2007

Health Professions Division Catalog 2007-2008

Nova Southeastern University

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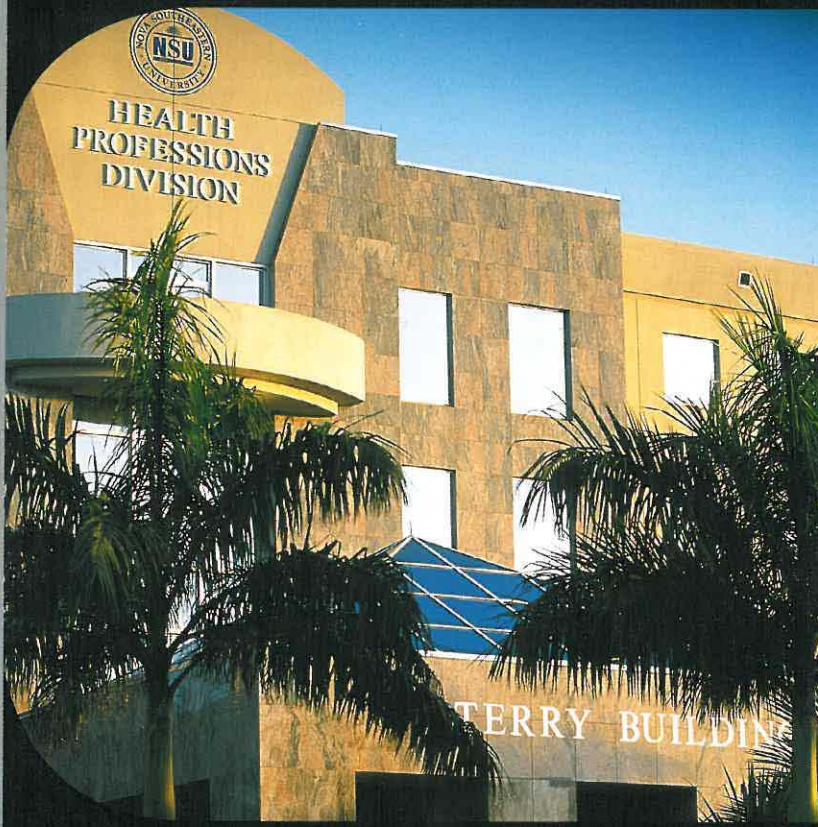
Health Professions Division

2007–2008 Catalog



NOVA SOUTHEASTERN UNIVERSITY

YOUR FUTURE. YOUR TERMS.

Notice: Credits and degrees earned from colleges within the state of Florida that are licensed by the State Board of Independent Colleges and Universities do not automatically qualify the individual to participate in professional examinations in Florida. The established procedure requires the appropriate state professional board to review and recognize the colleges granting the degrees prior to scheduling examinations. Additional information regarding Nova Southeastern University Health Professions Division and its Colleges of Osteopathic Medicine, Pharmacy, Optometry, Allied Health and Nursing, Medical Sciences, and Dental Medicine may be obtained by contacting the State Board of Independent Colleges and Universities, Department of Education, Tallahassee, Florida. Any student interested in practicing a regulated profession in Florida should contact the Department of Business and Professional Regulation, 2009 Apalachee Parkway, Tallahassee, Florida 32301.

This brochure is for information purposes only and does not represent a contract. Information contained herein is subject to change at any time by administrative decision or the direction of the Board of Trustees.

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.

Notice of Nondiscrimination

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

This nondiscrimination policy applies to admissions; enrollment; scholarships; loan programs; athletics; employment; and access to, participation in, and treatment in all university centers, programs, and activities. NSU admits students of any race, color, religion or creed, sex, pregnancy status, national or ethnic origin, nondisqualifying disability, age, ancestry, marital status, sexual orientation, unfavorable discharge from the military, veteran status, or political beliefs or affiliations, to all the rights, privileges, programs, and activities generally accorded or made available to students at NSU, and does not discriminate in the administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other school-administered programs. 05-009-07MCS

Nova Southeastern University Health Professions Division

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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Letter from the President

Ray Ferrero, Jr., J.D.
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 90,000 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

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

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

Morton Morris, D.O., J.D., FAOAO, FACOS, FACLM
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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 Board of Governors

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Health Professions Division Mission Statement

The mission of Nova Southeastern University Health Professions Division is to train primary care health practitioners in a multidisciplinary setting, with an emphasis on medically underserved areas.

The institutional premise is that health professionals should be trained in a multidisciplinary setting and, whenever possible, with integrated education. The university trains students in concert with other health profession students so that the various disciplines will learn to work together as a team for the good of the public's health. During their didactic work, students share campus facilities and, in some cases, have combined classes. In their clinical experiences, they work together in facilities operated by the university.

Furthermore, the division aims to educate health care practitioners who will eventually increase the availability of health care in areas of Florida that suffer from health care shortages. The division aims to alleviate some of these shortages by exposing the entire student body to the needs, challenges, and rewards of rural, underserved urban, and geriatric care. Existing curricula require all students to attend ambulatory care clerkships in rural or urban areas, or both, making Nova Southeastern University strongly oriented toward a pattern of training its students in areas geographically removed from the health center itself, and to the care of indigent and multicultural population groups.

In doing this, it developed training programs that address the primary care needs of the region's most medically underserved populations.

2007–2008 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 30–August 3, 2007	Fall Orientation and Registration Week
Sunday, August 5, 2007	Official Orientation/Registration (Family)
Monday, August 6, 2007	Freshman Classes Begin
Friday, August 24, 2007	Allied Health and Nursing Graduation Rehearsal
Saturday, August 25, 2007	Allied Health and Nursing Graduation Senior Awards Dinner
Sunday, August 26, 2007	Allied Health and Nursing Graduation
Monday, September 3, 2007	Labor Day, No Classes
Thursday, September 13, 2007	Rosh Hashanah, No Classes
Saturday, September 22, 2007	Yom Kippur, No Classes
Wednesday, November 21, 2007	Thanksgiving Recess Begins—5:00 p.m.
Thursday–Friday, November 22–23, 2007	Thanksgiving Holiday, University Closed
Monday, November 26, 2007	Classes Resume
Friday, December 14, 2007	Winter Recess Begins—5:00 p.m.
Monday, December 24, 2007	Christmas Eve, University Closed
Tuesday, December 25, 2007	Christmas Day, University Closed
Monday, December 31, 2007	New Year's Eve, University Closed
Tuesday, January 1, 2008	New Year's Day, University Closed
Wednesday, January 2, 2008	Classes Resume
Monday, January 21, 2008	Martin Luther King Day, No Classes
Friday, March 14, 2008	Spring Recess Begins—5:00 p.m.
Monday–Friday, March 17–21, 2008	Spring Recess, No Classes
Friday, March 21, 2008	Good Friday, University Closed
Monday, March 24, 2008	Classes Resume

Wednesday, May 21, 2008	Graduation Rehearsal (College of Osteopathic Medicine)
Thursday, May 22, 2008	Senior Day, Graduation Rehearsal (Colleges of Optometry, Pharmacy, Medical Sciences, and Dental Medicine)
Friday, May 23, 2008	Senior Awards Dinner
Sunday, May 25, 2008	Graduation
Monday, May 26, 2008	Memorial Day, No Classes
Friday, July 4, 2008	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 pretaped 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 known as the Assembly II Building 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 5087
  Bowling Green Station
  New York, NY 10274-5087
  (212) 966-6311
  Fax: (212) 739-6100
  San Francisco
  (415) 677-9378
  Chicago
  (312) 222-0882
  Washington, D.C.
  (202) 331-2925
  Miami
  (305) 358-6688
  www.wes.org

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

- Educational Credential
  Evaluators., Inc.
  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 a complete course-by-course evaluation must be sent to the Office of Admissions.

Admissions Policy

Students are admitted to a degree-seeking program based on a review of transcripts or other specific program admission requirements. However, this admission includes a condition that final and official documents and requirements must be received within 90 calendar days from the start of the term. If these final and official documents and/or requirements are not received by that time, the student will not be allowed to continue class attendance. Financial aid will not be disbursed to a provisional/conditional student until he or she has been fully admitted as a regular student (all admissions requirements have been met and approved by the college/program admissions office).

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 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 may deem 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 Office of Student Financial Assistance assists qualified students in obtaining the funds necessary to pursue their educational objectives. In order to be eligible for student financial aid, students must complete the U.S. Department of Education's Free Application for Federal Student Aid (FAFSA) and meet federal general eligibility criteria. A need analysis is performed, utilizing information from the FAFSA to determine the student's Expected Family Contribution (EFC), or the amount the student and the student's family can contribute toward the student's educational expenses. Financial need is defined as the difference between the institution's Cost of Attendance (COA) and the EFC. The university's cost of attendance includes tuition and fees, books and supplies, room and board, transportation, and personal expenses.

The fastest way to apply for the FAFSA is online through FAFSA on the Web at *www.fafsa.edu.gov*. By applying electronically, financial aid information is forwarded to the Office of Student Financial Assistance within 72 hours, expediting the awarding process and reducing errors due to built-in edits. Students should request a Department of Education Personal Identification Number (PIN) online through *www.pin.ed.gov*. By using the PIN, students eliminate the need to send a signature page.

Undergraduate students may be eligible for grants, student employment, loans, and scholarships. Graduate/professional students may be eligible for loans in the form of Federal Subsidized and Federal Unsubsidized Stafford Loans, Federal Graduate Plus Loans, and private/alternative loans, as well as student employment (FWS) and scholarships. In order to successfully complete the financial aid process, students should apply early, provide all necessary documents and requests to the Office of Student Financial Assistance in a timely manner, register for at least the minimum number of credits required per term (half time in a degree-seeking program), and meet required deadlines.

For more information regarding the financial aid process, contacts, and other pertinent information, students may visit the NSU Financial Aid Web site at *www.nova.edu/cwis/finaid*. Students will be notified of missing information, their financial status, award notifications, and other financial aid related information via their NSU email addresses.

Office of Student Financial Assistance hours of operation:

Horvitz Administration Building
Monday–Thursday, 8:30 a.m.–7:00 p.m.
Friday, 8:30 a.m.–6:00 p.m.
Saturday, 9:00 a.m.–noon
(No Sunday hours)

Terry Administration Building
Monday–Thursday, 8:30 a.m.–6:00 p.m.
Friday, 8:30 a.m.–5:00 p.m.
(No Saturday or Sunday hours)

Orlando Student Educational Center
Monday–Friday, 8:30 a.m.–5:00 p.m.
(No Saturday or Sunday hours)

West Palm Beach Student Educational Center
Monday–Friday, 8:30 a.m.–5:00 p.m.
(No Saturday or Sunday hours)

For further assistance, please call (954) 262-3380 or 800-806-3680.

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 in the college office.

Immunization Requirements

Students must have completed the mandatory immunization form. The following immunization procedures are required of students at the Health Professions Division.

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. The university also has the right to require additional immunizations.

Current Additional Required Immunizations

- **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 supports 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 both our undergraduate and graduate/professional students. Students may also seek assistance in off-campus housing through the Office of Residential Life and Housing. Their assistance will help make your off-campus housing search a fun and pleasant experience. In addition, our off-campus housing coordinator can assist you with finding a place to live near any of NSU's campuses. For more information about off-campus housing options, contact the Office of Residential Life and Housing at (954) 262-7052 or visit the off-campus housing Web site at *www.nova.edu/reslife/offcampus/index.html*. Please indicate your undergraduate, graduate/professional student status when speaking with this office.

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 Health Professions Division Badge Room, in the Horvitz Administration Building, or from the Office of Student Affairs for distance programs students, 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.

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 online education programs 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* and clicking on the link for Student Health Insurance. 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

by completing the online waiver. To complete the waiver form, go to *www.nova.edu/smc* and click on the link for Student Health Insurance. Then click on the Waiver Form link. The online waiver is the only process by which insurance charges will be removed and coverage will be cancelled. Students who fail to complete the waiver form and provide proof of health insurance by the stated deadline will not be eligible to have charges removed and will continue to be enrolled in the insurance plan endorsed by NSU.

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. To initiate the petition, students should contact the Office of Student Financial Assistance, VA Benefits representative, at 800-986-3380.

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, or 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 nonacademic 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 HPD Library is located on the first floor at the north end of the Terry Building Complex in the Library/Lab Building. The print collection consists of more than 70,000 volumes, with 1,400 active journal subscriptions and more than 4,000 CD-ROMs, videocassettes, DVDs, and audiotapes. In addition, the Electronic Library is accessible 24/7 from any computer with an Internet connection. It provides access to 50 medical/health databases, including Medline, CINAHL, UptoDate, MD Consult, Micromedex, and Clinical Pharmacology. More than 300 medical textbooks are available full-text online, along with more than 21,000 full-text electronic journals. Interlibrary loan and document delivery services provide access to journal articles and books not available locally. Professional reference assistance is available during most operating hours. Students have access and borrowing privileges to print collections at any NSU library and may access more than 200 electronic databases via the HPD library home page (*www.nova.edu/hpdlibrary*).

