or
- a diploma or certificate of completion in a field of health care

Nondegree-Seeking Student Application Procedures
Nondegree-seeking students must submit:
- a completed application form along with a $50 nonrefundable application fee.
- official college, certificate and/or diploma-based transcripts from all undergraduate and graduate institutions attended, sent directly from the institution.
- one letter of evaluation from individuals other than relatives such as academic advisers, professors, or
- clinical or nonclinical supervisors, or a community associates

Due to the limited number of seats available in the program, preference for admission and registration priority will be given to degree-seeking students.

Nondegree-seeking students are limited to taking a maximum of nine semester hours of B.H.Sc. coursework.

Enrollment in these courses does not guarantee acceptance into the B.H.Sc. degree program or any other Nova Southeastern University program.

If after taking classes in the B.H.Sc. program a nondegree-seeking student decides to pursue the B.H.Sc. degree, the student must resubmit an application to the program to be a degree-seeking student and must meet all the admission requirements for the B.H.Sc. degree program.

Bachelor of Health Science—Vascular Sonography
(On-Campus, Entry-Level)
Sonography uses diagnostic ultrasound to image soft tissue structures in the body including abdominal and pelvic organs, fetal development, the heart, and blood vessels. Sonographers specializing in vascular diagnosis are referred to as vascular technologists. Vascular technologists use ultrasound and other diagnostic instruments to detect and assess vascular conditions of arteries and veins. These disorders include carotid artery disease, which may lead to stroke; abdominal vascular disease such as aneurysms; peripheral arterial disease which can result in loss of limbs; and venous disease, which may lead to blood clots and pulmonary embolism.

Vascular technologists are an important part of the medical team. They typically work in a hospital or clinical environment under the direction of radiologists, cardiologists, or vascular surgeons. Because of the skills and independence required for the field, vascular technologists are in high demand and with the aging of
Curriculum Overview
Admission to the program requires the completion of a minimum of 30 semester hours of general education coursework. The core of the vascular sonography course of study includes 96 semester hours. The entire program requires a total of 126 semester hours for a student to graduate with a bachelor of health science—vascular sonography.

The first year of the course of study is designed as a combination of on-campus lectures, an ultrasound laboratory practicum, online courses and off-campus integrated clinical training. Students will learn theory in the lecture and online courses, and apply that knowledge in the ultrasound laboratory. The integrated clinical experience relates lecture concepts and lab skills to the clinical setting.

The second year will focus almost entirely on clinical training with more than 1,500 hours of on-site, hands-on experience in a vascular laboratory under the supervision of a registered vascular technologist. Students will be required to fulfill competencies outlined in the clinical handbook. These competencies include all aspects of vascular sonography training and professional. In addition, four online courses are required during the senior year.

Online courses are provided to students through NSU computer accounts that include email. Students, however, must obtain their own Internet service provider (ISP) and their own computer system (IBM-compatible PC or Apple Macintosh, and modern.) New students are provided with an orientation and extensive online support on computer and software requirements, online access, online tools, and methods, and library resources.

Prerequisites
In order to be eligible to graduate with the Bachelor of Health Science—Vascular Sonography (B.H.Sc.) degree, a student must have completed 30 semester hours of general education coursework in addition to the vascular sonography curriculum with a resulting minimum total of 126 semester hours. Only courses with a minimum GPA of 2.0 on a 4.0 grading scale will be accepted.

Required general education coursework:
- written communication (three semester hours)
- mathematics (three semester hours, college math or above)
- humanities (six semester hours, three hours of foreign language recommended)
- social and behavioral sciences (nine semester hours)
- natural and physical sciences (nine semester hours, biology and anatomy and physiology recommended)

Total: 30 semester hours

Admission Requirements
Prospective vascular sonography students are selected by the Department of Health Science committee on admissions through consideration of the overall qualities of the applicant. The program will admit individuals with diverse education, work, and life experiences who have demonstrated capacity to pursue the course of study in vascular sonography. Areas of consideration include application content, academic record, letters of evaluation and personal motivation. In special circumstances, a personal interview with members of the committee may be required (phone interview may be substituted). All interview expenses are the responsibility of the applicant.

Admission to the program requires the following:
- a minimum of 30 semester credits, from a regionally accredited college or university with a minimum cumulative GPA of 2.5 on a 4.0 grading scale. Only courses with a minimum GPA of 2.5 on a 4.0 grading may be considered for possible transfer of credit.
- 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.

It should be noted that many criteria, in addition to academic credentials, play a role in the admission process for the vascular sonography course of study. While it allows the student to demonstrate academic capability, it does not ensure admission to any professional school. Admission to the vascular sonography course of study will not guarantee admission to any other program of Nova Southeastern University.

Upon receipt of the completed application, fees, credentials and transcripts, the admissions officers and the College of Allied Health and Nursing will review all material for evidence...
of the proper education, training and background to enter the B.H.Sc.—vascular sonography.

**Application Procedures**

Candidates for admission are responsible for the submission of:

- completed application forms with $50 nonrefundable application fees
- two letters of evaluation from individuals other than relatives such as academic advisers, professors, or clinical or nonclinical supervisors, or community associates
- official college, certificate, and/or diploma-based transcripts from all undergraduate and graduate institutions attended, sent directly from the institution
- a student-prepared learning portfolio requesting Assessment of Prior Experiences for Academic Credit (graduates from programs other than those from regionally accredited colleges or universities only)
- copies of national and or state professional certification, licensure or registration, if applicable.
- evaluation of coursework taken at a foreign institution for U.S. institutional equivalence

Foreign coursework must be evaluated by one of the following services:

- World Education Services
  P.O. Box 745
  Old Chelsea Station
  New York, New York 10113-0745
  (212) 966-6311
  www.wes.org
- Josef Silny & Associates
  7101 SW 102nd Avenue
  Miami, Florida 33173

(305) 273-1616
(305) 273-1338 fax
www.jsbry.com
info@jsbry.com

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

- complete resumes or curriculum vitae

The Office of Admissions for the B.H.Sc.—vascular sonography works on a rolling admissions basis. Applications are accepted year round. To ensure that your application receives prompt consideration, you should apply early. All admissions material should be sent to:

Nova Southeastern University
Enrollment Processing Services (EPS)
Acct: College of Allied Health and Nursing—B.H.Sc. Program
3301 College Avenue
P.O. Box 299002
Fort Lauderdale, Florida 33329-9905

The Department of Health Science committee on admissions will not consider an application until all required fees, credentials, transcripts, and test scores have been received by the Office of Admissions.

The university reserves the right to modify any requirements on an individual basis as deemed necessary by the dean of the College of Allied Health and Nursing. The college reserves the right, and the student, by his or her act of matriculation, concedes to the college the right to require his or her withdrawal any time the college deems it necessary to safeguard its standards of scholarship, conduct, and compliance with regulations or for such other reasons as are deemed appropriate.

The dean, department chair, and vascular sonography director reserve the right to require the student's withdrawal at any time for the above-mentioned reasons.

**Distance Education Support**

Students on clinical externships in vascular sonography must maintain NSU computer accounts including email. New students receive an orientation and extensive online technical support on online access, online tools and methods, and library resources.

Online interactive learning methods involve Web pages to access course materials, announcements, the electronic library, and other information, plus a range of online activities that facilitate frequent student-professor interaction. Faculty members and students interact via online forums using threaded bulletin boards, chat rooms, and email. Students are able to submit assignments as email attachments, through the use of online forms sent directly to program instructors, fax to fax, fax to email, and through WebCT. Some online courses may include electronic classroom sessions.

Tuition waivers and discounts for NSU students, staff, and faculty members will be in accordance with published policy and administered through the dean of the College of Allied Health and Nursing. Tuition, fees, and payment schedules are subject to change without notice.

**Requirement for Graduation**

To be eligible to receive the bachelor of health science—vascular sonography degree, students shall

- satisfactorily complete the program of study in the vascular sonography major required for the degree
- complete general education, major and elective requirements as specified by the program at time of admission
- attain a 2.0 cumulative grade point average.
- attain a 2.25 grade point average in the major area

- $250 deposit
- $250 preregistration fee
- Students are responsible for purchasing any required textbooks, uniforms, white coats and/or classroom materials.
- A graduation and diploma fee of $225 will be incurred by those students who elect to participate in the formal on-campus graduation ceremony (not required).
- A $125 vascular access fee is required yearly. This fee is required to pay for background checks, drug testing (if required), affiliation agreements, and immunizations.
• submit a degree application form before completing registration for the last semester.
• fulfill all obligations to the library, the student's program, and the bursar's office.
• receive recommendation by B.H.Sc. program director and the B.H.Sc. vascular sonography program director to the dean of the College of Allied Health and Nursing.

Graduation with Honors
A student eligible for graduation with a cumulative grade point average of 3.8 or higher who has completed at least 90 credits at NSU is eligible to receive the degree with distinction.

Computer Skills
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.

Curriculum Outline
Bachelor of Health Science—Vascular Sonography

<table>
<thead>
<tr>
<th>Required General Education Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>Social and behavior sciences</td>
<td>9</td>
</tr>
<tr>
<td>Humanities*</td>
<td>6</td>
</tr>
<tr>
<td>Human, biological and physical sciences**</td>
<td>9</td>
</tr>
<tr>
<td>Mathematics***</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education Subtotal: 30

* recommend 3 credits in foreign language
** recommend 3 credits in biology or anatomy and physiology
*** required 3 credits in college math or above

<table>
<thead>
<tr>
<th>Required Core B.H.Sc.—Vascular Sonography Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHS 3110 Health Care Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BHS 3120 Introduction to Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>BHS 3130 Principles of Leadership</td>
<td>3</td>
</tr>
<tr>
<td>BHS 3135 Conflict Resolution in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>BHS 3160 Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>BHS 4000 Cultural Competency in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>BHS 4110 Academic and Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>BHS 4110 Health Care and Aging</td>
<td>3</td>
</tr>
<tr>
<td>BHS 5100 APA Writing Seminar</td>
<td>3</td>
</tr>
<tr>
<td>BSV 3100 Ultrasound Physics I/Lab</td>
<td>3</td>
</tr>
<tr>
<td>BSV 3110 Clinical Anatomy for the Vascular Sonographer</td>
<td>3</td>
</tr>
<tr>
<td>BSV 3200 Ultrasound Physics Review</td>
<td>1</td>
</tr>
<tr>
<td>BSV 3210 Clinical Physiology for the Vascular Sonographer</td>
<td>3</td>
</tr>
<tr>
<td>BSV 3300 Cerebrovascular Testing/Lab</td>
<td>4</td>
</tr>
<tr>
<td>BSV 3400 Venous Testing/Lab</td>
<td>4</td>
</tr>
<tr>
<td>BSV 3500 Peripheral Arterial Testing/Lab</td>
<td>5</td>
</tr>
<tr>
<td>BSV 3600 Abdominal Vascular Testing/Lab</td>
<td>5</td>
</tr>
<tr>
<td>BSV 3700 Clinical Preparation and Review</td>
<td>4</td>
</tr>
<tr>
<td>FME 5105 Basic Life Support</td>
<td>1</td>
</tr>
<tr>
<td>BSV 4500 Clinical Externship I (16 weeks)</td>
<td>12</td>
</tr>
<tr>
<td>BSV 4600 Clinical Externship II (16 weeks)</td>
<td>12</td>
</tr>
<tr>
<td>BSV 4700 Clinical Externship III (16 weeks)</td>
<td>12</td>
</tr>
</tbody>
</table>

Required B.H.Sc. Courses Subtotal: 96

Minimum Total Semester Hours Required: 126

In order to be eligible to graduate with the bachelor of health science—vascular sonography degree, a student must have completed 30 semester hours of general education coursework, in addition to the B.H.Sc. curriculum, with a resulting minimum total of 126 semester hours. Only courses with a minimum GPA of 2.4 on a 4.0 grading scale will be accepted.
Bachelor of Health Science Course Descriptions

*Denotes a required B.H.Sc. core course

BHS 3100—Current Issues in Health Care
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 United States. (3 semester hours)

BHS 3101—History of the U.S. Health System
This course will examine the origins and ongoing development of the U.S. health system. Students will gain historical understanding of the origins and forces that have influenced change within the US health care system. (3 semester hours)

BHS 3110—Health Care Ethics*
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. (3 semester hours)

BHS 3120—Introduction to Epidemiology*
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 disease will be discussed. (3 semester hours)

BHS 3130—Research and Design for Health Care
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. (3 semester hours)

BHS 3140—Health Care Practice
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. (3 semester hours)

BHS 3145—Principles of Environmental Health
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, as well as the regulations promulgated to manage each. (3 semester hours)

BHS 3150—Principles of Leadership*
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. (3 semester hours)

BHS 3151—Health Services Management
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. (3 semester hours)

BHS 3155—Conflict Resolution in Health Care*
The purpose of this course is to develop an understanding of the conflict and effective methods of reducing the incidence of workplace conflict including employee-employee conflict, supervisor-subordinate conflict, patient-patient conflict, and patient/client-provider conflict. (3 semester hours)

BHS 3160—Health Policy*
This course provides the student with a broad understanding of policy, how health care is organized and dispensed, and how the practitioner can better work in the system. Topics of discussion include cost control, long term care, quality control, ethical issues, and insurance. (3 semester hours)

BHS 3161—Concepts of Health Care Finance
This course introduces the fundamental tools, concepts, and applications aimed at giving students an understanding of numerous financial theories and techniques used in health care financial management. The course materials are structured around emerging health care policies and the role economics and finance play in establishing policy. Case studies are drawn from a variety of sources including health maintenance organizations, home health agencies, nursing units, hospitals, and integrated health care systems. Some topics of discussion will include concepts of capital financing for providers, budgeting, financial ethics, payment systems, provider costs, the high cost of health care, and measuring costs. (3 semester hours)

BHS 3162—Economics of Health Care Services
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 pharmaceutical industry. The course will focus on the U.S. health care sector, but will also examine the health care systems of other countries. (3 semester hours)

BHS 3170—Health Care Delivery Systems
This course is designed as an introduction to health care plans that are underwritten by the federal government as well as selected private HMOs. Topics will include Medicare, Medicaid, public health, Indian Health Service, Veterans Administration, military health systems, and managed care. An understanding of the social, political and professional forces that shape the health care delivery system will be discussed. (3 semester hours)

BHS 3190—Patient Education in Health Care
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 a management perspective. Adult education theory, patient/practitioner 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. (3 semester hours)

BHS 3195—Therapeutic Communications for Health Care Professionals
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. (3 semester hours)

BHS 4000—Cultural Competency in Health Care*
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. (3 semester hours)

BHS 4005—Alternative Medicine in Health Care
This course examines and analyzes alternative and complementary medicine and their impact on the health care industry. The approach to the subject is to present selected alternative and complementary medicine fields in an informative, nonjudgmental format. Example topics include acupuncture, chiropractic, herbal medicine, homeopathy, massage, and naturopathic medicine. (3 semester hours)

BHS 4006—Fundamentals of Chinese Medicine
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, understanding that there are other forms of treatment for disease different from those taught in westernized medicine programs. Critical analysis of the meridians and pathways and various signs and symptoms associated with disease will be covered. (3 semester hours)

BHS 4009—Sports Medicine: Principles and Practice
This course will present a study of athletic injuries and the principles 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. (3 semester hours)

BHS 4010—Health Promotion and Disease Prevention
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 2010” initiatives. (3 semester hours)

BHS 4011—Bioterrorism: Health Care Readiness and Response
This course uses a systems perspective to provide health professionals with an understanding of the prevention and response to the intentional release of harmful 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 during unintentional outbreaks to reduce their impact. (3 semester hours)

BHS 4012—Torture, Violence, and Trauma: Health Care’s Healing Role
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 of health care as it relates to incidents of torture, violence, and trauma. (3 semester hours)

BHS 4010—Academic and Professional Writing*
The purpose of this course is to introduce students to the format, content, and thought processes for successful academic and professional writing through use of the NSU B.H.Sc. form and style manual as well as introduction to APA and AMA manuals. An overview of proper sentence and paragraph structure, grammar, punctuation usage, formatting, and bibliographic referencing will be discussed. (3 semester hours)

BHS 4110—Health Care and Aging
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. (3 semester hours)

BHS 4130—Internship
The student will complete 40 hours of internship in an area of interest within a health care organization. The final project of this internship will be to produce a SWOT analysis of the unit or health care organization. Note: Student must receive departmental and adviser approval in order to be allowed to register for this course. (3 semester hours)

BHS 4140—Independent Study
Students select an area of study in cooperation with the course adviser and/or program director. The project may include such items as work-related studies, conference attendance, grant proposals and/or planning documents. A comprehensive paper will be developed and delivered according to the NSU B.H.Sc form and style manual. Note: Student must receive departmental and adviser approval in order to be allowed to register for this course. (3 semester hours)

BHS 4150—The Science of Sound
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. (3 semester hours)

BHS 4154—Effect of Hearing Impairment on Speech and Language Phonology, morphologic, syntactic, and pragmatic aspects of human communication associated with hearing impairment. Study of methods of screening hearing-impaired patients for concomitant speech and language disorders. Prerequisite: a course in normal language development (3 semester hours)

BHS 4151—Linguistics and Psycholinguistic Variables of Normal Language Development
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 topical areas related to the dimensions of communication, neurological and anatomical bases of communication, models of speech and language development, and speech-language differences and diversity. (3 semester hours)

BHS 4152—Neuroanatomy and Neurophysiology of Audition
This course will provide an introduction to the gross structure of the brain and spinal cord. Functional relationship of their parts, with emphasis on the auditory and vestibular peripheral and central nervous systems, will be discussed. (3 semester hours)

BHS 4153—Speech and Language Disorders for Health Care Practitioners
Overview of speech and language delays and disorders, their etiology, and their treatment. How health care professionals can identify people with possible disorders and make appropriate referrals. Consideration of the communication needs within the health care system of people with speech-language disorders. (3 semester hours)

More specific vascular anatomy will be provided in the system courses. (3 semester hours)

BSV 3200—Ultrasound Physics Review
Ultrasound Physics Review is designed to integrate the principles of ultrasound physics with the theoretical and practical lessons provided in the previous and current sessions. Student will learn the fundamentals of image acquisition and optimization as it pertains to ultrasound physics. (1 semester hour)

BSV 3210—Clinical Physiology for the Vascular Sonographer
This course is designed to develop general understanding of human physiology for the vascular sonographer. Students will learn the function of the human system and the overall relationship to the structure of the human body. More specific vascular physiology will be provided in the system courses. (3 semester hours)

BSV 3700—Clinical Preparation and Review
Clinical Preparation and Review is a course designed to review general medical anatomy and physiology, terminolgy, treatment, and surgical and nonsurgical options used in the treatment of patients with vascular disease. It is designed to reinforce the non-technical/ultrasound components of the training including clinical ethics, diagnostic and treatment options, and other nonimaging skills such as EKG, lab correlation, and patient/sonographer interaction. This course is to ensure the student is well prepared for the clinical experience that will follow. (4 semester hours)

BSV 3300—Cerebrovascular Testing/Lab
This course will review the cerebrovascular anatomy and physiology associated with cerebrovascular disease. The student will learn the scanning protocols for extra and intracranial cerebrovascular testing and the diagnostic criteria for assessing disease. The student will also review various diagnostic and treatment options for the patient. (4 semester hours)

BSV 3400—Venous Testing/Lab
This course will review the venous anatomy and physiology associated with venous disease. The student will learn the scanning protocols for deep and superficial venous testing and the diagnostic criteria for assessing disease. The student will also review various diagnostic and treatment options for the patient. (4 semester hours)

BSV 3500—Peripheral Arterial Testing/Lab
This course will review the peripheral arterial anatomy and physiology associated with peripheral arterial system. The student will learn the scanning protocols for upper and lower extremity arterial testing and the diagnostic criteria for assessing disease. The student will also review various diagnostic and treatment options for the patient. (5 semester hours)

BSV 3600—Abdominal Vascular Testing/Lab
This course will review the abdominal anatomy and physiology associated with visceral vascular disease. The student will learn the scanning protocols for abdominal vascular testing and the diagnostic criteria for assessing disease. The student will also review various diagnostic and treatment options for the patient. (5 semester hours)

BSV 4500—Clinical Externship I
The first clinical externship is designed to introduce the student to the vascular laboratory and health
care environment. The student will be expected to prepare patients for examinations, 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. (12 semester hours)

BSV 4600—Clinical Externship II
The second clinical externship is designed to immerse the student into more routine and independent vascular testing. The student will be expected to complete normal studies under indirect supervision 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. (12 semester hours)

BSV 4700—Clinical Externship III
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 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. (12 semester hours)

FME 5105—Basic Life Support
The American Heart Association-approved course leads to certification upon successful completion. (1 semester hour)

An increasing number of employers are seeking master's-level, academically prepared professionals to fill expanded roles that include clinical specialization, health education, research, and health care administration.

The M.H.Sc. didactic curriculum provides education in a variety of health related topics. The practical component of the program will be tailored to the individual interest and goal of the graduate student. Under faculty guidance, students will demonstrate increased understanding in their chosen area of study.

The M.H.Sc. program is designed for working nonphysician clinicians and health professionals who have graduated from an accredited health program. The internship component of the M.H.Sc. program may be conducted at hospitals, private institutions, or locations approved by M.H.Sc. program administration.

Admission Requirements
The Department of Health Science committee on admissions considers the overall qualities of the applicant. Areas of consideration include personal motivation, quality and length of prior health care experience, academic performance, and level of achievement, life experiences, and personal recommendations.

Admission requirements for graduate allied health professional M.H.Sc. candidates:
In order to be considered for admission, applicants must submit the following prior to matriculation:
• official transcripts of all coursework attempted at all colleges and universities must be forwarded, by institutions attended, to the Enrollment Processing Services, Master of Health Science Program
It is the responsibility of the applicant to ensure that arrangements are made for these transcripts to be sent to
Nova Southeastern University
Enrollment Processing Services
Attn: College of Allied Health and Nursing—M.H.Sc. Program
3301 College Avenue
P.O. Box 299000
Fort Lauderdale, Florida
33329-9905
• completion of a bachelor's degree from a regionally accredited allied health program with a minimum cumulative grade point average of 2.5 or higher on a 4.0 point scale
• national professional certification or licensure (if applicable)
• current state license, registration, or certification (if applicable)
• two letters of evaluation from supervising physicians or managers. This form is supplied with the application package. Additional letters of recommendation are encouraged.

A personal interview with the committee on admissions may be required in some cases (phone interview may be substituted).

All interview expenses are the responsibility of the applicant.

The university reserves the right to modify any requirements on an individual basis as deemed necessary by the dean of the College of Allied Health and Nursing.

The college reserves the right, and the student, by his or her act of matriculation, to require his or her withdrawal any time the college deems it necessary to safeguard its standards of scholarship, conduct, and compliance with regulations or for such other reasons as are deemed appropriate.

The dean and M.H.Sc. program director reserve the right to require the student's withdrawal at any time for the above-mentioned reasons.

Tuition and Fees
Tuition for this program is $275 per credit hour. An NSU student services fee of $750 is required annually. Tuition waivers and discounts for NSU students and staff and faculty members will be in accordance with published policy and administered
Application Procedure
The M.H.Sc. program provides admission opportunities throughout the year. Applications may be submitted year round.

Once accepted, a start date will be assigned to the student after personal advisement. There are four start dates per year: January, April, July, and October. The student has a maximum of three years from the start date to complete the degree course of study and apply for the M.H.Sc. degree. Before the applicant can be reviewed for possible admission, the following must be submitted:

- a completed M.H.Sc. application form
- $50 nonrefundable application fee
- official transcripts of all coursework attempted at all colleges and universities must be forwarded, by institutions attended, to the Enrollment Processing Services (EPS), Master of Health Science Program.

It is the responsibility of the applicant to ensure that arrangements are made for these transcripts to be sent.

- a final official transcript, covering all of the applicant's work, must be forwarded to the Office of Admissions prior to matriculation
- two evaluation forms from professional supervisors

These evaluators, preferably supervising clinicians, should know the applicant's personal character and scholastic, clinical, and work abilities.

- official copies of all professional certifications, registrations, licenses or relevant credentialing materials.
- complete CV or resume
- all documents must be received at least one month prior to the anticipated start date.

Nova Southeastern University Enrollment Processing Services (EPS) Attn: College of Allied Health and Nursing-M.H.Sc. Program 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905

In special circumstances, a personal interview with members of the committee on admissions may be requested or required. A phone interview may be substituted. Upon receipt of the completed application and required credentials, the Department of Health Science committee on admissions will recommend to the dean and the M.H.Sc. program director those applicants to be considered for acceptance into the program.

Foreign Coursework
Undergraduate coursework taken at a foreign institution must be evaluated for U.S. institution equivalency. Foreign coursework must be evaluated by one of the services listed below.

Contact one of the following:
- World Education Services
  P.O. Box 745
  Old Chelsea Station
  New York, New York 10113-0745
  (212) 966-6311
  www.wes.org
- Josef Silny & Associates
  7611 SW 102nd Avenue
  Miami, Florida 33173
  (305) 273-1616
  (305) 273-1338 fax
  www.jsilny.com
  info@jsilny.com
- Educational Credential Evaluators
  P.O. Box 514070
  Milwaukee, Wisconsin 53203-3470
  (414) 289-3400
  www.ece.org

It is the applicant’s responsibility to have this coursework evaluated, and an official evaluation must be sent directly to NSU’s Enrollment Processing Services (EPS) from the evaluating service.

Requirements for Graduation
To be eligible to receive the M.H.Sc. degree, students shall

- be of good moral character
- satisfactorily complete the program of 36 hours (minimum) of study required for the degree with a numerical GPA of 3.0 or higher
- successfully complete the M.H.Sc. internship and practicum
- receive a recommendation by the M.H.Sc. program director to the dean of the College of Allied Health and Nursing.

The M.H.Sc. Program began transitioning to alphabetical grading on July 2006. In this system, students must satisfactorily complete the program of 36 hours (minimum) of study required for the degree with an average grade of B- or a GPA of 2.7 on a 4.0 scale.
Curriculum Outline—Master of Health Science Program

The curriculum involves completion of a minimum of 36 credit hours that must be completed in each of the two categories of courses (didactic and practical). There is some flexibility in curriculum design to accommodate students’ overall interests, employment, and educational goals. Educational counseling and advisement is always available to assist in the planning and registration process.

Generalist Curriculum Courses

Required Core Courses (17 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHS 5001 APA Writing Seminar</td>
<td>2</td>
</tr>
<tr>
<td>MHS 5205 Writing for Medical Publication</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5501 Epidemiology and Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5510 Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5521 Ethical Issues in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5530 Principles and Practice of Management in Health Care</td>
<td>3</td>
</tr>
</tbody>
</table>

Elective Courses (9 credits—choose three courses)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHS 5103 Principles of Advanced Life Support</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5112 Bioterrorism and Weapons of Mass Destruction</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5211 Contemporary Issues in Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5213 Stress Management: Concepts and Practice</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5400 Directed Studies</td>
<td>1-9</td>
</tr>
<tr>
<td>MHS 5541 Health Care Systems and Conflict</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5542 Health Care Education</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5543 Educational Theories and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5544 Curriculum and Instruction in Health Care</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5545 Assessment and Evaluation in Health Care</td>
<td>3</td>
</tr>
</tbody>
</table>

Practical Courses (10 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHS 5107 Internship</td>
<td>5</td>
</tr>
<tr>
<td>MHS 5207 Practicum</td>
<td>5</td>
</tr>
</tbody>
</table>

Specialty Tracks in the Master of Health Science Program

The M.H.Sc Program offers three specialty tracks: sports medicine, higher education, and health law. The internship and practicum must be completed in the specialty areas. There are no electives in the specialty tracks.

Sports Medicine Track Curriculum

Core Courses (14 credits)

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<tr>
<td>MHS 5510 Research Methods</td>
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<td>MHS 5521 Ethical Issues in Health Care</td>
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</tbody>
</table>

Specialty Courses (12 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHS 5211 Contemporary Issues in Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5801 Applied Anatomy for Kinesiology</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5802 Sports Injury Rehabilitation Principles</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5810 Certified Strength and Conditioning Specialist Preparation</td>
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Practical Courses (10 credits)

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</table>

Higher Education Track Curriculum

Core Courses (14 credits)

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<td>MHS 5543 Educational Theories and Psychology</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5544 Curriculum and Instruction in Health Care</td>
<td>3</td>
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<tr>
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Practical Courses (10 credits)

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</tbody>
</table>
Health Law Track Curriculum

This concentration is offered through a partnership with the NSU Shepard Broad Law Center. Students in this track should consider themselves in a locked-step schedule. For the health law concentration, one residential institute is required on the main campus. This summer institute is one-two days long.

### Core Courses (14 credits)

<table>
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<tr>
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<td>MHS 5501</td>
<td>Epidemiology and Biostatistics</td>
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<tr>
<td>MHS 5510</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5543</td>
<td>Principles and Practice of Health Care Management</td>
<td>3</td>
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</tbody>
</table>

### Specialty Courses (12 credits offered through the Shepard Broad Law Center)

<table>
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<th>Course Code</th>
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<tbody>
<tr>
<td>MHL 1020</td>
<td>Legal Research Methods and Reasoning**</td>
<td>4</td>
</tr>
<tr>
<td>MHL 1060</td>
<td>Tort and Contract Law</td>
<td>3</td>
</tr>
<tr>
<td>MHL 2030</td>
<td>Risk Management</td>
<td>2</td>
</tr>
<tr>
<td>MHL 1030</td>
<td>Administrative Law</td>
<td>2</td>
</tr>
<tr>
<td>MHL 1040</td>
<td>Legal and Ethical Issues in Health Care</td>
<td>2</td>
</tr>
<tr>
<td>MHL 1090</td>
<td>Law Accreditation/Licensing</td>
<td>2</td>
</tr>
<tr>
<td>MHL 1080</td>
<td>Law of Patients Rights and Advocacy</td>
<td>2</td>
</tr>
<tr>
<td>MHL 2020</td>
<td>Legal Negotiation</td>
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### Practical Courses (10 credits)

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** includes a 1-credit, on-campus institute

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Master of Health Science Course Descriptions

### Didactic Core Component Courses

#### Required Courses

**MHS 5001—APA Writing Seminar**
This seminar is designed to introduce students the APA 5 writing style. They will be guided by an instructor through the main components of an APA-style academic paper as well as internship and practicum reports. **(2 credits)**

**MHS 5205—Writing for Medical Publication**
Study and review of quality medical writing techniques, issues, and procedures with emphasis on cultivating personal style and content. Focus will be on writing for peer and evidence-based publications. **(3 credits)**

**MHS 5501—Epidemiology and Biostatistics**
The ability to understand the conceptual and practical aspects of biostatistics and epidemiology in health care is critical to understanding research and analyzing population data about disease. This survey course will improve the ability of the student to understand and apply these concepts. **(3 credits)**

**MHS 5510—Research Methods**
This course is designed to enable participants to develop skills in reading and critically evaluating published research by using the scientific model. The advantages and disadvantages of quantitative and qualitative research methods will be compared and contrasted. Research articles will be collaboratively analyzed to develop an appreciation of potential methodological problems and their implications for evidence-based professional practice. **(3 credits)**

**MHS 5521—Ethical Issues in Health Care**
The student will examine the ethical issues that confront health care providers and patients. The medical scientific, moral, and socioeconomic bases of these issues and the decision-making processes that providers and patients engage in are analyzed. Topics will include informed and voluntary consent, the role of institutional review boards, euthanasia, the allocation of scarce resources. **(3 credits)**

**MHS 5530—Principles and Practice of Management in Health Care**
This course will discuss the various principles of management and its associated issues as they relate to the modern health care professional. The course will explore topics such as concepts of organizational management, decision making, strategic planning, resource management and allocation, conflict, and the concept of power. **(3 credits)**

### Elective Courses

**MHS 5103—Principles of Advanced Life Support**
Introduction to the accepted principles of the advanced life support measures used in adult medical, traumatic, and pediatric emergencies. Includes a review of the most common emergency situations encountered and provides hands-on practical training that will assist the clinician in developing the skills required to stabilize patients with life-threatening conditions. **(3 credits)**
MHS 5112—Bioterrorism and Weapons of Mass Destruction
Students will review the effects of warfare and bioterrorism on populations, with emphasis on low-intensity conflict and dispersion of chemical and biological weapons in populated areas. Discussions will be devoted to the ecological, sociological, environmental, and general health effects. (3 credits)

MHS 5211—Contemporary Issues in Nutrition
Covers a variety of general concepts and contemporary discussions in the area of nutrition as it applies to personal health. Many of the concepts learned in this course can be applied to the patient counseling and advisement health care professionals are asked to perform. (3 credits)

MHS 5213—Stress Management: Concepts and Practice
Covers a variety of general concepts and contemporary discussions in the area of stress and stress management for the health care professional. Attention is paid to research, assessment, interventions, the environment, and other related issues in this increasingly important area of health care. (3 credits)

MHS 5400—Directed Studies
This course provides the opportunity for students to explore a special topic of interest under the direction of a faculty member. Arrangements are made directly with the appropriate faculty member and the program director. Topic exploration is governed by the needs of the program and the educational goals of the student. Possible topics involve clinical and nonclinical aspects of the practice of medicine in the United States. (1-9 credits)

MHS 5541—Health Care Systems and Conflict
This introductory course will assist learners to blend conflict-resolution theories, models, and skills into realistic strategies that can be used in a health care setting. The attitudes, knowledge, and skills from this course can be applied to those who deliver, receive, and manage health care. The strategies will be applicable to working with diverse populations, including people with different cultural backgrounds, genders, personalities, positions of power, and agendas. Types of negotiation strategies in order to move toward a collaborative situation will also be addressed. (3 credits)

MHS 5542—Health Care Education
This course explores the various theories and applications of adult-education in the practice of training, professional education, and postprofessional education of medical personnel. Critical analysis of the different methods of teaching and training health care professionals is accomplished through discussion, research, investigation, journal development, and assignments. (3 credits)

MHS 5543—Educational Theories and Psychology
This course explores the history and evolution of educational theories and their role in the development of curriculum and instruction related to health care education. (3 credits)

MHS 5544—Curriculum and Instruction in Health Care
Using the principles of curriculum development and related research, students will develop a plan for a unit of instruction for a health care course that includes a need assessment, use of resources, implementation specification, material development, and assessment of instructional effectiveness. (3 credits)

MHS 5545—Assessment and Evaluation in Health Care
This course provides an overview of student and program evaluation and assessment methods in health care education. This course will consider multiple assessment models used in clinical settings, from traditional written assessments to alternative assessment methods such as OSCEs, portfolios, and simulated patients. Students will develop an evaluation/ assessment plan tailored to their professional situations. (3 credits)

MHS 5801—Applied Anatomy for Kinesiology
This course will address medical terminology and anatomy as they pertain to the kinesiology of each joint. The course lays the foundation for understanding the relevant anatomical and physical biomechanics of sports. (3 credits)

MHS 5802—Sports Injury Rehabilitation Principles
This course will use the knowledge of biomechanics to understand the nature of traumatic and overuse injuries in athletes. Rehabilitation concepts as well as specific programs for athletes will be covered. (3 credits)

MHS 5810—Certified Strength and Conditioning Specialist Preparation
This course is a review of the material and preparation necessary for this national certification examination. CPR required prior to registration. (3 credits)

MHL 1020—Legal Research Methods and Reasoning
The law is never static. Coupled with its ever-increasing role in the governance of health care institutions and health care practitioners, this course means that health care practitioners and administrators may need to obtain, review, and apply newly issued laws or legal decisions in their day-to-day activities. This course will enable students to find the law, read and understand legal statutes and regulations, and to understand the analytic process lawmakers and lawyers use. (4 credits)

MHL 1060 Tort and Contract Law
This course provides a detailed introduction to the legal principles and major concepts of tort law and contract law, focusing on legal claims and disputes in the health care context. Prerequisite: MHL 1020 (3 credits)

MHL 2030 Risk Management
This course focuses on the legal importance of risk management programs for health care institutions. In doing so, it examines the keys to organizing and implementing successful risk management programs. It also focuses on considerations for developing effective risk management programs, evaluating them, and addressing specific risk areas, including those arising in managed care and integrated health care delivery systems. Prerequisite: MHL 1020 (2 credits)

MHL 1030 Administrative Law
This course explores the role of administrative law in health care and the effects of federalism and constitutional issues in that context. Students will review the sources of law for health care providers (institutions, organizations, and individuals). In doing so, they will chart the overlapping, and sometimes conflicting, roles of federal
and state legal regulation and study the implications and effects of the various types of laws that govern the provision of health care—administrative agency regulations, constitutional provisions, statutes, and court decisions. (2 credits)

MHL 1040 Legal and Ethical Issues in Health Care
This course examines how the law has affected health care ethics by exploring the principles of ethics for health care providers; the ways in which these ethical principles are reflected in the law; and the legal, ethical, and policy aspects of issues affecting health care providers. Students will analyze situations arising in the health care context and will consider issues relating to both individual and institutional health care providers' ethics. (2 credits)

MHL 1090 Law Accreditation/Licensing
This course provides a detailed examination of the legal aspects of two credentialing concepts—accreditation and licensure—in both the individual health care practitioner setting and the institutional setting. Students will examine the primary goal of these concepts (i.e., protecting the public), how accreditation differs from licensure, and how they interrelate. Prerequisite: MHL 1020 (2 credits)

MHL 1080 Law of Patients Rights and Advocacy
Over the last century, the law governing medicine has seen a shift from paternalism to respect for patients as the decision makers. Beginning with the development of the bedrock legal principles of informed consent, this course will examine the legal aspects of the patients' rights movements and will trace the status of patients' legal abilities to control their treatment. Part of the course will be devoted to the existence of, substance of, and reasons for patients' rights statutes specific to hospital and nursing home settings. Prerequisite: MHL 1020 (2 credits)

MHL 2020 Legal Negotiation
This course seeks to familiarize students with the various ways in which their legal counsel will attempt to resolve disputes on their behalf. Lawyers, of course, may litigate to resolve disputes, but far more often, they choose negotiation, arbitration, and mediation. Students in this course will have the opportunity to review, discuss, and experiment with some of the skills their lawyers will be using on their behalf. They will come to appreciate the legal issues that can affect such nonlitigation techniques. Attention will also be paid to the legal mechanisms by which parties to disputes are more and more often being forced into mediation or arbitration. Prerequisite: MHL 1020 (2 credits)

Practical Components
MHS 5107—Internship
The student will complete 80 hours of internship in an area of interest within a health care organization, outside of their regular places of employment. The final product of this internship is an in-depth SWOT analysis of the unit or health care organization. The internship site requires prior M.H.Sc faculty approval. (5 credits)

MHS 5207—Practicum
The practicum is a cumulating experience for M.H.Sc students. Under supervision of an M.H.Sc faculty adviser, students will develop community-based health promotion and disease prevention interventions with underserved and/or nontraditional

M.H.Sc.—Anesthesiologist Assistant
Anesthesiologist Assistants (AAs), also known as anesthetists, are highly educated and skilled allied health professionals who work under the supervision of physician anesthesiologists to develop and implement anesthesia care plans. AAs work exclusively within the anesthesia care team environment as described by the American Society of Anesthesiologists (ASA). AAs possess a premedical background and a baccalaureate degree, and also complete a comprehensive didactic and clinical program at the graduate level. AAs are trained extensively in the delivery and maintenance of quality anesthesia care as well as advanced patient monitoring techniques. The goal of AA education is to nurture the transformation of qualified student applicants into competent health care practitioners who aspire to practice in the anesthesia care team.

The 27-month AA course of study consists of an intensive academic and didactic program that will prepare the student to function within the anesthesia care team. The students will get an extensive clinical training experience that will consist of a minimum of 2,500 clinical hours that encompass all aspects of anesthesia care for the surgical patient. Upon completion of the course of study, students will have earned a master of health science degree from NSU.

Students will be trained in the newly constructed, 6,000-square-foot AA facilities. The state-of-the-art facilities contain a mock operating room, which will house the latest Meti-Man anesthesia simulator, a laboratory with a mock postoperative care unit/intensive care unit, a lecture hall, a student break area, and anesthesia faculty member offices.

The first year of study focuses on the foundations of anesthesia practice through classroom, mock operating room scenarios and studies, and laboratory work. Clinical experience during the first year will increase as the year progresses. The senior year (semesters 5, 6, and 7) will consist of clinical rotations assigned in two-week and four-week intervals. During the senior year, clinical rotations are full time and involve all specialty areas in anesthesia, including general surgery, pediatrics, obstetrics and gynecology, otolaryngology, orthopedics, neurosurgery, ophthalmology, genitourinary surgery, vascular surgery, cardiac surgery, thoracic surgery, transplantation, and trauma. Clinical rotations include days, evenings, nights, weekends, and on-call—depending upon the rotation.
Accreditation
The Master of Health Science—Anesthesiologist Assistant course of study at NSU is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

Mission
The mission of the M.H.Sc.—Anesthesiologist Assistant is to prepare students for lifelong learning and leadership roles that will benefit the health care community. The educational process will be committed to training and educating competent anesthetists who will embrace the anesthesia care team to provide safe, quality, and compassionate care for all degrees of illness for the surgical patient.

Vision
The M.H.Sc.—Anesthesiologist Assistant program at Nova Southeastern University will provide state-of-the-art educational facilities and environment, which will allow anesthesiologist assistant students to cultivate into health care providers who are driven by compassion and guided by science to provide the best and safest patient care. It will be locally, nationally, and internationally recognized as an authority and primary source for anesthesiologist assistant information and services related to promoting the practice of delivering safe and quality anesthesia as a member of the anesthesia care team. The faculty members and students will be recognized as leaders within the profession through our collective service to the American Academy of Anesthesiologist Assistants (AAAA) and other professional organizations.

Admission Requirements
Prospective M.H.Sc.—Anesthesiologist Assistant students are selected by the Committee on Admissions (COA), which considers the overall qualities of the applicant. Areas of consideration include interpersonal skills, personal motivation, knowledge and understanding of the AA profession and the anesthesia care team, academic performance and level of achievement, life experiences, and recommendations. Personal interviews are offered to the most qualified applicants to assess interpersonal and communication skills, altruistic attitude, maturity, and commitment to the AA profession and anesthesia care team model.

Other requirements include
1. baccalaureate degree from a nationally recognized and accredited college or university, including above average performance in courses required in a premed curriculum (refer to required courses following)

Required
- English
  3 semester hours
- General biology
  6 semester hours
- General chemistry w/lab
  6 semester hours
- Organic chemistry w/lab
  3 semester hours
- Biochemistry
  3 semester hours
- General physics w/lab
  6 semester hours
- Calculus
  3 semester hours

Preferred but not required
- Cell and molecular biology
  1 semester hour

Organic chemistry II
  3 semester hours

Note: A grade of C or better is required in all prerequisite classes.

2. official transcripts of all undergraduate and graduate coursework

3. a minimum cumulative GPA of 2.75 on a 4.0 grading scale; minimum GPA of 3.0 preferred

4. Graduate Record Examination (GRE) or Medical College Admissions Test (MCAT) scores (taken within the past five years) taken early enough for official scores to be received by admissions office by the supplemental application due date of February 28

The NSU code number is 5522. GRE information can be obtained from www.gre.org. Information for the MCAT is at www.aamc.org/students/mcat.

5. three letters of recommendation from people familiar with applicant’s prior academic performance, potential, character, work habits, and suitability for graduate study leading into a career in clinical practice

6. at least eight hours of documented anesthesia exposure by observation in the operating room

7. summary of an article published in a current anesthesia journal

The applicant who has graduated from a college or university in a country where English is not the primary language, regardless of United States residency status, must obtain a minimum score of 600 on the written (or comparable score on the computerized) Test of English as a Foreign Language (TOEFL). An official set of scores must be sent to Nova Southeastern University directly from the Educational Testing Service in Princeton, New Jersey.

Computer Requirements
All students are required to have a computer with the following minimum specifications:
- Pentium III 800MHz minimum or equivalent Macintosh processor
- 256 megabytes RAM
- Video and monitor capable of 1024 x 768 resolution or better
- CD-ROM
- Full duplex sound card and speakers
- 56.6 baud modem (DSL or cable modem preferred)
- 800 x 600 or higher video display
- Windows 2000, ME, XP, or NT
- Microsoft Office 2000 with PowerPoint, Word, and Excel minimum
- Surge suppressor electrical outlet
- Printer
  Suggested option: Zip drive

Personal Interviews
Once your application is complete, the Committee on Admissions will decide whether or not your application is strong enough to warrant an invitation for a personal interview. Interviews are conducted on the Nova Southeastern University main campus and are by invitation only. Interviews will be held from December through March. An invitation to interview is not a guarantee of admission. Notice of acceptance or action by the committee on admissions will be on a “rolling” or periodic schedule; therefore early completion of the application is in the best interest of the student.
Tuition and Fees
Tuition for 2007–2008 (subject to change by the board of trustees without notice): $25,000. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

1. Acceptance Fee—$500. This fee is required to reserve the accepted applicant's place in the entering first-year class, but is not refundable in the event of a withdrawal. It is payable within two weeks of an applicant's acceptance.

2. Deposit—$250. This is due February 15, under the same terms as the Acceptance Fee.

3. Preregistration Fee—$250. This is due April 15, under the same terms as the Acceptance Fee.

The first semester's tuition and fees, less the $1,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met. The financial ability of applicants to complete their training at the college is important because of the limited number of positions available in each class. Applicants should have specific plans for financing 27 months of professional education. This should include tuition, living expenses, books, equipment, and miscellaneous expenses. Each student is required to carry adequate personal medical and hospital insurance. Students may avail themselves of the hospitalization insurance plan obtainable through the university.

Application Procedures
Applicants for admission must submit to EPS, or be responsible for submission of

1. a completed 2007 application form, along with a $50 nonrefundable application fee, accepted July 1, 2006 to February 15, 2007
2. three evaluation forms—supplied in the application package or by request—from supervisors or colleagues, clinical or nonclinical
3. official transcripts sent directly from all previously attended undergraduate, professional, and graduate institutions
4. all coursework from international institution(s), if applicant attended or is a graduate of any international institution(s)

Applicant is responsible for contacting one of the evaluation services listed here. The official evaluation must be sent directly from the evaluation service to EPS.

World Education Services, Inc.
P.O. Box 745
Old Chelsea Station
New York, New York 10113-0745
(212) 966-6311

Josef Silny & Associates
7101 SW 102nd Avenue
Miami, Florida 33173
(305) 273-1616
(305) 273-1338 (fax)
www.jsilny.com

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

5. complete resume or curriculum vita
6. copies of national and professional certifications or licenses by a recognized certifying body (if applicable)
7. summary of an article published in a current anesthesia journal (form supplied in application package)
8. evidence of eight hours documented anesthesia exposure (form supplied in application packet)

The M.H.Sc. Committee on Admissions will not consider an application until all required fees, credentials, transcripts, and evaluations have been received by the EPS.

Requirements for Graduation
Applicants for admission must

• successfully complete all academic and clinical courses and degree requirements
• satisfactorily meet all financial and library obligations
• attend in person the rehearsal and commencement program at which the degree is conferred
Anesthesiologist Assistant Curriculum

Start Date: June 2007
Length: 27 months
Degree: Master of Health Science—Anesthesiologist Assistant
Didactic: 14 months
Clinical: 13 months
Total Credit Hours: 130
Total Clinical Hours: 2,592

All courses with the MHS prefix will be taken online.

Summer—Semester I (June 2007—August 2007)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANES 5001</td>
<td>Clinical Anesthesia I</td>
<td>1</td>
</tr>
<tr>
<td>ANES 5048</td>
<td>Medical Terminology</td>
<td>1</td>
</tr>
<tr>
<td>ANES 5621</td>
<td>Principle of Airway Management I</td>
<td>2</td>
</tr>
<tr>
<td>ANES 5081</td>
<td>Introduction to Clinical Anesthesia</td>
<td>2</td>
</tr>
<tr>
<td>ANES 5076</td>
<td>Physics of Anesthesia Practice</td>
<td>1</td>
</tr>
<tr>
<td>ANA 5420</td>
<td>Anatomy</td>
<td>5</td>
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<tr>
<td>PHS 5400</td>
<td>Physiology</td>
<td>3</td>
</tr>
<tr>
<td>ANES 5301</td>
<td>Anesthesia Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>MHS 5001</td>
<td>APA Writing Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Credit Hours 18

Minimum clinical experience: 46 hours. (anesthesia rotations in hospital)
Basic Life Support Certification will be obtained during this semester.

Fall—Semester II (September 2007—December 2007)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANES 5002</td>
<td>Clinical Anesthesia II</td>
<td>3</td>
</tr>
<tr>
<td>ANES 5302</td>
<td>Anesthesia Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>ANES 5601</td>
<td>Applied Physiology for Anesthesia Practice</td>
<td>3</td>
</tr>
<tr>
<td>ANES 5462</td>
<td>Pharmacology for Anesthesia I</td>
<td>2</td>
</tr>
<tr>
<td>ANES 5801</td>
<td>Principles of Instrumentation and Patient Monitoring I</td>
<td>2</td>
</tr>
<tr>
<td>ANES 5622</td>
<td>Principle of Airway Management II</td>
<td>2</td>
</tr>
<tr>
<td>MHS 5205</td>
<td>Writing for Medical Publication</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 17

Minimum clinical experience: 148 hours (anesthesia rotations in hospital)

Winter—Semester III (January 2008—May 2008)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANES 5003</td>
<td>Clinical Anesthesia III</td>
<td>5</td>
</tr>
<tr>
<td>ANES 5463</td>
<td>Pharmacology for Anesthesia II</td>
<td>2</td>
</tr>
<tr>
<td>ANES 5303</td>
<td>Anesthesia Laboratory III</td>
<td>1</td>
</tr>
<tr>
<td>ANES 5602</td>
<td>Applied Physiology for Anesthesia Practice II</td>
<td>2</td>
</tr>
<tr>
<td>ANES 5328</td>
<td>ECG for Anesthesiologist Assistants</td>
<td>1</td>
</tr>
<tr>
<td>ANES 5901</td>
<td>Anesthesia Principle and Practices I</td>
<td>2</td>
</tr>
<tr>
<td>MHS 5510</td>
<td>Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5400</td>
<td>Directed Studies in Anesthesia I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 19

Minimum clinical experience: 252 hours. (anesthesia rotations in hospital)

Summer—Semester IV (June 2008—August 2008)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ANES 5004</td>
<td>Clinical Anesthesia IV</td>
<td>3</td>
</tr>
<tr>
<td>ANES 5304</td>
<td>Anesthesia Laboratory IV</td>
<td>2</td>
</tr>
<tr>
<td>ANES 5802</td>
<td>Principles of Instrumentation and Patient Monitoring II</td>
<td>1</td>
</tr>
<tr>
<td>MHS 5107</td>
<td>Internship</td>
<td>5</td>
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<tr>
<td>MHS 5401</td>
<td>Directed Studies in Anesthesia II</td>
<td>3</td>
</tr>
<tr>
<td>ANES 5902</td>
<td>Anesthesia Principle and Practices II</td>
<td>3</td>
</tr>
<tr>
<td>MHS 5103</td>
<td>Principles of Life Support*</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 20

Minimum clinical experience: 216 hours. (anesthesia rotations in hospital)
*Pediatric and Advanced Cardiac Lifesaving will be obtained during this semester.

Clinical Year, Fall—Semester V (September 2008—December 2008)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MHS 5207</td>
<td>Practicum—Senior Seminar in Anesthesia I*</td>
<td>5</td>
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<tr>
<td>ANES 6110</td>
<td>Anesthesia Review I</td>
<td>1</td>
</tr>
<tr>
<td>ANES 6001</td>
<td>Clinical Anesthesia V</td>
<td>13</td>
</tr>
<tr>
<td>MHS 5501</td>
<td>Epidemiology and Biostatistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours 22

Minimum clinical experience: 675 hours. (anesthesia rotations in hospital)
*MHS 5207 will be completed over fall, winter, and summer semesters.
Clinical Year, Winter—Semester VI (January 2009—May 2009)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANES 6120</td>
<td>Anesthesia Review II</td>
<td>1</td>
</tr>
<tr>
<td>ANES 6002</td>
<td>Clinical Anesthesia VI</td>
<td>15</td>
</tr>
<tr>
<td>MHS 5521</td>
<td>Ethical Issues in Health Care</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours 19**

Minimum clinical experience: 760 hours. (anesthesia rotations in hospital)

Clinical Year, Summer—Semester VII (June 2009—August 2009)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANES 6130</td>
<td>Anesthesia Review III</td>
<td>1</td>
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<tr>
<td>ANES 6003</td>
<td>Clinical Anesthesia VII</td>
<td>11</td>
</tr>
<tr>
<td>MHS 5530</td>
<td>Principles of Health Care Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credit Hours 15**

Minimum clinical experience: 495 hours. (anesthesia rotations in hospital)

Curriculum is subject to change as directed by the department.

**Anesthesiologist Assistant Course Descriptions**

**ANES 5001—Clinical Anesthesia I**

Developmental skills and foundations of the clinical practice of anesthesia are gained through one-on-one supervised instruction in the operating room and other ancillary anesthetizing locations. Participation and responsibilities increase through the year as knowledge and skills develop. (1 credit)

**ANES 5002—Clinical Anesthesia II**

This course is a continuation of ANES 5001. Developmental skills and foundations of the clinical practice of anesthesia are gained through one-on-one supervised instruction in the operating room and other ancillary anesthetizing locations. Participation and responsibilities increase through the year as knowledge and skills develop. (3 credits)

**ANES 5003—Clinical Anesthesia III**

This course is a continuation of ANES 5002. Developmental skills and foundations of the clinical practice of anesthesia are gained through one-on-one supervised instruction in the operating room and other ancillary anesthetizing locations. Participation and responsibilities increase through the year as knowledge and skills develop. (5 credits)

**ANES 5004—Clinical Anesthesia IV**

This course is a continuation of ANES 5003. Developmental skills and foundations of the clinical practice of anesthesia are gained through one-on-one supervised instruction in the operating room and other ancillary anesthetizing locations. Participation and responsibilities increase through the year as knowledge and skills develop. (3 credits)

**ANES 5201—Principle of Airway Management I**

This course will provide an opportunity to learn and appreciate structure, function, pathophysiology, disease, and management of the human airway. The basic and advanced principles of elective and emergent airway management, including equipment and techniques, will be covered. Examination, recognition, techniques, and management involved in pediatric and adult difficult airways will be discussed. Course will correlate with laboratory work for a better understanding and use of bag-mask ventilation, oral and nasal airways, and nasal intubation techniques, lightwands, fiberoptic intubations, double lumen tubes, surgical airways, and application of laryngeal mask airway. (2 credits)

**ANES 5622—Principle of Airway Management II**

This course will provide an opportunity to learn and appreciate structure, function, pathophysiology, disease, and management of the human airway. The basic and advanced principles of elective and emergent airway management, including equipment and techniques, will be covered. Examination, recognition, techniques, and management involved in pediatric and adult difficult airways will be discussed. Course will correlate with laboratory work for a better understanding and use of bag-mask ventilation, oral and nasal airways, and nasal intubation techniques, lightwands, fiberoptic intubations, double lumen tubes, surgical airways, and application of laryngeal mask airway. (2 credits)

**ANES 5048—Medical Terminology**

Self-study online course. Use of medical language for appropriate and accurate communication in patient care. Course includes terminology and symbols, word formation, body systems and disease terms, abbreviations, and procedures. (1 credit)

**ANES 506—Physics of Anesthesia Practice**

Basic physical principles and processes applied to the practice of anesthesia. Includes dimensional analysis, work, energy, and power; gas laws; fluid mechanics; heat transfer; vaporization; solubility, diffusion, and osmosis; fires and explosions; laser and X-ray radiation; principles of electrical circuit theory used to model anesthesia equipment, physiologic systems, and time constants. (1 credit)

**ANES 5081—Introduction to Clinical Anesthesia**

Prepares and educates the student to work within the anesthesia care team. Introduction to induction, maintenance, and emergence from anesthesia. Includes history of anesthesia, types of anesthesia, universal precautions and infection control, layout of the operating room, sterile fields and techniques, interacting with patients, starting intravenous catheters and arterial cannulae, obtaining arterial blood samples, and application of ASA-standard monitors. Students will use an anesthesia simulator to gain the basic knowledge and usage of monitors. (2 credits)

**ANES 5301—Anesthesia Laboratory III**

A state-of-the-art laboratory and anesthesia simulator will prepare the
This course is a continuation of ANES 5302. A state-of-the-art laboratory and anesthesia simulator will prepare the student for the usage and complete understanding of the monitors and practice of anesthesia. Students will apply their didactic knowledge to scenarios on the anesthesia simulator. Patient modalities—such as pulse oximetry, capnography, and blood pressure monitoring systems—are explored. Laboratory experiments will develop students' understanding of anesthesia delivery systems, various types of breathing circuits, fresh gas flow effect, theory of dilutional methods of cardiac output monitoring, and relations between mean circulatory filling pressures and central venous pressure. A vascular sonography lab will allow a unique and comprehensive understanding of transesophageal and transthoracic echocardiography, cerebrovascular testing, and venous and peripheral arterial testing. (1 credit)

ANES 5303—Anesthesia Laboratory III
This course is a continuation of ANES 5302. A state-of-the-art laboratory and anesthesia simulator will prepare the student for the usage and complete understanding of the monitors and practice of anesthesia. Students will apply their didactic knowledge to scenarios on the anesthesia simulator. Patient modalities—such as pulse oximetry, capnography, and blood pressure monitoring systems—are explored. Laboratory experiments will develop students' understanding of anesthesia delivery systems, various types of breathing circuits, fresh gas flow effect, theory of dilutional methods of cardiac output monitoring, and relations between mean circulatory filling pressures and central venous pressure. A vascular sonography lab will allow a unique and comprehensive understanding of transesophageal and transthoracic echocardiography, cerebrovascular testing, and venous and peripheral arterial testing. (2 credits)

ANES 5302—Anesthesia Laboratory II
This course is a continuation of ANES 5301. A state-of-the-art laboratory and anesthesia simulator will prepare the student for the usage and complete understanding of the monitors and practice of anesthesia. Students will apply their didactic knowledge to scenarios on the anesthesia simulator. Patient modalities—such as pulse oximetry, capnography, and blood pressure monitoring systems—are explored. Laboratory experiments will develop students' understanding of anesthesia delivery systems, various types of breathing circuits, fresh gas flow effect, theory of dilutional methods of cardiac output monitoring, and relations between mean circulatory filling pressures and central venous pressure. A vascular sonography lab will allow a unique and comprehensive understanding of transesophageal and transthoracic echocardiography, cerebrovascular testing, and venous and peripheral arterial testing. (1 credit)

ANES 5304—Anesthesia Laboratory IV
This course is a continuation of ANES 5303. A state-of-the-art laboratory and anesthesia simulator will prepare the student for the usage and complete understanding of the monitors and practice of anesthesia. Students will apply their didactic knowledge to scenarios on the anesthesia simulator. Patient modalities—such as pulse oximetry, capnography, and blood pressure monitoring systems—are explored. Laboratory experiments will develop students' understanding of anesthesia delivery systems, various types of breathing circuits, fresh gas flow effect, theory of dilutional methods of cardiac output monitoring, and relations between mean circulatory filling pressures and central venous pressure. A vascular sonography lab will allow a unique and comprehensive understanding of transesophageal and transthoracic echocardiography, cerebrovascular testing, and venous and peripheral arterial testing. (1 credit)

ANES 5328—ECG for Anesthesiologist Assistants
Basic and advanced ECG interpretation using simulators to understand an overview of heart anatomy, function, and neurophysiology. (1 credit)

PHY 5400—Physiology
Clinically relevant physiologic principles of the major organ systems covered in Anatomy. Pathological changes that occur in the human physiology in the disease process. (3 credits)

ANA 5420—Anatomy
Gross structures of the human body. Integrates topographic and radiographic anatomy to stress the application and importance of clinical anatomy. Develops the knowledge of the human anatomy necessary for the practice of the profession. (5 credits)

ANES 5462—Pharmacology for Anesthesia I
Emphasizes drugs specifically related to the practice of anesthesia, including inhaled anesthetics, opioids, barbiturates, benzodiazepines, anticholinesterases and anticholinergics, neuromuscular blockers, adrenergic agonists and antagonists, nonsteroidal anti-inflammatory drugs, antihistamines, calcium channel blockers, diuretics, anticoagulants, and antimicrobials. (2 credits)

ANES 5463—Pharmacology for Anesthesia II
This course is a continuation of ANES 5462. Emphasizes drugs specifically related to the practice of anesthesia, including inhaled anesthetics, opioids, barbiturates, benzodiazepines, anticholinesterases and anticholinergics, neuromuscular blockers, adrenergic agonists and antagonists, nonsteroidal anti-inflammatory drugs, antihistamines, calcium channel blockers, diuretics, anticoagulants, antihistamines, and antimicrobials. (2 credits)
regulation, blood gases/pH, and maternal and fetal physiology. Also emphasizes those systems that affect evaluation and planning for anesthesia and that are affected by the administration of anesthesia. (2 credits)