In addition, there are 48 individual/small group study rooms in the library and Assembly II Building. Rooms can be checked out for up to three hours. All rooms are equipped with white boards and the library study rooms have video players. A small teaching lab is available for group instruction and two 50-station computer labs are open when the library is open. Both buildings have full wireless connectivity. Laptop computers and DVD players are available for checkout.

Hours of operation for the library, study center, and adjoining computer labs are:
Monday–Thursday, 7:30 a.m. to midnight

Friday, 7:30 a.m. to 9:00 p.m.

Saturday, 10:00 a.m. to 10:00 p.m.

Sunday, 9:00 a.m. to midnight

During exam periods, the library is open until 1:00 a.m. each night.

For further assistance, please call (954) 262-3106.

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.

- **Student Medical Center**
  The mission of the student medical center is to provide quality primary health care services to our collegiate population. The Student Medical Center is located on the first floor of the Sanford L. Ziff Health Care Center. It is staffed by board certified physicians and physician assistants who provide primary care services including physical exams, women's health care, immunizations, preventive care, general medical care, and minor surgical procedures.

- **Student Counseling Center**
  The Student Counseling Center is committed to helping NSU students effectively manage the personal and social challenges of learning and changing in a university environment. All services are provided on the main campus in Suite 150 of the Parker Building. Services that are provided include individual counseling, couples counseling, group counseling, and psychiatric services.

- **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, Florida

  A primary care facility with state-of-the-art full service radiologic-diagnostic capabilities. Contained in this facility are the following services: family medicine, pediatrics, internal medicine, nephrology and hypertension, geriatrics, obstetrics/gynecology, dermatology, sports medicine, osteopathic medicine, X-ray, occupational therapy, pharmacy, physical therapy, physical medicine and rehabilitation, optometric clinic, optical dispensary, and cardiology and other specialty practices.

- **Eye Care Institute of Fort Lauderdale**
  The Eye Care Institute of 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 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. Osteopathic medical students must be able to perform multiple tasks in a diverse, dynamic, highly competitive, and challenging environment. They must be able to think quickly and accurately in an organized manner, despite environmental distractions.

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 and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Motor Skills

Candidates and students should have sufficient motor function to execute movements reasonably required to provide general care and emergency treatment to patients. Examples of emergency treatment reasonably required to some health care professionals are cardiopulmonary resuscitation (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 weigh chemical and pharmaceutical (including intravenous) solutions, prepare prescriptions, and carry out sterile procedures.

Strength and Mobility

Candidates and students must have sufficient mobility to attend to emergency codes and to perform such maneuvers as CPR when required. They must have the physical ability to move sufficiently from room to room and to maneuver in small places. Osteopathic medical students must have the ability to position patients for the administration and delivery of osteopathic manipulative treatment in a variety of settings and to position and move patients when required.

Pharmacy students must be able to move about within a pharmacy setting and a patient's room.

Physical therapy and occupational therapy students must be able to administer treatment in a variety of settings and positions and move patients when required.

Hearing

Candidates and students should have sufficient auditory ability to monitor and assess health needs. They must be able to hear information given by the patient in answer to inquiries; to hear cries for help; to hear features in an examination, such as the auscultatory sounds; and to be able to monitor equipment.

Visual

Candidates and students must have visual ability sufficient for observation and assessment necessary in patient care. It must be consistent in many cases with being able to assess asymmetry, range of motion, and tissue texture changes. Osteopathic medicine, optometry, and physician assistant students must have sufficient visual ability to use ophthalmologic instruments. It is necessary to have adequate visual capabilities for proper evaluation and treatment integration. Candidates and students must be able to observe the patient and the patient's responses including body language and features of the examination and treatment. Pharmacy students must be able to interpret prescriptions and medical orders, as well as to inspect medicine for deterioration or expiration.

Tactile

Candidates and students must have sufficient tactile ability for physical assessment. They must be able to perform palpation, functions of physical examination, and/or those related to therapeutic intervention. Pharmacy students must be able to measure and compound, sometimes transferring from container to container and to carry out sterile procedures. Dental students must be able to deliver

appropriate treatment using high technology equipment such as dental drills and surgical instruments.

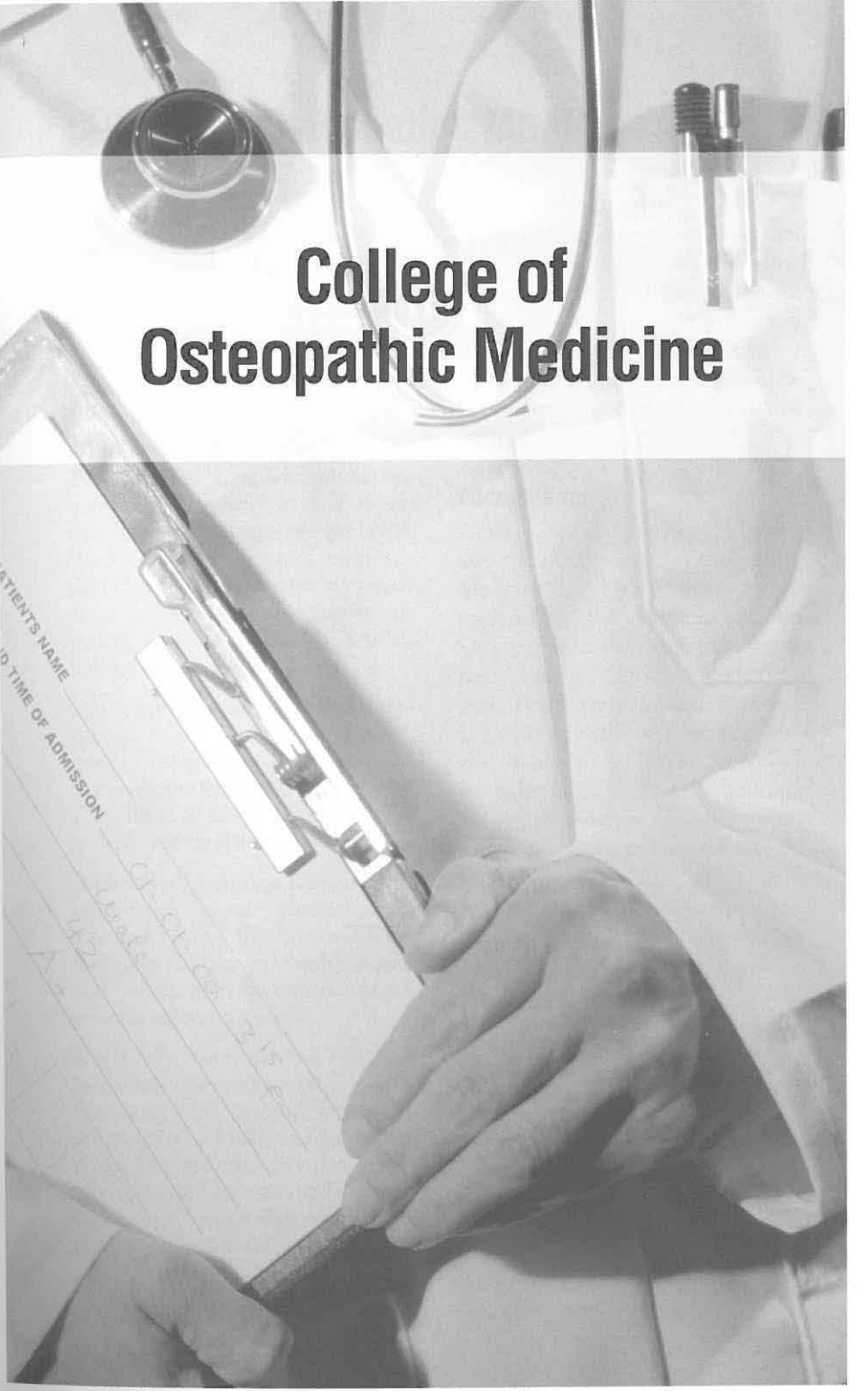
Sensory

Osteopathic and physician assistant students 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.

College of Osteopathic Medicine



College of Osteopathic Medicine

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

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. Silvagni, 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

Pablo Calzado, D.O., M.P.H.
Assistant Dean for
Clinical Operations

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

Martha Echols, Ph.D.
Assistant Dean for
Medical Education

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.*

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 15:

- 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 a 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 he or she has been fully admitted as a regular student (all admissions requirements have been approved by the program office).

Tuition and Fees

1. The anticipated tuition for 2008–2009 (subject to change by the board of trustees without notice): $29,030 for Florida residents and $35,545 for out-of-state students. 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 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. For first-year students, a microscope/laboratory fee of $100 is required. In addition, a Health Professions Division general access fee of $145 is required each year. An NSU student services fee of $750 is also required annually. Additional program fees may apply.

3. Acceptance fee is $750. 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, but is not refundable in case of a withdrawal.

4. Deposit is $1,250. This advance payment is due March 15. It will be deducted from the tuition payment, but is not refundable in the event of a withdrawal. Applicants accepted after this date will have a due date following the date of acceptance.

Applicants accepted prior to November 15 will have until December 14 to pay the acceptance fee. Applicants accepted between November 15 and February 16 will have 30 days to pay this acceptance fee. Those accepted between February 16 and April 15 will pay the combined acceptance fee and deposit ($2,000 total) within 30 days after their acceptance. Anyone accepted on April 16 or later will pay the combined acceptance fee and deposit of $2,000 within 14 days after acceptance.

The first semester's tuition and fees, less the $2,000 previously paid, are due upon receipt of the NSU invoice. Students will be billed tuition for each subsequent semester. 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 four years of medical education, including tuition, living expenses, books, equipment, clinical rotation travel, and miscellaneous expenses.

Schedule of Application for Admission Cycle

June—Application cycle for the next academic year begins. Inquiries are invited by Nova Southeastern University College of Osteopathic Medicine, and AACOMAS forms are made available.

July—Credentials sent to AACOMAS are processed, and applicant records are forwarded to Nova Southeastern University College of Osteopathic Medicine. A supplemental application is then sent to the applicant. When the supplemental application is completed and returned and when recommendations are received, the completed application is evaluated for interview.

August—Personal interviews start.

January 15—Deadline for AACOMAS applications.

March 15—Deadline for NSU-COM supplemental applications.

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 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 Curriculum

Credit hours

Fall Term

COM 5021	Medical Biochemistry I	3.0
COM 5010	Gross Anatomy	8.0
COM 5020	Medical Histology	4.0
COM 5061	Medical Physiology I	3.0
COM 5001	Clinical Practicum I	2.0
COM 5170	Ethnocultural Medicine	0.5
COM 5121	OPP I	2.0
COM 5171	IGC Preceptorship I	1.0
COM 5070	Smoking Cessation	0.5
COM 5080	Basic Life Support	1.0
	TOTAL:	25

Winter Term

COM 5002	Clinical Practicum II	2.0
COM 5172	IGC Preceptorship II	1.0
COM 5141	Public Health and Epidemiology I	2.0
COM 5030	Medical Microbiology	7.0
COM 5022	Medical Biochemistry II	3.0
COM 5062	Medical Physiology II	4.0
COM 5011	Neuroanatomy	3.0
COM 5122	OPP II	2.0
COM 5900	Principles of Radiology	1.0
	TOTAL:	25

Elective Offerings

COM 9300	Medical Spanish—Fall and Winter	2.0
COM 9400	Preclinical Preceptorship—Summer	2.0
COM 9600	Research—Fall, Winter, and Summer	3.0
	TOTAL:	7

Second Year Curriculum

Credit hours

Fall Term

COM 6001	Principles of Clinical Medicine (PCM)	8.0
COM 6050	Principles of Pharmacology	2.0
COM 6040	Principles of Pathology	3.0
COM 6150	Rural Medicine	0.5
COM 6100	Integumentary System	2.0
COM 6101	Hematology and Lymph System	2.0
COM 6102	Respiratory System	2.0
COM 6103	Cardiovascular System	5.0
COM 6104	Gastrointestinal System	3.0
COM 6105	Endocrine System	1.5
COM 6110	Women's Health System	3.0
COM 6173	IGC Preceptorship III	2.0
COM 6090	End of Life Seminar	0.5
COM 6123	OPP III	2.0
COM 6003	Complementary and Alternative Medicine (CAM)	2.0
COM 6071	HIV Seminar	0.5
	TOTAL:	39