ANES 5801—Principles of Instrumentation and Patient Monitoring I
Practical principles, application, and interpretation of various monitoring modalities including ECG, invasive and noninvasive blood pressure, oximetry, cardiac output, respiratory gas analysis, respiration, and instrumentation as they pertain to anesthesia practice. Also includes intraoperative neurophysiology monitoring, temperature, renal function, coagulation/hemostasis, neuromuscular junction, transesophageal and transesophageal echocardiography, cerebrovascular testing, and venous and peripheral arterial testing. (2 credits)

ANES 5802—Principles of Instrumentation and Patient Monitoring II
This course is a continuation of ANES 5801. Practical principles, application, and interpretation of various monitoring modalities including ECG, invasive and noninvasive blood pressure, oximetry, cardiac output, respiratory gas analysis, respiration, and instrumentation as they pertain to anesthesia practice. Also includes intraoperative neurophysiology monitoring, temperature, renal function, coagulation/hemostasis, neuromuscular junction, transesophageal and transesophageal echocardiography, cerebrovascular testing, and venous and peripheral arterial testing. (1 credit)

ANES 5901—Anesthesia Principle and Practices I
Principles involved in the formulation of anesthetic plans based upon data obtained during the preoperative evaluation. Includes the formulation and practices of different anesthetic plans and techniques as related to specific surgical procedures and pathophysiology. (2 credits)

ANES 5902—Anesthesia Principle and Practices II
This course is a continuation of ANES 5901. Principles involved in the formulation of anesthetic plans based upon data obtained during the preoperative evaluation. Includes the formulation and practices of different anesthetic plans and techniques as related to specific surgical procedures and pathophysiology. (3 credits)

ANES 6001—Clinical Anesthesia V
Encompasses the student's clinical experience in required rotations through all sub-specialty areas of anesthesia. Clinical rotations are assigned in two-week and four-week intervals and will require being on-call during some nights and weekends. Clinical practice of anesthesia is gained through one-on-one supervised instruction in the operating room and other ancillary anesthetizing locations. Monthly required readings are assigned. Monthly comprehensive examinations are administered. Each course's grade is composed of clinical evaluations and comprehensive examination scores. (15 credits)

ANES 6003—Clinical Anesthesia VII
This course is a continuation of ANES 6001. Encompasses the student's clinical experience in required rotations through all sub-specialty areas of anesthesia. Clinical rotations are assigned in two-week and four-week intervals and will require being on-call during some nights and weekends. Clinical practice of anesthesia is gained through one-on-one supervised instruction in the operating room and other ancillary anesthetizing locations. Monthly required readings are assigned. Monthly comprehensive examinations are administered. Each course's grade is composed of clinical evaluations and comprehensive examination scores. (11 credits)

ANES 6100—Anesthesia Review I
Lectures, required readings, and discussions with faculty members, visiting residents, and current residents on clinical and research topics. Includes correlation of case management and complications. (1 credit)

ANES 6120—Anesthesia Review II
This course is a continuation of ANES 6110. Lectures, required readings, and discussions with faculty members, visiting residents, and current residents on clinical and research topics. Includes correlation of case management and complications. (1 credit)

MHS 5001—APA Writing Seminar
This seminar is designed to introduce students to the APA 5 writing style. They will be guided by an instructor through the main components of an APA-style academic paper as well as internship and practicum reports. (2 credits)

MHS 5103—Principles of Life Support
Provides for the certification in Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS). Courses will focus on assessment and management of adults, children, and infants in a cardiopulmonary crisis. Pediatric and Advanced Cardiac Lifesaving will be obtained during this semester. (3 credits)

MHS 5107—Internship
The student will complete 80 hours of internship in an area of interest within a health care organization, outside of his or her regular place of employment.
The final product of this internship is an in-depth SWOT analysis of the unit or health care organization. The internship site requires prior M.H.Sc. faculty approval. (3 credits)

MHS 5205—Writing for Medical Publications
Study and review of quality medical writing techniques, issues, and procedures with emphasis on cultivating personal style and content. Focus will be on writing for peer- and evidence-based publications. (3 credits)

MHS 5207—Practicum
The practicum is a cumulative experience for M.H.Sc. students. Under supervision of an M.H.Sc. faculty adviser, students will develop community-based health promotion and disease prevention interventions with underserved and/or nontraditional populations. (3 credits)

MHS 5501—Epidemiology and Biostatistics
The ability to understand the conceptual and practical aspects of biostatistics and epidemiology in health care is critical to understanding research and analyzing population data about disease. This survey course will improve the ability of the student to understand and apply these concepts. (3 credits)

MHS 5510—Research Methods
This course is designed to enable participants to develop skills in reading and critically evaluating published research by using the scientific model. The advantages and disadvantages of quantitative and qualitative research methods will be compared and contrasted. Research articles will be collaboratively analyzed to develop an appreciation of potential methodological problems and their implications for evidence-based professional practice. (3 credits)

MHS 5400—Directed Studies in Anesthesia I
This course provides the opportunity for students to explore a special topic of interest under the direction of a faculty member. Arrangements are made directly with the appropriate faculty member and the program director. Topic exploration is governed by the needs of the program and the educational goals of the student. Possible topics involve clinical and nonclinical aspects of the practice of medicine in the United States. (3 credits)

MHS 5401—Directed Studies in Anesthesia II
This course is a continuation of MHS 5400. (3 credits)

MHS 5521—Ethical Issues in Health Care
The student will examine the ethical issues that confront health care providers and patients. The medical, scientific, moral, and socioeconomic bases of these issues and the decision-making processes that providers and patients engage in are analyzed. Topics will include informed and voluntary consent, the role of institutional review boards, euthanasia, and the allocation of scarce resources. (3 credits)

MHS 5530—Principles and Practice of Management in Health Care
The course will discuss the various principles of management and its associated issues as they relate to the modern health care professional. The course will explore topics such as concepts of organizational management, decision making, strategic planning, resource management and allocation, conflict, and the concept of power. (3 credits)

For information about the NSU AA course of study, or to request an AA admissions application packet, please contact the NSU admissions office at Nova Southeastern University Health Professions Division Anesthesiologist Assistant 3200 South University Drive Fort Lauderdale, Florida 33328-2018 (954) 262-1101 or 800-356-0026, ext 1101 www.nova.edu/mhs/anesthesia

Sources of Additional Information
Links to non-NSU sites are provided for your convenience and do not constitute an endorsement.

For information on a career as an anesthesiologist assistant, contact:
American Academy of Anesthesiologist Assistants
P.O. Box 13978
Tallahassee, Florida 32317
Telephone: 850-628-5858
Fax: (850) 628-5858
Email: info@aa-naa.org
www.aa-naa.org

For information on the certification process for anesthesiologist assistants, contact:
National Commission for Certification of Anesthesiologist Assistants
P.O. Box 15519
Atlanta, Georgia 30333-0519
Fax: (404) 687-9978
www.aa-nccaa.org

For information about the anesthesia care team, contact:
American Society of Anesthesiologists
520 N. Northwest Highway
Park Ridge, Illinois 60068-2573
www.asahq.org

Doctor of Health Science Program (D.H.Sc.)
The D.H.Sc. is a postprofessional online doctoral program designed for master's prepared health care professionals. The program was developed by health care practitioners and educators to provide advanced knowledge in health arts and sciences, and health care delivery systems.

Through professor-driven, student-centered online course delivery, coupled with an internship, practicum, doctoral analysis, and two one-week on-campus institutes, the D.H.Sc. program challenges the student to examine the current state of health care, and to consider their role in the provision of services to their patients, clients, and the community at large.

Through examination of alternative methods of health care, community diversity, current delivery systems both national and international, health care policy and issues facing practitioners and administrators, the D.H.Sc. curriculum is rigorous, enlightening, and designed with working health care professionals in mind.

Admission Requirements
Prospective D.H.Sc. students are selected by an admissions committee that considers the overall qualities
of the applicant and his or her suitability for this course of study. Areas of interest include application content, academic record, prior health care experience, letters of evaluation, and personal motivation. In special circumstances, a personal interview with members of the admissions committee may be required.

1. Prior to matriculation, applicants must have completed a master’s degree from a regionally accredited college or university.

2. Applicants should demonstrate a cumulative master’s degree GPA of 3.0 or above on a 4.0 scale to be eligible for regular admission.

3. All applicants, except those who have received their master’s degrees from the Department of Health Science at NSU, will be required to submit GRE scores as of January 2006. Our school code is 5522. GRE scores may be obtained by contacting Graduate Record Examination at their Web site: www.gre.org, or by telephone at (609) 921-9000. We will base an admissions decision on all information submitted—there will be no “cut-off” score used to evaluate applicant results on this standardized test as long as an applicant meets our cumulative master’s degree GPA requirements of at least a 3.0 on a 4.0 scale (see item 2 above). Otherwise-qualified applicants (applicants who meet these GPA requirements) who submit verbal scores of under 500, and/or analytic writing scores below 4, will generally be provisionally admitted, and may be required to take and pass DHSS 8180 (Medical Writing) as their first program course in order to achieve full program matriculation.

The admissions committee will make a recommendation to the dean of the college as to any remedial coursework necessary for an applicant to achieve full admission.

4. Prior health care experience is required and is strongly considered in the admissions process. The D.H.Sc is a postprofessional degree designed for health practitioners and clinicians from a wide variety of disciplines. The commonality exhibited by our students is the expert practice of a recognized health occupation at a professional level. The successful applicant’s health profession may be emphasized delivery of services to individual clients (e.g., PA, PT, R.N., LCSW, etc.) or be population based (M.P.H.). An appropriate level of professional practice is generally recognized by either health professions licensure (e.g., R.N., PT), a national certification (e.g., PA-C, RVT, RRT, CRNA), a recognized health professions academic credential (e.g., M.P.H., M.S.N., M.S.W.), or a combination of the above. All questions regarding the appropriateness of an applicant’s qualifications for admission can be discussed with the department chair or program director on an informal basis, but the official recommendations are made by the Committee on Admissions to the dean of the College of Allied Health and Nursing. The dean makes the final determination.

Application Procedures
Applicants for admission must submit or be responsible for submission of

1. a completed application form along with a $50 nonrefundable application fee
2. two letters of evaluation from a supervising physician (clinical) or manager (nonclinical). This form is supplied in the application package.
3. official transcripts sent directly from all previously attended undergraduate, graduate and professional institutions to Nova Southeastern University Enrollment Processing Services (EPS) Attn: College of Allied Health and Nursing—D.H.Sc. Program 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905
4. an evaluation for U.S. institutional equivalence for all coursework from international institution(s), if applicant attended or is a graduate of any international institution(s)

Applicant is responsible for contacting one of the evaluation services listed here. The official evaluation must be sent directly from the evaluation service to the EPS.
- World Education Services PO. Box 745 Old Chelsea Station New York, New York 10213-0745 (212) 966-6311 www.wes.org
- Josef Silny & Associates 1010 SW 102Nd Avenue Miami, Florida 33173 (305) 273-1616 (305) 273-1338 fax www.jsilny.com info@jsilny.com
- Educational Credential Evaluators P.O. Box 510470 Milwaukee, Wisconsin 53203-3420 (414) 289-3400 www.ece.org
5. official scores from the Graduate Record Examination (GRE) general test sent directly to the EPS

Submitting your GRE scores is mandatory for students matriculating in 2006.

Our school code is 5522. GRE scores may be obtained by contacting Graduate Record Examination directly at www.gre.org or by telephone at (609) 921-9000.

6. a complete resume or CV
7. copy of national and professional certifications or licenses by recognized by a certifying body (if applicable)

8. The D.H.Sc. Office of Admissions works on a rolling admissions basis. Applications are accepted year round. To ensure that your application receives prompt consideration, you should apply early. All final documentation must be received by the Office of Admissions no later than one month prior to intended registration date.

9. The D.H.Sc. committee on admissions will not consider an application until all required fees, credentials, transcripts and test scores have been received by the Office of Admissions.

Tuition and Fees
Anticipated tuition for the 2007-2008 D.H.Sc. program (subject to change by the board of trustees without notice): is $475 per credit hour. Additional expenses and fees may be incurred. Examples include, but not limited to, travel to and from campus, graduation fees, books, etc. An NSU student services fee of $750 is required annually.
Requirements for Graduation
To be eligible to receive the D.H.Sc. degree, students shall
• be of good moral character
• satisfactorily complete the program of 60 semester hours (minimum) of study required for the degree in the generalist track and 64 in the conflict resolution track
• successfully complete the D.H.Sc. internship and practicum, and doctoral analysis
• receive a recommendation by the D.H.Sc. program director to the dean of the College of Allied Health and Nursing

Required Course of Study
The generalist curriculum is a 60 total credit hour doctoral program while the conflict resolution track is 64.

Full Course Roster
Generalist Program
• DHS 8000—Health Care for Diverse Populations
• DHS 8010—Statistics and Research Methods (on-campus institute)
• DHS 8030—Community Health Promotion and Disease Prevention
• DHS 8040—Health Care Ethics
• DHS 8050—National Health Care (elective)
• DHS 8070—Special Populations (elective)
• DHS 8090—Health Policy, Planning, and Management
• DHS 8100—Alternative and Complementary Medicine (elective)
• DHS 8110—Community Environmental and Occupational Health
• DHS 8120—Doctoral Analysis (capstone project)
• DHS 8130—Internship
• DHS 8140—Practicum
• DHS 8150—Internship (continuing services)
• DHS 8160—Practicum (continuing services)
• DHS 8180—Medical Writing (elective)
• DHS 8190—Health Care Education
• DHS 8200 and 8250—Independent Study (electives)
• DHS 8300—Grant Writing
• DHS 8400—Global Health Issues
• DHS 8500—Psychology of Aging
• DHS 8700—Comparative International Health Systems
• DHS 8750—Patient Safety
• HSP 9006—Evidence-Based Medical Practice

Concentration in Conflict Resolution
• CARD 7040—Theories of Conflict and Conflict Resolution I
• CARD 7050—Theories of Conflict and Conflict Resolution II
• CRHS 5000—Foundations and Development of Conflict Resolution
• CRHS 5040—Human Factors
• CRHS 5140—Negotiation Theory and Practice (elective)
• CRHS 6130—Internship in Conflict Resolution
• CRHS 6160—Practicum in Conflict Resolution
• CRHS 6170—Violence Prevention and Intervention
• CRHS 7010—Philosophical and Social Issues
• CRHS 7020—Systems Design
• DHS 8000—Health Care for Diverse Populations
• DHS 8010—Statistics and Research Methods (on-campus institute)
• DHS 8030—Community Health Promotion and Disease Prevention
• DHS 8040—Health Care Ethics
• DHS 8050—National Health Care (elective)
• DHS 8070—Special Populations (elective)
• DHS 8090—Health Policy, Planning, and Management
• DHS 8100—Alternative and Complementary Medicine (elective)
• DHS 8110—Community Environmental and Occupational Health
• DHS 8120—Doctoral Analysis (capstone project)
• DHS 8130—Medical Writing (elective)
• DHS 8190—Health Care Education
• DHS 8200 and 8250—Independent Study (electives)
• DHS 8300—Grant Writing
• DHS 8400—Global Health Issues
• DHS 8500—Psychology of Aging
• DHS 8700—Comparative International Health Systems
• DHS 8750—Patient Safety
• HSP 9006—Evidence-Based Medical Practice

Research Track
• HSP 9006—Evidence-Based Medical Practice
• HSP 9003—Biostatistics for the Health Sciences I
• HSP 9004—Biostatistics for the Health Sciences II
• HSP 9001—Quantitative Research Methods
• HSP 9002—Qualitative Research Methods
• HSP 9005—Theory Construction

On-campus institutes—These one-week sessions are located on the Health Professions Division main campus in Fort Lauderdale, Florida. Two such institutes are required to complete the program for the D.H.Sc. degree. These institutes are required for both the generalist track and the conflict resolution track.
Doctor of Health Science Course Descriptions

DHS 8000—Health Care for Diverse Populations
This course includes a discussion and analysis of the impact of ethnic and cultural issues on health care delivery systems. An in-depth analysis of the barriers faced by health care providers when presented with a diverse ethnic population is presented. Critical analysis of the different cultural perceptions of disease and treatment is given, and the need for developing cultural sensitivity and competency is explored. The student is expected to gain knowledge of cultural differences and the need to respect the background of the patient when formulating treatment plans. The student will be required to research a chosen topic on a diverse population and develop a paper regarding their impact on the health care system. (4 semester hours)

DHS 8010—Statistics and Research Methods
This course allows the student to develop an understanding through critical analysis of the basic research methods used in health care. Students will be taught to critically analyze medical information and perform effective literature reviews. Students will select a health care topic and perform a review of the literature that is at least 10 pages and includes a minimum of 20 references from books and journals, using the NSU electronic library. (4 semester hours, on-campus institute)

DHS 8030—Community Health Promotion and Disease Prevention
This course develops the knowledge and skills needed to work with communities to improve health status of the population. Major topics will include health promotion and disease prevention. Special emphasis will be placed on the Healthy People 2010 initiatives. Students will be required to complete a paper of at least 20 pages based on an intervention strategy from Healthy People 2010. The paper will include an introduction, review of the literature, discussion, and conclusion in chapter form. (4 semester hours)

DHS 8040—Health Care Ethics
This course is an in-depth study of the concepts of health care ethics. The course of study analyzes the differences between ethics and law and discusses the three ethical theories. There is a critical discussion and analysis of the ethical dilemmas faced by health care personnel in such areas as cloning, organ transplantation, and the implications of the Human Genome Project. The impact of technological advances on ethical issues will be studied for their implications for future health care practitioners. The student will be required to choose an ethical issue in health care and prepare a written paper on that subject. (4 semester hours)

DHS 8050—National Health Care
This course is an advanced analysis of health care plans that are written by the federal government. Topics will include Medicare, Medicaid, public health, Indian Health Services, Veterans Administration, and military health care systems, including CHAMPUS, and the conversion of these health care plans to managed care. These systems will be contrasted with private HMOs and insurance plans. The student will write a paper comparing and contrasting these plans. The student will reflect on the pros and cons of a national health insurance plan and their presentation should include discussion of the national health plans of other countries. Students will be expected to present their own argument for or against national health care and an implementation plan. (4 semester hours)

DHS 8060—Health Nutrition
This course examines and analyzes the increasing significance of nutrition in achieving and maintaining optimal health and well-being. Special attention will be given to women, children, and the elderly populations. Added emphasis will be placed on the growing epidemic of obesity in the general population and the ramifications for health care and the health care delivery systems. An in-depth analysis of the nutritional recommendations of the Healthy People 2010 Initiative will be explored through a position paper prepared by the student. (4 semester hours, elective)

DHS 8070—Special Populations
This course provides an analysis of special populations that present to the community and the health care market. Major topics will include rural, migrant, inner city populations and minority populations. Emphasis will be placed on a critical analysis of the impact of socioeconomic factors that are included in social epidemiology, the impact on the individual's health and well-being, and in their ability to access the health care system. The student will be required to prepare a paper on a special population and the barriers presented to that population in accessing the health care system. (4 semester hours)

DHS 8080—Conflict Resolution in Health Care
This course examines and analyzes the nature and dynamics of human conflict within civil societies. Emphasis is placed on conflicts within and among governments and public sector agencies and between the health provider, patients, and medical institutions. Students will be expected to take an active role in the course and develop their own strategies for dealing with conflict. A paper will be required that details and analyzes a conflict situation in the student's work or other environment and how the conflict was resolved. (4 semester hours, one-week on-campus institute)

DHS 8090—Health Policy, Planning, and Management
This course critically examines the dynamics of health care in the United States. The student is expected to analyze the health care industry and contrast non-profit and for-profit health care delivery systems. An exploration of the ramifications of health care reform and the impact on institutions and individuals will be undertaken. The concepts of cost containment and long-term care will be analyzed. The student will be expected to write a paper on health care reform and managed care that is at least 10 pages in length and provides an informed opinion on future directions of health care reform. The paper should address the question new directions managed care may take and what the future of health care reform may be. (4 semester hours)
DHS 8100—Alternative and Complementary Medicine
This course examines and analyzes alternative and complementary medicine and their impact on the health care industry. The approach to the subject is to present selected alternative and complementary medicine fields in an informative, non-judgmental format. Students will be allowed to choose either an alternative or complementary medicine field and complete a paper of at least 15 pages that is presented as a patient or community education tool. Special emphasis will be placed on the educational value of the project, rather than a pro/con stance. (4 semester hours)

DHS 8110—Community Environmental and Occupational Health
Issues such as air and water quality and waste management will be examined. OSHA will be examined and analyzed for its impact on health and health care. Trends in environmental and occupational health legislation will be examined for their impact potential. Students will participate by contacting one of their senators or house representatives for an environmental statement and then write a critical analysis. (4 semester hours)

DHS 8130—Internship
The student will perform an internship at a community health care institution, clinic, etc., that is approved by the D.H.Sc. faculty. The student should spend a minimum of 80 clock hours in the health promotion or similar department. Health promotion activities should be critically analyzed. The student will complete a 20-page paper describing the institution, defining the population served, analyzing the reimbursement options accepted, and detailing the health promotion activities observed. A critical evaluation should be made that details strengths, weaknesses, opportunities, and threats to the institution. Recommendations for improvement should be made, if needed. (5 semester hours)

DHS 8140—Practicum
The practicum is a written project that is developmental in nature. The D.H.Sc. faculty advisers must approve the practicum topic. The practicum must be preceded by a proposal that contains the project idea and a preliminary literature review. The student will be required to choose a health topic, perform a literature review, and create a product that is a health promotion program that can be used for community education. An implementation and evaluation plan must be included in the final product. (5 semester hours)

DHS 8150—Internship
This course is a continuation of the DHS 8130 Internship. It is used when the student is in need of additional time to satisfy the requirements for an incomplete internship. (continuing services, 0 semester hours)

DHS 8160—Practicum
This course is a continuation of the DHS 8140 Practicum. It is used when the student is in need of additional time to satisfy the requirements for an incomplete practicum. (continuing services, 0 semester hours)

DHS 8170—Leadership in Health Care
This course explores the various methods of leadership and management, both in and out of health care, and their impact on productivity, profitability, and employee satisfaction. Critical analysis of the different types of leadership and management theories is given and the need for developing a leadership plan is explored. The student is expected to gain knowledge of the various types of leaders and systems and will be required to research and develop a paper on a specific leadership theory. (4 semester hours, one-week on-campus institute)

DHS 8180—Medical Writing
This course examines in practical terms the elements required for the successful publication of a journal article or clinical case review. Methods of document preparation, proper word and punctuation use, and the requirements for authors of biomedical journal articles will be discussed. All students are required to develop a quality paper that meets the standards required for publication in a peer-reviewed professional/biomedical journal. (4 semester hours)

DHS 8190—Health Care Education
This course explores the various theories and applications of adult education in the practice of training, preprofessional education, and postprofessional education of medical personnel. Critical analysis of the different methods of teaching and training health care professionals is accomplished through discussion, research, investigation, journal development, and assignments. The capstone of the course will be to develop a 10-page paper on a specific method of educating health care professionals. (5 semester hours)

DHS 8200—Independent Study A
This course is a self-directed, faculty-supervised experience for the student. The student will be required to develop a proposal regarding the topic of study, a learning contract with a minimum of six specific objectives, and a plan of action that includes methods of obtaining the information and the material produced, thus demonstrating an in-depth understanding of the subject areas listed in the objectives. A faculty member will be assigned to the student for the supervised study and will follow the approved learning contract for successful completion of the course. The purpose of this course is to allow the student to explore an area of interest in the field of health care or health sciences. The secondary benefit of the course is to allow the student, with the assistance of the faculty member, to develop a doctoral-level course of study. (4 semester hours)

DHS 8250—Independent Study B
This course is a self-directed, faculty-supervised experience for the student. The student will be required to develop a proposal regarding the topic of study, a learning contract with a minimum of six specific objectives, and a plan of action that includes methods of obtaining the information and the material produced, thus demonstrating an in-depth understanding of the subject areas listed in the objectives. A faculty member will be assigned to the student for the supervised study and will follow the approved learning contract for successful completion of the course. The purpose of this course is...
to allow the student to explore an area of interest in the field of health care or health sciences. The secondary benefit of the course is to allow the student, with the assistance of the faculty member, to develop a doctoral-level course of study. (4 semester hours)

DHS 8300—Grant Writing
This course provides a step-by-step framework for developing grant proposals. It uses structured questions to help the participant draw out and organize his or her thinking. The course follows the development of a single proposal related to human services in a workbook approach. Short, narrated PowerPoint presentations and weekly postings allow participants to move through the course in much the same way they would move through a grant proposal. (4 semester hours)

DHS 8400—Global Health Issues
Global health care is an emerging priority for health professional education programs and clinical practice. It is essential for all health care professionals to understand the impact of global health issues on health care and international economic stability. This course explores the many facets of global health to expose the student to the complexity of the concepts that impact health care in developing and developed countries. (4 semester hours)

DHS 8500—Psychology of Aging
The course is an advanced overview of the theories of development. We will study three broad theoretical approaches to explaining psychological changes during the period of adolescence to the onset of late adulthood. We will also focus on the dominant and emerging paradigms in the social psychology of aging, psychosocial aspects of the aging process and of old age. Needs of the elderly and their reactions to agencies and programs for the aged will be examined. Critical examination of aging policy—in light of empirical findings on the elderly’s economic power and utilization patterns, prevalence of dependency, and the cost-effectiveness of policy options, including long-term care—will be analyzed. (4 semester hours)

DHS 8700—Comparative International Health Systems
Every country in the world implements a unique health service delivery system or model; some have been more successful than others in promoting and meeting the health needs of their citizens. Currently, all countries are struggling to reform their health care systems and are experiencing conflict between controlling costs and maintaining or improving quality and quantity of health care services provided. The purpose of this course is to provide an introduction to the principles, structure, and function of international health systems through a comparative analysis of various countries’ health care systems. The course will explore how national systems have evolved and how countries confront the emerging issues in health care. It will explore and develop a systematic comparative analysis of the evolution, administrative structures, societal choices, financing, and provision of health care services in underdeveloped, developing, and developed countries. (4 semester hours)

DHS 8750—Patient Safety
This course is an in-depth study of the concepts and practices related to patient safety in the United States health care system, enabling students to apply them in the context of professional practice. The course will provide an overview of the origins of the patient safety movement, its rise to public awareness and as a national policy initiative, the scope and magnitude of medical error in U.S. health care today, and current practices for improvement. (4 semester hours)

Conflict Resolution Track

CRHS 5000—Foundations and Development of Conflict Resolution
This course outlines the substantive themes, history, origins, contexts, and philosophical foundations of conflict resolution, healing, peacemaking, and problem solving. Students will examine levels of interventions and processes in the field of conflict resolution. (3 semester hours)

CRHS 5040—Human Factors
This course presents communication theories relevant to conflict resolution as well as theories about understanding, analyzing, and managing conflict. The course focuses on the human and emotional aspects of conflict and includes the influence of gender and culture. This course is pragmatic as well as theoretical, and presents communication and conflict resolution models in a practice-based approach. (3 semester hours)

CRHS 5140—Negotiation Theory and Practice
This course examines conflict intervention from the perspective of the disputant/negotiator. The integration of theory and practice will emphasize the tactics, strategies, and operations of effective and ineffective bargaining/negotiating behavior. The course develops negotiator skills and knowledge, leading to collaborative-based actions and solutions. Prerequisites: CRHS 5000 and CRHS 5040 (3 semester hours)

CRHS 6130—Internship in Conflict Resolution
This course is a field research project that incorporates classroom knowledge and real-world settings. Students will demonstrate their ability to apply theory to practice and analyze situations using knowledge from previous coursework. Prerequisites: CRHS 5000 and CRHS 5040 (3 semester hours)

CRHS 6160—Practicum in Conflict Resolution
Continuation of CRHS 6130. Prerequisites: CRHS 6130 (3 semester hours)

CRHS 6170—Violence Prevention and Intervention
This course examines various theories of human aggression and violence, exploring their underlying assumptions about human nature and the causes of violence. Also included is an introduction to a range of violence intervention and prevention approaches developed for use at the interpersonal, intergroup, and societal level. Prerequisites: CRHS 5000 and CRHS 5040 (3 semester hours)

CRHS 7010—Philosophical and Social Issues
A review of philosophical and social contexts and issues relevant to the understanding and practice of conflict
This course includes descriptive statistics, estimation, and one- and two-sample hypothesis testing, including paired and unpaired situations. Instruction includes assisting the student attain mastery-level skill in data entry and use of SPSS software. (3 semester hours)

**HSP 9004—Biostatistics for the Health Sciences II**
This course includes methods of regression for observational and experimental data. Methods of analysis and hypothesis testing for three or more treatments are presented for various experimental designs and treatment combinations for normally distributed and ordinal data. Instruction includes helping the students attain mastery-level skill in the use of SPSS software. Prerequisites: HSP 9001 and HSP 9003 (3 semester hours)

**HSP 9001—Quantitative Research Methods**
This course focuses on quantitative research methodology to provide the student with a firm grounding in biostatistics, research methodologies, and approaches to data analysis and interpretation. This includes, to name a few, Chi Square and ANOVA, factor analysis, and methods of research and data collection instrument design. Prerequisite: DHS 8010 (3 semester hours)

**HSP 9002—Qualitative Research Methods**
This course focuses on qualitative research methodology to provide the student with a firm grounding in research methodologies, approaches to data gathering, reporting procedures, and data analysis and interpretation from a qualitative point of view. Methods and design of data collection instruments are stressed. Prerequisite: DHS 8010 (3 semester hours)

**HSP 9005—Theory Construction**
A course providing emphasis on the discovery of knowledge related to health care and the development of research theories. The course is aimed at assisting the student in developing the ability to evaluate existing knowledge critically and to engage in the use and creation of knowledge specifically applicable to the health sciences. Prerequisite: DHS 8010 (3 semester hours)

**HSP 9006—Evidence-Based Medical Practice**
This course provides a working knowledge of evidence-based medicine. Cases will be used as the backbone of this course to assist the student in analyzing data to justify the treatments used in clinical practice. Students will also learn how to critically appraise the literature, evaluate diagnostic test performance, design clinical pathways and standards of care, and implement evidenced-based medicine findings in their own clinical or administrative setting. (4 semester hours)

**Capstone Course (all)**
**DHS 8120—Doctoral Analysis**
In this faculty-supervised project, and the capstone of the program, the student will develop a paper, using the objectives from the core courses and one elective as guidelines and references to form the basis of the paper. This will require research in teaching and learning methods as well as online and in-class comparisons. The outcome or final product will be an in-depth analysis of the information presented and the knowledge gained during the doctoral program. This paper will also include methods for improving the program of study in the D.H.Sc. program and detailed methods to be used to deliver the proposed changes. (2 semester hours, final project)
Master of Medical Science Program
The Master of Medical Science online degree program has been transferred to the Department of Health Science under the new degree name of Master of Health Science. Current students in the Master of Medical Science program shall refer to the Master of Health Science policies and requirements. No further students will enter the Master of Medical Science online program.
Nursing Department

The Nursing Department offers bachelor of science in nursing (B.S.N.) and master of science in nursing (M.S.N.) degree programs as well as a post-M.S.N. certificate program. The B.S.N. may be earned through an 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. The M.S.N. program has four tracks—nursing education, business administration, and health law. Both programs focus on developing nursing professionals to assume leadership roles in the complex health care environment.

Department Mission Statement

The mission of the Nova Southeastern University Nursing Department is to educate the health care leaders of tomorrow through the provision of quality and innovative teaching and learning environments. This mission is fostered within an interdisciplinary Health Professions Division promoting an atmosphere of respect within which students may evolve as broadly educated, responsible, and accountable professionals dedicated to the principles of lifelong learning.

Accreditation

Nova Southeastern University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097, telephone number: (404) 679-4501) to award associate's, bachelor's, master's, educational specialist, and doctoral degrees. The NSU Bachelor of Science in Nursing and Master of Science in Nursing programs are accredited as of April 8, 2006, for a period of 5 years by the Commission on Collegiate Nursing Education (CCNE), (One Dupont Circle, NW, Suite 530, Washington, DC 20036-1120, telephone number: (202) 887-6791).

The Nova Southeastern University Baccalaureate Nursing Program is also accredited by the National League for Nursing Accrediting Commission, Inc. (NLNAC) 61 Broadway, 33rd Floor, New York, NY 10006, 800-669-1656.

Undergraduate Courses of Study

Option 1: 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 30 semester 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. Though the track may be completed in as little as six terms, some students elect to spread the coursework out over a longer period of time.

B.S.N. Program Goals

The goal of the Nova Southeastern University bachelor of science in nursing degree program is to graduate nurses prepared to:

- design, manage, and coordinate culturally competent holistic client care for individuals, families, and aggregates through primary, secondary, and tertiary prevention/intervention strategies
- provide leadership in health care and the profession
- assume personal responsibility for lifelong learning

Option 2: 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. If the applicant does not hold this license, the license must be approved by the nursing department chair and the College of Allied Health and Nursing dean. Failure to comply will result in the accepted student's inability to continue with his or her coursework. Students may complete the general education requirements in conjunction with the R.N. to B.S.N. track. Students are awarded 61 semester 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 six terms, some students elect to spread the coursework out over a longer period of time.

Entry-Level B.S.N. Track

Admission Requirements

Applicants must have completed a minimum of 30 semester hours (or equivalent quarter hours) of specific undergraduate coursework from a regionally accredited college or university prior to matriculation into the nursing program. Other requirements include:

- completion of each prerequisite course with a grade of C or higher
- overall GPA of 2.75 or higher on a 4.0 scale
- a personal interview with the admissions committee
- two letters of recommendation from individuals other than relatives (academic instructors, professors, or advisers)

Your completed application must be received no later than May 1 to be considered for the August class and October 1 to be considered for the January class.

If, at any time, you wish to withdraw your application from consideration, please do so in writing. Direct this correspondence to

Nova Southeastern University
College of Allied Health and Nursing
Nursing Department Admissions
3200 South University Drive
Fort Lauderdale, Florida
33328-2018

All applicants who are accepted must submit official transcripts of all completed coursework to the NSU EPS Nursing Department Admissions address that follows, in its entirety. It is the responsibility of the applicant to ensure that arrangements are made for these transcripts to be sent.
If applicant attended or is a graduate of a foreign institution, all coursework from the foreign institution must be evaluated for U.S. institutional equivalence. The official evaluation must be sent directly from the evaluation service to the EPS. See the Application Procedure section for the names of evaluation services.

**Entry-Level B.S.N. Application Procedure**

- All applicants must submit a completed application form to Nova Southeastern University, along with a $50 nonrefundable application fee.
- Send your completed application to Nova Southeastern University Enrollment Processing Services (EPS) College of Allied Health and Nursing Nursing Department 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905
- Your completed application must be received no later than May 1 in order to be considered for admission for the August entering class and October 1 to be considered for the January class.
- If, at any time, you wish to withdraw your application from consideration, please do so in writing. Direct this correspondence to Nova Southeastern University College of Allied Health and Nursing Nursing Department Admissions 3200 South University Drive Fort Lauderdale, Florida 33328-2018
- One official copy of your academic transcript must be sent directly from each college, university, or professional school that you have attended to the NSU EPS. Transcripts must be official. The school seal must be imprinted or embossed on the transcript, which should be forwarded in a sealed envelope, directly from the institution, in order to be considered an official transcript. Photocopies and facsimiles will not be accepted.
- A transcript is required for each college, university, or professional school attended, even though transfer credit from one college may appear on another college's transcript.
- If applicant attended or is a graduate of a foreign institution, all coursework from the foreign institution must be evaluated for U.S. institutional equivalence. The official evaluation must be sent directly from the evaluation service. For evaluations, please contact one of the following:
  - World Education Services
    P.O. Box 745
    Old Chelsea Station
    New York, New York 10113-0745
    (212) 966-6311
    www.wes.org
  - Josef Silny & Associates
    7101 SW 102nd Avenue
    Miami, Florida 33173
    (305) 273-1616
    (305) 273-1338 fax
    www.jsilny.com
    info@jsilny.com
  - Educational Credential Evaluators
    P.O. Box 514070
    Milwaukee, Wisconsin 53203-3470
    (414) 289-3400
    www.ece.org
- Applicants must submit two letters of recommendation from individuals other than relatives (academic instructors, professors, or advisers). **Entry-Level Track Tuition and Fees**
  - Tuition for the 2006-2007 academic year (subject to change by the board of trustees without notice): $11,995 for Florida residents and $18,445 for out-of-state students. Tuition for the 2007-2008 academic year (subject to change by the board of trustees without notice): $17,250 for Florida residents and $18,750 for out-of-state students.
  - A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.
  - Acceptance fee is $500. This fee is required to reserve the accepted applicant's place in the entering first-year class, but is not refundable in the event of a withdrawal. It is payable within two weeks of an applicant's acceptance.
  - Deposit is $250. This is due July 15 for August admission and November 15 for January admission.
  - Preregistration fee is $250. This is due August 1 for August admission and December 1 for January admission.
  - Lab fee is $150. This is due on or before registration.
  - Students may incur additional costs in the program, including PDA, FNSA dues, uniforms, and lab coat. The first semester's tuition and fees, less the $1,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met.

Each student is required to carry adequate personal medical and hospital insurance. Students may avail themselves of the hospitalization insurance plan obtainable through the university.

The Office of Student Financial Assistance and the Nursing Department are eager to assist you in exploring all the grants and loans currently available for nursing students. Do not hesitate to ask for this help.
Curriculum Outline—Nursing Entry-Level Track

Undergraduate Course Requirements

General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written communication—Any written communications course</td>
<td>3</td>
</tr>
<tr>
<td>Social behavioral sciences—One PSYC, one SOC, Human Growth and Development</td>
<td>9</td>
</tr>
<tr>
<td>Humanities—Any ARTS, HIST, HUMN, LITR, PHIL, or foreign language</td>
<td>3</td>
</tr>
<tr>
<td>Natural/physical sciences—Anatomy and physiology, at least 6 semester hours with lab (5 semester hours of anatomy and physiology with 3 semester hours of biology may be substituted); chemistry, at least 3 semester hours; microbiology, at least 3 semester hours.</td>
<td>12</td>
</tr>
<tr>
<td>General education elective—Any college-level ENC, MAT, PSYC, SOC, ARTS, HIST, HUMN, LITR, PHIL, or foreign language course (courses beginning with 00 are not considered college level)</td>
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</tbody>
</table>

Total General Education Credits 30

General education courses may be completed at any accredited community college or university. Dual enrollment students should follow the Farquhar College of Arts and Sciences Curriculum Plan for Nursing Dual Enrollment Students.

Nursing Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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<tr>
<td>PHS 4904 Advanced Anatomy for Health Professions</td>
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<tr>
<td>NUT 3000 Nutrition for Health Professionals</td>
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</tr>
<tr>
<td>BHS 3110 Health Care Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BHS or Nursing Elective *</td>
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</tr>
<tr>
<td>NUR 3000 The Nurse as a Scholar</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3020 Theoretical Foundations of Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3029 Foundations of Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3032 Foundations of Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3050 Applied Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3130 Foundations of Professional Nursing Practice</td>
<td>6</td>
</tr>
<tr>
<td>NUR 3160 Introduction to Professional Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3170 Nursing and Health Care Informatics</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3180 Primary Concepts of Adult Nursing</td>
<td>6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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</thead>
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<tr>
<td>NUR 3191 Pharmacological Basis for Nursing Interventions I</td>
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</tr>
<tr>
<td>NUR 3192 Pharmacological Basis for Nursing Interventions II</td>
<td>2</td>
</tr>
<tr>
<td>NUR 3200 Biostatistics for Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3250 Concepts of Psychiatric-Mental Health Nursing</td>
<td>4</td>
</tr>
<tr>
<td>NUR 4020 The Nurse as a Leader and Manager</td>
<td>3</td>
</tr>
<tr>
<td>NUR 4030 The Business of Health Care</td>
<td>3</td>
</tr>
<tr>
<td>NUR 4110 Advanced Concepts of Adult Nursing II</td>
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</tr>
<tr>
<td>NUR 4120 Advanced Concepts of Adult Nursing III</td>
<td>5</td>
</tr>
<tr>
<td>NUR 4130 Concepts of Maternal-Child Nursing and Families</td>
<td>5</td>
</tr>
<tr>
<td>NUR 4150 Concepts of Community-Based Nursing Practice</td>
<td>4</td>
</tr>
<tr>
<td>NUR 4160 Genetics for Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td>NUR 4180 Nursing Practicum</td>
<td>6</td>
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</tbody>
</table>

Total Nursing Credits 91
Total Degree Requirements 121

*Please see bachelor of health science course descriptions starting on page 276.

Entry-Level Course Descriptions

BHS 3110—Health Care Ethics
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. (3 credits)

NUR 3000—The Nurse as a Scholar
This course is designed to assist the adult learner in making the transition to the university setting and the role of the nursing student. During this course, students will be introduced to skills that facilitate success in achieving their educational goals at NSU. Opportunities for writing and library searches will be provided. Use of technology as a tool for learning and time management are additional skills that will be emphasized. This class will involve active participation in cooperative group activities as well as individualized activities. (3 credits: 3 didactic/0 clinical)

NUR 3160—Introduction to Professional Nursing
This course introduces the student to the roles of the professional nurse including provider of care, manager of care, advocate, teacher, 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
the concepts of the Neuman's Systems Model as a theory of practice, as well as ethical and legal principles, medical terminology, sociocultural concepts, and political principles guiding the profession. (3 credits: 3 didactic/0 clinical)

NUR 3130—Foundations of Professional Nursing Practice
This course introduces the entry-level student to the culture and practice of nursing. It examines the holistic concepts of individuals, environment, health, and nursing. It focuses on system variables of an individual including the physiological, psychological, social, cultural, cognitive, and spiritual domains. The important themes of primary, secondary, and tertiary prevention-as-intervention modalities; the client system's reaction to interpersonal, intrapersonal and extrapersonal stressors; and critical thinking are integrated throughout the course to prepare the students for practice. Students are introduced to health promotion, the legal and ethical issues, and contemporary trends in health care that impact nursing practice. The course provides fundamental nursing concepts, skills, and techniques of nursing practice and a firm foundation for more advanced areas of study. (6 credits: 3 didactic/3 clinical)

NUR 3180—Primary Concepts of Adult Nursing
This course integrates nursing theory and practice using the nursing process and the Neuman's Systems Model with an emphasis on primary and secondary interventions. The focus is on adults and older adults experiencing medical or surgical stressors affecting physiological, psychological, sociocultural, spiritual, and developmental stability. Contemporary trends, legal and ethical issues, and health promotion will be discussed. Topics covered include selected alterations in immune, gastrointestinal, endocrine, renal, integumentary, and hematological systems. This course will include both a clinical and didactic component. (6 credits: 3 didactic/3 clinical)

NUR 3191—Pharmacological Basis for Nursing Interventions I
This course focuses on the basic principles of pharmacology and therapeutics necessary for nursing practice throughout the life span. Concepts of drug efficacy, pharmacokinetics, mechanism of action, and drug interaction will be examined as they apply to primary, secondary, and tertiary prevention to assist clients to retain, attain, or maintain optimal system stability. Contemporary trends in administration and delivery of pharmacological therapies will be addressed. Emphasis will be placed on the pharmacological action of drugs on specific organ systems. Medications used in the treatment of gastrointestinal, hematological, immune, endocrine, and renal disorders will be explored. Corequisite NUR 3180. (2 credits: 2 didactic/0 clinical)

NUR 4110—Advanced Concepts of Adult Nursing II
This course integrates nursing theory and evidence-based practice using the nursing process and the Neuman's Systems Model with a focus on primary and secondary interventions. The focus is on adults and older adults experiencing medical or surgical stressors affecting physiological, psychological, sociocultural, spiritual, and developmental stability. Contemporary trends, legal and ethical issues, and health promotion will be discussed. Topics covered include selected alterations in musculoskeletal, respiratory, cardiovascular, peripheral vascular, and neurological systems. This course will include both a clinical and didactic component. (6 credits: 3 didactic/3 clinical)
NUR 3200—Biostatistics for Nursing Practice
This course introduces biostatistical methodology and applications that can be used to draw practical conclusions regarding empirical data pertaining to nursing and patient care. Concepts, techniques, and methods used in the description and analysis of data and statistical inference are presented. Statistical topics studied include frequency distributions, measures of central tendency (descriptive statistics), statistical graphs and charts, binomial and normal distributions, probability, confidence intervals, ANOVA, hypothesis testing, and correlation. (3 credits: 3 didactic/0 clinical)

NUR 3020—Theoretical Foundations of Nursing Practice
This course focuses on the acquisition, evaluation, use, and interpretation of information designed to link Neuman’s Systems Model as a foundation for nursing practice. Selected behavioral, social, and physical science theories impacting nursing practice will be explored as a basis for understanding self and others as individuals, families, groups, and communities. Contemporary trends in theory development will be introduced. (3 credits: 3 didactic/0 clinical)

NUR 4130—Concepts of Maternal-Child Nursing and Families
This course integrates nursing theory and evidence-based practice using the nursing process and the Neuman’s Systems Model with an emphasis on primary and secondary interventions. The focus is on the childbearing family and children experiencing stressors affecting physiological, psychological, sociocultural, spiritual, and developmental stability. Contemporary trends, social justice issues, and legal and ethical issues, as well as health promotion and risk reduction will be discussed. Topics covered include the family as client, care of the pregnant woman, and complex nursing care of children experiencing stressors of selected body systems. This course will include both a clinical and didactic component. (5 credits: 3 didactic/2 clinical)

NUR 3050—Applied Nursing Research
This course introduces concepts of critical analysis and outcomes research. Students will analyze the scientific merit of quantitative and qualitative research reports with an emphasis on application to, and implication for, evidence-based nursing practice as it relates to primary, secondary, and tertiary interventions. Students will also be exposed to the contemporary trends and legal and ethical issues guiding the research process. (3 credits: 3 didactic/0 clinical)

NUR 3170—Nursing and Health Care Informatics
This course is designed to introduce students to the emerging field of nursing informatics. Students will integrate computer technology and information science to identify, gather, process, and manage health care information. Hardware, software, databases, communications applications, computer developments, and associated legal and ethical issues are addressed. Contemporary trends in health care informatics applications will be explored. Students learn how nurses can assess, develop, and use information systems to work more efficiently, allocate resources more effectively, and improve client care. Focus is on technologies in health care, nomenclatures and classification systems, health care documentation, electronic medical records, and Web-based technologies for health care. (3 credits: 3 didactic/0 clinical)

NUR 3250—Concepts of Psychiatric-Mental Health Nursing
This course applies nursing theory and evidence-based practice using physiological, psychological, sociocultural, spiritual and developmental theories to develop primary, secondary, and tertiary interventions to attain and maintain optimal mental health across the life span. 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 extra-personal stressors of the psychological variable will be discussed. Students will also reflect on their own behaviors and methods of communication. This course will include both a clinical and didactic component. (4 credits: 3 didactic/1 clinical)

NUR 4150—Concepts of Community-Based Nursing Practice
This course provides the foundation for developing and using Neuman’s Systems Model and epidemiological theory and concepts in planning and implementing primary, secondary, and tertiary levels of prevention for at-risk aggregates and communities. It focuses on the process of conceptualizing individuals, families, groups, and communities within their environments. Students will learn to facilitate health care delivery to aggregates and communities of diverse cultures, using effective communication, negotiation, problem-solving skills, and collaboration with the interdisciplinary health care team and members of the community. Students will demonstrate an ability to evaluate health and wellness within primary, secondary, and tertiary levels of prevention using Neuman’s Systems Model and principles of evidence-based practice. Contemporary trends in community-based nursing practice will be discussed. Students will also examine the economic, sociocultural, legal, and ethical influences on community-based nursing practice. (4 credits: 3 didactic/1 practicum)

NUR 4020—The Nurse as a Leader and Manager
This theory-based nursing course is designed to assist the nursing student to focus on basic concepts that relate to leadership; management; and working with individuals, families, groups, and communities in providing nursing care. Using Neuman’s Systems Model, students will view the collective staff as a client system and assess the intrapersonal, interpersonal, and extra-personal stressors that may impact the functioning of the nursing unit. The legal and ethical issues regarding delegation, risk management, and client care will be discussed. Contemporary trends in leadership and management theories will be explored. (3 credits: 3 didactic/0 clinical)

NUR 4120—Advanced Concepts of Adult Nursing III
This course integrates nursing theory and evidence-based practice using the...
nursing process and the Neuman's Systems Model with an emphasis on secondary and tertiary intervention. The focus is on adults and older adults experiencing acute and chronic multi-system stressors affecting physiological, psychological, sociocultural, spiritual, and developmental stability. Students will apply previously learned theoretical concepts and critical care skills in complex settings. Contemporary trends, legal and ethical issues, and health promotion will be emphasized as it pertains to the care of clients with multiple needs. This course will include both a clinical and didactic component. (5 credits: 3 didactic/2 clinical)

NUR 4030—The Business of Health Care
This web-enhanced course examines the financial environment of the health services industry and how it affects today's nurse manager role. Students examine the principles of financial accounting and budgeting. This course presents the concepts of cost and revenue, basic vocabulary, processes, functions, and reports commonly seen in health care environments. This includes types of budgets and considerations for use of human and material resources. (3 credits: 3 didactic/O clinical)

NUR 4160—Genetics for Nursing Practice
This course will focus on providing students with a fundamental understanding of human genetics and its role in pathophysiology, 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. They will be asked to apply knowledge of inheritance and immunogenetics in predicting the possible effect of genetics on disease processes. This course will also discuss the ethical, social, political, and economical impact of selected genetic diseases, DNA-based genetic diagnoses, and gene therapy. (3 credits: 3 didactic/O clinical)

NUR 4180—Nursing Practicum
This seminar/clinical capstone course 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 apply Neuman's Systems Model to identify client stressors and discuss ways to develop primary, secondary, and tertiary prevention/intervention strategies to attain, maintain and retain stability within client care systems. Students will apply leadership skills and client care 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. (6 credits: 2 didactic/4 clinical)

PHS 4904—Advanced Anatomy for Health Professions
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 and 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. (4 credits: 3 didactic/1 lab)

Nursing Elective
Undergraduate nursing electives may be offered at the discretion of the department.
R.N. to B.S.N. Track
Admission Requirements
• overall GPA 2.5 or higher on a 4.0 scale
• proof of current 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 Allied Health and Nursing dean for admission into the program.

R.N. to B.S.N.
Admission Procedures
• Applicants must submit a completed application form to Nova Southeastern University, along with a $50 nonrefundable application fee. Send your completed application to Nova Southeastern University Enrollment Processing Services (EPS) College of Allied Health and Nursing Nursing Department 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33328-9005.
• The nursing department has rolling admissions for the R.N. to B.S.N. track. Candidates must submit all applications and transcripts by August 1 for priority consideration for the August entering class and by December 1 for priority consideration for the January entering class. Applications are accepted year round for R.N. to B.S.N. entering classes.
• If, at any time, you wish to withdraw your application from consideration, please do so in writing. Direct this correspondence to Nova Southeastern University College of Allied Health and Nursing Nursing Department Admissions 3200 South University Drive Fort Lauderdale, Florida 33328-2018
• Proof of current registered nurse (R.N.) licensure is required. Licensure must remain current throughout the program.
• One official copy of your academic transcript must be sent directly from each college, university, or professional school that you have attended to NSU's EPS. Transcripts must be official. The school seal must be imprinted or embossed on the transcript, which should be forwarded in a sealed envelope, directly from the institution, in order to be considered an official transcript. Photocopies and facsimiles will not be accepted. A transcript is required for each college, university, or professional school attended, even though transfer credit from one college may appear on another college's transcript.
• If applicant attended or is a graduate of a foreign institution, all coursework from the foreign institution must be evaluated for U.S. institutional equivalence. The official evaluation must be sent directly from the evaluation service. For evaluations, please contact one of the following:
  - World Education Services
    P.O. Box 745
    Old Chelsea Station
    New York, New York 10113-0745
    (212) 966-6311
    www.wes.org
  - Josef Silny & Associates
    7101 SW 102nd Avenue
    Miami, Florida 33173
    (305) 273-1616
    (305) 273-1338 fax
    www.jsilny.com
    info@jsilny.com
  - Educational Credential Evaluators
    P.O. Box 514070
    Milwaukee, Wisconsin 53203-3470
    (414) 289-3400
    www.ece.org
• Applicants must submit two letters of recommendation from individuals other than relatives: one from academic instructor, professor, or adviser and one from a community associate.

R.N. to B.S.N. Tuition and Fees
Tuition for the R.N. to B.S.N. track is $485 per credit hour for academic year 2006-2007 and $495 per credit hour for academic year 2007-2008 (subject to change by the board of trustees without notice). A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

There are a number of national, Florida, and hospital grants available for the R.N. student. Additionally, student loan interest for nursing students is lower than for students seeking other degrees. The financial aid office and the nursing department are eager to assist you in exploring all possible financial aid options. Please do not hesitate to ask for this help.
### Curriculum Outline — R.N. to B.S.N. Track

**Undergraduate Course Requirements**

<table>
<thead>
<tr>
<th>General Education</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>Written communication—Any written communications course</td>
<td>3</td>
</tr>
<tr>
<td>Social behavioral sciences—One PSYC, one SOC, Human Growth and Development</td>
<td>9</td>
</tr>
<tr>
<td>Humanities—Any ARTS, HIST, HUMN, LITR, PHIL, or foreign language</td>
<td>3</td>
</tr>
<tr>
<td>Natural/physical sciences—Credit with R.N. license</td>
<td>12*</td>
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*General education elective—Any college-level ENC, MAT, PSYC, SOC, ARTS, HIST, HUMN, LITR, PHIL, or foreign language course (courses beginning with 00 are not considered college level)*

**Total General Education Credits** 30

<table>
<thead>
<tr>
<th>Cognate Courses</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>PHS 4904 Advanced Anatomy and Physiology for Health Professions</td>
<td>4*</td>
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<tr>
<td>NUT 3000 Nutrition for the Health Professional</td>
<td>3*</td>
</tr>
<tr>
<td>BHS 3110 Health Care Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BHS or Nursing Elective**</td>
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**Total Cognate Credits** 13

<table>
<thead>
<tr>
<th>Nursing Courses</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>NUR 3000 The Nurse as a Scholar</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3013 Transition to Professional Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3020 Theoretical Foundations of Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3031 Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3030 Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>NRU 3200 Biostatistics for Nursing Practice</td>
<td>3</td>
</tr>
<tr>
<td>NUR 3170 Nursing and Health Care Informatics</td>
<td>3</td>
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</tbody>
</table>

**Prior Learning Nursing Credits** 42*

**Total Nursing Credits** 78

**Total Degree Requirements** 121

General education courses may be completed at any accredited community college or university.

Cognate and nursing courses must be completed at NSU.

*Credit with R.N. license

**Please see bachelor of health science course descriptions starting on page 276.
R.N. to B.S.N. 
Course Descriptions 

NUR 3000—The Nurse as a Scholar
This course is designed to assist the adult learner make the transition to the university setting and the role of the nursing student. During this course, students will be introduced to skills that facilitate success in achieving their educational goals at NSU. Opportunities for writing and library searches will be provided. Use of technology as a tool for learning and time management are additional skills that will be emphasized. This class will involve active participation in cooperative group activities as well as individualized activities. (3 credits)

NUR 3013—Transition to Professional Nursing
This course focuses on the role transition to professional nurse as provider of care, manager of care, and member of the profession. The student will explore the history of nursing and how society views the nursing profession. Ethical and legal principles guiding the nursing profession are introduced. The concepts of the Neuman's Systems Model as a conceptual framework of nursing practice are investigated. (3 credits)

NUR 3020—Theoretical Foundations of Nursing Practice
This course focuses on the acquisition, evaluation, use, and interpretation of information designed to link Neuman's Systems Model as a foundation for nursing practice. Selected behavioral, social, and physical science theories impacting nursing practice will be explored as a basis for understanding self and others as individuals, families, groups, and communities. Contemporary trends in theory development will be introduced. (3 credits)

NUR 3030—Health Assessment
This course focuses on health assessment skills, emphasizing data collection among the five variables of Neuman's Systems Model. Students will be expected to use assessment skills in identifying pertinent data as it relates to physiological, psychological, sociocultural, spiritual, and developmental variables. Students will use this data to identify stressors in assigned clients and develop appropriate primary, secondary, and tertiary nursing interventions/interventions to attain, maintain, or retain lines of defense with an emphasis on health promotion for these clients. Contemporary trends in nursing practice and legal and ethical issues pertaining to health assessment will be explored. (3 credits)

NUR 3031—Pathophysiology
This course emphasizes the physiological variable and incorporates the psychological, sociocultural, spiritual and developmental variables included in the Neuman's Systems Model. The student 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. The focus will be on maintaining lines of defense and stressors that penetrate the lines of resistance that cause instability in the client system. Contemporary trends, legal and ethical issues, and health promotion concepts pertaining to pathophysiological stressors will be explored. (3 credits)

NUR 3035—Health Promotion in the Community
This course focuses on the role of the community in the promotion of health and the design of community health programs that can be developed in the community setting. Contemporary trends in community health practices and the role of the community nurse in community health programs will be explored. (3 credits)

NUR 3040—Nursing Research
This course introduces students to the process of conducting and evaluating research. Contemporary trends in research methodologies and applications will be explored. Students will design and conduct research projects and interpret research findings. (3 credits)

NUR 3050—Applied Nursing Research
This course introduces concepts of critical analysis and outcomes research. Students will analyze the scientific merit of qualitative and quantitative research reports with an emphasis on application to, and implication for, evidence-based nursing practice as it relates to primary, secondary, and tertiary preventions/interventions. Students will also be exposed to the contemporary trends and legal and ethical issues guiding the research process. (3 credits)

NUR 3170—Nursing and Health Care Informatics
This course is designed to introduce students to the emerging field of nursing informatics. Students will integrate computer technology and information science to identify, gather, process, and manage health care information. Hardware, software, databases, communications application, computer developments, and associated legal and ethical issues are addressed. Contemporary trends in health care informatics applications will be explored. Students learn how nurses can assess, develop, and use information systems to work more efficiently, allocate resources more effectively, and improve client care. Focus is on technologies in health care, nomenclatures and classification systems, health care documentation, electronic medical records, and Web-based technologies for health care. (3 credits)

NUR 3200—Biostatistics for Nursing Practice
This course introduces biostatistical methodology and applications that can be used to draw practical conclusions regarding empirical data pertaining to nursing and patient care. Concepts, techniques, and methods used in the description and analysis of data and statistical inference are introduced. Statistical topics studied include frequency distributions, measures of central tendency (descriptive statistics), statistical graphs, and charts, binomial and normal distributions, probability, confidence intervals, ANOVA, hypothesis testing, and correlation. (3 credits)

NUR 4020—The Nurse as a Leader and Manager
This theory-based nursing course is designed to assist the nursing student to focus on basic concepts that relate to leadership and management; and working with individuals, families, groups, and communities in providing nursing care. Using Neuman's Systems Model, students will view the collective staff as a client system and assess the intrapersonal, interpersonal, and extrapersonal stressors that may impact the functioning of the nursing unit. The legal and ethical issues regarding delegation, risk management, and client care will be discussed. Contemporary trends in leadership and management theories will be explored. (3 credits)

NUR 4030—The Business of Health Care
This web-enhanced course examines the financial environment of the health services industry and how it affects today's nurse manager role. Students examine the principles of financial accounting and budgeting. This course presents the concepts of cost and revenue, basic vocabulary, processes, functions, and reports commonly seen in health care
environments. This includes types of budgets and considerations for and use of human and material resources.

(3 credits)

NUR 4150—Concepts of Community-Based Nursing Practice
This course provides the foundation for developing and using Neuman’s Systems Model and epidemiological theory and concepts in planning and implementing primary, secondary, and tertiary levels of prevention for at-risk aggregates and communities. It focuses on the process of conceptualizing individuals, families, groups, and communities within their environments. Students will learn to facilitate health care delivery to aggregates and communities of diverse cultures, using effective communication, negotiation, problem-solving skills, and collaboration with the interdisciplinary health care team and members of the community. Students will demonstrate an ability to evaluate health and wellness within primary, secondary, and tertiary levels of prevention using Neuman’s Systems Model and principles of evidence-based practice. Contemporary trends in community-based nursing practice will be discussed. Students will also examine the economic, sociocultural, legal, and ethical influences on community-based nursing practice.

(4 credits)

NUR 4160—Genetics for Nursing Practice
This course will focus on providing students with a fundamental understanding of human genetics and its role in pathophysiology, 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. They will be asked to apply knowledge of inheritance and immunogenetics in predicting the possible effect of genetics on disease processes. This course will also discuss the ethical, social, political, and economical impact of selected genetic diseases, DNA-based genetic diagnoses, and gene therapy.

(3 credits)

Nursing Elective
Undergraduate nursing electives may be offered at the discretion of the department.