Winter Term

COM 6221	ACLS	1.0
COM 6091	Psychiatry and Behavioral Medicine	2.0
COM 6174	IGC Preceptorship IV	2.0
COM 6004	Medical Ethics Seminar	0.5
COM 6005	Medical Jurisprudence	1.0
COM 6107	Musculoskeletal System	2.0
COM 6108	Nervous System	3.0
COM 6124	OPP IV	2.0
COM 6082	PALS	1.0
COM 6002	Pre-Clerkship Seminar	0.5
COM 6109	Renal/Urinary System	2.0
COM 9501	Integration of Biomedical and Clinical Sciences	5.0
	TOTAL:	22

Elective Offerings

COM 9300	Medical Spanish—Fall and Winter	2.0
COM 9500	Guided Study—Fall, Winter, and Summer	2.0
COM 9600	Research—Fall, Winter, and Summer	3.0
	TOTAL:	7

Fellows Curriculum

Credit hours

Fall and Winter Terms

COM 9100	Osteopathic Principles and Practice Fellowship	8.0
COM 9200	Research Fellowship	8.0
	TOTAL:	16

Third Year Curriculum

Credit hours

Fall Term—Didactic Course

COM 7090	Geriatrics	1.0

Fall and Winter Terms—Didactic Courses

COM 7140 Public Health and Epidemiology II 2.0
COM 7100 Infectious Disease 1.0
COM 7101 Comlex I 1.0
COM 9502 Integration of Clinical Sciences and Diagnosis 1.0

Fall and Winter Terms—Core Clinical Rotations

COM 7093 Geriatrics 8.0
COM 7131 Pediatrics/Ambulatory 8.0
COM 7132 Pediatrics/Hospital 8.0
COM 7110 Obstetrics/Gynecology 8.0
COM 7094 Psychiatry 8.0
COM 7091 Family Medicine I 8.0
COM 7092 Family Medicine II 8.0
COM 7104 General Surgery I 8.0
COM 7105 General Surgery II 8.0
COM 7102 Internal Medicine I 8.0
COM 7103 Internal Medicine II 8.0
COM 7106 Internal Medicine III 8.0

TOTAL: 102

Fourth Year Curriculum

Credit hours

Fall Term—No Didactic Courses

Winter Term—Didactic Courses

COM 8002 Comlex II—CE 1.0
COM 8003 Comlex II—PE 1.0
COM 8004 Senior Seminar 1.0

Fall and Winter Terms—Core Clinical Rotations

COM 7095 Emergency Medicine 8.0
COM 7151 Rural Medicine I 8.0
COM 7152 Rural Medicine II 8.0
COM 7153 Rural Medicine III 8.0

TOTAL: 35

Fall and Winter Terms—Clinical Elective Courses

COM 8103 Allergy and Immunology 8.0
- Clinical and Laboratory—Immunology

COM 8104 Anesthesiology 8.0
- Critical Care Medicine
- Pain Medicine
- Pediatric Anesthesiology

COM 8105 Colon and Rectal Surgery 8.0
COM 8108 Dermatology 8.0
- Dermatopathology

COM 8009 Emergency Medicine 8.0
- Medical Toxicology
- Pediatric Emergency Medicine
- Sports Medicine

COM 8012 Family Medicine 8.0
- Sports Medicine

COM 8015 Geriatric Medicine 8.0
COM 8018 Internal Medicine 8.0
- Cardiovascular Disease
- Clinical Cardiac Electrophysiology
- Critical Care Medicine
- Endocrinology, Diabetes, and Metabolism
- Gastroenterology
- Hematology
- Hematology and Oncology
- Infectious Disease
- Interventional Cardiology
- Nephrology
- Oncology
- Pulmonary Disease
- Pulmonary Disease and Critical Care Medicine
- Rheumatology
- Sports Medicine

COM 8021 Medical Genetics 8.0
COM 8024 Neurological Surgery 8.0
- Endovascular Surgical Neuroradiology

COM 8023 Neurology 8.0
- Child Neurology
- Clinical Neurophysiology
- Neuromuscular Medicine
- Pain Medicine

COM 8022 Nuclear Medicine 8.0
COM 8025 Obstetrics and Gynecology 8.0
- Women's Health
- Reproductive Endocrinology
- Maternal/Fetal Medicine
- Gynecology/Oncology

COM 8027 OPP Medicine 8.0
COM 8028 Ophthalmology 8.0
- Retina
- Cornea

COM 8029 Orthopedic Surgery 8.0
- Adult Reconstructive Orthopedics
- Foot and Ankle Orthopedics
- Hand Surgery
- Musculoskeletal Oncology
- Orthopedic Sports Medicine
- Orthopedic Surgery of the Spine
- Orthopedic Trauma
- Pediatric Orthopedics

COM 8011 Otolaryngology 8.0
- Otology/Neurotology
- Pediatric Otolaryngology

COM 8031 Pathology—Anatomic and Clinical 8.0
- Blood Banking/Transfusion Medicine
- Chemical Pathology
- Cytopathology
- Forensic Pathology
- Hematology
- Medical Microbiology
- Neuropathology
- Pediatric Pathology
- Selective Pathology

COM 8032 Pediatrics 8.0
- Adolescent Medicine
- Neonatal/Perinatal Medicine
- Pediatric Cardiology
- Pediatric Critical Care Medicine
- Pediatric Emergency Medicine
- Pediatric Endocrinology
- Pediatric Gastroenterology
- Pediatric Hematology and Oncology
- Pediatric Infectious Disease
- Pediatric Nephrology
- Pediatric Ophthalmology
- Pediatric Pulmonology
- Pediatric Rheumatology
- Pediatric Sports Medicine

COM 8038 Physical Medicine and Rehabilitation 8.0
- Pain Medicine
- Spinal Cord Injury Medicine

COM 8035 Plastic Surgery 8.0
- Craniofacial Surgery
- Hand Surgery

COM 8030 Preventive Medicine 8.0
- Medical Toxicology

COM 8036 Psychiatry 8.0
- Addiction Psychiatry
- Child and Adolescent Psychiatry
- Forensic Psychiatry
- Geriatric Psychiatry
- Pain Medicine

COM 8170 Public Health 8.0
COM 8020 Radiation Oncology 8.0
COM 8037 Radiology—Diagnostic 8.0
- Abdominal Radiology
- Cardiothoracic Radiology
- Endovascular Surgical Neuroradiology
- Musculoskeletal Radiology
- Neuroradiology
- Nuclear Radiology
- Pediatric Radiology
- Vascular and Interventional Radiology

COM 8040 Rural/International Medicine 8.0
COM 8014 Surgery—General 8.0
- Hand Surgery
- Pediatric Surgery
- Surgical Critical Care
- Vascular Surgery
- Vascular Surgery—Integrated

COM 8042 Thoracic Surgery 8.0
COM 8044 Urology 8.0
- Pediatric Urology

TOTAL: 240

Electives may be taken in half-month or one-month increments.
No more than four half-month electives may be taken in the fourth year.

College of Osteopathic Medicine Course Descriptions

COM 5001—Clinical Practicum I
Students will learn the components of a patient history and physical examination and will develop effective interviewing techniques and skills.

2.0 Credit Hours

2.0 Lecture Hours

COM 5002—Clinical Practicum II
This is the second semester of a two-semester course in which the student will learn the components of a patient history and physical examination and will develop effective interviewing techniques and physical examination skills. The course will consist of assigned readings, lectures, and laboratory sessions in which diagnostic techniques will be practiced and performed by students under faculty assistance and supervision. There will also be a simulated patient experience in which each student will perform a complete history and physical examination from memory on a surrogate patient.

2.0 Credit Hours

2.0 Lecture Hours

COM 5010—Gross Anatomy
Study of the structure of the human trunk, extremities, head and neck, including dissection by student teams.

8.0 Credit Hours

8.0 Lecture Hours

COM 5011—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.

3.0 Credit Hours

3.0 Lecture Hours

COM 5020—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.

4.0 Credit Hours

4.0 Lecture Hours

COM 5021—Medical Biochemistry I
Covers biochemical reactions and pathways of normal human health; nutrition from a biochemical viewpoint; and the biochemistry of the gastrointestinal, pulmonary, renal, musculoskeletal, endocrine, and other systems.

3.0 Credit Hours

3.0 Lecture Hours

COM 5022—Medical Biochemistry II
Clinical practice is changing so rapidly that the physician must be a perpetual student and must be able to read and understand the literature in order to keep up to date. We offer the student the fundamentals of biochemistry, many aspects of which are currently and directly relevant to medicine. Other aspects may seem far removed from practical application, but serve to round out scientific preparation, and in the future, may emerge at the center of medical advances. This course covers biochemical reactions and pathways of normal human health, nutrition from a biochemical viewpoint, and the biochemistry of the body systems including, but not limited to, the gastrointestinal, pulmonary, renal, musculoskeletal, and endocrine systems.

3.0 Credit Hours

3.0 Lecture Hours

COM 5030—Medical Microbiology
This course will be presented in lecture format to emphasize two important medical areas, immunology and microorganisms involved in infectious diseases. The immunology section covers both innate and adaptive immune responses of humans with a focus on the host's interaction with an environment containing a variety of potential pathogens. In addition, other aspects of immunology—such as immunodeficiencies, autoimmunities, allergies, graft rejection, and immunity to tumors—are presented. Viruses, bacteria, fungi, and parasites commonly involved in human diseases, as well as new and reemerging pathogens, will be presented from a clinically relevant perspective. The sections on microorganisms will stress practical clinical skills by presenting case studies, visual illustrations of typical clinical symptoms, and the most common therapies.

7.0 Credit Hours

7.0 Lecture Hours

COM 5061—Medical Physiology I
Study of general physiology (cell function, membrane translocation, electrophysiology, muscle physiology), cardiovascular, renal, gastrointestinal, respiratory, endocrine, and neurophysiology.

3.0 Credit Hours

3.0 Lecture Hours

COM 5062—Medical Physiology II
This is the second semester of a two-semester physiology course. As with the first semester, the material will be presented using an organ systems approach. This semester will include the study of the respiratory, renal, nervous, endocrine, reproductive, and gastrointestinal systems.

4.0 Credit Hours

4.0 Lecture Hours

COM 5070—Smoking Cessation
This course will focus on providing first-year medical students with knowledge and skills-based training covering the following topics: (1) pharmacology of smoking, tobacco use, and drug-delivery systems; (2) effects of smoking and tobacco use; (3) dependence/addiction; and (4) helping people change attitudes and behavior. Techniques learned will include how to diagnose and treat common clinical manifestations of tobacco use and how to implement behavioral change therapies.

0.5 Credit Hours

0.5 Lecture Hours

COM 5080—Basic Life Support
An American Heart Association course that includes both didactic material (including methods of reducing cardiovascular risk) and instruction in the psychomotor skills necessary for the initial resuscitation of the cardiac arrest patient.

1.0 Credit Hour

1.0 Lecture Hour

COM 5121—OPP 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.

2.0 Credit Hours

2.0 Lecture Hours

COM 5122—OPP 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 techniques.

2.0 Credit Hours

2.0 Lecture Hours

COM 5141—Public Health and Epidemiology I
This course will provide the medical student with the skills needed to apply the fundamentals to preventive medicine/public health. The student of public and community medicine will be properly positioned to evaluate whether we have achieved such goals. The success or failure of changes implemented by politicians and economists during the turbulent and controversial period for medicine will be measured by the epidemiologist and the practitioner of preventive medicine. This course teaches the principles of epidemiology and also provides the basic skills on critical reading of the medical literature and the use of epidemiological methods in the evaluation and development of health care services and policy.

2.0 Credit Hours

2.0 Lecture Hours

COM 5170—Ethnocultural 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.

0.5 Credit Hours

0.5 Lecture Hours

COM 5171—IGC Preceptorship I
The Interdisciplinary Generalist Curriculum (IGC) Preceptorship for first-year students is composed of the IGC Physician Mentor Program. The premise of the IGC Program is that exposure to professional role models is a significant determinant of medical students' career choices. In addition, an early clinical experience is an essential learning component for medical students to begin to correlate classroom knowledge with actual patient encounters. The IGC Preceptorship I and II Courses expose

first year medical students to clinical settings by matching each student with a community-based physician mentor for a primary care rotation.

1.0 Credit Hour

1.0 Lecture Hour

COM 5172—IGC Preceptorship II
The Interdisciplinary Generalist Curriculum (IGC) Program has three components: (1) The IGC Physician Mentor Program, (2) The IGC Managed Care/Business of Medicine Program; and (3) the College of Osteopathic Medicine in Community Service (COM Serve) Program. The Premise of the IGC Program is that exposure to professional role models is a significant determinant of medical students' career choices. In addition, an early clinical experience is an essential learning component for medical students to begin to correlate classroom knowledge with actual patient encounters.

1.0 Credit Hour

1.0 Lecture Hour

COM 5900—Principles of Radiology
This course provides an overview of common imaging modalities used in clinical practice. The course syllabus, as well as selected course content and radiological images, will be posted on the student WebCT throughout the duration of the course. It is the students' responsibility to visit the WebCT prior to and after each lecture and the final exam. Students are responsible for knowing and understanding all posted content and being able to interpret all posted radiological images. Students are also expected to complete the required reading prior to each lecture.