Graduate Nursing Program
Master of Science in Nursing (M.S.N.)
The Master of Science in Nursing Program is an online degree program for graduates of bachelor of science programs with a major in nursing who hold registered nurse (R.N.) licensure. Four tracks are offered: education, business administration, health law, and public/community health nursing. The M.S.N. education track prepares nurses for career paths in staff development, vocational-technical, or community college education. This degree serves as a foundation for doctoral study for those interested in teaching in B.S.N. or higher programs. All students in M.S.N. tracks take 21 semester hours of core foundational nursing courses online. An additional 15 semester hours of nursing education courses are required for this track, including 6 semester hours of nursing education practicum and capstone project work applying what has been learned. These courses are taught online by nursing department faculty members with advanced preparation and extensive experience in higher education. Thus, a total of 36 semester hours are required to complete the M.S.N. education track; however, additional elective courses may be taken by students with special interests.

The M.S.N. business administration track prepares nurses for career paths in health care administration and entrepreneurship. All students in M.S.N. tracks take 21 semester hours of core foundational nursing courses online. An additional 3-semester hour nursing entrepreneurship course is taken online through the nursing department. Twelve semester hours of coursework in areas such as accounting, finance, and management are completed online through the H. Wayne Huizenga School of Business and Entrepreneurship. Finally, 6 semester hours of nursing business administration practicum and capstone project work conclude the program. Thus, a total of 42 semester hours are required to complete the M.S.N. business administration track. Students in this track may choose to complete the dual degrees M.S.N./M.B.A. Contact the nursing department’s graduate program director for information on the dual degree option.

The M.S.N. public/community health nursing track prepares nurses for career paths in community and public health nursing. All students in M.S.N. tracks take 21 semester hours of core foundational nursing courses online. An additional 3-semester hour public/community health nursing course is taken online through the nursing department and 12 semester hours of coursework in public health are completed online through the College of Osteopathic Medicine’s Master of Public Health Program. Finally, 6 semester hours of nursing public/community health nursing practicum and capstone project work conclude the program. Thus, a total of 42 semester hours are required to complete the M.S.N. public/community health nursing track. Students in this track may choose to complete the dual degrees M.S.N./M.P.H. Contact the nursing department’s graduate program director for information on the dual degree option.
Admission Requirements

Prospective Master of Science in Nursing Program students are selected for admission based on application content, academic record, curriculum of completed required courses, professional nursing licensure, and evaluation forms.

Admission to the M.S.N. program requires the following:

- bachelor of science degree from a regionally accredited college or university
- B.S.N. GPA of 3.0
- current active professional nursing (R.N.) licensure in the jurisdiction of the practicum (must remain current throughout the program)
- a minimum of two years of health care experience

Students may begin the program part-time prior to completion of two years of health care experience with permission of the program director.

- application with writing sample, two evaluation (reference) forms, and application fee

Application Procedures

- applicants must submit signed application form with writing sample, two evaluation (reference) forms, and nonrefundable application fee of $50
- official transcripts from each college, university, and professional school attended sent directly from the school to the address on the application
- proof of current registered nurse (R.N.) licensure, which must remain current throughout the program

Tuition and Fees

Tuition for academic year 2006–2007 is $445 per credit hour. Tuition for academic year 2007–2008 is $485 per credit hour. An NSU student services fee of $750 is required annually. Courses in the M.S.N. tracks that are taken at the H. Wayne Huizenga School of Business and Entrepreneurship, the Shepard Broad Law Center, or the College of Osteopathic Medicine (Master of Public Health Program) are taken at the prevailing tuition rate for those schools. All tuition charges and fees are subject to change by the board of trustees without notice.

Academic Policies

The following academic policies apply to all students in the graduate nursing program. Academic policies of the H. Wayne Huizenga School of Business and Entrepreneurship also apply to students taking more than four courses in the M.B.A. program. Shepard Broad Law Center academic policies also apply to students taking courses through the law center. College of Osteopathic Medicine Master of Public Health Program academic policies also apply to students taking courses through the M.P.H. program.

Transfer Credits

No more than 6 graduate credits may be transferred into the M.S.N. program from other graduate programs. Courses will be evaluated for credit towards the M.S.N. degree by the program director, whose decision will be final. To be considered for credit, a course must have been taken at an accredited graduate program and be the equivalent of a course offered in the student's chosen track. The student must have earned a grade of B or higher in the course. The student must submit the syllabus of any course he or she is seeking credit for directly to the program director. Additional documentation may be required by the program director before credit may be granted. Only courses completed prior to matriculation in the M.S.N. program will be considered for transfer credit.

Progression Requirements

To progress in the M.S.N. program, the student must take a minimum of one course per semester, with no more than one semester taken off per year. All coursework must be completed within five years. All courses must be completed with a minimum grade of B- for credit to be received toward the M.S.N. degree. A course may be repeated once if a grade less than B is obtained. Only one repeated course can be applied toward the M.S.N. degree. A second course with a grade less than B- will preclude completion of the program and the student will be dismissed from the program.

A GPA of 3.0 or above must be maintained throughout the program in order for the student to progress. If the student's GPA falls below 3.0 he or she will be on probation and must increase his or her GPA to 3.0 or above within the next semester attended to remain in the program. Otherwise, the student is automatically dismissed from the program.

To receive an M.S.N. degree all students must fulfill the following requirements:

- successfully complete a minimum of 36 semester hours of coursework
- satisfactorily complete the program requirements for the degree including all required courses for the chosen track with a minimum GPA of 3.0 and with no course with a grade below B- applied toward the degree
- apply for graduation
- have satisfactorily met all financial and library obligations
- receive a recommendation for graduation by the program director

Courses of Study

The M.S.N. program offers four tracks of study: education, business administration, health law, and public/community health nursing. Dual degrees are available in M.S.N./M.B.A., M.S.N./M.H.L., or M.S.N./M.P.H. While the core M.S.N. courses remain constant, courses for each track are specific to the area of interest and are provided by the appropriate schools. Courses can be added to the student's program track to accommodate the student's overall interest, employment, and educational goals. The program director is available for individualized program advisement. Capstone nursing courses allow the student to apply synthesized knowledge gained from all prior courses to an individualized project in the chosen track.

Graduation Requirements

To receive an M.S.N. degree all students must fulfill the following requirements:

- successfully complete a minimum of 36 semester hours of coursework
- satisfactorily complete the program requirements for the degree including all required courses for the chosen track with a minimum GPA of 3.0 and with no course with a grade below B- applied toward the degree
- apply for graduation
- have satisfactorily met all financial and library obligations
- receive a recommendation for graduation by the program director
### Curriculum Outline—M.S.N. Program

#### Core Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 5100</td>
<td>Advanced Theoretical Foundations in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5110</td>
<td>Nursing Research 1: Advanced Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5120</td>
<td>Nursing Research 2: Utilization of Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5130</td>
<td>Health Care Policy, Organization, and Finance</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5140</td>
<td>Ethical, Legal, and Social Issues in Nursing</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5220</td>
<td>Health Promotion and Disease Prevention</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5340</td>
<td>Nurse Leadership Roles in Health Care Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Core Courses** 21

In addition to the core M.S.N. courses, the following courses are required to complete the M.S.N. Education track:

#### M.S.N. Education Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 5300</td>
<td>Nursing Curriculum Development</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5310</td>
<td>Instructional Strategies for Nurse Educators</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5320</td>
<td>Evaluation and Testing for Nurse Educators</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5360</td>
<td>Nurse Educator Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5500</td>
<td>Nursing Education Capstone Project</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Education Courses** 15

In addition to the core M.S.N. courses, the following courses are required to complete the M.S.N. Business Administration track:

#### M.S.N. Business Administration Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 5270</td>
<td>Nursing Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5460</td>
<td>Nursing Business Administration Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5510</td>
<td>Nursing Business Administration Capstone Project</td>
<td>3</td>
</tr>
<tr>
<td>GMPN 5001</td>
<td>Introductory Accounting*</td>
<td>3</td>
</tr>
<tr>
<td>GMPN 5008</td>
<td>Business Finance*</td>
<td>3</td>
</tr>
<tr>
<td>GMPN 5020</td>
<td>Managing Organizational Behavior*</td>
<td>3</td>
</tr>
<tr>
<td>GMPN 5012</td>
<td>21st Century Management Practices* or</td>
<td>3</td>
</tr>
<tr>
<td>GMPN 5030</td>
<td>Managing Human Resources*</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Business Administration Courses** 21

*These business courses are to be completed through the H. Wayne Huizenga School of Business and Entrepreneurship prior to taking NSG 5460 and NSG 5510.

In addition to the core M.S.N. courses, the following courses are required to complete the M.S.N. Health Law track:

#### M.S.N. Health Law Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 5470</td>
<td>Nursing Health Law Practicum</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5520</td>
<td>Nursing Health Law Capstone Project</td>
<td>3</td>
</tr>
<tr>
<td>MHLN 1010</td>
<td>Institute for the Study of Health Law, Part I*</td>
<td>1</td>
</tr>
<tr>
<td>MHLN 1020</td>
<td>Legal Research, Methods, and Reasoning*</td>
<td>3</td>
</tr>
<tr>
<td>MHLN 1030</td>
<td>Administrative Law*</td>
<td>2</td>
</tr>
<tr>
<td>MHLN 1050</td>
<td>Law of Medicare and Medicaid*</td>
<td>3</td>
</tr>
<tr>
<td>MHLN 1080</td>
<td>Law of Patients' Rights and Advocacy*</td>
<td>2</td>
</tr>
<tr>
<td>MHLN 1090</td>
<td>Law of Accreditation and Licensing</td>
<td>2</td>
</tr>
<tr>
<td>MHLN 2030</td>
<td>Law of Risk Management*</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Health Law Courses** 21

*These health law courses are to be completed through the Shepard Broad Law Center prior to taking NSG 5470 and NSG 5520.
Post-Master of Science in Nursing Certificate (Post-M.S.N. Certificate)
The Post-Master of Science in Nursing Program is an online certificate program for graduates of master of science programs with a major in nursing who hold registered nurse (R.N.) licensure. One track, nursing education, is offered.

The post-M.S.N. education track prepares nurses who already hold an M.S.N. degree for career paths in staff development, vocational-technical, or community college education. This program prepares nurse educators for national certification in nursing education (CNE). Students in the post-M.S.N. education track take 18 semester hours of online and practicum nursing courses. These courses are taught by nursing department faculty members with advanced preparation and extensive experience in higher education. A total of 18 semester hours are required to complete the post-M.S.N. education track; however, additional elective courses may be taken by students with special interests.

Admission Requirements
Prospective post-master of science in nursing students are selected for admission based on application content, academic record, professional nursing licensure, and evaluation forms.

Admission to the post-M.S.N. program requires the following:
- master of science degree with a major in nursing
- M.S.N. GPA of 3.0
- current active professional nursing (R.N.) licensure, in the jurisdiction of the practicum (must remain current throughout the program)
- minimum of two years of health care experience
- application with writing sample, two evaluation (reference) forms, and application fee

Application Procedures
Applicants must submit
- signed application form with writing sample, two evaluation (reference) forms, and the nonrefundable application fee of $50
- official transcripts from each college and university attended, sent directly from the school to the EPS address on the application
- Proof of current registered nurse (R.N.) licensure, in the jurisdiction of the practicum, which must remain current throughout the program

Tuition and Fees
Tuition for academic year 2006–2007 is $445 per credit hour. Tuition for academic year 2007–2008 is $485 per credit hour. An NSU student services fee of $750 is required annually. All tuition charges and fees are subject to change by the board of trustees without notice.

Academic Policies
Transfer Credits
No credits may be transferred into the post-M.S.N. program from other graduate programs.

Progression Requirements
To progress in the post-M.S.N. program, the student must take a minimum of one course per semester, with no more than one semester taken off per year. All coursework must be completed within five years. All courses must be completed with a minimum grade of B- for credit to be applied to the post-M.S.N. certificate. A course may be repeated once if a grade of less than B- is obtained. Only one repeated course can be applied toward the certificate.

Certificate Completion Requirements
To receive a post-M.S.N. certificate, students must fulfill the following requirements:
- successfully complete a minimum of 18 semester hours of coursework
- satisfactorily complete the program requirements for the certificate with a minimum GPA of 3.0 and with no course with a grade below B-
- apply for the certificate
- have satisfactorily met all financial and library obligations
- receive a recommendation for the certificate by the program director

Students who have been dismissed may petition the program director for reinstatement if a year has passed since the dismissal. The applicant is required to present adequate evidence that the factors that caused the prior inadequate academic performance have changed significantly so that there is reasonable expectation that the applicant can perform satisfactorily if permitted to resume his or her study. Readmission will be at the discretion of the program director.
Course of Study
The post-M.S.N. program offers one track of study: education. Courses can be added to the student's program track to accommodate the student's overall interest, employment, and educational goals. The program director is available for individualized program advisement.

Curriculum Outline—Post-M.S.N. Certificate Program

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSG 5120</td>
<td>Nursing Research 2: Utilization of Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5300</td>
<td>Nursing Curriculum Development</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5310</td>
<td>Instructional Strategies for Nurse Educators</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5320</td>
<td>Evaluation and Testing for Nurse Educators</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5340</td>
<td>Nurse Leadership Roles</td>
<td>3</td>
</tr>
<tr>
<td>NSG 5360</td>
<td>Nurse Educator Practicum</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Courses 18

Graduate Nursing Program Course Descriptions

Business Administration
M.S.N. business administration track courses are to be completed through the H. Wayne Huizenga School of Business and Entrepreneurship prior to NSG 5460 and NSG 5510. Please see the Huizenga School catalog for course descriptions for these business courses.

Health Law
M.S.N. health law track courses are to be taken through the Shepard Broad Law Center prior to taking NSG 5470 and NSG 5520. Please see the Law Center catalog for course descriptions for these health law courses.

Public/Community Health Nursing
M.S.N. public/community health nursing track courses are to be taken through the College of Osteopathic Medicine's Master of Public Health Program prior to taking NSG 5480 and NSG 5530. Please see the M.P.H. section of this catalog for course descriptions for the public health courses.

NSG 5100—Advanced Theoretical Foundations in Nursing
This course explores the diverse nature of knowledge, values, and beliefs foundational to professional nursing practice. The relationship of theories from nursing as well as various other fields to science, research, and practice is analyzed with an emphasis on understanding the development, testing, and use of theory to promote high quality health care. Models, theories, paradigms, and philosophies are examined through critical inquiry to facilitate development of a framework for graduate nursing practice. (3 semester hours)

NSG 5110—Nursing Research 1: Advanced Nursing Research
This course provides the scientific basis for the development of nursing research proposals and an understanding of the research process for nursing. All steps of the research process are explored and analyzed in depth. The relationship of statistical methods to study design and their appropriateness to specific research questions is examined. Research protocols consistent with the first three chapters of a thesis will be completed in this course. (3 semester hours)

NSG 5120—Nursing Research 2: Utilization of Nursing Research
This course focuses on the evaluation and utilization of new knowledge for evidence-based nursing practice. Evidence is evaluated for translation into practice. Leadership, adoption of innovation, quality improvement, and change theories are used in applying the nursing process to an identified problem in the specialty practice setting that is amenable to evidence-based change. Fostering an organizational culture valuing evidence-based practice and an infrastructure supportive of the adoption of innovation based on evidence for improved outcomes are stressed. Prerequisite: NSG 5110 (3 semester hours)

NSG 5140—Ethical, Legal, and Social Issues in Nursing
This course focuses on ethical theory, principles, and models for decision making in nursing. Students evaluate individual, family, community, and health care situations and determine appropriate actions within an ethical framework, respecting personal values and beliefs. Implications of decisions are explored in relation to legal, economic, environmental, technological, and cultural issues. The issues of poverty and public health as they relate to the WHO (1978) definition of primary health care will be addressed. Human diversity, societal issues, and cultural competence are emphasized. (3 semester hours)

NSG 5220—Health Promotion and Disease Prevention
Students examine the theoretical bases for health promotion and disease prevention. Health objectives for the nation will be examined from the perspective of primary, secondary, and tertiary prevention. Health promotion and disease prevention will be explored from an ecological/epidemiological perspective, including critical social, political, racial/ethnic, cultural, and economic environments.
The ability to critically and accurately apply the nursing process to the community experiences of diverse clients is emphasized at the aggregate level with consideration of individuals, families, and groups comprising the aggregate. Students analyze holistic nursing for health promotion. Evidence-based practice and political advocacy are addressed. (3 semester hours)

NSG 5270—Nursing Entrepreneurship
The process of business planning will be analyzed and applied to the nurse-owned business. Funding, regulatory, and licensure issues specific to health care will be addressed from the nurse entrepreneur perspective. (3 semester hours)

NSG 5280—Introduction to Public/Community Health Nursing
This course introduces the student to public/community health nursing at the specialty level. The core public health functions of assessment, policy development, and assurance are emphasized. Working with the community to improve population health, primary prevention for vulnerable populations, and elimination of aggregate health disparities are emphasized. (3 semester hours)

NSG 5300—Nursing Curriculum Development
This course introduces the student to the process of curriculum development. The relationship of nursing curriculum to the parent institution's mission and philosophy is identified. Issues of accreditation, standards of professional nursing practice, and policy issues are analyzed within the context of curriculum development.

Fundamental theories, principles, and techniques of curriculum development and implementation used in educational programs for nursing are explored. Cultural competence and higher education law are discussed and applied to curriculum development. (3 semester hours)

NSG 5310—Instructional Strategies for Nurse Educators
Learning theories and individual learning styles are examined in the context of complexity science. A variety of traditional, nontraditional, and online learning strategies for classroom and clinical instruction specific to nursing education are presented. Syllabus development is explored in the context of systematic design of instruction and cultural competence. (3 semester hours)

NSG 5320—Evaluation and Testing for Nurse Educators
Students will learn to apply concepts of measurement, evaluation, and testing in nursing education. Students will develop the knowledge and skills to systematically assess learning outcomes, evaluate critical thinking and higher levels of learning, and assess clinical competencies. The efficacy of formative and summative evaluation will be explored. (3 semester hours)

NSG 5340—Nurse Leadership Roles in Health Care Systems
This course provides the student with the opportunity to analyze the underlying premises, theories, research, state-of-the-art models, and practices regarding current and future challenges facing the profession of nursing. The content will include an analysis of the roles of the master's degree-prepared nurse in today's health care environment. Role theory and role development, along with methods of achieving high quality health care, are explored. This course also examines and analyzes issues related to collaboration, change, conflict management, and negotiation. (3 semester hours)

NSG 5360—Nurse Educator Practicum
Students will analyze, synthesize, and utilize theories and principles of educational strategies, curriculum development, evaluation, and all prior courses to develop and implement a teaching project. Students will develop the nursing education teaching project meeting the course criteria. A learning contract for the student's proposed project is required and must be approved by the program director and faculty adviser prior to the beginning of the project. The project will be implemented as per the agreement. Prerequisite: Student must have completed all courses in the M.S.N. health law track except NSG 5520 or have program director permission. (3 semester hours)

NSG 5460—Nursing Business Administration Practicum
Students will analyze, synthesize, and utilize knowledge from all prior courses to develop a business plan for a project in the area of health law. A student-developed learning contract meeting the course criteria must be approved by the program director and faculty adviser prior to the beginning of the project. The project will be implemented as per the agreement. Prerequisite: Student must have completed all courses in the M.S.N. health law track except NSG 5520 or have program director permission. (3 semester hours)

NSG 5470—Nursing Health Law Practicum
Students will analyze, synthesize, and utilize knowledge from all prior courses for the completion of a nursing project in the area of health law. A student-developed learning contract meeting the course criteria must be approved by the program director and faculty adviser prior to the beginning of the project. The project will be implemented as per the agreement. Prerequisite: Student must have completed all courses in the M.S.N. health law track except NSG 5520 or have program director permission. (3 semester hours)

NSG 5480—Public/Community Health Nursing Practicum
Students will analyze, synthesize, and utilize knowledge from all prior courses to complete a nursing practicum in the area of public/community health nursing. A student-developed learning contract meeting the course criteria must be approved by the program director and faculty adviser prior to the beginning of the project. The practicum will be implemented as per the agreement. Prerequisite: Student must have completed all courses in the M.S.N. public/community health nursing track except NSG 5520 or have program director permission. (3 semester hours)

NSG 5500—Nursing Education Capstone Project
Students will develop a learning contract with the program director and faculty adviser for a project that puts into practice what has been learned in
the program. This course provides the student with a learning experience in which the student implements a project or thesis under the direction of a graduate faculty member. The capstone course combines beginning research skills, theoretical knowledge, and nursing experience to study a topic of relevance to graduate-level nursing in the nurse educator role. The capstone project will be reported in print. The project material must also be defended orally in real time, either on campus or electronically. Continuous enrollment at 3 semester hours per semester is required until completion of the project. Prerequisite: Student must have completed all M.S.N. education track nursing courses except NSG 5360 or have program director permission. (3 semester hours)

NSG 5520—Nursing Health Law Capstone Project
Student will develop a learning contract with the program director and faculty adviser for a project that puts into practice what has been learned in the program. This course provides the student with a learning experience in which the student implements a project or thesis under the direction of a graduate faculty member. The capstone course combines beginning research skills, theoretical knowledge, and nursing experience to study a topic of relevance to graduate-level nursing in the health law field. The capstone project will be reported in print. The project material must also be defended orally in real time, either on campus or electronically. Continuous enrollment at 3 semester hours per semester is required until completion of the project. Prerequisite: Student must have completed all M.S.N. health law track courses except NSG 5470 or have program director permission. (3 semester hours)

NSG 5530—Public/Community Health Nursing Capstone Project
Students will develop a learning contract with the program director and faculty adviser for a project that puts into practice what has been learned in the program. This course provides the student with a learning experience in which the student implements a project or thesis under the direction of a graduate faculty member. The capstone course combines beginning research skills, theoretical knowledge, and nursing experience to study a topic of relevance to graduate-level nursing in the public/community health nursing field. The capstone project will be reported in print. The project material must also be defended orally in real time, either on campus or electronically. Continuous enrollment at 3 semester hours per semester is required until completion of the project. Prerequisite: Student must have completed all M.S.N. public/community health nursing track courses except NSG 5480 or have program director permission. (3 semester hours)
College of Medical Sciences
College of Medical Sciences

Mission Statement
The mission of the College of Medical Sciences is to train students in the basic medical sciences and to prepare them for careers in health care and higher education. In accordance with this mission, the College of Medical Sciences offers a master of biomedical sciences degree and provides basic science instructors for the colleges within the Health Professions Division.

Administration
Harold E. Laubach, B.S., M.S., Ph.D.
Dean
Howard S. Hada, B.A., M.S., Ph.D.
Assistant Dean for Academic Affairs
Lori B. Dribin, B.A., Ph.D.
Assistant Dean for Student Affairs

Degree Programs
In line with its mission, the College of Medical Sciences currently offers a master of biomedical sciences degree program.

Accreditation
While there is no specific accreditation process for basic science or medical sciences, this portion of our educational process has always been evaluated by visiting accreditation teams of the several professions and has always received highest grades and commendation.

Admission Requirements
In order to be considered for admission into the master's program, the student must meet the following requirements:

- completion of a bachelor's degree from a regionally accredited college or university
- completion of eight semester hours with a minimum 2.0 grade point average in each of the following: general biology, general chemistry, organic chemistry, and general physics, all with laboratory
- a minimum cumulative GPA of 2.5 on a four-point scale.
- submit scores from one of the following: the Medical College Admission Test (MCAT) or the Dental Admission Test (DAT)

Scores may not be more than five years old.

It should be noted that many criteria, in addition to academic credentials, play a role in the admissions process to professional schools. While the biomedical science program does provide an opportunity for the student to demonstrate academic capability, it does not ensure admission to any professional school. Admission to the graduate program or completion of courses will not guarantee admis-
tion to any other program of Nova Southeastern University.

**Application Procedures**

Candidates for admission must submit:

1. a completed application form along with a $50 nonrefundable application fee. Application deadline is April 15.
2. official transcripts of all undergraduate, graduate, and professional coursework, submitted directly to Nova Southeastern University Enrollment Processing Services (EPS) College of Medical Sciences Office of Admissions 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905.
3. official reports of standardized test scores such as the MCAT or DAT, not more than five years old
4. one letter of recommendation from\_{\text{an}} \text{advisory committee, or, if}}\text{this does not exist, two letters of recommendation from employers who can testify to the student's characteristics, integrity, application, and aptitude in science. If an applicant has been in the work world for a considerable period of time, two letters of recommendation may be substituted from instructors who can testify to the student's characteristics, integrity, application, and aptitude in science.}

Upon receipt of the completed application and required credentials, the committee on admissions will select those applicants to be interviewed. All applicants who are eventually accepted into the program must be interviewed. An invitation to appear for an interview should not be construed by the applicant as evidence of acceptance.

The dean of the College of Medical Sciences is empowered to evaluate the total qualifications of every student and to modify requirements in unusual circumstances.

The admission process to the graduate program in biomedical sciences is not related in any way to the admissions process of any other program at Nova Southeastern University.

**Schedule of Application for Admission Cycle**

Applications will be accepted starting January 1, and the deadline is April 15 of the year of matriculation.

**Tuition and Fees**

1. Anticipated tuition for 2007–2008 is $26,860. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually. A microscopelab fee of $100 each year is required of all students.
2. Acceptance fee is $100. This fee is required to reserve the accepted applicant's place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in case of withdrawal. It is payable within two weeks of the applicant's acceptance.
3. A deposit of $400 is due two weeks after the notification of acceptance.
4. Preregistration fee is $500, due July 15, under the same terms as the acceptance fee.
5. Student activities fee is $100, payable at each fall registration.

The first semester's tuition and fees, less the $1,000 previously paid, are due on or before registration day. Tuition for the subsequent semester is due on or before registration day for that semester. Students will not be admitted until their financial obligations have been met.

**Transfer Credits**

A student who has attended another college or university in a medical sciences program, must ask the registrar of that institution and all other institutions attended to send official transcripts of credit to Nova Southeastern University Enrollment Processing Services (EPS) College of Medical Sciences Office of Admissions 3301 College Avenue P.O. Box 299000 Fort Lauderdale, Florida 33329-9905.

The student shall request that the dean of the previously attended college send a letter of recommendation directly to the dean of the College of Medical Sciences.

No more than 6 hours of the 36 hours required for the degree can be transferred from another institution and only graduate courses with a B or better, after approval by the student's advisory committee and the dean, will be accepted.

The dean's office will evaluate the courses and determine appropriate credits.

**Dismissal and Suspension**

Students may be dismissed from the College of Medical Sciences if:

- they earn less than an 80 percent grade in more than seven hours of classroom courses in any semester or overall
- they do not maintain an overall average, at any time, of 80 percent in the program
- they fail a course during any semester
- they exceed a six-year limit for completing all graduation requirements, exclusive of any approved leave of absence or withdrawal in good standing
- in the opinion of the dean, circumstances of a legal, moral, behavioral, ethical, or academic nature warrant such action, or if, in the dean's opinion, there are factors that would interfere with or prevent them from meeting appropriate professional standards

A student may be suspended (removed from academic enrollment and/or revocation of all other privileges or activities and from the privilege to enter the campus for a specified period of time) if, in the opinion of the dean, the student has not attained the academic level and/or has deviated significantly from the standards of behavior established by the College of Medical Sciences.

**Policy on Readmission**

Students who are dismissed for any reason may petition for reinstatement, if a reasonable time has elapsed since the dismissal. Readmission will be at the discretion of the dean. The
To receive a degree, every student must fulfill the following requirements:

- be of good moral character
- satisfactorily pass all required examinations
- complete a minimum of 36 semester hours of coursework
- satisfactorily complete the program requirements for the degree including all assignments, with a minimum GPA of 80 percent and with no credit hours below 80 percent
- have satisfactorily met all financial and library obligations
- attend in person the rehearsal and commencement program at which time the degree is awarded

**Course of Study**

The master of biomedical sciences is a full-time degree program that is completed in two years. Students are admitted in August every year. The program includes four semesters of on-campus study. Students select an adviser who directs their program of study. Coursework is completed along with students in the professional programs and select coursework is offered by the College of Medical Sciences. Many of the courses offered in the College of Medical Sciences are taught to students within other Health Professions Division colleges. Each course can be found listed under the appropriate college. Courses are identified by their College of Medical Sciences course number, with specific college-designation and number. Courses are titled in accordance with their titles in their specific college, and may bear no relationship with other courses in this list.

Note: Listed at the end of each entry are lecture clock hours, laboratory clock hours, and semester hours.

**Student Organization**

**Student Council**—The College of Medical Science Student Council is the official voice of all students in the College of Medical Sciences. The organization is open to all students and welcomes participation from the student body. Its responsibilities include expressing student opinions and dispensing funds for student activities.

**College of Medical Sciences Course Descriptions**

The college offers courses for graduate credit within the other Health Professions Division colleges. Each course can be found listed under the appropriate college. Courses are identified by their College of Medical Sciences course number, with specific college-designation and number.