1.0 Credit Hour

1.0 Lecture Hour

COM 6001—Principles of Clinical Medicine (PCM)
Principles of Clinical Medicine is a full-year course that prepares the student for clinical rotations by providing experience in evaluating standardized patients, performing common medical procedures, and documenting both.

8.0 Credit Hours

8.0 Lecture Hours

COM 6002—Pre-Clerkship Seminar
A series of presentations at the end of the sophomore year to reinforce knowledge and skills useful for clinical rotations. Topics include risk management, medical record documentation, OSHA regulations, doctor/patient relationships, standard health maintenance care of adults and children, hospital protocols, literature research, and educational resources.

0.5 Credit Hours

0.5 Lecture Hours

COM 6003—Complementary and Alternative Medicine (CAM)
This introduction will consist of six one-hour lectures. Emphasis will be placed on the ways in which selected CAM techniques and substances may be used therapeutically by a physician and recognized interferences or contraindications with regard to "standard" practice and therapy.

2.0 Credit Hours

2.0 Lecture Hours

COM 6004—
Medical Ethics Seminar
Discusses and explores important issues in medical ethics, especially those involved in doctor/patient relationships. Emphasis is on developing the tools to work through actual ethics cases students will face in practice.

0.5 Credit Hours

0.5 Lecture Hours

COM 6005—
Medical Jurisprudence
Seminar and lecture series covering physician/attorney relationships, legal terminology, and principles. Emphasizes medical risk management.

1.0 Credit Hour

1.0 Lecture Hour

COM 6040—Principles of Pathology
The purpose of this course is to introduce the fundamental concepts of general pathology so the student may understand the basic pathological processes involved in development of diseases most likely to be encountered in hospitals and clinics. The gap between preclinical and clinical subjects may thus be spanned with a scientific foundation of the etiology, pathogenesis, morphologic alterations, and effects of diseases. The course consists of fundamental principles of general pathology, such as cell injury, inflammation, hemodynamic derangements (including thrombosis, infarction, and shock), basic pathologic processes of infectious diseases, the role of genetics and immunity in contributing to disease, and general discussion of neoplasia.

3.0 Credit Hours

3.0 Lecture Hours

COM 6050—Principles of Pharmacology
Basic pharmacological concepts and principles needed for the applied clinical science courses to follow during the semester.

2.0 Credit Hours

2.0 Lecture Hours

COM 6071—HIV Seminar
The HIV Seminar will cover the epidemiology of HIV/AIDS (with emphasis on South Florida); the diagnosis and treatment of common clinical manifestations of HIV disease; HIV therapies using current diagnostic tools; the provision of pre- and post-test counseling to patients; and Florida laws regarding HIV reporting, testing, and counseling. The seminar will also describe the psychosocial effects of HIV on people with the disease. The course will consist of eight hours of lectures. An interdisciplinary team of faculty members from the College of Osteopathic Medicine and the Center for Psychological Studies will teach the seminar, along with a practicing attorney, a pharmacist, a social worker, and a patient with HIV disease.

0.5 Credit Hours

0.5 Lecture Hours

COM 6082—PALS
PALS presents a systematic, interactive approach dealing with the survival of critically ill and injured children. This care includes a broad spectrum of services, from early identification of problems through pre-hospital, hospital, and rehabilitative care. It also presents a way for resuscitation providers to treat a desperately ill patient in a coordinated way, regardless of whether the response team consists of one person, two people, or a team. PALS-trained providers will use the same guidelines and approaches inside and outside the hospital, as well as nationally and internationally. This course will consist of 15 hours of interactive instruction supplemented by audiovisuals; demonstration of required skills on Pediatric Advance Life Support Manikins; and practice using defibrillators, EKG monitors, and intubation equipment.

1.0 Credit Hour

1.0 Lecture Hour

COM 6090—End of Life Seminar
Review of common geriatric syndromes, pertinent pathophysiological processes, and their evaluation and management. Stresses psychosocial aspects, therapeutics, and approach to the dying patient.

0.5 Credit Hours

0.5 Lecture Hours

COM 6091—Psychiatry and Behavioral Medicine
Introduces the major clinical concepts of psychiatry. Emphasizes the biophysical model as it relates to the assessment, diagnosis, and empathic and compassionate treatment of major psychiatric disorders, as listed in the DSM-IV.

2.0 Credit Hours

2.0 Lecture Hours

COM 6100—Integumentary System
Clinical aspects of skin diseases, infections of the skin, skin pathology, pediatric dermatoses, neoplastic disorders of the skin, burn management plastic surgery, skin disorders, and cutaneous manifestations of systemic disorders and diseases of the breast.

2.0 Credit Hours

2.0 Lecture Hours

COM 6101—Hematology and Lymph System
This course covers the diagnosis and management of diseases of the hematopoietic and lymphoreticular system and will consist of 30 hours of lectures. The course begins with a discussion of disorders of red cells white cells, platelets and hemostasis. Myeloproliferative, lymphoproliferative, and immunoproliferative disorders will also be discussed. Discussion of cancer chemotherapy and principles of surgical oncology will be given in the latter part of the course. Indications for, and adverse reaction to, blood transfusion will also be addressed.

2.0 Credit Hours

2.0 Lecture Hours

COM 6102—Respiratory System
This course presents pathophysiology, diagnosis and management of selected respiratory disorders, infectious disorders, and neoplasms of the respiratory system. Ventilatory functions and management of respiratory failure are discussed. Speakers are from the Departments of Internal Medicine, Family Medicine, Pediat-

rics, Pathology, Pharmacology, OPP, and Surgery including the Division of Otorhinolaryngology. There will be 47 hours of lecture, plus reading assignments and additional topics for independent learning.

3.0 Credit Hours

3.0 Lecture Hours

COM 6103—Cardiovascular System

Pathophysiology, diagnosis, and management of common cardiovascular disorders. Teaches electrocardiography, and includes training in the use of "Harvey."

5.0 Credit Hours

5.0 Lecture Hours

COM 6104—Gastrointestinal System

This course covers pathophysiology, diagnosis, and management of gastrointestinal diseases and diseases of the lower and biliary system. The instruction involves the participation of the faculty from Departments of Internal Medicine (Gastroenterology division), Surgery, Pediatrics, Pathology, Pharmacology, and Osteopathic Principles and Practice.

3.0 Credit Hours

3.0 Lecture Hours

COM 6105—Endocrine System

This course presents the pathophysiology, diagnosis, and management of hormonal disorders, including diseases of the endocrine glands, as well as neoplasms and infectious diseases affecting the endocrine system. The system component of the interdisciplinary curriculum involves participation by the Departments of Internal Medicine, Pediatrics, Surgery, Pathology, Pharmacology, and Osteopathic Principles and Practice. Lectures are integrated so that clinical aspects, pathophysiology of diseases, and disorders of each system are addressed.

1.5 Credit Hours

1.5 Lecture Hours

COM 6107—Musculoskeletal System

Diseases and disorders of the musculoskeletal system. Addresses pathophysiology; diagnosis and management of rheumatologic disorders; orthopedics; aspects of physical medicine; and rehabilitation. Osteopathic manipulative medicine is in this system.

2.0 Credit Hours

2.0 Lecture hours

COM 6108—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.

3.0 Credit Hours

3.0 Lecture Hours

COM 6109—Renal/Urinary System

Renal pathophysiology, glomerular, tubulointerstitial diseases, renal failure, congenital disorders, metabolic disorders, neoplasms of the renal/urinary system, and urology.

2.0 Credit Hours

2.0 Lecture Hours

COM 6110—Women's Health System

Pathophysiology, diagnosis, and treatment of common gynecologic and obstetric disorders. Special issues are discussed, such as domestic violence.

3.0 Credit Hours

3.0 Lecture Hours

COM 6123—OPP 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.

2.0 Credit Hours

2.0 Lecture Hours

COM 6124—OPP 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.

2.0 Credit Hours

2.0 Lecture Hours

COM 6150—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.

0.5 Credit Hours

0.5 Lecture Hours

COM 6173—IGC Preceptorship III

The Interdisciplinary Generalist Curriculum (IGC) Program has four components: (1) The IGC Physician Mentor Program; (2) The IGC Managed Care/Business of Medicine Program; (3) the College of Osteopathic Medicine in Community Service (COM Serve) Program; and (4) the Public Health Field Experience. The premise of the IGC Program is that exposure to professional role models is a significant determinant of medical students' career choices. In addition, an early clinical experience is an essential learning component for medical students to begin to correlate classroom knowledge with actual patient encounters.

2.0 Credit Hours

2.0 Lecture Hours

COM 6174—IGC Preceptorship IV

The IGC Preceptorship IV course exposes second-year medical students to clinical settings by matching each student with a community-based physician mentor for a primary care clinical rotation. At this time, students are also exposed to the central role of the primary care physician in managed health care and/or the management of their practices. In addition, students learn about the business aspects of practice and the various components of managed care organizations (MCOs) by being assigned to either an MCO teaching partner or attending a special conference or seminar on health care systems, policy, and access. In addition, students rotate through community-based clinics and other

service organizations that provide health care to medically underserved or at-risk populations.

2.0 Credit Hours

2.0 Lecture Hours

COM 6221—ACLS

ACLS presents a systematic interactive approach to dealing with people experiencing a cardiopulmonary emergency or an acute cerebral vascular accident. ACLS presents a way for resuscitation providers to treat a desperately ill patient in a coordinated way, regardless of whether the response team consists of one person, two people, or more. ACLS-trained providers will use the same guidelines and approaches inside and outside the hospital, as well as nationally and internationally. This course will consist of 15 hours of interactive instruction supplemented by audiovisuals; demonstration of required skills on Advanced Life Support Manikins; and practice using defibrillators, EKG monitors, and intubation equipment.

1.0 Credit Hour

1.0 Lecture Hour

COM 7000—Clinical Core Rotations

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

12.0 Credit Hours

12.0 Lecture Hours

COM 7090—Geriatrics

In this course, M3 students will be exposed to the major syndromes of aging. Case scenarios will be used to review the pathophysiology, diagnosis, and treatment of the key geriatric syndromes.

1.0 Credit Hour

1.0 Lecture Hour

COM 7091—Family Medicine I

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7092—Family Medicine II

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7093—Geriatrics

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7094—Psychiatry

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7095—Emergency Medicine

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7100—Infectious Disease

This course covers the diagnostic considerations in the immune-competent adult; the immune-compromised adult; and the elderly adult presenting with the complaints of fever, diarrhea, or cough.

1.0 Credit Hour

1.0 Lecture Hour

COM 7101—Comlex I

The Comlex I is designed to assess the osteopathic medical knowledge considered essential for osteopathic generalist physicians to practice medicine without supervision. Comlex I represents the basic science examination component of the licensing process of osteopathic medicine.

1.0 Credit Hour

1.0 Lecture Hour

COM 7102—Internal Medicine I

Internal Medicine is hospital-based, content-driven specialty training that places a premium on the cognitive work and interpersonal skills necessary for providing well-patient care and for managing medical problems seen on this clinical service. Emphasis is placed on differentiating normal from abnormal history and physical findings, interpreting diagnostic tests, establishing differential diagnoses, developing skills for accurate reporting and recording of data and problems, and developing management plans—including health education for patients and families and referrals.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7103—Internal Medicine II

Internal Medicine is hospital-based, content-driven specialty training that places a premium on the cognitive work and interpersonal skills necessary for providing well-patient care and for managing medical problems seen on this clinical service. Emphasis is placed on differentiating normal from abnormal history and physical findings, interpreting diagnostic tests, establishing differential diagnoses, developing skills for accurate reporting and recording of data and problems, and developing management plans—including health education for patients and families and referrals.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7104—General Surgery I

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty. It will also provide experience and help acquire skills in a surgical setting.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7105—General Surgery II

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7106—Internal Medicine III

Internal Medicine is hospital-based, content-driven specialty training that places a premium on the cognitive work and interpersonal skills necessary for providing well-patient care and for managing medical problems seen on this clinical service. Emphasis is placed on differentiating normal from abnormal history and physical findings, interpreting diagnostic tests, establishing differential diagnoses, developing skills for accurate reporting and recording of data and problems, and developing management plans—including health education for patients and families and referrals.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7110—Obstetrics and Gynecology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7131—Pediatrics/Ambulatory

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7132—Pediatrics/Hospital

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7140—Public Health and Epidemiology II

This course will provide the medical student with the skills needed to apply the fundamentals to preventive medicine/public health. The student of public and community medicine will be properly positioned to evaluate whether we have achieved such goals. The success or failure of changes implemented by politicians and economists during this turbulent and controversial period for medicine will be measured by the epidemiologist and the practitioner of preventive medicine. This course teaches the principles of epidemiology and also provides the basic skills on critical reading of the medical literature and the use of epidemiological methods.