**ANA 5714—Medical Histology**
The study of the microanatomy of the cells, tissues, and organs of the body; correlating structure and function. (36-54-4)

**ANA 5723—Neuroanatomy**
The study of the structure and function of the spinal cord, brain stem, and cerebrum. Primary emphasis is on major motor and sensory pathways, spinal and cranial nerves, and integrative mechanisms of the central nervous system. Laboratory studies include the use of CAT and MRI scans. (36-18-3)

**ANA 5727—Gross Anatomy**
The study of the structure and function of the human trunk, extremities, head, and neck. Course includes laboratory study of cadavers. (108-54-7)

**ANA 5744—Gross Anatomy**
The study of the structure and function of the human body. Emphasis on the detailed anatomy of the head and neck with dissection of the region by teams of students. (36-54-4.5)

**ANA 6700—Special Topics**
Topics and hours to be arranged. (1 to 6 semester hours)

**Biochemistry**

Chairman and Professor: R. E. Block

Professors: E. E. Groseclose, K. V. Venkatachalam

Assistant Professor: W. G. Campbell

**BCH 5713—Medical Biochemistry I**
Introduces the structures and functions of the important carbohydrates,
lipids, nucleic acids, proteins, and properties of enzymes. Covers the pathways of normal metabolism and their controls. Genetics is introduced. DNA replication, translation, and transcription are discussed. A few clinical correlation lectures by physicians are included. (54-0-3)

BCH 5723—Medical Biochemistry II

Begins with completion of protein synthesis, cell cycles and cancer. Includes hemostasis with details of coagulation factors, nutrition and biochemical aspects of digestive, neural, visual, respiratory, musculoskeletal, and endocrine systems. Includes tutorials based upon the current medical literature. (54-0-3)

BCH 5735—Biochemistry

Introduces the structures and functions of the carbohydrates, lipids, nucleic acids, and proteins. Covers the pathways of normal metabolism and their controls, as well as nutrition, digestion, and absorption. Includes biochemical aspects of the dental, neural, visual, respiratory, musculoskeletal, and endocrine systems. (72-0-4)

BCH 6700—Special Topics

Topics and hours to be arranged. (1 to 6 semester hours)

Pharmacology

Chairman and Professor: C. E. Reigel, Jr. | Associate Professors: L. Gorman, T. Panavelli | Assistant Professor: C. Powell

PCO 5504—Pharmacology I

Introduces basic receptor theory, pharmacokinetics, and basic principles of drug action. Discusses mechanisms of action, indications, contraindications, and adverse reactions of drugs affecting major organ systems. (50-0-4)

PCO 5503—Pharmacology II

A continuation of PCO 5504—Pharmacology I, with particular emphasis on drugs used in oral medicines and dentistry as well as oral manifestations of systemic diseases. (48-0-3)

PCO 6700—Special Topics

Topics and hours to be arranged. (1 to 6 semester hours)

Physiology

Acting Chairman: H. E. Laubach | Professors: H. N. Mayrovitz, S. Taraskevich | Associate Professors: A. Jimenez, W. A. Schreier, Y. Zagvazdin | Assistant Professor: D. King

PHS 5500—Physiology

Physiology covering organ systems, cell function, membrane functions, membrane translocation, electrophysiology, muscle physiology, neurophysiology, and the cardiovascular, renal, respiratory, gastrointestinal, endocrine, and nervous systems. (64-0-4)

PHS 5723—Medical Physiology I

The first semester of a two-semester course covering the study of general physiology (cell function, membrane translocation, electrophysiology, and muscle physiology), the autonomic nervous system, and cardiovascular physiology. (54-0-3)

PHS 5724—Medical Physiology II

The continuation of Medical Physiology I. This semester includes the study of renal, respiratory, endocrine, reproductive, gastrointestinal and nervous systems. (72-0-4)

PHS 6700—Special Topics

Topics and hours to be arranged. (1 to 6 semester hours)

Core Courses

COMS 5702—Seminar

Students and faculty members observe and present research seminars on selected topics. Topics and hours to be arranged. (1 to 4 semester hours)

COMS 6700—Special Topics

Coursework is designed to advance knowledge in a specific area of science. Topics and hours to be arranged. (1 to 6 semester hours)
College of Dental Medicine
Mission Statement
The College of Dental Medicine's mission is to educate and train students to ensure their competency to practice the art and science of the dental profession. This requires graduates to be biologically knowledgeable, technically skilled, compassionate, and sensitive to the needs of all patients and the community. The College of Dental Medicine fosters excellence in dental education through innovative teaching, research, scholarship, and community service.

Administration
Robert Uchin, D.D.S.
Dean
Timothy L. Hottel, D.D.S., M.S., M.B.A.
Executive Associate Dean of Academic and Financial Affairs
Peter Keller, D.D.S.
Executive Associate Dean of Clinical Affairs
Steven M. Keener, D.M.D., M.S.
Associate Dean of Institutional Affairs
Franklin Garcia-Godoy, D.D.S., M.S.
Assistant Dean for Research
Abby J. Brodie, D.M.D.
Assistant Dean for Curriculum and Educational Affairs

Stephen N. Abel, D.D.S., M.S.
Assistant Dean for Extramural Affairs
Sergio Kuttler, D.D.S.
Assistant Dean for Advanced Education Programs
Hal Lippman, D.D.S.
Assistant Dean for Student Affairs and Admissions

Dental Medicine
If you are considering a career in dentistry, your education will focus on producing a competent, confident, and mature professional. You will be trained to function as a highly qualified primary care practitioner capable of delivering comprehensive dental care to patients of all ages.

For the highly trained and skilled dentist, career opportunities are almost limitless. The options can be fulfilling and rewarding. The skilled dentist may choose to practice individually in urban, suburban, or rural environments; join an established, respected, and successful practice; or may choose public service in governmental agencies or the military. The skilled dentist may opt to specialize with additional advanced education in such fields as endodontics, oral pathology, oral surgery, orthodontics, pediatric dentistry, periodontology, prosthodontics, public health dentistry, or oral radiology.

For rewards so great, the training is extensive and complete. The nationally recognized faculty of Nova Southeastern University College of Dental Medicine (NSU-CDM) will prepare you to take your place as a leader among oral health care providers. A dynamic career awaits a committed individual.
Accreditation
Our programs in dentistry, advanced education in general dentistry, endodontics, orthodontics, oral and maxillofacial surgery, periodontology, pediatric dentistry, and prosthodontics are fully accredited by the Commission on Dental Accreditation. The Commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

Facilities
The College of Dental Medicine uses the facilities of a $75 million physical plant of the university's Health Professions Division. A separate building consisting of 70,900 square feet of space is for the sole use of the College of Dental Medicine and houses a clinic providing modern dental care, a postgraduate student dental clinic, a virtual reality dental simulation laboratory; a faculty intramural practice; a clinical simulation laboratory; laboratory facilities to support the clinics; seminar rooms; research laboratories; and offices for the dean, faculty members, administration, and staff members.

Predoctoral Program
Requirements for Admission
The College of Dental Medicine selects students based on preprofessional academic performance, Dental College Admission Test (DAT) scores, personal interview, written application, and letters of evaluation.

1. Prior to matriculation, applicants must have completed a minimum of 90 semester hours of coursework at a regionally accredited college or university. Not more than 60 semester hours from community or junior college will be applied to the 90-semester hour minimum.

2. Students should have a cumulative grade point average (GPA) of 3.0 or higher on a 4.0 scale. In addition, students should have a science grade point average of 3.0 or higher on a 4.0 scale. Students must have earned a grade of 2.0 or better in each of the following required courses:
   - general biology—zoology and microbiology are acceptable alternatives (8 semester hours including laboratory)
   - general chemistry (8 semester hours including laboratory)
   - organic chemistry (8 semester hours including laboratory)
   - physics (8 semester hours including laboratory)
   - English composition (3 semester hours)
   - English literature (3 semester hours)
   - Two of the following advanced science courses must also be taken:
     - biochemistry (3 semester hours)
     - cell or molecular biology (3 semester hours)
     - microbiology (3 semester hours)
     - physiology (3 semester hours)
     - histology (3 semester hours)
     - genetics (3 semester hours)
     - human or comparative anatomy (3 semester hours)

It is strongly recommended that students take
- additional courses in advanced sciences
- courses in social sciences, principles of management, accounting, communication, foreign languages, and art and sculpture to contribute to a broad educational background

Upon review of a student's individual record, the Committee on Admissions may require additional coursework and testing as a condition of acceptance. The dean may evaluate an applicant's qualifications and modify requirements in unusual circumstances. Inquiries should be directed to Nova Southeastern University Health Professions Division Dental Admissions 3200 South University Drive Fort Lauderdale, Florida 33328-2018 (954) 262-1101 800-356-0026, ext. 1101

Transfer of Credit Policy
Circumstances may warrant that a student enrolled in one dental school seeks to transfer to another institution. Credits may only be transferred from a dental school accredited by the Commission on Dental Accreditation. The Office of the Associate Dean of Academic Affairs will evaluate a prospective transfer student's coursework, which must be comparable to that of Nova Southeastern University College of Dental Medicine (NSU-CDM).

- Transfer students from another dental school will be required to complete, at minimum, their last two years of instruction at the college granting the dental degree (i.e., NSU-CDM).

Transfer credits will be given consideration based upon the student's academic standing, as well as documentation from the dean or dean's designee of the previous dental school(s).

- Credit is only given for completed courses with a grade of 70 percent (C) or better from the applicant's previous dental school(s).

Any dental student wishing to transfer to Nova Southeastern University College of Dental Medicine must:
1. make a formal application to Nova Southeastern University College of Dental Medicine
2. meet all the predoctoral admission requirements, which include submitting official transcripts of all college work (including dental school transcripts); DAT scores; National Board scores, if taken; and two letters of evaluation (No transfer student will be accepted without an interview)
3. be in good standing at the student's current institution, as documented by a letter from the dean of that institution
4. supply a letter of recommendation from a faculty member of the transferring dental school
5. supply a written statement outlining the reasons for the request for transfer

Decisions on transfers are made by the dean's office. The decision will be based on factors which include, but are not limited to, academic record, circumstances leading to the transfer...
request, available space, and compliance with admissions standards.

**Application Procedure**

1. Nova Southeastern University College of Dental Medicine uses the American Association of Dental Schools Application Service (AADSAS). AADSAS takes no part in the selection of students. The application deadline for the AADSAS application is January 1, 2007, for the class entering August 2007. Applications are available from American Association of Dental Schools Application Service (AADSAS) 1625 Massachusetts Ave., NW Suite 600 Washington, D.C. 20036-2212 (202) 667-1886 800-353-2237

Applicants may also obtain their application through www.aadea.org. Candidates may choose to either fill out an electronic application or download a paper application.

Materials to be mailed to AADSAS include the following:

- AADSAS application
- an official transcript from the registrar of each college or university in which the student was enrolled (mailed directly by the college to AADSAS)
- Dental College Admission Test (DAT) scores
- Applicants will be required to provide the following materials to the Office of Admissions:
- the supplemental application (electronically submitted to the College of Dental Medicine)
- a nonrefundable application fee of $50
- an evaluation by a preprofessional health adviser or committee from the applicant's undergraduate institution. If this evaluation cannot be provided, three individual letters of evaluation are required from undergraduate instructors, two from science instructors, and one from a liberal arts instructor. If possible, these letters should be from faculty members who know the applicant's scholastic abilities and personal character. Otherwise, they should be from people (nonrelatives) who can provide an evaluation to the Committee on Admissions.
- a letter of evaluation from a dentist is highly recommended but not required.

Upon receipt of the completed application and the required credentials, the Committee on Admissions will select candidates for interview. Those selected will be notified in writing of the time and place. All applicants who are admitted by the college must be interviewed, but an invitation to appear for an interview should not be construed as evidence of acceptance. Notice of acceptance or other action by the Committee on Admissions will be on a "rolling" or periodic schedule; therefore, early completion of the application is in the best interest of the student.

Although the Committee on Admissions realizes that the majority of applicants take the DAT in October, conditional acceptances may be made to exceptional candidates pending receipt of the spring DAT test results.

Final official transcripts, covering all of the applicant's work, must be forwarded to Nova Southeastern University, Enrollment Processing Services (EPS), College of Dental Medicine, Office of Admissions, 3301 College Avenue, P.O. Box 299000, Fort Lauderdale, Florida 33329-9905.

Incomplete applications will not be considered. If your file will not be complete prior to the deadline, please attach a statement to the NSUCOM Supplemental Application for Admission explaining what documents will be submitted after the deadline and the reason for their delay. Decisions to review late applications are at the discretion of the Committee on Admissions.

**Tuition and Fees**

- Tuition for 2007-2008 (subject to change by the board of trustees without notice) is $37,585 for Florida residents and $39,585 for out-of-state students. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually. Eligible students must request in-state tuition on application. For tuition purposes, a student's Florida residency status (in-state or out-of-state) will be determined at initial matriculation and will remain the same throughout the entire enrollment of the student at NSU. Accordingly, tuition will not be adjusted as a result of any change in residency status after initial enrollment registration.

- Acceptance fee is $1,000. This fee is required to reserve the accepted applicant's place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in the event of withdrawal. Candidates accepted on or after December 1 have 45 days to pay their acceptance fee. Candidates accepted on or after January 1 have 30 days to pay their acceptance fee. Applicants accepted on or after February 1 are required to submit their acceptance fee within 15 days. Applicants accepted after July 15 must pay their acceptance fee immediately.

- Preregistration fee is $1,000 and is due April 15, under the same terms as the acceptance fee.

The first semester's tuition and fees, less the $2,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met. It is extremely important that applicants be committed to meeting their financial responsibilities during their four years of training. This should include tuition, living expenses, books, equipment, and miscellaneous expenses.

It is mandated that each student carry adequate personal medical and hospital insurance. Students may avail themselves of the hospitalization insurance plan obtainable through the university.
International Dental Graduate Program

The College of Dental Medicine has available a limited number of openings for graduates of non-U.S. dental schools who wish to earn a U.S. dental degree in order to qualify for licensure in the United States.

Admission Requirements

The College of Dental Medicine selects students based on academic records, letters of evaluation, a computer-generated minimum score of 80 in the Test of English as a Foreign Language (TOEFL), a minimum score of 85 on the Test of English as a Foreign Language (TOEFL), a minimum score of 373 on the Part I of the National Board Dental Examination, a translated GPA of the American equivalent of a 3.0, a personal interview, and a psychomotor bench test. The psychomotor bench test and clinical case presentation may include the following: Canadian wax carving examination, typodont tooth preparation and restoration in amalgam, and typodont tooth preparation for a full metal crown. The clinical case presentation will consist of an oral presentation related to a clinical scenario. Procedures in the bench test are subject to change.

All materials needed for the above will be provided by NSU-CDM. The fee for this psychomotor bench test and clinical case presentation will be $2,500. This fee is in addition to the tuition for the IDG program, should the applicant be selected for admission.

In order to qualify, the applicant must have received, prior to matriculation in this International Dental Graduate Program, a D.M.D., D.D.S., or their equivalent, from a non-U.S. dental school.

Application Procedure

The applicant must electronically submit materials to Nova Southeastern University, Enrollment Processing Services (EPS), Office of Dental Medicine, Office of Admissions, 3301 College Avenue, P.O. Box 299000, Fort Lauderdale, Florida 33329-9905. The following materials should be mailed by January 1, 2007:

- the completed College of Dental Medicine application form for the International Dental Graduate Program
- a nonrefundable application fee of $50
- official scores from the Test of English as a Foreign Language (TOEFL).

The applicant must arrange for the following to be sent to the Office of Admissions by January 1, 2007:

1. one official transcript sent directly from each college, professional school, or university attended
2. official National Board scores
3. three letters of evaluation

Transcripts must be sent directly from the institutions attended to Nova Southeastern University, Enrollment Processing Services (EPS), Office of Dental Medicine, Office of Admissions, 3301 College Avenue, P.O. Box 299000, Fort Lauderdale, Florida 33329-9905. Coursework taken at a foreign institution must be evaluated for U.S. institution equivalency by one of the three services listed below. You should contact one of the following:

- World Education Services
  P.O. Box 745
  Old Chelsea Station
  New York, New York 10113-0745
  (212) 966-6311
  www.wes.org
- Josef Silny & Associates
  7101 SW 102nd Avenue
  Miami, Florida 33173
  (305) 273-1616
  (305) 273-1338 fax
  www.jsilny.com
  info@jsilny.com
- Educational Credential Evaluators
  P.O. Box 514070
  Milwaukee, Wisconsin 53203-3470
  (414) 269-3400
  www.ece.org

It is the applicant's responsibility to have this coursework evaluated, and an official evaluation must be provided.

2. official National Board scores

Please request the secretary of the National Board of Dental Examiners to forward the applicant's scores for Part I and Part II (if taken) of the dental boards. This information should be sent to Nova Southeastern University, Enrollment Processing Services (EPS), College of Dental Medicine, Office of Admissions, 3301 College Avenue, P.O. Box 299000, Fort Lauderdale, Florida 33329-9905. The National Board of Dental Examiners is located at 211 East Chicago Avenue, Chicago, Illinois 60611.

Upon entering the program, students will purchase all necessary instruments, equipment, and an NSU-specific laptop computer required of all first- and second-year predoctoral students.

Acceptance fee is $1,000. This fee is required to reserve the accepted applicant's place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in the event of a withdrawal. It is payable within two weeks of an applicant's acceptance.

- Preregistration fee is $1,000, and due May 15, under the same terms as the acceptance fee.
The first semester's tuition and fees, less the $2,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met.

It is extremely important that applicants be committed to meeting their financial responsibilities during their three years of training. This should include tuition, living expenses, books, equipment, and miscellaneous expenses.

It is mandated that each student carry adequate personal medical and hospital insurance. Students may avail themselves of the hospitalization insurance plan obtainable through the university.

**Expenses and Financial Aid for All Predoctoral Programs**

Students should anticipate the following approximate expenses for books:
- first year—$1,850
- second year—$1,850
- third year—$800
- fourth year—$800

Students should anticipate the following approximate expenses for instruments, equipment, and NSU-specific laptop computer:
- first year—$10,300
- second year—$7,250
- third year—$1,500
- fourth year—$1,500

The purpose of the Student Financial Assistance Program at Nova Southeastern University is to help as many qualified students as possible to complete their health professions education. Various loans, scholarships, and grants are available to qualified students to help ease the high cost of a health professions education. These financial assistance programs are described in a separate university publication: *A Guide to Student Financial Assistance*.

Opportunities for a limited number of part-time work assignments are available. However, the demands of a program of professional study limit the number of hours a student can work.

**Policies Related to Academic and Student Affairs**

The policies regarding suspension, dismissal, reenrollment and other academic and student policy issues are described in the College of Dental Medicine Predoctoral Student Handbooks, which are revised, updated, and distributed annually to all predoctoral dental medicine students.

**Graduation Requirements**

To receive a D.M.D. degree from the College of Dental Medicine, every student must fulfill the following requirements:
- be of good moral character
- have demonstrated the ethical, personal, and professional qualities deemed necessary for the successful and continued study and practice of dental medicine
- have satisfactorily completed all required didactic and clinical courses and clinical rotations
- have satisfactorily completed all clinical requirements and competency examinations
- have completed all coursework in the College of Dental Medicine within five years from the date of matriculation (exclusive of any approved leave of absence in good standing)
- have satisfactorily completed all assigned curriculum requirements for the D.M.D. degree with a numerical average of 70 percent or higher
- have passed the National Board Dental Examination (NBDE) Part I and Part II
- have satisfactorily met all financial and library obligations
- have attended, in person, the graduation rehearsal and the commencement program at which the D.M.D. degree is awarded
- have complied with any other university or Health Professions Division graduation requirements

Degrees are not awarded solely upon the completion of any prescribed number of courses or upon passing a prescribed number of examinations but, in addition, when the faculty believes that the student has attained sufficient maturity of thought and proficiency. Matriculation and enrollment do not guarantee the issuance of a degree without satisfactorily meeting the aforementioned curriculum and degree requirements.

**Course of Study**

The College of Dental Medicine embodies an innovative, newly developed curriculum designed to graduate competent clinicians devoted to primary care and total comprehensive care of each patient.

The college is closely allied with Nova Southeastern University's College of Osteopathic Medicine and the other health professions colleges of the NSU Health Professions Division, in proximity as well as in academic collaboration.

Early introduction into clinical settings under the preceptorship of faculty members will enable the student to achieve a better understanding of the dynamics of the patient/dentist relationship. It also will reinforce classroom instruction in basic and behavioral sciences to allow for management and delivery of quality dental health care.

Students will be taught the importance of teamwork in an efficient, modern health care delivery system.
### 2006–2007 Curriculum Outline

Calculated based on an 18-week semester (subject to change)

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College of Dental Medicine
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*College of Dental Medicine*
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<td>CDM 400H</td>
<td>Honors Endodontics (continued in Winter 2007—D4)</td>
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<td>CDM 402H</td>
<td>Honors Periodontology</td>
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CDM 410H Honors Pediatric Dentistry (continued in Winter 2007—D4)
CDM 4404H Oral Medicine Honors (continued in Winter 2007—D4)
CDM 414H Honors Program in Orthodontics and Facial Orthopedics (continued in Winter 2007—D4)
CDM 412H Honors Prosthodontics (continued in Winter 2007—D4)
CDM 420E Oral Radiology Application in Clinical Practice (Elective) 0 0 0.5
CDM 403E Advanced Elective in Endodontics (continued in Winter 2007—D4)

WINTER 2007—D4
CDM 4111 Practice Management II 18 0 1
CDM 4120 Regional Board Prep Course 0 72 1
CDM 4502 Clinical Periodontology VIII 0 0 1
CDM 4600 Clinical Restorative Dentistry VI 0 0 4
CDM 4621 Clinical Endodontics II 28 0 1
CDM 4430 Clinical Fixed Prosth. VI 0 0 2
CDM 4431 Clinical Removable Prosth. VI 0 0 2
CDM 4020 Clinical Oral Medicine Case Presentations 18 0 1
CDM 4503 Clinical Periodontology Rotation II (continued from Fall 2006—D4) 0 0 1
CDM 4505 Clinical Emergency Rotation III (continued from Fall 2006—D4) 0 0 1
CDM 4507 Clinical OMFS Rotation VI 0 0 1
CDM 4525 Clinical Pediatric Dentistry Rotation IV (continued from Fall 2006—D4) 0 0 2
CDM 4611 Community Dentistry Rotation II (continued from Fall 2006—D4) 0 0 1
CDM 4651 Clinical Radiology II (continued from Fall 2006—D4) 0 0 1
CDM 400H Honors Endodontics (continued from Fall 2006—D4) 10 0 1
CDM 414H Honors Program in Orthodontics and Facial Orthopedics (continued from Fall 2006—D4) 36 0 2
CDM 4404H Oral Medicine Honors (continued from Fall 2006—D4) 48 0 1
CDM 412H Honors Prosthodontics (continued from Fall 2006—D4) 54 0 1
CDM 403E Advanced Elective in Endodontics (continued from Fall 2006—D4) 10 0 1

College of Dental Medicine Course Descriptions

INTERDISCIPLINARY
BIOMEDICAL SCIENCES


CDM 1000—Anatomy
Lecture/Laboratory
Human anatomy with an emphasis on the thorax, neck, and head. Lecture sessions, laboratory dissection and prosection, organogenesis of regions dissected. Radiological anatomy.

CDM 1030—Histology
Principles of cell biology, normal microscopic and submicroscopic anatomy of cells, and tissues. Correlated with gross anatomy and physiologic function. Microscopic anatomy of normal tissues and organs.

CDM 1130—Neuroanatomy
Lecture/Laboratory
Study of the gross structure of the brain and spinal cord and the functional relationship among their parts. Emphasizes major motor and sensory pathways and integrative mechanisms of the central nervous system.

Biochemistry—Chair and Professor: R. E. Block | Professor: E. E. Grosselose | Associate Professor: K. V. Venkatachalam | Assistant Professor: W. G. Campbell

CDM 1025—Dental Biochemistry and Nutrition
This course includes concepts and principles of biochemistry of normal
and pathologic human life processes. In addition, the principles of nutrition, biochemical roles of dietary constituents, digestion, and absorption are discussed.

Microbiology—Chair and Professor: H. Hada | Professor: D. Burris | Associate Professor: J. Coffman | Assistant Professor: K. Davis

CDM 1110—Microbiology
Basic medical aspects of immunology, bacteriology, virology, and mycology, as well as taxonomy, morphology, epidemiology, growth cycles, pathogenesis, and treatment. Emphasizes oral microbial ecosystems and biofilm.

CDM 1111—Immunology
Includes basic medical aspects of immunology, bacteriology, virology, and mycology, as well as taxonomy, morphology, growth cycles, pathogenesis, epidemiology, and treatment. Emphasizes oral microbial ecosystems and biofilms.

Pathology—Chair and Professor: W. A. Gibson | Assistant Professors: B. Jones, A. B. Trif

CDM 1260—Pathology
Covers the basic pathologic processes of human disease, with a scientific foundation in etiology, pathogenesis, morphologic alterations, and effects of diseases of the organ systems. Emphasizes bone pathology and relevant disease states that affect the orofacial region.

Pharmacology—Chair and Professor: C. E. Reigel | Associate Professor: T. Panavelli | Assistant Professors: L. Gorman, M. Parker, C. Powell

CDM 2010—Pharmacology I
Introduces pharmacological concepts and principles, clinical indications, contraindications, risks, complications, and toxicity of drugs and pharmacological agents.

CDM 2130—Pharmacology II
Particular emphasis on the drugs and drug interactions important to the dentist as well as the principles and concepts of pharmacology and pharmacological actions and drug interactions.

Physiology—Professors: H. Mayrovitz, P. S. Taraskevich | Associate Professors: W. Schreier, Y. Zagyadin

CDM 1120—Physiology
Physical and chemical factors and processes responsible for the development, progression, and procreation of life; organ systems approach; cell function; membrane function; membrane translocation; electrophysiology; muscle physiology; neurophysiology; and cardiovascular, renal, respiratory, gastrointestinal, endocrine, and nervous systems.

CARIOLGY AND
RESTORATIVE DENTISTRY

Virtual Reality
Dental Simulation Rotations
High-tech computerized dental simulation is used to assist the D1 and D2 student in basic principles and procedures in tooth preparation. This virtual reality-type system stresses ergonomically correct technique, time efficiency, objective feedback, and small group learning. The rotations are scheduled along with Clinical Dental Assisting Rotation in the D1/Fall semester, and afterwards incorporated into existing courses in CDM 1210—Operative Dentistry, CDM 2060—Endodontics, and CDM 2080 and CDM 2270—Fixed Prosthodontics.

CDM 1010—Cariology
Introductory course dealing with the disease, dental caries—its prevention, causes, and treatment. The interdependent roles of saliva, diet, bacteria, plaque, fluoride application, and tooth factors, including heredity in this disease, are discussed. The medical model for diagnosis, treatment, and prevention is emphasized, while recording patient's caries risk assessment with selected courses of treatment. Special emphasis is given to the use of Diagnodent™, transilluminators, and ozone applicators.

CDM 1015—Clinical Dental Assisting Rotation I
This clinical rotation in the D1 fall semester provides the student with early exposure and experience in the professional clinical dental environment, including observation of diagnostic methods, dental procedures, and patient-student-faculty interaction. D1 students are instructed in basic dental assisting skills and infection control principles, and implement these skills while assisting D3 and D4 students in the CDM predoctoral clinics.

CDM 1016—Clinical Dental Assisting Rotation II
This clinical rotation in the D1 winter and D2 summer semesters gives the student continued and expanded exposure to the clinical dental environment in the CDM predoctoral student clinics. During this rotation, the D1 student's knowledge of biomedical science, dental procedures, instrumentation, and record keeping is further integrated with the clinical setting.

CDM 1080—Dental Anatomy Laboratory
In this course, characteristics differentiating each tooth will be replicated through the use of wax carving and add-on techniques. Anatomic and internal root anatomy drawings and the sorting and identification of teeth will also be useful tools in mastering tooth morphology. Emphasis will be placed on teaching students how to
develop their visual and psychomotor skills.

CDM 1090—Dental Anatomy Lecture
This course will provide the student with the understanding of basic dental terminology, tooth morphology, including external and internal root anatomy, the anatomical and functional differences of teeth, and the application of this knowledge to various phases of dentistry. In addition, the students will have an introduction to eruption sequences of teeth, comparative anatomy of permanent and primary dentitions, and dental anomalies.

CDM 1135—Multidisciplinary Introduction to Record Keeping
This course will give first-year dental students hands-on experience with completing dental treatment records by making entries in a “chart” made for the student's typodont. The students will participate in clinical exercises to generate their own dental records as well.

CDM 1200/CDM 1210—Operative Dentistry Lecture/Laboratory
These courses introduce the student to the management of dental caries based on a medical model and coordinate these teachings with CDM 1010—Cariology, which runs simultaneously.

CDM 1250—Virtual Reality Dental Simulation Laboratory
This preclinical dental simulation laboratory rotation provides the new dental student with an introduction to the use of dental instrumentation, terminology, tooth preparation, and dental ergonomics. The computerized technology provides immediate objective feedback and enhances the student's self-evaluation skills.

CDM 2000—National Board Dental Examination Part I Review
This course will be presented electronically and is available to students eligible to take the NBDE Part I. The materials provided in the presentation will provide a review of knowledge obtained in previous related courses. Contained within the presentation are released sample National Board Part I questions, which simulate the format of the standardized test.

CDM 2240—Documentation for Comprehensive Care Treatment Planning
This course provides formal lectures to guide students through the thought processes necessary in the development of treatment plans. The emphasis will be on comprehensive diagnosis and the approach used in our clinic for providing patients with optimal, alternative, and emergency treatment plans. Lectures will focus on the phase approach and will include the concept of decisional analysis. Students will develop treatment plans based on actual diagnostic aids. Expertise from various clinical and biological disciplines will be provided.

CDM 2241—Discipline-Integrated Comprehensive Care I
This course provides a group presentation/seminar format to help prepare students to deal with their patients from the standpoint of diagnosis and treatment planning. Groups of nine or less students per week (1 hour/week) will present well-researched, multidisciplinary case-based/problem-based treatment plans for consideration. The course instructor serves as facilitator for development of thought-provoking student presentations and as supporting lecturer to emphasize the link between discipline-integrated comprehensive care treatment and diagnostic/management sciences.

CDM 3240—Discipline-Integrated Comprehensive Care II
This course builds on course material from CDM 2241 (with a seminar format) and provides formal seminar/lecture presentations to help prepare students to deal with their patients from the standpoint of diagnosis and treatment planning and communication. The emphasis will be on exposing students to the approach used in our clinic of providing patients with options of optimal, alternative treatment planning for health and emergency diagnostic or recall treatment plans. Interactive seminars will emphasize the phase approach to treatment planning and will include the concept of decisional analysis.

CDM 3241—Discipline-Integrated Comprehensive Care III
This course provides a group presentation/seminar format to help prepare students to deal with their patients from the standpoint of diagnosis and treatment planning. Groups of nine or less students per week (1 hour/week) will present well-researched, multidisciplinary case-based/problem-based treatment plans for consideration. The course
include demonstration and clinical simulation. Participants must demonstrate competency by written and clinical simulation and examination in the safety aspects of laser use prior to using lasers.

CDM 4240—Discipline-Integrated Comprehensive Care IV
This course provides a group presentation/seminar format to help prepare students to deal with their patients from the standpoint of diagnosis and treatment planning. Groups of nine or less students per week (1 hour/week) will present well-researched, multidisciplinary case-based/problem-based treatment plans for consideration. The course instructor serves as facilitator for development of thought-provoking student presentations and as supporting lecturer to emphasize the link between discipline-integrated comprehensive care treatment and diagnostic/management sciences.

CDM 4500—Clinical Restorative Dentistry IV
CDM 4550—Clinical Restorative Dentistry V
CDM 4600—Clinical Restorative Dentistry VI

COMMUNITY DENTISTRY
Chair: D. Ede-Nichols | Associate Professors: J. Henkin, J. Tabak | Assistant Professor L. Sakarais, E. Shehadeh, F. Slavichak, J. Virag | Adjunct Faculty: M. Brothers, A. Burch, R. Cantor, J. Carle, M. Coultier, C. Fasano, C. Freidman, F. Knoll, G. Nieto, D. Rodriguez, D. Seiflin

The community dentistry curriculum serves to introduce the pre- and post-doctoral student to the underserved population within our community—including patients with developmental, acquired, medical, and mental disabilities and the frail elderly. It also includes ethics, behavioral science, issues related to the dental profession, and practice management. The curriculum integrates the didactic and clinical education by incorporating extramural rotations, externships, community health fairs, and residency programs. In addition, NSU-CDM has created the Institute for Special Needs Dentistry, located in the main clinic on the Davie campus. The institute allows for the enhancement of clinical training of students while providing much-needed dental care to these underserved populations.

CDM 1050—Ethics and Professionalism
This introductory course will provide the new student with an awareness of the ethical issues and expected behavior at the College of Dental Medicine. In addition, students will develop an understanding of the impact of various ethical issues as they relate to their dental education and future practices.

CDM 2085—Introduction to Special Needs Dentistry
Introduction to Special Needs Dentistry is a didactic and clinical course that will define special needs patients, focus on their oral health needs, and present methodology for overcoming the lack of care in this patient population.

CDM 3090—Introduction to the Dental Profession
Practice management and organizational theory, economic theory, and practical aspects of managing a dental practice.

CDM 3140—Special Needs Dentistry
CDM 3140 is a semester-long didactic course that presents a curriculum that introduces the predoctoral student to the pathophysiology of patients with special needs. The course will also demonstrate the management tools and techniques necessary for the provision of dental care to this underserved population in both the academic arena and the private practice setting.

CDM 4060—Practice Management I
The students will become acquainted with the basic steps and techniques in the business side of establishing a dental practice. These will include accounting principles and legal considerations in the process of forming a private practice. Contract form and content will be discussed. The areas of basic office design, equipment selection, and overall office organization including records and personnel will be reviewed.

CDM 4111—Practice Management II
A continuation of the practice management course. This course deals with dental practice administration and career opportunities. Discussion on contracts, career tracks, and residency will prepare the student for opportunities of specialty study or employment opportunities.
CDM 4611—Community Dentistry Rotation I
The community dentistry rotation is designed to complement the didactic course CDM 3140, presented in the winter semester of the D3 year. D4 students will use the didactic information to evaluate, assess, and provide treatment for individuals with developmental and acquired disabilities, medically and psychologically compromised patients, and the frail elderly. The D4 students will become familiar with the team approach to patient management, the logical appearance and treatment of specific disease entities involving the head and neck. Differential diagnosis is emphasized, giving clinical relevance to the discipline.

CDM 3021—Common Oral Conditions
A continuation of Oral Medicine I and II. The lectures are presented to develop the skills of interpreting a medical history through head and neck examinations and the dental management of the medically complex patient. The course will discuss the diagnosis and management of common oral and orofacial conditions as well as how to provide safe and effective oral health care for patients with life threatening medical disorders.

CDM 4020—Clinical Radiology Rotation I and II
In these clinical rotations, students practice radiographic techniques and interpretations in a clinical setting.

CDM 4020—Clinical Oral Medicine Case Presentations
Clinical manifestations of common systemic disorders are discussed to help students in making a tentative presumption diagnosis and developing a differential diagnosis.
CDM 4170—Oral Manifestations of Disease
A case-based presentation of common conditions and diseases that patients will bring to the general practitioner. The goal is to review the physiology, clinical signs and symptoms, and the modifications to dental treatment that may be necessary. Also to be included are pharmacotherapeutics of common oral conditions, tobacco cessation, and recommendation for referrals to dental specialists.

CDM 4505—Clinical Emergency Rotations I and II
The fourth-year student will develop a systematic approach to evaluating a patient who presents with severe pain or swelling in the orofacial region. The student will present an emergency treatment plan and provide the treatment as appropriate. Students on rotation will participate in a grand rounds summary at the close of each session to review specific patients and techniques.

CDM 4650—Clinical Radiology III and IV
Students practice radiographic techniques and interpretations in a clinical setting.

CDM 4404H—Oral Medicine Honors
This honors course will allow students with a special interest in the discipline of oral medicine to increase their exposure to patient cases involving advanced decision-making and clinical management skills beyond the scope of the predoctoral curriculum.

**ENDODONTICS**


CDM 2050—Endodontics Lecture
This course is an introduction to the theory and practice of endodontics. It presents the fundamental principles of the treatment of pulpal and periapical disease. Along with CDM 2060, it prepares the student to provide clinical endodontic treatment.

CDM 2060—Endodontics Laboratory
This course is an introduction to the actual treatment procedures required to treat pulpal disease. By carrying out procedures on extracted teeth from each tooth group, this course, along with CDM 2050, prepares the student to provide clinical endodontic treatment.

CDM 400H—Honors Endodontics
The honors program offers students who are beginning their fourth year of dental school the opportunity to apply for honors courses in one of eight different specialties. Candidate selection will be based on the approval of the associate dean of academic affairs and the director of clinics, as well as criteria established by each participating department chair. Students who are selected will take part in postdoctoral-level seminars, case presentations, and research. Additionally, honors students will assist in the diagnosis, treatment planning, and care of complex patients. The specific format of each honors program course will be provided to students at the time their applications are submitted.

CDM 403E—Advanced Elective in Endodontics

**ORAL AND MAXILLOFACIAL SURGERY**

Chair and Professor: S. Kaltman | Postgraduate Director, Oral and Maxillofacial Surgery, and Professor: J. McCain | Predoctoral Director and Assistant Professor: E. Arellano | Postgraduate Research Director and Assistant Professor: T. Koyama | Professor: S. Mintz | Adjunct Professors: E. Blanck, D. Feiner, K. Friedman, L. Garvar, K. Kaner, M. Kohn, H. Richman, P. Richmond, P. Seider, D. Smith, J. Stevens, S. Stewart, G. Wayne | Visiting Professors: B. Epker, S. Guttenberg, M. Pikos

CDM 2040—Anesthesia I
Didactic course that reviews the anatomy of the head and neck in relation to administration of local anesthesia. Topics covered include the pharmacology of local anesthetics and vasoconstrictors. Delivery and alternative anesthesia techniques are covered in this course. Clinical practice includes demonstration and hands-on experience in administering local anesthesia.

CDM 2150—Oral Surgery I
A didactic, lecture-oriented course that is reinforced with hands-on
practical sessions and demonstrations. Fundamentally, the predoctoral program is designed to prepare the student in oral and maxillofacial surgery as it relates to the practice of general dentistry. The major objective of this course is to provide introductory information on the full scope of oral and maxillofacial surgery.

CDM 2170—Anesthesia II
Didactic course that reviews the anatomy and physiology of respiration in relation to inhalation anesthetic agents and the pharmacology of nitrous oxide: oxygen analgesia and its use in the management of anxiety. Other topics covered include intravenous sedation/general anesthesia and pain and anxiety control.

CDM 3040—Oral Surgery II
Didactic series expanding on the background begun in the second semester of the sophomore year. Formal presentations to review the techniques of tooth extraction will be incorporated logically in sequence, incorporating pertinent review of the basic sciences. Hands-on instruction will be provided chairside. The student will be required to demonstrate competency in routine tooth extraction, flap elevation for more difficult extractions, and other minor oral surgical procedures. Students will also be exposed to more complex and modern practices in oral and maxillofacial surgery. This includes orthognathic surgery, TMJ surgery, pathology, and reconstruction surgery.

CDM 3507—Clinical OMFS Rotation I
Third-year students are assigned to clinical rotations to observe and to provide surgical treatment for patients requiring dentoalveolar surgery and the management of odontogenic infections. Proficiency in patient evaluation and surgical techniques is stressed.

CDM 4507—Clinical OMFS Rotation III
Fourth-year students are assigned to clinical rotations to observe and to provide surgical treatment for patients requiring dentoalveolar surgery and the management of odontogenic infections. Proficiency in patient evaluation and surgical techniques is stressed.

CDM 4999—Advanced Techniques in Pain and Anxiety Control
The goal of this course is to introduce the wide spectrum of pain and anxiety control available in dentistry. During this course, the student will establish a basic understanding of the additional techniques available to the dental practitioner to cope with the problems of anxiety and fear commonly found in dental patients. The advanced techniques learned are not only used for the purpose of aiding the fearful dental patient, but also in prevention of medical emergencies in the dental office by attenuating the potentially harmful effects associated with the stress response.

ORTHODONTICS
Chair and Director of Postgraduate Orthodontics: M. Meister | Professor: J. Burch | Acting Director of Postgraduate Orthodontics and Associate Professor: J. Zagarra | Assistant Professor: R. Masella | Associate Professor: J. Sotsky | Assistant Professors: J. Godel, S. Kessel, L. Matza, M. Minars | Adjunct Faculty: S. Aaron, S. Allen, A. Amelinckx, S. Berkowitz, A. Kapit, N. Le, B. Matza, M. Minars, H. Shullman, J. Singer, R. Singer, J. Tartakow | Visiting Professors: Z. Davidovich, R. Isaacson, S. Rosenstein

CDM 2005—Craniofacial Growth and Development
This course is intended to be a preliminary course in a new growth and development of the face and the head. Theories of the method of growth of the face and head, the method of the directional descent of the maxillary and mandibular complex, and the mechanisms of compensatory growth in maintaining the integrity of the stomatognathic system will be discussed.

CDM 2200—Orthodontics Lecture/Laboratory
The orthodontics lecture course is designed to teach students to assess normal and abnormal growth and development, diagnosis and classification of malocclusion, and differentiation between limited and comprehensive orthodontic treatment. The orthodontics laboratory course is designed to teach principles and concepts used in treatment in orthodontics and dentofacial orthopedics. Laboratory skills are taught in orthodontic mechanotherapy, enabling students to participate in the clinical experience.

CDM 3605—Orthodontic Clinical Comanagement Program
The predoctoral student will work with the postgraduate orthodontic student in all phases of orthodontic care including examination, diagnostic record taking, analysis, diagnosis, differential diagnosis, and treatment planning. The predoctoral student will join the postgraduate student in the postgraduate clinic for patients' orthodontic appointments, assisting in all phases of clinical care.

CDM 414H—Honors Program in Orthodontics and Facial Orthopedics

PEDIATRIC DENTISTRY
Chair and Professor: R. Ocanto | Director for Postgraduate Pediatric Dentistry and Associate Professor: M. Roseman | Professors: F. Garcia-Godoy, J. Berne, Y. Gomez-Ruane, E. Nacht, E. Packer, E. Pulver, G. Pyser, R. Sherman, E. Steinicki, D. Trupkin

CDM 2081—Introduction to Pediatric Dentistry
This course is a primer on the diagnosis and treatment planning of primary and mixed dentition patients. Emphasis will be placed on dental disease, etiology, and prevention, recognition and management of disorders common in childhood. This course prepares students for the second semester didactic and laboratory experience in pediatric dentistry.
CDM 2180—
Pediatric Dentistry Lecture
Provides the student with an overview of "normalcy" as well as the most common disorders and conditions in children. Diagnosis and treatment planning of pediatric patients with primary, transitional, and permanent dentitions are emphasized. This includes behavior management techniques, the development and morphology of the dentition, oral surgery and oral pathology, restorative and preventive procedures and materials, pulpal and periodontal therapy, traumatic injuries, space management, and oral habits. This course prepares students for their clinical interactions with children.

CDM 2190—
Pediatric Dentistry Laboratory
Behavioral and interpersonal components of working with children, basic information related to pediatric dentistry, concepts of facial and dental growth and development, and primary and permanent teeth.

CDM 3525—Clinical Pediatric Dentistry Rotations I and II
This course includes the clinical application of preclinical pediatric dentistry skills in children and adolescents. All patients are treated in a comprehensive care format with emphasis on: 1) nonpharmacological behavioral management; 2) record keeping, comprehensive diagnosis, and treatment planning; 3) common oral lesions and recommended treatments; 4) restorative dentistry including composite and amalgam restorations in primary and mixed dentition, anterior composites, pulp therapy, and stainless steel crowns; and 5) interceptive orthodontics. All clinical treatment is accomplished under the direct supervision of faculty members from the Department of Pediatric Dentistry.

CDM 4525—Clinical Pediatric Dentistry Rotations III and IV
Clinical application of pediatric dentistry preclinical skills and clinical skills acquired during the first year are accomplished in a population of indigent children attending extramural dental clinics in South Florida. All patients are treated in a comprehensive care format with emphasis on: 1) nonpharmacological behavioral management; 2) record keeping, comprehensive diagnosis, and treatment planning; 3) common oral lesions and recommended treatments; 4) restorative dentistry including composite and amalgam restorations in primary and mixed dentition, anterior composites, pulp therapy, and stainless steel crowns; and 5) interceptive orthodontics (space analysis and maintenance). All clinical treatment is accomplished under the direct supervision of faculty members from the Department of Pediatric Dentistry.

CDM 410H—
Honors Pediatric Dentistry

PERIODONTAL DISEASE


CDM 1070—Periodontology I
Overview of periodontology, basic terminology defined, and presenting learning objectives. The relationship of anatomical structures relative to the periodontium. Recognition and assessment of health of the periodontium. Introduction to histologic structures of the periodontium, gingival indices, and transcription of clinical findings into records. Introduction to periodontal diagnoses.

CDM 1170—Periodontology II
Introduction to histology of the gingival crevice, microbiology of the gingival crevice in health and disease, and periodontal pathology. The interrelationship between gingival microflora, the formation of dental plaque, and gingival disease. Review of histologic structures relative to diagnostic and therapeutic techniques. Correlates clinical procedures with the scientific (basic science) rationale; scope of periodontology signs and symptoms of gingival health and disease progression; and scientific data supporting the clinical observations, recording the clinical data, and introduction to basic treatment procedures designed to establish and maintain gingival health. Demonstration and application of instrumentation. Goals of the prophylaxis as a treatment modality. Initial clinical experience, the prophylaxis as a treatment modality.

CDM 1185—Introduction to Clinical Periodontology
Gives students the opportunity to apply the knowledge learned in Periodontology I and additional lectures in Periodontology II, which involve understanding and application of clinical data collection, examination of the periodontium, and instrumentation techniques. Students are required to apply their knowledge first on their classmates and then on an assigned patient requiring a prophylaxis.

CDM 2030—Periodontology III

CDM 2160—Periodontology IV
Histopathology of periodontal lesions, root planing, early periodontitis, and moderate and advanced periodontitis. Histopathology of tooth mobility, injury and repair. Treatment of the early gingival/periodontal lesion. The rationale and implementation of...
The purpose of this year in periodontology is to provide students with clinical experience to recognize periodontal disease of the hard and soft tissues and develop skills related to hand instrumentation. After active periodontal treatment is completed, students will provide treatment and follow the progress of patients involved in supportive periodontal therapy. Each student will plan appropriate maintenance sequences for their patient.

CDM 3502—Clinical Periodontology VI
The purpose of this course is to introduce the student to the concepts of clinical periodontology and further develop skills related to hand instrumentation. After active periodontal treatment is completed, students will provide treatment and follow the progress of patients involved in supportive periodontal therapy. Each student will plan appropriate maintenance sequences for their patient.

CDM 4501—Clinical Periodontology VII
The purpose of this course is to provide students with clinical experience to recognize periodontal disease of the hard and soft tissues and develop a process for formulating a proper sequenced and effective periodontal treatment plan, focusing on early to moderate periodontitis. In addition, students will be exposed to protocols relative to implant maintenance.

CDM 4502—Clinical Periodontology VIII
The purpose of this year in periodontology is to provide students with clinical experience to recognize periodontal disease of the hard and soft tissues and develop a process for formulating a properly sequenced and effective periodontal treatment plan, focusing on early to moderate periodontitis. In addition, students will be exposed to protocols relative to implant maintenance.

CDM 4503—Clinical Periodontology Rotation
The purpose of this course is to provide students with the clinical experience to recognize periodontal disease of the hard and soft tissues and develop a process for formulating a properly sequenced and effective periodontal treatment plan focusing on moderate to advanced periodontitis. In addition, students will be exposed to protocols relative to implant placement and restoration in harmony with maintenance of a healthy periodontium. Students will understand the interrelationships of periodontal medicine relative to low birth weight babies, cardiovascular disease, osteoporosis, and diabetes.

CDM 402H—Honors Periodontology

PROSTHODONTICS

CDM 1100—Dental Biomaterials I Lecture
At the end of this course, students will be able to understand the optimum performance requirements, properties, and handling characteristics for specific dental materials as well as understanding the selection criteria based on clinical significance of the mechanical and physical properties of dental materials.

CDM 1220—Occlusion I Lecture
Occlusion is the branch of dentistry that relates to the form and function of the masticatory system. Dental students must have a broad understanding of embryology, histology, growth and development, head and neck anatomy, dental anatomy, and physiology. They will be responsible for incorporating the knowledge from current and previous courses to aid in their understanding of occlusion. This course will provide the dental student with basic information and knowledge in dental occlusion and its related topics. Through lectures, the dental student will attain a comprehensive understanding of the related areas of dental anatomy and occlusion. This course will introduce the concepts of anatomy and normal function of the stomatognathic system.

CDM 1221—Occlusion I Laboratory
Occlusion is the branch of dentistry that relates to the form and function of the masticatory system. Dental
students must have a broad understanding of embryology, histology, growth and development, head and neck anatomy, dental anatomy, and physiology. They will be responsible for incorporating the knowledge from current and previous courses to aid in their understanding of occlusion. This course will provide the dental student with information and knowledge in dental occlusion and its related topics. Through preclinical procedures, the dental student will attain a comprehensive understanding of related areas of dental anatomy and occlusion. The beginning of the course will be dedicated to practical application of the basic concepts of occlusion in the laboratory. Toward the end, the course will be dedicated to the practical application (laboratory) of more advanced concepts of occlusion. This course will be held in the CDM Sim-lab.

CDM 1230—
Dental Biomaterials Laboratory
At the end of this course, students will be able to understand the optimum performance requirements, properties, and handling characteristics of specific dental materials as well as understanding the selection criteria based on clinical significance of the mechanical and physical properties of dental materials.

CDM 2070/CDM 2080—
Fixed Prosthodontics I Lecture/Laboratory
Appropriate use of the terminology and instruments, psychomotor skills of tooth preparation, and provisional and final restoration. Preparing teeth for single or multiple unit cast fixed prosthodontic restorations and fabricating provisional restorations for single or multiple unit restorations.

CDM 2090/CDM 2100—
Removable Partial Prosthodontics Lecture/Laboratory
Fundamental technical knowledge, concepts, and skills. Diagnosing and treating oral conditions that require replacement of lost teeth and their associated structures with complete and partial removable dentures.

CDM 2101—
Dental Biomaterials II Lecture
At the end of this course, the students will be able to understand the optimum performance requirements, properties, and handling characteristics for specific dental materials, as well as understanding the selection criteria based on clinical significance of the mechanical and physical properties of dental materials.

CDM 2102—
Dental Biomaterials II Laboratory
At the end of this course, the students will be able to understand the optimum performance requirements, properties, and handling characteristics of several dental materials, as well as understanding the clinical significance of the mechanical and physical properties of dental materials.

CDM 2220/CDM 2230—Complete Denture Prosthodontics Lecture/Laboratory
Fundamental technical knowledge, concepts, and skills. Diagnosing and treating conditions that require replacement of lost teeth and their associated structures with complete and partial removable dentures.

CDM 2260/CDM 2270—
Fixed Prosthodontics II Lecture/Laboratory
The lecture course presents theory and technique of anterior and posterior fixed partial dentures, porcelain application, and treatment of endodontically treated teeth as they relate to the overall restorative treatment of the patient. This course, in conjunction with the laboratory course, provides the foundation for the student to use the same knowledge and techniques that will be used in clinical application.

CDM 3060—TMD
This course is a series of lectures that present the clinical evaluation, diagnosis, and management of patients that present with pain and/or dysfunction in the masticatory system (temporomandibular disorders) and other related orofacial pain conditions.

CDM 3120—
Implant Restorative Dental Lecture
Instead of providing programs based on the materials of implant manufacturers, the approach will be one of comparative implantology which will emphasize the biological background relating to implant systems. Demonstrations and case presentations will be provided. Where possible, evidence-based studies will be referenced.

CDM 3130—Cosmetic Dentistry
This course provides formal lecture presentations and practical laboratory projects to help prepare and familiarize students with esthetic dental procedures commonly performed by general dentists.

CDM 3200—Laboratory and Clinical Applications of Occlusion
After completion of this clinical-laboratory course, the dental student should be able to perform impressions, obtain face bow record, obtain occlusal records, properly mount the casts in the articulator and perform an occlusal analysis in the clinical setting, and use these records for diagnostic purposes.

CDM 3221—
Advanced Clinical Occlusion
This course will provide the dental students with a complete understanding of the normal function of the masticatory system and will be the introduction to the studies on occlusal analysis and occlusal diagnosis. Through lectures and preclinical and guided clinical procedures, the dental students will attain a comprehensive understanding on all the related areas of dental anatomy and occlusion.

CDM 3410—Clinical Fixed Prosthodontics I
Clinical experience consists of preparing and placing anterior and posterior fixed partial dentures, single coronal restorations. Restorations may be of full gold, complete porcelain or a combination of the two. Restorations on implants are an integral part of the clinical experience. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 3411—Clinical Removable Prosthodontics I
Clinical application of preclinical skills in complete and removable dentures, overdentures on teeth and implants are accomplished on patients. All patients are treated in the comprehensive care format with
emphasis on the whole head and neck. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 3420—Clinical Fixed Prosthodontics II
Clinical experience consists of preparing and placing anterior and posterior fixed partial dentures, single coronal restorations. Restorations may be of full gold, complete porcelain, or a combination of the two. Restorations on implants are an integral part of the clinical experience. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 3421—Clinical Removable Prosthodontics II
Clinical application of preclinical skills in complete and removable dentures, overdentures on teeth and implants are accomplished on patients. All patients are treated in the comprehensive care format with emphasis on the whole head and neck. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 3430—Clinical Fixed Prosthodontics III
Clinical experience consists of preparing and placing anterior and posterior fixed partial dentures, single coronal restorations. Restorations may be of full gold, complete porcelain or a combination of the two. Restorations on implants are an integral part of the clinical experience. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 3431—Clinical Removable Prosthodontics III
Clinical application of preclinical skills in complete and removable dentures, overdentures on teeth and implants are accomplished on patients. All patients are treated in the comprehensive care format with emphasis on the whole head and neck. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 3530—Evidenced-Based Dentistry in Clinical Practice
This lecture series presents historical aspects of the development of critical thinking in health care. It provides the student with different sources for accessing scientific information and reviews scientific articles and principles in observational and epidemiological studies. It stresses the importance of evidenced-based cases and the principles of clinical decision-making and statistics.

CDM 4410—Fixed Prosthodontics IV
Clinical application of preclinical skills in complete and removable dentures, overdentures on teeth and implants are accomplished on patients. All patients are treated in the comprehensive care format with emphasis on the whole head and neck. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 4411—Clinical Removable Prosthodontics IV
Clinical experience consists of preparing and placing anterior and posterior fixed partial dentures, single coronal restorations. Restorations may be of full gold, complete porcelain, or a combination of the two. Restorations on implants are an integral part of the clinical experience. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 4420—Fixed Prosthodontics V
Clinical experience consists of preparing and placing anterior and posterior fixed partial dentures, single coronal restorations. Restorations may be of full gold, complete porcelain, or a combination of the two. Restorations on implants are an integral part of the clinical experience. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 4421—Removable Prosthodontics V
Clinical application of preclinical skills in complete and removable dentures, overdentures on teeth and implants are accomplished on patients. All patients are treated in the comprehensive care format with emphasis on the whole head and neck. All clinical treatment is accomplished under the direct supervision of faculty members.

CDM 412H—Honors Prosthodontics (Fall 2006 and Winter 2007)
Advanced students with a high interest in prosthodontics attend honors prosthodontic seminars and gain experience in clinical prosthodontics, treating more complex patients.

Related Educational Programs
The College of Dental Medicine also offers the following programs:

Combined D.M.D/Master's Degree in Health Law
Students seeking specialized knowledge in law as related to health care may apply for admission to the combined D.M.D./Master's Degree in Health Law Program. The master's degree in health law is an online program offered by NSU’s Shepard Broad Law Center, requiring significant self-directed study and learning.

Combined D.M.D/Master's Degree in Public Health
An academic track combining specialized knowledge in public health, leading to the M.P.H. degree, with the doctor of dental medicine curriculum will enhance career prospects in government and private health care enterprises. This program will require 6-12 months of additional study beyond the four years needed for the D.M.D. Application may be made on successful completion of the first dental-school year.

Combined D.M.D/Doctoral Degree in Health Care Education
In the third dental year, applicants considering part-time or full-time teaching and administration in dental education and whose clinical competencies are current may apply for enrollment in either the master's degree or doctoral degree in health care education programs. Candidates for the master's degree in health care education will spend the year after dental school graduation in full-time study in education, while doctoral candidates will invest two to three years of study in education after receipt of the D.M.D. degree.
Predoctoral Honors Research Program

Students showing exceptional performance in biomedical sciences, laboratory, and clinical dentistry will be eligible for selection to the Predoctoral Honors Research Program. Under the supervision of faculty members, these students will gain familiarity with the scientific method and engage in laboratory and clinical research leading to preparation and presentation of a scientific article. One credit per semester may be earned through this program.

Predoctoral Honors Peer Tutoring

Students with exceptional academic records will be eligible to offer peer tutoring classes to predoctoral students in need of academic assistance. Peer tutors will receive transcript credit and an hourly wage for their time.

Predoctoral Honors Clinical Participation Program

Students with exceptional academic records will be eligible for special clinical experiences in the third and fourth years of predoctoral study in endodontics, oral surgery, orthodontics, pediatric dentistry, and restorative dentistry. Selection of such participants will be at the discretion of the department chairperson.

Research

The College of Dental Medicine in the Health Professions Division of Nova Southeastern University provides an active and collaborative research environment that is growing rapidly. Currently, the NSU College of Dental Medicine has eight D.D.S./Ph.D.s and four basic science Ph.D.s on the full-time faculty. Recently, 13 new research faculty members have been hired: 12 Ph.D.s (eight of which have D.D.S./Ph.D.s) and 1 D.D.S./M.S. Further, 18 of the faculty members have dual research/clinical graduate degrees and 12 of these are also practicing clinicians. Each of these is working together in some capacity with our health professional postdoctoral students on research activities.

The NSU College of Dental Medicine is currently engaged in research areas that meet the national agenda such as neoplastic diseases of the head and neck, bacterial genetics, craniofacial anomalies and healing, infectious diseases, biomaterials, biomimetics and tissue engineering, systemic manifestations of oral disease, and diabetes. Our research program is expected to attract, develop, and train scientists with an appreciation for research directed toward the needs of underserved and special care populations, including geriatrics, and to meeting health disparities in health care and health care delivery.

The continuous development of research infrastructure and research training programs within the College of Dental Medicine and the Health Professions Division significantly strengthens the research program at the dental college. The international experience of the faculty members and the opportunities for research exchange also add strength and diversity to the research program.

Postdoctoral Programs

The College of Dental Medicine developed postdoctoral specialty training programs in several fields starting in the fall of 1997. There are training positions available in endodontics, orthodontics, pediatric dentistry, periodontology, prosthodontics, advanced education in general dentistry, and an oral and maxillofacial surgery program that was initiated in 2002.

These programs are supervised by board-certified and educationally qualified dental specialists.

Postdoctoral Core Courses

All postdoctoral students are required to take the following courses during their first year:

- CDM 5000—Advanced Dental Radiology
  Consideration of hard and soft tissue craniofacial imaging modalities, including MRI, tomography, and digital imaging.

- CDM 5004—Advanced Oral Histology and Embryology
  Cytological and developmental considerations in embryological, fetal, and neonatal human craniofacial growth and development.

- CDM 5006—Fundamentals of Biostatistics
  Analysis of descriptive and inferential statistics as used in contemporary biomedical research, including electronic-based statistical programs.

- CDM 5002—Research Design
  The objective of this course is to learn how to plan research projects, initiate the projects, and effectively present the findings. Critical evaluation of the literature about the field of interest will be emphasized.

CDM 5003—Advanced Microbiology and Cell Biology

This course offers graduate training in microbiology, including virology, bacteriology, microbial genetics, and microbial pathogenesis.

CDM 5008—Advanced Medical Physiology

This course gives a detailed examination of cells and their transport—cardiac, pulmonary, and acid base—as related to maintenance of oral health and onset of disease.

CDM 5109—Ethics and Jurisprudence

This course reviews hallmarks of dental professional ethics and aspects of the law that commonly impact on the daily practice of dentistry.

CDM 5102—Advanced Oral and Maxillofacial Pathology

Gross and histological specimen consideration in hard and soft tissue diseases of the oral and maxillofacial structures.

CDM 5103—Advanced Head and Neck Anatomy Lecture Series

Didactic and dissection-based consideration of head and neck structure and function essential to advanced dental practice.

CDM 5104—Advanced Head and Neck Anatomy Lab Series

Laboratory-based consideration of head and neck structure and function essential to advanced dental practice.
The didactic portion of the program curriculum that concentrates heavily on knowledge of the literature. The program is designed to fulfill the specialty certification of the American Board of Endodontics.

The program also includes research, teaching, and instruction by several well-known visiting professors.

Postdoctoral Orthodontics
The Department of Orthodontics offers a 24-month postdoctoral training program designed to fulfill the specialty certification requirements of the American Board of Orthodontics. Comprehensive lectures in the relevant basic sciences as well as seminars and case conferences in the clinical art and science of orthodontics comprise one component of the program.

The other component of the program includes clinical treatment of adults, adolescents, and children to enable the student to develop proficiency in the use of basic edgewise and other orthodontic appliances. Interdisciplinary conferences and coordinated treatment procedures of complex cases with postdoctoral periodontic, prosthodontic, and endodontic students are part of the educational experience.

Students will be required to complete a research project and to participate as assistant instructors in the predoctoral orthodontics course.

Postdoctoral Oral and Maxillofacial Surgery
Nova Southeastern University offers a four-year accredited program in oral and maxillofacial surgery sponsored by the College of Dental Medicine. This clinical and didactic program is designed to meet the accreditation standards set forth by the Commission on Dental Accreditation of the American Dental Association and certification requirements of the American Board of Oral and Maxillofacial Surgery.