2.0 Credit Hours

2.0 Lecture Hours

COM 7151—Rural Medicine I

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7152—Rural Medicine II

Rural medicine incorporates family medicine training into the rural setting and stresses the development of the independent practitioner who, with a minimum use of sophisticated technical and ancillary services, will have the ability to diagnose and formulate a treatment plan based on the data gathered through history, physical examinations, and minimal laboratory work. The core medical knowledge and practical experience gained in the didactic years and in family medicine rotations will provide the platform for learning to diagnose and provide cost-effective treatment and education for patients within the rural setting.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 7153—Rural Medicine III

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8002—Comlex II—CE

The Comlex Level 2-CE is designed to assess the osteopathic medical knowledge considered essential for osteopathic generalist physicians to practice medicine without supervision. Comlex Level 2-CE deals with the clinical aspects of diagnosis.

1.0 Credit Hour

1.0 Lecture Hour

COM 8003—Comlex II—PE

Standard patient examination that all M4 students are required to sit for to graduate from the College of Osteopathic Medicine. This exam is a component of the Osteopathic National Medical Licensing Exam conducted by the NBOME.

1.0 Credit Hour

1.0 Lecture Hour

COM 8004—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, and emergency management. A mock trial is presented.

1.0 Credit Hour

1.0 Lecture Hour

COM 8009—Emergency Medicine

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8011—Otolaryngology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8012—Family Medicine

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8014—Surgery—General

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8015—Geriatric Medicine

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8018—Internal Medicine

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8020—Radiation Oncology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8021—Medical Genetics

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8022—Nuclear Medicine

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8023—Neurology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8024—Neurological Surgery

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8025—Obstetrics and Gynecology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8027—OPP Medicine

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8028—Ophthalmology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8029—Orthopedic Surgery

The clerkship will expose the student to the practice of medicine in the

inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8030—Preventive Medicine

Pain management is considered an elective rotation to be taken during fourth-year clerkships. COM students performing this elective clerkship will be exposed to patients with chronic pain syndromes and the management of these unique diseases by a physician who specializes in this area of medicine.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8031—Pathology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct

supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8032—Pediatrics

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8035—Plastic Surgery

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8036—Psychiatry

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8037—Radiology—Diagnostic

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8038—Physical Medicine and Rehabilitation

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8040—Rural/International Medicine

Rural medicine incorporates family medicine training into the rural setting and stresses the development of the independent practitioner who, with a minimum use of sophisticated technical and ancillary services, will have the ability to diagnose and formulate a treatment plan based on the data gathered through history, physical examinations, and minimal laboratory work. The core medical knowledge and practical experience gained in the didactic years and in family medicine rotations will provide the platform for learning to diagnose and provide cost-effective treatment and education for patients within the rural setting.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8042—Thoracic Surgery

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8044—Urology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8103—Allergy and Immunology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8104—Anesthesiology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8105—Colon and Rectal Surgery

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8108—Dermatology

The clerkship will expose the student to the practice of medicine in the inpatient and ambulatory environments. Students will be engaged in the care of patients under the direct supervision of a physician certified in a specialty.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 8170—Public Health

A structured and supervised experience at a public health agency or public health-related institution. The student will acquire skills and experiences in the application of basic public health concepts and specialty knowledge to the solution of community health problems.

4.0–24.0 Credit Hours

4.0–24.0 Lecture Hours

COM 9100—Osteopathic Principles and Practice Fellowship

The continuation of the first practicum, this rotation builds on the Fellows' patient care responsibilities and stresses a more intense teaching load.

8.0–48.0 Credit Hours

8.0–48.0 Lecture Hours

COM 9200—Research Fellowship

The goal of the research fellowship is to provide a year-long, structured training experience in conceptualizing, conducting, and disseminating research for select medical students in the College of Osteopathic Medicine (COM). The fellowship consists of three core activities: completing academic coursework, serving as research associate on an existing research study, and participating in communication of scientific knowledge. The percentage of time each fellow will dedicate to the three activities will be outlined in an individualized fellowship training plan. Following the model of the OPP fellowship, the fellowship year will occur between the M2 and M3 years. In addition to their fellowship year, fellows will receive tuition remission for their M3 and M4 years.

8.0–48.0 Credit Hours

8.0–48.0 Lecture Hours

COM 9300—Medical Spanish

This introductory course will provide the medical student with the fundamentals needed to interview Spanish-speaking patients (history, disease presentation) and provide these patients with basic medical information with regards to diagnosis, treatment, and public health concerns.

2.0 Credit Hours

2.0 Lecture Hours

COM 9400—Preclinical Preceptorship

This course provides the opportunity for the student to participate in a self-guided experience in health-related fields. The student will be under the supervision of a College of Osteopathic Medicine faculty member. Publications and presentations may be generated from this experience.

2.0 Credit Hours

2.0 Lecture Hours

COM 9500—Guided Study

Special assignment on a clinical or scientific subject, under faculty supervision.

2.0 Credit Hours

2.0 Lecture Hours

COM 9501—Integration of Biomedical and Clinical Sciences

Review of basic science as it pertains to osteopathic medical knowledge considered essential for osteopathic generalists to practice medicine without supervision.

5.0 Credit Hours

5.0 Lecture Hours

COM 9502—Integration of Clinical Sciences and Diagnosis

This course is designed to assess the osteopathic medical knowledge considered essential for osteopathic generalist physicians to practice medicine without supervision. Comlex Level 1 represents the basic science examination component of the licensing process of osteopathic medicine.

1.0 Credit Hour

1.0 Lecture Hour

COM 9600—Research

This course provides the opportunity for the student to participate in scientific research in health-related fields. The student will be under the supervision of a research scientist/faculty member. Publications and presentations may be generated from this experience.

3.0 Credit Hours

3.0 Lecture Hours

Affiliated Hospitals

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

Bay Pines Veteran Affairs Medical Center
St. Petersburg

Bethesda Memorial 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.
D.M.E.: Myron Howell, D.O.

Columbia Hospital
West Palm Beach
D.M.E.: Bradley Feuer, D.O., J.D.

Copper Green Hospital
Birmingham
DME: Jeremy Alberg, D.O

Coral Springs Medical Center
Coral Springs
Associate Medical Education Director: Daniel Hurwitz, M.D.
D.M.E.: Myron Howell, D.O.

Florida Hospital East Orlando
Orlando
D.M.E.: Joseph Allgeier, D.O.

Jackson Memorial Hospital North
North Miami Beach
D.M.E.: Stanley Simpson, D.O.

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

Lee Memorial Hospital
Fort Myers
DME: Jeremy Alberg, D.O.

Memorial Regional Hospital
Hollywood
Director of Medical Affairs: Stanley Marks, M.D.

Miami Children's Hospital
Miami
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
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.

Osteopathic Institute of the South
Atlanta
President: Barry Doublestein

Palmetto General Hospital
Hialeah
D.M.E.: Marc Morganstine, D.O.

Palms West Hospital
Loxahatchee
D.M.E.: Bradley Feuer, D.O., J.D.

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

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

UM/Jackson Memorial Medical Center
Miami
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 (COM^2Serve) 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 his or her decision making. There are approximately 140 primary care physician mentors who teach first- and/or second-year medical students in their private offices. This network of preceptors is composed of physicians in the three primary care disciplines; they are located throughout the tricounty area.

IGC Business of Medicine/ Managed Care Program
Students learn the business aspects of practice as well as the various components of managed care organizations (MCOs). Each student is either assigned to an MCO teaching partner, or attends a special conference or seminar on health care systems, policies, and access. Students learn how a managed care organization operates by participating in seminars and small group discussions led by professionals representing various departments/ experiences such as medical operations, physician committee meetings, utilization management, quality management, and provider/ practice management.

IGC COM2Serve Program

This is the community service component of the IGC preceptorship, in which second-year medical students are involved in service learning with community health centers, public health departments, homeless assistance centers, migrant farmworker clinics, and other subsidized community clinics. The COM^{2}Serve partner organizations provide health care and other needed services to medically underserved, minority, and at-risk populations.

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 post-doctoral 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 includes 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 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 month-long, 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.

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, sociopolitical 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 15 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

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

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.

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.

Curriculum Outline

Core Courses (required)		Lecture	Practice	Semester Hours
PUH 5220	Environmental and Occupational Health	45	0	3
PUH 5301	Biostatistics	45	0	3
PUH 5430	Epidemiology	45	0	3
PUH 5512	Health Policy, Planning, and Management	45	0	3
PUH 5520	Legal and Ethical Issues in Public Health	45	0	3
PUH 6001	Social and Behavioral Sciences Applied to Health	45	0	3
PUH 6002	Public Health Field Experience	0	200	6
PUH 6604	Research Methods in Public Health	30	30	3

Elective Courses		Lecture	Practice	Semester Hours
PUH 5002	Health Promotion and Disease Prevention	45	0	3
PUH 5003	Public Health Seminar	30	15	3
PUH 5004	Public Health Grant Writing	15	60	3
PUH 5101	Introduction to Public Health	45	0	3
PUH 5110	Culture, Ethnicity, and Health	45	0	3
PUH 5111	Public Health Issues of the Elderly	45	0	3
PUH 5112	Weapons of Mass Destruction and Bioterrorism	45	0	3
PUH 5115	Principles of Health Education	45	0	3
PUH 5210	Public Health Communications	15	60	3
PUH 5312	Genetics in Public Health	45	0	3
PUH 5314	Global Health	45	0	3
PUH 5420	Epidemiology of Diseases of Major Public Health Importance	45	0	3
PUH 5500	School Health	45	0	3
PUH 5502	Children's Health	45	0	3
PUH 5503	Women's Health	45	0	3
PUH 5510	Maternal and Child Health	45	0	3
PUH 5513	Public Health Nutrition	45	0	3
PUH 5516	Public Health Informatics	45	0	3
PUH 5802	Epidemiologic Surveillance and Outbreak Investigation	30	30	3
PUH 6005	Public Health Research I	0	90	3
PUH 6006	Public Health Research II	0	90	3
PUH 6008	Public Health Advocacy	45	0	3
PUH 6009	Disaster Management	30	30	3
PUH 6016	Survey Methods in Public Health	30	30	3
PUH 6017	Special Studies in Public Health	0	90	3
PUH 6022	Community Health Project	0	90	3

PUH 6101	Health Care Organization and Administration	45	0	3
PUH 6104	Health Services Planning and Evaluation	45	0	3
PUH 6201	Tropical Diseases	45	0	3
PUH 6521	Budgeting and Accounting for Health Care Organizations	45	0	3
PUH 6522	Strategic Marketing for Health Care Organizations	45	0	3
PUH 6523	Strategic Leadership in Management of Human Resources	45	0	3

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 5002—Health Promotion and Disease Prevention

Students learn health education strategies that can be incorporated into multiple settings, focusing on wellness and preventive interventions. This course addresses individual and social factors as well as behavioral issues, health detriments, and community resources. (45-0-3)

PUH 5003—Public Health Seminar

The course requires attendance at a minimum of 45 hours of public health special lectures arranged or preapproved by the course director. A written report is required for each lecture. The student may fulfill the total required hours of lectures over three semesters, starting from the semester of enrollment. (30-15-3)

PUH 5004—Public Health Grant Writing

Introduction to the skills of grant writing in public health. Each student will submit a grant as a culminating experience. (15-60-3)

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 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)

PUH 5111—Public Health Issues of the Elderly

Examines important determinants of morbidity and mortality among the aged population. Emphasizes social, cultural, economic, behavioral, and physical characteristics of importance in the design and development of appropriate prevention efforts directed at the elderly. (45-0-3)

PUH 5112—Weapons of Mass Destruction and Bioterrorism

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. (45-0-3)

PUH 5115—Principles of Health Education

Historical and philosophical foundations of health education, focusing

on the principles of the discipline and preparation for service as a professional. Theoretical models will be discussed. **(45-0-3)**

PUH 5220—Environmental and Occupational Health

Investigates environmental and occupational factors that contribute to the development of health problems in industrialized and developed countries. Includes such topics as toxic substances, pests and pesticides, food quality, air and water pollution, solid and hazardous waste disposal, occupational hazards, and injury prevention. **(45-0-3)**

PUH 5301—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. **(45-0-3)**

PUH 5312—Genetics in Public Health

This course will address the principles and practice of genetics as well as the ethical, legal, and social issues of genetics in public health practice. **(45-0-3)**

PUH 5314—Global Health

This course addresses global health problems and trends translated to the needs and demands of populations, as well as the socioeconomic and political impact on health delivery. The role of international health agencies will also be addressed. **(45-0-3)**

PUH 5420—Epidemiology of Diseases of Major Public Health Importance

In-depth study of the distribution and determinants of specific infectious, non-infectious, and chronic diseases of public health importance. **Prerequisites:** PUH 5430, PUH 5301 **(45-0-3)**

PUH 5430—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. **(45-0-3)**

PUH 5500—School Health

Study of the development and enhancement of school level health education and health service programs that support student health and academic achievement. **(45-0-3)**

PUH 5502—Children's Health

This course addresses disease and disorders of children of public health significance as well as public health issues in children such as child safety, child abuse, and newborn screening. **(45-0-3)**

PUH 5503—Women's Health

This course addresses disease and disorders of women of public health significance as well as public 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 systemic 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 tolls 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 surveillance and investigation of disease outbreaks. Surveillance data collection, analysis, and reporting are emphasized as well as indicators for assessing the effectiveness of such programs. **Prerequisites:** PUH 5430, PUH 5301 **(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 enhancement. Reviews the linkage between public health and other social sciences. Students gain knowledge and awareness of today's most pressing public health problems and the social and behavioral factors determining 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 educational 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

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

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. **(0-90-3)**

PUH 6022—Community Health Project

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 6101—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 will provide 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 Biomedical Informatics

Nova Southeastern University College of Osteopathic Medicine in collaboration with the NSU Graduate School of computer and Information Sciences (GSCIS) has developed a course of study leading to the degree of master of science in biomedical informatics. It is designed to train future leaders in the development, dissemination, and evaluation of information technology as it relates to health care environments, such as hospitals, health systems, health information technology system vendors, eHealth companies, insurers, pharmaceutical companies, and academic institutions. This innovative distance program uses a completely **online format** to enable working professionals to earn a master's degree in biomedical informatics without career disruption.

There has been an emergence of biomedical 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 biomedicine and clinical decision making.

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

Biomedical informatics allows physicians and other health professionals to integrate advanced information system capabilities and highly trained individuals with a clinical outlook and approach. The methods, tools, and resources developed through biomedical informatics often help physicians and other health professionals accomplish tasks that they were already doing, but in a more efficient, perhaps more accurate, or even 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 access 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 biomedical informatics include

- generating information from data in the form of basic statistics, ideas, or knowledge
- 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 clinicians in rural and remote areas
- serving as the only such program in Florida
- 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 biomedical 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 in large populations
- reducing adverse complications in health care
- overcoming physician resistance to intricate systems and information technology
- maximizing constrained resources

Course of Study

The M.S.BI 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. 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 addition, the quality of the biomedical 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 M.S.BI 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 bioinformatics 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 biomedical informatics, the graduate will be able to

- layout and design an information system
- understand the fundamentals of a telecommunication network design and the Internet
- have in-depth knowledge of database systems and structures
- evaluate medical information technology to determine what should be integrated into clinical medicine
- employ the knowledge, skills, and concepts of biomedical 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 biomedical informatics and related areas
- have a basic understanding of biostatistics and epidemiology and their application to biomedical informatics
- use and apply interface design principles to biomedical informatics systems

Admission to the Master of Science in Biomedical Informatics

The M.S.BI 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
- demonstrate the ability to clearly communicate in a written manner

A health professions degree is desirable, but not required. Students without prior degrees or work experience in health care may have to take prerequisite courses. 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).

To be considered by the admissions committee, all applicants must

- complete the online application
- send the nonrefundable application fee of $50

Please mail all supplemental admissions material to

Nova Southeastern University
Enrollment Processing Services (EPS)
College of Osteopathic Medicine
M.S.BI Admissions
3301 College Avenue
P.O. Box 299000
Fort Lauderdale, Florida 33329-9905

Upon receipt of the completed application and required material, the Committee on Admissions will review the application and the applicant's file and make recommendations 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.

Should you have any questions, please email *com@nsu.nova.edu* or call 800-262-1101.

Nondegree-Seeking Students

A nondegree-seeking student is one who wishes to take courses in the M.S.BI program, but does not intend to pursue the master's degree at the time of application. The nondegree-seeking student must provide the following admission requirements in order to take classes in the M.S.BI program:

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

Nondegree-seeking students are not guaranteed future acceptance into the Master of Biomedical Informatics Program. If after taking classes in the program as a nondegree-seeking student, the student wishes to become degree seeking, they must apply to the master's program as a new student and meet all the requirements for admission.

Nondegree-seeking students may request credit transfer towards the degree once they are admitted to the degree program. All credit transfer requests should be submitted to the program director.

Tuition and Fees

Tuition is $475 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 or enrollees of the NSU-COM Master of Science in Biomedical Informatics Program may petition for a transfer of credit hours toward their degree from an accredited institution. To be considered for transfer of credit, courses must have been completed prior to admission to the M.S.BI program and less than five years prior to the beginning of the student's first semester in the M.S.BI program. All courses to be transferred must be substantially equivalent to courses offered in the program, as determined by the program director and appropriate faculty members. No transfer credits will be given for electives.

All courses considered for transfer into the program must have been successfully completed with a grade of B (80 percent) or better. Transfer course grades are not calculated toward the student's grade point average.

An accepted applicant to the program who wishes to receive transfer credit must submit a written request and the appropriate verification documents (e.g., official transcripts, syllabi, and catalogs) to the program director.

Graduation Requirements

To be eligible for the M.S.BI degree, students must fulfill the following requirements:

- satisfactorily complete, within five years of matriculation, the course of study required for the M.S.BI degree—minimum of 43 semester hours of courses (40 hours of required core courses and 3 hours of elective credit).
- have taken no less than 50 percent of total credits in an M.S.BI program
- satisfactorily meet all NSU 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 biomedical informatics program at NSU-COM, a curriculum has been developed that includes teaching, clinical care, research, and development.

The didactic courses will be offered online, using WebCT or some similar format. Students will be required to complete a practicum within the environment in which it is being conducted. Each practicum will require the submission of a completed project or report.

Biomedical Informatics Program Curriculum Outline

Required Courses		Credits
MI 5120	Management Information Systems	3
MI 5121	Information Systems Project Management	3
MI 5130	Database Systems	3
MI 5152	Information Security	3
MI 5153	Telecommunications and Computer Networking	3
MI 5160	System Analysis and Design	3
MI 5171	Decision Support Systems	3
MI 5180	Human-Computer Interaction	3
MI 5200	Survey of Biomedical Informatics	3
MI 5302	Epidemiology and Biostatistics	3
MI 5401	Managing Organizational Behavior	3
MI 5203	Biomedical Informatics Applications to Health Services	3
MI 7000	Biomedical Informatics Project/Practicum	4
	Subtotal	**40**

Elective Courses (3 credits required)		Credits
MI 6400	Outcome Research	3
MI 6401	Biostatistics	3
MI 6403	Epidemiology	3
MI 6404	Special Topics in Biomedical Informatics	3
MI 6405	Public Health Informatics	3
MI 6406	Information Technology Applications in Management Decisions	3
MI 6407	Grant Writing	3
MI 6408	Health Policy, Planning, and Management	3

Total Credits 43

Master of Science in Biomedical Informatics Program Core Courses

MI 5120—Management Information Systems (MIS)

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 5121—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. Case studies are used throughout the course to support concepts, principles, and problem solving. **(3 credits)**

MI 5130—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 models), client-server database applications, distributed databases, and object-oriented databases. **(3 credits)**

MI 5152—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 5153—Telecommunications and Computer Networking

This course provides a framework for understanding telecommunications 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 5160—Systems Analysis and Design

Analysis of requirements for information systems. Elicitation/fact-finding, problem analysis, decomposition, and the requirements document. Concepts, methods, techniques, and tools for systems analysis, modeling and simulation, and prototyping. Structured and object-oriented analysis. Role of the systems analyst in the organization. Gaining user commitment and fulfilling user needs. Concepts, tools, and techniques for systems design. Design principles, quality factors, decomposition of complex systems, and modularization techniques. Design methods such as object-oriented and function-oriented design. Comparison of analysis and design techniques. **(3 credits)**

MI 5171—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 5180—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 5200—Survey of Biomedical Informatics

This course provides an examination of the broad spectrum of biomedical 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 biomedical

informatics in a variety of health care and related settings. **(3 credits)**

MI 5203—Biomedical Informatics Applications to Health Services
This online course builds on the knowledge acquired through Survey of Biomedical Informatics. This course explores the practical aspects of health information technology and seeks to apply the information learned in previous courses to the health care arena. Students will learn to integrate the needs of health care institutions and providers with the use of information technology applications through practical task assignments. Topics will be discussed from a practical standpoint, from the health care provider's perspective. **(3 credits)**

MI 5302—Epidemiology/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)**

MI 5401—Managing Organizational Behavior
Students will gain a working knowledge of how to manage personal, interpersonal, and group processes by having the interpersonal skills to assume responsibility for leading and promoting teamwork among diverse stakeholders. Students will learn to manage individual and group behaviors in improving organizational productivity and performance. Through experimental learning, students will learn to integrate home, work, and educational observations and experiences and to work, and educational observations and experiences and to convert them into proactive practical applications for growth and renewal. **(3 credits)**

MI 7000—Biomedical Informatics Project/ Practicum
This practicum provides an opportunity for participation in selected health care environments (e.g., hospital, clinic, other health care institution) using information technology in such activities as the creation of medical-decision logic and the evaluation of existing medical computer services. The practicum or project must obtain the approval of the program director or his or her designee. **(3 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 6400—Outcome Research
This course 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. **(3 credits)**

MI 6401—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 6403—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 6404—Special Topics in Biomedical Informatics
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. **(3 credits)**

MI 6405—Public Health Informatics
This course focuses on developing the knowledge and skills of systemic 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 some informatics tools (such as evidence-based practice or GIS) in practice. **(3 credits)**

MI 6406—Information Technology Applications in Management Decisions
Students enter MIS courses with varied levels of knowledge and understanding. Effective managers know what information systems are, how they affect the organization and its employees, and how IT can make businesses more competitive. This course will help students learn to design and develop computer applications that use common end-user software packages to solve problems facing managers today. **(3 credits)**

MI 6407—Grant Writing
Introduction to the skills of grant writing in health information technology. Each student will submit a grant as a culminating experience. **(3 credits)**

MI 6408—Health Policy, Planning, and Management
This course discusses principles and logic involved in health policy, planning, and management; addresses historical, political, and environmental contexts; and incorporates it into population research. **(3 credits)**

MI 6409—Health Service Planning and Evaluation
This course is an in-depth review of basic planning and evaluation techniques for the implementation of community health care programs. The course is designed, and will be taught, employing comparative methodology. The material will be taught using multiple international examples and experiences. The course covers the interdependence of policy, planning, and management. It will consist of 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 **(3 credits)**

College of Osteopathic Medicine Departments

ANATOMY

Chair and Professor: **G. R. Conover** | Professors: **L. Dribin, A. Mariassy, R. K. Yip** | Assistant Professors: **N. Lufti, S. Purvis, K. Tu**

BIOCHEMISTRY

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

MICROBIOLOGY

Chair and Professor: **H. Hada** | Professors: **D. Burris, H. E. Laubach** | Assistant Professor: **K. Davis**

PATHOLOGY

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

PHARMACOLOGY

Chair and Professor: **C. E. Reigel, Jr.** | Associate Professors: **L. Gorman, T. Panavelil, C. Powell** | Assistant Professor: **M. Parker**

PHYSIOLOGY

Chair and Associate Professor: **W. Schreier** | Professors: **H. Mayrovitz, S. Taraskevich** | Associate Professors: **A. Jimenez, Y. Zagvazdin**

PSYCHIATRY

Chair: **TBA**

DIVISION OF MEDICAL HUMANITIES

Chair and Professor: **S. Cohen**

FAMILY MEDICINE

Chair and Associate Professor: **P. Calzada** | Professors: **L. Levy, H. Neer, R. Oller, A. Silvagni** | Associate Professors: **J. DeGaetano, M. Howell, N. Pandya, D. Shaw, S. Simpson, P. Anderson-Worts** | Assistant Professors: **B. Arcos, R. Bekic, J. Breen, R. Cherner, P. Cohen, R. Ferrero III, K. Munoz, J. Schaffer, S. Scott-Holman, R. Wood, A. Whitehead, S. Ledbetter**

DIVISION OF COMMUNITY MEDICINE

Chair and Professor: **S. Zucker** | Professors: **R. Foster, F. Lippman** | Assistant Professors: **D. Steinkohl, M. Wilkinson**

GERIATRICS

Chair and Associate Professor: **N. Pandya** | Assistant Professors: **S. Ledbetter, D. Sanders-Cepeda** | Clinical Assistant Professor: **M. Warhaftig**

PREVENTIVE MEDICINE

Chair and Clinical Associate Professor: **J. Malecki** | Professors: **G. S. Bowen, M. Fernandez** | Assistant Professors: **J. Pellosie, J. Warren**