The program has been designed to give residents a broad academic and didactic experience in the complete spectrum of oral and maxillofacial surgery. To increase the scope of the residents' training and to maximize available clinic exposure, rotations through a multihospital network—including two level 1 trauma centers and two outpatient clinics—will provide the core teaching sites of the program. Residents will gain experience in the full scope of oral and maxillofacial surgery with particular strengths in the areas of maxillofacial trauma, reconstruction, cleft and craniofacial surgery, cosmetic maxillofacial surgery, temporomandibular joint procedures, and implant surgery. Residents are assigned to formal rotations in anesthesia, medicine, general surgery, trauma surgery, plastics, and head and neck surgery.

The curriculum is designed to develop the clinical, academic, and communicative skills that will provide for diversified career options. Graduates of the program will be prepared to pursue a contemporary full scope oral and maxillofacial surgery practice and be prepared for licensure and the rigorous of special board examination.

Postdoctoral Pediatric Dentistry
The Department of Pediatric Dentistry offers a 24-month postdoctoral program in pediatric dentistry. The program is designed to prepare the student to fulfill the specialty certification of the American Board of Pediatric Dentistry. This university and hospital-based training program includes significant hospital and extramural affiliations in the Miami and Fort Lauderdale areas.

Lectures, seminars, and multidisciplinary conferences are conducted related to pediatric patients and their dental treatment. Students are trained in hospital and operating room protocol including the use of general anesthetics. They also serve as instructors in the predoctoral laboratory and clinic. An original research project must be conducted by each student.

Upon successful completion of the program, the trainee receives a certificate in pediatric dentistry.

Postdoctoral Periodontology
The Department of Periodontology offers a 36-month postdoctoral program that is designed to prepare the student for the American Board of Periodontology exam. The program is open to all dental school graduates. Internship or residency experience is preferred, but not required.

The program consists of a didactic core curriculum in basic sciences and behavioral sciences, a series of seminars in periodontology and implant dentistry, literature review seminars, and periodontal prosthesis. Students will participate as clinical instructors in the predoctoral periodontology clinic. In addition, all students participate in related research.

Postdoctoral Prosthodontics
The 36-month postdoctoral program in prosthodontics is open to all dental school graduates. Internship or residency experience is preferred, but not required.
The program consists of a didactic core curriculum in basic sciences and behavioral sciences; a series of seminar presentations in prosthodontics, periodontology, and implant dentistry; and literature review seminars. Students will be prepared and encouraged to pursue the specialty certification of the American Board of Prosthodontics.

**Advanced Education in General Dentistry**

The Department of Community Dentistry offers a program in Advanced Education in General Dentistry (AEGD). The AEGD Program began in 2001, based at the college's new 28-chair clinic at the North Miami Beach (NMB) campus. The NMB AEGD is a multi-post option one- or two-year program. The optional second year of the program includes either a special needs care track or a geriatric dentistry track. The didactic portion of the program includes a core science curriculum designed to provide all postdoctoral students with a basic interdisciplinary education and a detailed general practice curriculum. Various off-site rotations are included. The program pays a stipend and fringe benefits including health and professional liability insurance.

**Master of Science in Dentistry**

The goal of the Master of Science in Dentistry Program is to provide advanced training in research and research methodology to students, primarily those enrolled in one of the College of Dental Medicine's postdoctoral programs. All master's degree candidates are required to complete a core curriculum of courses, emphasis track courses, and a research thesis. Research in this program includes various aspects of craniofacial/oral health and disease. Graduates of this master's degree program will be trained to think critically, enabling them to more readily pursue research activities and academic careers. For postdoctoral students enrolled in the master's degree program, requirements for both postdoctoral program certification and the master of science in dentistry program will be fulfilled concurrently. Those master's degree candidates who are not currently students enrolled in one of the college's postdoctoral programs will be required to meet the College of Dental Medicine's Office of Admissions criteria. It is anticipated that students who are accepted into the master's degree program will complete the program requirements within two to three years. Final decisions regarding a student's participation in this master's degree program are at the dean's discretion.

**Anticipated Expenses**

Equipment costs for each program will be equal to or less than the average for all U.S. dental schools.

**Requirements for Admission**

The College of Dental Medicine selects postdoctoral students based on application content, academic record, letters of recommendation, National Board Dental Examination scores (if taken), and personal interview.

Prior to matriculation, applicants must have completed a D.M.D., D.D.S., or an equivalent degree.

**Application Procedure**

The applicant should mail the following materials by March 15, 2007:

1. the completed College of Dental Medicine application for postdoctoral students
2. a nonrefundable application fee of $50
3. an official transcript from each college, professional school, or university attended. Coursework taken at foreign institutions must be evaluated for U.S. institution equivalence. This coursework must be evaluated by one of the services listed below.

Students should contact one of the following:

- World Education Services
  P.O. Box 745
  Old Chelsea Station
  New York, New York 10113-0745
  (212) 966-6311
  www.wes.org
- Josef Silny & Associates
  7101 SW 102nd Avenue
  Miami, Florida 33173
  (305) 273-1616
  (305) 273-1338 fax
  www.jsilny.com
  info@jsilny.com
- Educational Credential Evaluators
  P.O. Box 514070
  Milwaukee, Wisconsin 53203-3470
  (414) 289-3400
  www.ece.org

It is the applicant's responsibility to have this coursework evaluated, and an official evaluation must be provided.

The applicant must arrange for the following to be sent to Nova Southeastern University, Enrollment Processing Services (EPS), College of Dental Medicine, Office of Admissions, 3301 College Avenue, P.O. Box 299000, Fort Lauderdale, Florida 33329-9905

**Postdoctoral Tuition and Fees**

- Tuition for all postdoctoral programs for 2007–2008 (subject to change by
the board of trustees without notice) is $32,357. A Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually.

- Acceptance fee is $500. This fee is required to reserve the accepted applicant's place in the entering first-year class. This advance payment will be deducted from the tuition payment due on registration day, but is not refundable in the event of a withdrawal. It is payable within two weeks of an applicant's acceptance.

- Deposit is $500, due March 15, under the same terms as the acceptance fee.

- Preregistration fee is $1,000, due May 15, under the same terms as the acceptance fee.

The first semester's tuition and fees, less the $2,000 previously paid, are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day. Students will not be admitted until their financial obligations have been met. It is extremely important that applicants be committed to meeting their financial responsibilities during their training. This should include tuition, living expenses, books, equipment, and miscellaneous expenses.

It is mandated that each student carry adequate personal medical and hospital insurance. Students may avail themselves of the hospitalization insurance plan obtainable through the university.
Health Professions Division

Emeritus Faculty

Reba L. Anderson
Emeritus Professor, Occupational Therapy
B.S., Richmond Professional Institute, 1959
M.A., University of Florida, 1970
Ph.D., University of Florida, 1982
Fellow, American Occupational Therapy Association

Donald C. Bergmann
Emeritus Professor, Pathology
B.S., Baldwin-Wallace College, 1942
D.O., Kirksville College of Osteopathic Medicine, 1945
Fellow, American College of Pathologists

Clarence L. Brumback
Emeritus Professor, Community Medicine
A.B., University of Kansas, 1936
M.D., University of Kansas, 1943
M.P.H., University of Michigan, 1948
Fellow, American College of Preventive Medicine

Daniel M. Finkelstein
Emeritus Professor, Radiology
B.A., New York University, 1943
D.O., Philadelphia College of Osteopathic Medicine, 1946

Maxwell Greenhouse
Emeritus Professor, Osteopathic Principles and Practice
B.A., Webster University, 1939
D.O., University of Osteopathic Medicine and Health Sciences, 1939
M.S., Kansas University, 1943
D.P.H., Kansas University, 1943

William D. Hardigan
Emeritus Dean, Pharmacy
Professor, Pharmaceutical and Administrative Sciences

Lester Janoff
Emeritus Professor, Optometry
O.D., Pennsylvania College of Optometry, 1953
M.S.Ed., University of Southern California, 1975
Fellow, American Academy of Optometry

Stanley B. Kaye
Emeritus Professor, Surgery
B.A., University of Arizona, 1949
D.O., University of Health Sciences College of Osteopathic Medicine, 1954
Fellow, American College of Osteopathic Surgeons

Harold Kirsh
Emeritus Professor, Surgery
B.S., St. John's University, 1942
D.O., University of Health Sciences College of Osteopathic Medicine, 1946
Fellow, American College of Osteopathic Surgery

Michael A. Longo
Emeritus Professor, Surgery
B.S., Ohio State University, 1966
M.S., Ohio State University, 1971
Ph.D., University of Southern California, 1995
Fellow, American Occupational Therapy Association

Ferol Menks Ludwig
Emeritus Professor, Occupational Therapy
B.S., Ohio State University, 1966
M.S., Ohio State University, 1971
Ph.D., University of Southern California, 1995
Fellow, American Occupational Therapy Association

Nancy Nashiro
Emeritus Professor, Occupational Therapy
<table>
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<tr>
<th>Name</th>
<th>Title/Institution</th>
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<tbody>
<tr>
<td>Sigmund Stahl</td>
<td>Emeritus Associate Dean and Professor, Dental Medicine, 1944</td>
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<tr>
<td>Paul Ashplals</td>
<td>Professor, Optometry</td>
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<tr>
<td>Renee B. Alexis</td>
<td>Assistant Professor, Obstetrics and Gynecology, 1989</td>
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<td>Paulina A. de Alzars</td>
<td>Assistant Professor, Pathology, 1976</td>
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<tr>
<td>Laura M. Amon</td>
<td>Associate Chair and Assistant Professor, Physician Assistant Studies, 1989</td>
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<tr>
<td>Deborah Amster</td>
<td>Assistant Professor, Optometry, 1997</td>
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<tr>
<td>Holly Anderson</td>
<td>Assistant Professor, Pharmacy Practice, 1978</td>
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<tr>
<td>Paula L. Anderson-Wort</td>
<td>Assistant Professor, Family Medicine, 1976</td>
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<tr>
<td>John Antonelli</td>
<td>Professor, Prosthodontics, 1976</td>
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<td>Maryellen Antonetti</td>
<td>Clinical Director and Assistant Professor, Physician Assistant Studies, 1996</td>
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<tr>
<td>Donald Antonson</td>
<td>Chair, Cardiology and Restorative Dentistry, 1997</td>
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<td>Sibel Antonson</td>
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<td>Arthur Snyder</td>
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Health Professions Division—Full-time Faculty Members
H. John Baldwin
Associate Dean, Research and Graduate Studies
Professor, Pharmaceutical and Administrative Sciences
B.Sc. (Pharm.), University of Manitoba, 1962
M.S., Purdue University, 1967
Ph.D., Purdue University, 1969

Daniel R. Barkus
Professor, Obstetrics and Gynecology
B.A., Temple University, 1955
M.D., Philadelphia College of Osteopathic Medicine, 1959
Fellow, American College of Obstetricians and Gynecologists

Mary Bartuccio
Assistant Professor, Optometry
O.D., Nova Southeastern University, 1997

Herbert Bass
Assistant Professor, Cariology and Restorative Denistry
D.D.S., University of New York, 1961

Harvey Beaver
Assistant Professor, Pediatric Dentistry
D.D.S., New York University, 1961
Fellow, American Academy of Pediatric Dentistry

Cheryl Beckey
Assistant Professor, Pharmacy Practice
Pharm.D., Nova Southeastern University, 2002

Kristina Beekhuizen
Assistant Professor, Physical Therapy
B.S., University of Miami, 1992
M.S., University of Miami, 1997
Ph.D., University of Miami, 2004

James F. Benenati
Medical Director, Vascular Sonography Program
B.S., University of Notre Dame, 1978
M.D., University of South Florida College of Medicine, 1984

Sandra Benavides
Assistant Professor, Pharmacy Practice
Pharm.D., University of California, 2001

Camille Z. Bentley
Associate Professor, Family Medicine
B.S., University of South Florida, 1977
M.S., George Mason University, 1982
D.O., Southeastern University College of Osteopathic Medicine, 1992

Eulogio Besada
Associate Professor, Optometry
O.D., University of Houston, 1989

Gregory Black
Assistant Professor, Optometry
O.D., Indiana College of Optometry, 1996

Mary T. Blackinton
Director, T.D.P.T. Program and Assistant Professor
B.S./P.T., University of Pennsylvania, 1981
M.S., George Mason University, 1982
Ed.D., Nova Southeastern University, 2002

Cyril Blavo
Professor, Public Health
Professor, Pediatrics
B.S., Abilene Christian University, 1973
M.S., Abilene Christian University, 1985
D.O., Texas College of Osteopathic Medicine, 1984
M.P.H. and Ph.D., Tulane University School of Public Health and Tropical Medicine, 1985
Fellow, American College of Osteopathic Pediatricians

Charles Bleicher
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., University of Pennsylvania, 1960

Jeffrey M. Bleicher
Associate Professor, Nephrology
B.S., Muhlenberg College, 1973

Ronald E. Block
Professor and Chair Biochemistry
B.S., College of Charleston, 1963
M.S., Clemson University, 1966
Ph.D., Clemson University, 1969

David R. Boesler
Associate Professor, Osteopathic Principles and Practice
B.A., LaSalle University, 1981
M.S., Villanova University, 1983
D.O., Des Moines University College of Osteopathic Medicine and Surgery, 1988

Carolyn Bordenkircher
Clinical Assistant Professor, Pharmacy
A.A., Broward Community College, 1994
Pharm.D., Nova Southeastern University, 1998

Nancy Borja
Clinical Assistant Professor, Pharmacy Practice
A.A., University of Florida, 2001
Pharm.D., University of Florida, 2005

George S. Bowen
Professor, Preventive Medicine
Professor, Public Health
B.A., University of California, 1964
M.D., The Regents of the University of California, 1968
M.P.H., University of California, 1971

Paul Bradley
Professor, Diagnostic Sciences
B.D.S., University of Birmingham, 1959
M.B., B.S., University of London, 1966
F.D.S.R.C.S. (Eng), Royal College of Surgeons of England, 1985
F.D.S.R.C.S. (Edin), Royal College of Surgeons of Edinburgh, 1985
F.D.S.R.C.S. (Edin), Royal College of Surgeons of Edinburgh, 1988
M.D., University of London, 1989

Abby Brodie
Assistant Dean, Curriculum and Educational Affairs

D.O., Des Moines University College of Osteopathic Medicine, 1976

Associate Professor, Cariology and Restorative Dentistry
D.M.D., University of Pennsylvania, 1983

Dawn Brown-Cross
Associate Professor, Physical Therapy
B.S., Kean College, 1983
M.B.A., University of South Florida, 1985
Ed.D., Nova Southeastern University, 2000

James Burch
Professor, Orthodontics
D.D.S., Ohio University, 1962
M.S., Ohio State University, 1966
CT, Ohio State University, 1966
CT, Ohio State University, 1979

Donald E. Burris
Professor, Microbiology
B.S., Ohio University, 1976
Ph.D., Washington State University, 1986

Josh Caballero
Assistant Professor, Pharmacy Practice
B.A., University of Florida, 1997
Pharm.D., University of Tennessee—Memphis, 2001

Diane Calderon
Assistant Professor, Optometry
O.D., Pennsylvania College of Optometry, 2003

Pablo J. Calzada
Assistant Professor, Family Medicine
M.P.H., University of South Florida, 2001
D.O., Southeastern University College of Osteopathic Medicine, 1993

W. Grady Campbell
Associate Professor, Biochemistry
B.S., Emory University, 1991
M.S., University of Tennessee, 1995
Ph.D., University of Florida Medical School, 1998

Stuart Caplan
Assistant Professor, Diagnostic Sciences
D.D.S., Marquette University, 1963
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<td>Robert L. Casady</td>
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<td>Margaret Davis</td>
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<td>Richard E. Davis</td>
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<td>Hilda M. DeGaetano</td>
<td>Associate Professor, Pediatrics</td>
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<td>Joseph S. DeGaetano</td>
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<td>Kimberly Demonaco</td>
<td>Director and Instructor, Periodontology</td>
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<td>R.D.H., University of Pittsburgh, 1989</td>
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Health Professions Division—Full-time Faculty Members
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<th>Name</th>
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<tr>
<td>Lori B. Dribin</td>
<td>Associate Professor, Anatomy</td>
<td>Northwestern University</td>
<td>1972</td>
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<td>M.S., Northwestern University</td>
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<tr>
<td>Lisa M. Deziel-Evans</td>
<td>Executive Associate Dean,</td>
<td>Washington University</td>
<td>1983</td>
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<td></td>
<td>Professor, Pharmacy Practice</td>
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<td>B.S. (Pharm.), Washington</td>
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<td>Morton A. Diamond</td>
<td>Medical Director and Professor</td>
<td>New York University</td>
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<td>Associate Professor, Optometry</td>
<td>Nova Southeastern University</td>
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<td>Fellow, American Academy of Optometry</td>
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<td>David B. Fink</td>
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<td>LaSalle University</td>
<td>1982</td>
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<td>M.S., Drexel University</td>
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<td>1956</td>
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<td>1978</td>
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<td>2001</td>
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<td>College of Dental Medicine</td>
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<td>D.S., University of Boston</td>
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<td>Rosebud Foster</td>
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422  Health Professions Division—Full-time Faculty Members  

423  Health Professions Division—Full-time Faculty Members
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<th>Institution</th>
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B.C.E., University of Florida, 1965
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Speros G. Hampilos
Clinical Assistant Professor, Family Medicine
<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Institution</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>Jon F. Harrell</td>
<td>Clinical Assistant, Philadelphia College of Osteopathic Medicine, 1984</td>
<td>1978</td>
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<tr>
<td>Usama A. Hanhan</td>
<td>Clinical Assistant Professor, Pediatrics, M.D., University of Jordan, Medical School, 1983</td>
<td>1983</td>
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<td>Andrew J. Hanly</td>
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<td>1991</td>
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<tr>
<td>Dennis E. Hanney</td>
<td>Clinical Assistant Professor, Cardiology, B.A., Hofstra University, 1971, M.A., Hollins College, 1972, D.O., Kirksville College of Osteopathic Medicine, 1976</td>
<td>1976</td>
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<td>Andrew Hano</td>
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<td>1977</td>
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<tr>
<td>Ryan Hargreaves</td>
<td>Clinical Assistant Professor, Optometry, O.D., New England College of Optometry, 1996</td>
<td>1996</td>
</tr>
<tr>
<td>John N. Harker</td>
<td>Clinical Assistant Professor, Orthopedic Surgery, D.O., Southeastern University College of Osteopathic Medicine, 1989</td>
<td>1989</td>
</tr>
<tr>
<td>Charles L. Harkness</td>
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<td>1978</td>
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<td>Richard M. Harrell</td>
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<td>1979</td>
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<td>1971</td>
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<td>1981</td>
</tr>
<tr>
<td>Michael A. Harry</td>
<td>Clinical Assistant Professor, Family Medicine, M.D., University of the West Indies, 1976</td>
<td>1976</td>
</tr>
<tr>
<td>Edward Hartwig</td>
<td>Clinical Assistant Professor, Family Medicine, B.A., Youngstown State University, 1969, M.Ed., Kent State University, 1970, D.O., Kansas City College of Osteopathic Medicine, 1979</td>
<td>1979</td>
</tr>
<tr>
<td>Jeannette L. Hartzell</td>
<td>Associate Professor, Public Health, B.A., Old Dominion University, 1977, M.S., Old Dominion University, 1979</td>
<td>1979</td>
</tr>
<tr>
<td>Louis Hasbrouck</td>
<td>Clinical Associate Professor, Osteopathic Principles and Practice, B.A., Trinity College, 1943, D.O., Des Moines School College of Osteopathic Medicine, 1953</td>
<td>1953</td>
</tr>
<tr>
<td>Armando L. Hassun, Jr.</td>
<td>Clinical Assistant Professor, Anesthesiology, B.S., University of Miami, 1985, D.O., Southeastern University College of Osteopathic Medicine, 1992</td>
<td>1992</td>
</tr>
<tr>
<td>Anna Hayden</td>
<td>Clinical Associate Professor, Community Medicine, B.S., Seton Hall University, 1983, D.O., University of the Health Sciences College of Osteopathic Medicine, 1988</td>
<td>1988</td>
</tr>
<tr>
<td>Jerome L. Haym</td>
<td>Clinical Assistant Professor, Family Medicine, A.B., Princeton University, 1964, M.D., Georgetown Medical School, 1968</td>
<td>1968</td>
</tr>
<tr>
<td>Michael Heid</td>
<td>Clinical Assistant Professor, Surgery, B.S., University of South Florida, 1987, D.O., Southeastern University College of Osteopathic Medicine, 1993</td>
<td>1993</td>
</tr>
<tr>
<td>Steve Heiden</td>
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<td>1972</td>
</tr>
<tr>
<td>J. Michael Heider</td>
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<td>1987</td>
</tr>
<tr>
<td>Gretchen Heinisen</td>
<td>Clinical Assistant Professor, Endodontics, D.D.S., University of Puerto Rico School of Dentistry, 1982</td>
<td>1982</td>
</tr>
<tr>
<td>Allen Helfer</td>
<td>Adjunct Assistant Professor, Endodontics, D.D.S., Columbia University, 1961</td>
<td>1961</td>
</tr>
<tr>
<td>Murry Helfman</td>
<td>Adjunct Faculty, Prosthodontics, D.D.S., New York University, 1959</td>
<td>1959</td>
</tr>
<tr>
<td>Charles H. Henneke</td>
<td>Clinical Professor, Preventive Medicine, B.S., Queens College, 1963</td>
<td>1963</td>
</tr>
<tr>
<td>M.D., Cornell University Medical College, 1967</td>
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</tr>
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<td>1984</td>
</tr>
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<td>1966</td>
</tr>
<tr>
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<td>1994</td>
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<td>1987</td>
</tr>
</tbody>
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</tr>
<tr>
<td>Randy Sims</td>
<td>Adjunct Faculty, Health Science</td>
<td>Ph.D., Florida Atlantic University, 1993</td>
</tr>
</tbody>
</table>
Glenn R. Singer  
Clinical Associate  
Professor, Internal Medicine  
B.S., Tulane University, 1974  
M.D., University of South Florida, 1978

Jay Singer  
Clinical Assistant  
Professor, Orthodontics  
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School of Dentistry, 1978

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Clinical Assistant Professor, Urology  
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School of Medicine, 1980

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Clinical Assistant  
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M.B.B.S., All India Institute of Medical Sciences, 1978

Thomas A. Sipprell  
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B.S., Bethany College, 1971  
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Clinical Associate  
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B.S., University of Miami, 1967  
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B.S., Pacific University, 1966  
O.D., Pacific University, 1967

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Jeffrey Oral 500

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Visiting Lecturer, Periodontology,

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Clinical Assistant Professor, Neurology

M.D., Sackler School of Medicine, 1980

Samuel Szomstein

Clinical Assistant Professor, Surgery

M.D., Universidad Central de Venezuela, 1993

Arnold L. Tanis

Clinical Professor, Pediatrics

B.S., University of Chicago, 1949

M.D., University of Chicago, 1951

Dennis Tartakow

Clinical Associate Professor, Orthodontics

D.M.D., Tufts University School of Dental Medicine, 1969

James H. Taylor

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B.S., Dickinson College, 1972

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B.S., University of Miami, 1968

M.D., University of Zaragoza, 1975

Ann Marie Tharpe

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B.S., University of Arizona, 1979

M.S., Vanderbilt University, 1994

Ph.D., Vanderbilt University, 1994

A. Adam Thau

Clinical Instructor, Internal Medicine

M.D., American University of the Caribbean, 1984

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B.S., The Ohio State University College of Pharmacy, 1992

M.D., The Ohio State University College of Medicine, 1996

Valerie B. Thomas

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B.S., University of Alabama, 1981

M.D., University of Alabama School of Medicine, 1985

Lanetta Thorpe

Adjunct Faculty, Health Science

B.A., University of North Carolina, 1987

M.S.P.H., University of North Carolina, 1988

M.D./M.P.H., University of North Carolina, 1993

John Tierney

Clinical Assistant Professor, Optometry

M.S., Pacific University, 1978

O.D., New England College of Optometry, 1978

Jeffrey H. Tischler

Clinical Assistant Professor, Family Medicine

B.A., Temple University, 1973

D.O., Chicago College of Osteopathic Medicine, 1977

Elias Tobon

Adjunct Faculty, Prosthodontics

D.M.D., Tufts University, 1992

H. Murray Todd

Clinical Professor, Neurology
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
<th>Graduation Year</th>
</tr>
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<tbody>
<tr>
<td>Valerio J. Toyos</td>
<td>Adjunct Clinical Professor, Family Medicine</td>
<td>D.O., University of Miami</td>
<td>1981</td>
</tr>
<tr>
<td>Kathleen L. Todd</td>
<td>Clinical Assistant Professor, Family Medicine</td>
<td>D.O., University of Miami</td>
<td>1981</td>
</tr>
<tr>
<td>Ronald B. Tolchin</td>
<td>Clinical Associate Professor, Physical Medicine and Rehab.</td>
<td>D.O., Southeast University</td>
<td>1981</td>
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<tr>
<td>Melissa Tovin</td>
<td>M.S., B.S.P.T., Community Dentistry</td>
<td>D.O., Southeast University</td>
<td>1981</td>
</tr>
<tr>
<td>Santiago H. Triana</td>
<td>Clinical Assistant Professor, Surgery</td>
<td>M.D., Universidad Nacional de Colombia, 1959</td>
<td></td>
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<tr>
<td>Nancy M. Troast</td>
<td>Clinical Assistant Professor, Internal Medicine</td>
<td>B.A., Washington and Jefferson College, 1979</td>
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<tr>
<td>Dennis P. Trupkin</td>
<td>Clinical Assistant Professor, Pediatric Dentistry</td>
<td>D.D.S., Medical College of Virginia School of Dentistry, 1970</td>
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<tr>
<td>Claudia D. Tuda</td>
<td>Clinical Assistant Professor, Infectious Disease</td>
<td>M.D., University of Buenos Aires, 1986</td>
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<tr>
<td>Michael J. Turley</td>
<td>Clinical Instructor, Physician Assistant Studies</td>
<td>P.A., Bayley Seton Hospital, Physician Assistant Program, 1973</td>
<td></td>
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<tr>
<td>Robert A. Turner, Jr.</td>
<td>Clinical Professor, Internal Medicine</td>
<td>A.B., University of North Carolina, 1959</td>
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<tr>
<td>Norman Urich</td>
<td>Clinical Assistant Professor, Family Medicine</td>
<td>B.S., University of Alabama, 1966</td>
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<tr>
<td>Eugene Usberghii, Jr.</td>
<td>Clinical Assistant Professor, Family Medicine</td>
<td>B.S., University of Akron, 1968</td>
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<td>Mark A. Vacker</td>
<td>Clinical Assistant Professor, Family Medicine</td>
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<td>B.A., State University of New York, 1973</td>
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<td>Yolanda M. Valdes</td>
<td>Clinical Assistant Professor, Pediatrics</td>
<td>M.D., University of Miami, 1989</td>
<td></td>
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<tr>
<td>Gabriel A. Valle</td>
<td>Clinical Assistant Professor, Nephrology</td>
<td>B.S., University of Heredia, 1972</td>
<td></td>
</tr>
<tr>
<td>Michel G. Vandormael</td>
<td>Clinical Associate Professor, Cardiology</td>
<td>M.D., University of Liege, 1974</td>
<td></td>
</tr>
<tr>
<td>Andrea E. Varga</td>
<td>Clinical Assistant Professor, Internal Medicine</td>
<td>M.D., Semmelweis University of Medicine, 1997</td>
<td></td>
</tr>
<tr>
<td>Paul Vazquez</td>
<td>Clinical Associate Professor, Urology</td>
<td>B.S., University of Miami, 1976</td>
<td></td>
</tr>
<tr>
<td>German Vergara</td>
<td>Clinical Assistant Professor, Nephrology</td>
<td>M.D., University of Liege, 1974</td>
<td></td>
</tr>
<tr>
<td>Ramon G. Vidal</td>
<td>Clinical Assistant Professor</td>
<td>M.D., University of Liege, 1974</td>
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</tr>
</tbody>
</table>

Health Professions Division—Adjunct/Clinical/Visiting Faculty Members
Adjunct Faculty, Technology of Osteopathic Medicine, 1977

Clinical Assistant, University of Miami, 1997

B.A., University of Pennsylvania, 1958
M.D., Temple University, 1962

Neil J. Weinreb
Clinical Associate Professor, Hematology/Oncology
M.D., State University of New York, 1966

Mitchell D. Weinstein
Clinical Associate Professor, Urology
B.S., Pennsylvania State University, 1979
D.O., University of Health Sciences, 1984

Jeffrey I. Weisberg
Clinical Associate Professor, Hematology/Oncology
B.A., Brooklyn College, 1967
D.O., University of Health Sciences College of Osteopathic Medicine, 1971

Arnold Weisgold
Visiting Professor, Periodontology
D.D.S., Temple University School of Dentistry, 1961

Randy S. Weisman
Clinical Associate Professor, Pulmonary Medicine
B.S., Brandeis University, 1988
M.D., Albert Einstein College of Medicine, 1992

Donald J. Weiss
Clinical Assistant Professor, Family Medicine
B.A., Wayne State University, 1960
D.O., College of Osteopathic Medicine and Surgery, 1966

Michael C. Weiss
Clinical Assistant Professor, Orthopedic Surgery
B.S., University of Florida, 1981
D.O., Southeastern University College of Osteopathic Medicine, 1986

David Wessel
Adjunct Faculty, Prosthodontics
D.M.D., University of Pittsburgh, 1971

Benjamin J. Westby
Clinical Assistant Professor, Sports Medicine
B.S., Moorhead State University, 1997
M.S., Des Moines University, 2000

Graham E. Whitfield
Clinical Assistant Professor, Orthopedic Surgery
B.S., University of London, 1963
Ph.D., University of London, 1969
M.D., New York Medical College, 1976

Martha M. Wichert
Clinical Faculty, Physical Therapy
B.S., University of Iowa, 1980
B.S. PT, University of Miami, 1980

Edward L. Wiener
Clinical Associate Professor, General Surgery
D.O., Michigan State University College of Osteopathic Medicine, 1976

Ronald J. Wiewora
Adjunct Assistant Professor, Public Health
Clinical Assistant Professor, Preventive Medicine
B.S., University of Illinois, 1974
M.D., University of Illinois, 1978
M.P.H., University of Miami, 1986

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Clinical Professor, Family Medicine
B.S., Louisiana Technical University, 1969
M.S., Texas A&M University, 1972
Ph.D., Texas A&M University, 1977

Lanelle Williams
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D.O., Philadelphia College of Osteopathic Medicine, 1963

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Clinical Professor, Neurology
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College of Osteopathic Medicine
College of Pharmacy
College of Optometry
College of Allied Health and Nursing
College of Medical Sciences
College of Dental Medicine

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