RURAL MEDICINE

Chair and Professor: **J. Howell**

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 Professors: **D. Boesler, M. Sandhouse, E. Shamus** | Assistant Professor: **A. Kusienski** | Instructor **Y. Hussain-Quersh** | Professors Emeritus: **M. Greenhouse, A. Snyder**

DIVISION OF PHYSICAL MEDICINE AND REHABILITATION

Chair and Clinical Assistant Professor: **R. Tolchin**

DIVISION OF SPORTS MEDICINE

Chair and Professor: **E. Wallace** | Associate Professor: **E. Shamus** | Assistant Professor: **A. Kusienski**

INTERNAL MEDICINE

Chair and Associate Professor: **S. Snyder** | Associate Professor: **J. Bleicher** | Assistant Professors: **N. Bray, M. Echols, R. Hasty, G. Hill, G. Merlino, A. Sciberras**

DIVISION OF CARDIOVASCULAR MEDICINE

Chair and Professor: **A. A. Greber** | Clinical Professor: **R. Kaufman** | Clinical Assistant Professor: **C. Vogel**

DIVISION OF DERMATOLOGY

Chair and Clinical Professor and Residency Program Director: **S. Skopit** | Instructor: **T. Favreau**

DIVISION OF ENDOCRINOLOGY

Chair and Clinical Professor: **L. Chaykin** | Clinical Assistant Professor: **C. Coelho**

DIVISION OF GASTROENTEROLOGY

Chair: **TBA** | Clinical Professor: **A. Levine** | Clinical Assistant Professors: **M. Carp, G. Cowan, M. Lamet**

DIVISION OF HEMATOLOGY/ ONCOLOGY

Chair: **TBA** | Clinical Associate Professor: **J. Leslie** | Clinical Assistant Professors: **J. Krathen, S. Rozin**

DIVISION OF INFECTIOUS DISEASES

Chair and Clinical Associate Professor: **J. Spalter** | Assistant Professor: **J. Hamstra**

DIVISION OF NEPHROLOGY

Chair and Associate Professor: **S. Snyder** | Associate Professor: **J. Bleicher** | Clinical Assistant Professor: **J. Waterman**

DIVISION OF NEUROLOGY

Chair and Clinical Assistant Professor: **H. M. Todd** | Professor: **L. Jacobson** | Clinical 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**

OBSTETRICS AND GYNECOLOGY

Chair and Professor: **D. R. Barkus** | Associate Professor: **K. Johnson** | Assistant Professor: **R. Alexis**

PEDIATRICS

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

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 GENERAL SURGERY

Chair and Clinical Associate Professor: **E. Wiener**

DIVISION OF OPHTHALMOLOGY

Chair and Clinical Professor: **W. Bizer**

DIVISION OF ORTHOPEDIC SURGERY

Chair and Clinical Professor: **M. Rech** | Professor: **M. J. Morris** | Clinical Associate Professor: **J. Rush**

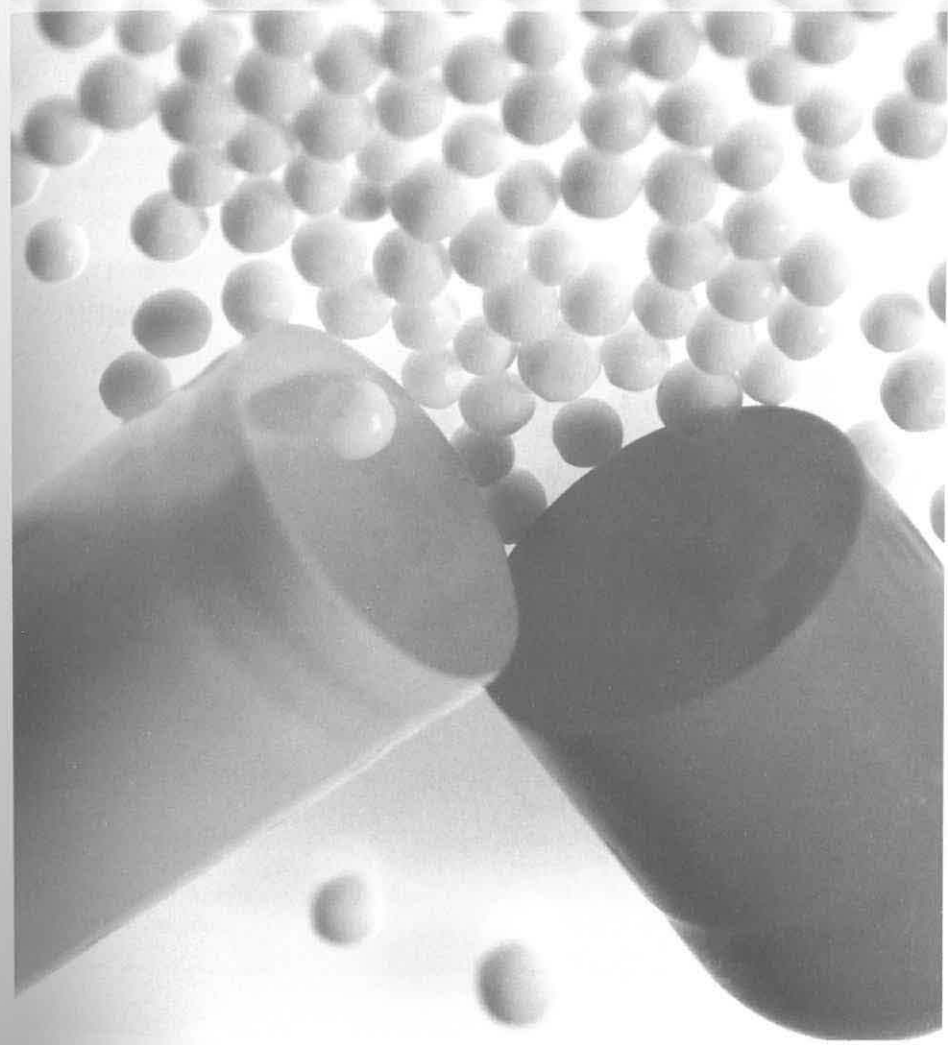
DIVISION OF OTORHINOLARYNGOLOGY

Chair and Clinical Associate Professor: **R. Contrucci**

DIVISION OF UROLOGY

Chair: **TBA**

College of Pharmacy



College of Pharmacy

Andrés Malavé,
M.S., Ph.D.
Dean

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

William Wolowich, Pharm.D.
Interim 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

Betty J. Harris, B.S., Pharm.D.
Assistant Dean, Experiential Education and Student Services

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 for 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-accredit.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 headquartered 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 they are 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*. Although most 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

Students must have an additional three hours of either general biology or anatomy and physiology and one semester hour of laboratory from either subject.

- general biology/anatomy and physiology, including laboratory—four 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
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 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) 612-2050

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 registrars 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 the preprofessional 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 pharmacist is highly recommended and may substitute for a letter from a professor

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
33329-9905

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 2008–2009 (subject to change by the board of trustees without notice) is $19,975 for Florida residents and $23,740 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 2008–2009 (subject to change by the board of trustees without notice) is $19,975 (U.S.) with a College of Pharmacy contract and $23,740 (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 64B16-26.400(4), or by the Board of Pharmacy in the state in which the student plans to fulfill the requirements for internship. A Social Security number is 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. An intern license 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 *intl@nsu.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 Pharmaceutics, 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 students to experience pharmacy practice first hand 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 eight 160-hour experiences: four in core practice areas and four 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 advanceed pharmacy practice sites in Puerto Rico for the entry-level students. Students must expect to use Florida sites for most experiences. The curriculum is designed so that knowledge gained in one semester becomes the foundation for material covered in subsequent semesters. Therefore, if students do not successfully complete the coursework specified for one semester, it will impede their ability to take courses in the future semesters. (Students have 60 days after the end of the semester to resolve any grade disputes; after that, the instructor may discard all materials from the semester.) This may lead to a delay in graduation. The program must be completed within seven years from the date of matriculation.

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

Entry-Level Curriculum Outline

FIRST YEAR—Fall Semester		Credits
Orientation		0
BCH 5200	Biochemistry	4
PHA 4100	Pharmaceutics I	3
PHA 4120	Pharmacy Calculations	1
PHA 4200	Pharmacodynamics I	3
PHA 4300	Pharmacy and the Health Care System	2
PHA 4400	Dean's Hour I	0
PHA 4580	Early Practice Experience: Service Learning	0
PHA 5211	Pharmacy Anatomy and Physiology I	4
	Total:	**17**

FIRST YEAR—Winter Semester		Credits
PHA 4110	Pharmaceutics II	3
PHA 4110L	Pharmaceutics II Lab	0
PHA 4130	Pharmacokinetics	4
PHA 4210	Pharmacodynamics II	3
PHA 4310	Pharmaceutical Marketing	2
PHA 4410	Dean's Hour II	0
PHA 4550	Drug Information Resources	1
PHA 4580	Early Practice Experience: Service Learning (continued from first semester)	2
PHA 5221	Pharmacy Anatomy and Physiology II	4
	Total:	**19**

SECOND YEAR—Fall Semester		Credits
MIC 5200	Microbiology	3
PHA 5100	Clinical Pharmacokinetics	3
PHA 5220	Pharmacodynamics III	5
PHA 5300	Social and Behavioral Pharmacy	2
PHA 5380	Pharmacy Law	2
PHA 5580	Early Practice Experience: Community	0
	Suggested Electives	2
	Total:	**17**

SECOND YEAR—Winter Semester		Credits
PHA 5150	Nonprescription Therapies	3
PHA 5230	Pharmacodynamics IV	4
PHA 5330	Communication Skills	2
PHA 5580	Early Practice Experience: Community (continued from first semester)	3
PHA 5610	Therapeutics/Pathophysiology I	5
	Suggested Electives	2
	Total:	**19**

THIRD YEAR—Fall Semester		Credits
PHA 6300	Research Design and Statistics	3
PHA 6440	Pharmacy Management	3
PHA 6580	Early Practice Experience: Health System	2
PHA 6620	Therapeutics/Pathophysiology II	5
PHA 6710	Patient Care Management I	2
PHA 6710L	Patient Care Management I Lab	0
	Suggested Electives	2
	Total:	**17**

THIRD YEAR—Winter Semester		Credits
PHA 6410	Pharmacoepidemiology and Pharmacoeconomics	3
PHA 6560	Physical Assessment*	2
PHA 6610	Drug Literature Evaluation	2
PHA 6630	Therapeutics/Pathophysiology III	4
PHA 6680	Early Practice Experience: Pharmacy Service	2
PHA 6720	Patient Care Management II	1
PHA 6720L	Patient Care Management II Lab	0
	Suggested Electives	4
	Total:	**18**

FOURTH YEAR—Fall Semester		Credits
PHA 7620	Advanced Practice Experience: Acute Care Medicine	4
PHA 7640	Advanced Practice Experience: Ambulatory Medicine	4
PHA 7660	Advanced Practice Experience: Select Community	4
PHA 7680	Advanced Practice Experience: Select Hospital	4
	Total:	**16**

FOURTH YEAR—Winter Semester		Credits
PHA 7610	Advanced Practice Experience: Elective I	4
PHA 7630	Advanced Practice Experience: Elective II	4
PHA 7650	Advanced Practice Experience: Elective III	4
PHA 7670	Advanced Practice Experience: Elective IV	4
PHA 7690	Advanced Practice Experience Ninth Course Option	4**
PHA 7800	Eighth Semester	0
	Total:	**16**

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

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 experiencies on a full-time basis. The curriculum requires completion of four, four-week advanced practice experiences. Licensure as a Florida or Puerto Rico 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 Accreditation Council for Pharmacy 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 2008–2009, 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

FIRST YEAR—Fall Semester		Credits
PHA 7700	Research Design and Statistics	2
PHA 7740	Drug Literature Evaluation	2
PHA 7750	Disease Management II	4
		Total: 8

FIRST YEAR—Winter Semester		Credits
PHA 7710	Pharmacoeconomics	2
PHA 7720	Physical Assessment*	2
PHA 7760	Disease Management I	4
PHA 7780	Management and the U.S. Health Care System	2
		Total: 10

SECOND YEAR—Fall Semester		Credits
PHA 7730	Clinical Pharmacokinetics	4
PHA 7770	Disease Management III	4
		Total: 8

SECOND YEAR—Winter Semester		Credits
PHA 7790	Research Project** (alternate options may be available)	4
PHA 7820	APE: Acute Care Medicine	4
PHA 7840	APE: Chronic Care Medicine	4
		Total: 12

SECOND YEAR—Summer Semester		Credits
PHA 7860	Advanced Practice Experience Elective I	4
PHA 7880	Advanced Practice Experience Elective II	4
		Total: 8

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

**If PHA 7790 is not completed in one semester, student must register for PHA 7790C (Research Project Continuation, 1 credit) in each successive semester until the project is successfully completed.

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 relation, 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 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. Applicants may be required to complete some pre-pharmacy coursework from the College of Pharmacy.

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 213 on the computer-based exam or 79–80 on the Internet-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

TOEFL/TSE Services
P.O. Box 6153
Princeton, NJ 08541-6153
(609) 771-7100

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 equivalence. 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.

Test Scores

Applicants must request to have official TOEFL scores sent if English is not their native language. Scores must come directly to the Office of Admissions, College of Pharmacy from the testing center—photocopies and facsimiles will not be accepted.

Extensive experience in an English-speaking environment may be evaluated for substitution of this requirement.

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 2008–2009, which is subject to change at any time at the board's discretion:

- Anticipated tuition is $23,475 (U.S.) for noncontract students and $20,275 (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 $1,000.

  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 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/isss

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		Credits
	Orientation	0
PHA 4300	Pharmacy and the Health Care System	2
PHA 5300	Social and Behavioral Pharmacy	2
PHA 5380	Pharmacy Law	2
PHA 5580	Early Practice Experience: Community	2
PHA 6101	Clinical Pharmacology	4
PHA 7730	Clinical Pharmacokinetics	4
	Total:	**16**

FIRST YEAR—Winter Semester		Credits
PHA 5330	Communication Skills	2
PHA 5580	Early Practice Experience: Community (Continued from first semester)	2
PHA 5610	Therapeutics/Pathophysiology I	5
PHA 6410	Pharmacoepidemiology and Pharmacoeconomics	3
PHA 6560	Physical Assessment*	2
PHA 6610	Drug Literature Evaluation	2
PHA 6630	Therapeutics/Pathophysiology III	4
	Total:	**20**

FIRST YEAR—Summer Semester		Credits
PHA 6590	Advanced Practice Experience: Community	4
	Total:	**4**

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

SECOND YEAR—Fall Semester		Credits
PHA 5150	Nonprescription Therapies	3
PHA 6300	Research Design and Statistics	3
PHA 6440	Pharmacy Management	3
PHA 6620	Therapeutics/Pathophysiology II	5
PPS 4180	Prescription Practice	3
PPS 4180L	Prescription Practice Lab	0
	Total:	17

SECOND YEAR—Winter Semester		Credits
PHA 6690	Advanced Practice Experience: Hospital	4
PHA 6790	Advanced Practice Experience: General Clinical	4
PHA 7620	Advanced Practice Experience: Acute Care Medicine	4
PHA 7640	Advanced Practice Experience: Ambulatory Medicine	4
PHA 7800	Eighth Semester	0
	Total:	16

THIRD YEAR—Summer/Fall Semester		Credits
PHA 7610	Advanced Practice Experience: Elective I	4
PHA 7630	Advanced Practice Experience: Elective II	4
PHA 7650	Advanced Practice Experience: Elective III	4
PHA 7660	Advanced Practice Experience: Select Community	4
PHA 7670	Advanced Practice Experience: Elective IV	4
PHA 7680	Advanced Practice Experience: Select Hospital	4
	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.

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

Covers 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 cause, prevention, 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 the fundamental physiological principles. **(64-0-4)**

PHA 5221—
Pharmacy Anatomy and Physiology II

Continuation of Pharmacy Anatomy and Physiology I. **(64-0-4)**

Pharmacy—Required Courses

PHA 4100—Pharmaceutics I

Theory of physicochemical principles that apply to pharmaceutical systems and a study of liquid and solid dispersion systems. **(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 (Pharmaceutics II). 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 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 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-medicated 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 5380—Pharmacy Law
This course covers federal and state statues, 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. (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, patients, 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/pharmacoeconomic 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)**

PHA 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:** P3 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 distribution, 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 **(16-24-2)**

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

PHA 6720—Patient Care Management II
Continuation of Patient Care Management I. **Prerequisites:** Pharmacodynamics II and III, Therapeutics/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 7610/7630/7650/7670/7690—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 therapeutics, pharmacokinetics, drug information retrieval and evaluation, verbal and written communication, patient monitoring, and case presentations. 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 knowledge in outpatient settings. 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 pharmacoepidemiology and pharmacoeconomics. Emphasizes identifying the principles and methodologies of pharmacoepidemiology/pharmacoeconomic analysis and the strengths and weaknesses of specific methods. Stresses application of relevant principles within critical pathways. Discusses practical examples for successful implementation of theses 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: geriatrics, neurological and psychiatric disorders, gastrointestinal diseases, nutritional issues, pulmonology, and substance abuse/withdrawal. **(64-0-4)**

PHA 7770—Disease Management III

This course is a continuation of Disease Management II. 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 7780—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. **Prerequisites:** 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, clinical 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 physicochemical 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 statutes that regulate the activity of the consultant pharmacist, the HCFA survey guidelines, the types of 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 5113—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. **(32-0-2)**

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 the 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 20–23 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 in Houston, Texas. **Prerequisite:** PHA 4110 **(24-60-2)**

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 compounding veterinary dosage forms. Note: A special fee is required. Taught at the P*Ceutics Institute in Houston, Texas. **Prerequisite:** PHA 4110 **(24-16-2)**

PHA 5223—Drugs of Abuse

This course covers types of substances abused, methods and routes of administration, the pertinent toxicokinetics, 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, synoptic transmission and recent molecular biological approaches and techniques that have revolutionized the understanding of membrane channels. **(32-0-2)**

PHA 5227—Pharmacoethics

Introduces the student to bioethical issues encountered in health care with emphasis on those ethical problems of particular importance to the practice of pharmacy. Students will explore issues that have arisen from advances in biotechnology, resource allocation, research using human subjects, informed consent, the function of ethics committees, and the right to privacy as they impact on the legal rights and responsibilities of patients, health providers, and government policy makers. **(32-0-2)**

PHA 5333—Development and Implementation of Clinical Trials

This course describes the principles, ethics, and regulatory requirements of clinical trial design and conduct for drug products, in the context of global drug development and regulatory review. **(32-0-2)**

PHA 5335—Drug-Induced Disease

The course will describe and discuss the most serious negative and undesired effects of drugs, as well as their impact on public health. The course emphasizes the role of pharmacists in the recognition of early signs and symptoms of life-threatening adverse drug events and in the prevention of such events. Medical terminology, understanding and discussion of case reports, and evidence-based management of most common severe adverse drug reactions are important aspects of the course. When appropriate, the role of pharmacogenomics in determining drug-induced disease will be discussed. The course is designed to acquaint students with the FDA actions and policies implemented to protect human health and with the FDA medical products reporting program and policies for product recalls and withdrawals. **(16-0-1)**

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. **(32-0-2)**

PHA 5383—Essentials of Managed Health Care

Pharmacy is an essential component in managed health care systems. Pharmacy practitioners are currently influenced 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. **(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. (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 of 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 pharmacy is and the responsibilities, activities, and knowledge required in order to function as a nuclear pharmacist. The course places emphasis on radiopharmaceutials (radioactive medication), their mechanisms of action, dose range, method of compounding, and ultimate role in diagnosis of disease and/or therapy. (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, divided up by the body system they are used to treat. **Prerequisite:** P3 Standing (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. **Prerequisite:** P3 Standing (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. **Prerequisite:** P3 Standing (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 discussion 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, tasting nutritional supplements, 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 residing 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. **Prerequisites:** PHA 5610 Therapeutics and Pathophysiology I, P3 Standing (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 Neuropsycopharmacology

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. (32-0-2)

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 5991—Research in Pharmacy Practice

Students, under the direction of one or more pharmacy practice faculty members, will perform individual research projects. Projects may involve direct patient care or translational research (i.e., pharmacokinetics, pharmacogenomics). Semester credits must be negotiated with the adviser and approved by the department chair prior to the start of any work. Students will be involved in both the planning and execution of the research project. (0-[48–144]-[1–3])

PHA 5995—Independent Research in Administrative Sciences I

One to three credits available to students performing individual research projects under the supervision of administrative science faculty members. Students will be involved in both the planning and execution of a research project. (0-[48–144]-[1–3])

PHA 5997—Independent Research in Administrative Sciences II

Two or three credits available to students performing individual research projects under the supervision of administrative science faculty members. Students will be involved in all aspects of the research project. **Prerequisite:** Individual Research in Administrative Sciences I. (0-[96–144]-[2–3])

PHA 5999—Research in 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 6301—Statistical Methods in Pharmacy

Course focusing on inferential statistics for students interested in conducting quantitative research in pharmacy. It is designed to enable students to gather data and apply experimental-design models toward improving the efficiency of pharmaceutical and health care services. **Prerequisite:** PHA 6300. (48-0-3)

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 back-

ground 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)

PUH 5101—Introduction to Public Health

This course provides an introduction to the concepts, values, principles, and practice of public health, with an overview of the major areas, including biostatistics, social and behavioral sciences, environmental health and health policy, planning, and management. (48-0-3)

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** | Professors: **E. E. Groseclose, K. V. Venkatachalam** | Associate Professor: **W. G. Campbell**

Microbiology

Chairman and Professor: **H. Hada** | Professors: **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. Taraskevich** | Associate Professors: **W. Schreier, Y. Zagvazdin** | Assistant Professor: **D. King**

Pharmaceutical and Administrative Sciences

Chair and Associate Professor: **A. Rathinavelu** | Professors: **H. J. Baldwin, M. S. Carvajal, L. Cubeddu, W. D. Hardigan, A. Malavé** | Associate Professors: **L. Deziel-Evans, L. Lai, C. Luque-Rey, J. Rey** | Assistant Professors: **G. Armayor, A. Castejon, M. Clark, K. Fuller, M. Hernandez, N. Khanfar, S. Leonard, H. Omidian, N. Sangasubana, B. Soto-Torres** | Clinical Assistant Professors: **R. Finkel, L. Arce-Malavé, D. M. Gazze**

Pharmacy Practice

Interim Chair and Assistant Professor: **W. Wolowich** | Associate Professors: **K. Clauson, K. Daniel, M. L. Glover** | Assistant Professors: **H. Anderson, C. Beckey, S. Benavides, N. Borja, J. Caballero, E. Frenzel-Shepherd, S. Leung, C. Machado, M. Maniscalco, M. Metzner, B. Min, B. Ortiz, F. Ortiz, M. Poulakos, M. Ramirez, G. Robles, M. Seamon, D. Singh, R. Torres, W. Wolowich, A. Zapantis** | Clinical Professor: **A. Silvagni** | Academic Facilitators: **F. Sircar-Ramsewak, J. Varela**

Experiential Sites

The following institutions are affiliated with the College of Pharmacy for experiential education.

- A.G. Holley State Hospital
  Lantana, Florida
- Alberque La Providencia
  Ponce, Puerto Rico
- Albertsons
  Florida
- Allen's Drugs
  South Miami, Florida
- American Pharmaceutical Services
  Longwood, Florida
- American Pharmacists Association
  Washington, D.C.
- Apotex Corporation
  Weston, Florida
- Arecibo, PR VA
  Arecibo, Puerto Rico
- Arnold Palmer Hospital
  for Women and Children
  Orlando, Florida
- Arthur's 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 Pharmacy
  St. Petersburg, 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
- Cambridge/Century Village
  Deerfield Beach, Florida
- Cape Coral Hospital
  Cape Coral, Florida
- CC City Pharmacy
  Fort Lauderdale, Florida
- Center Pharmacy II
  Cape Coral, Florida
- Centers 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—Alfaya
  Orlando, Florida
- Central Florida
  Family Health Center
  Sanford, Florida
- Central Florida Family
  Health Center—Hoffner
  Orlando, Florida
- Centro de Cuidado Diurno y Desarrollo
  Pediatrico San Miguel
  Ponce, Puerto Rico

- Centro de Envejeciente Cruz Espada
  Ponce, Puerto Rico
- Centro Esperanza Para la Vejez
  Cruz Espada
  Ponce, Puerto Rico
- 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
- Columbia Hospital
  West Palm Beach, Florida
- Columbia Medical Center
  Port St. Lucie, Florida
- Commcare Pharmacy
  Fort Lauderdale, Florida
- Compounding Docs, Inc.
  Boca Raton, Florida
- Comprehensive Care Center
  Fort Lauderdale, Florida
- ComScript/Omnicare Pharmacies
  Boca Raton, Florida
- Conexus Health
  Tampa, Florida
- Consejo de Salud de la Comunidad de la
  Playa de Ponce, Inc.
  Ponce, Puerto Rico
- Consultant Pharmacy Services, Inc.
  St. Petersburg, Florida
- Cooperative Feeding Program
  Fort Lauderdale, Florida
- Coral Gables Hospital
  Coral Gables, Florida
- Coral Springs Medical Center
  Coral Springs, Florida
- Corrections Health Services
  Miami, Florida
- Covenant Hospice, Inc.
  Pensacola, Florida
- Cullen Home Health Pharmacy
  Sunrise, Florida
- CuraScript Pharmacy
  Orlando, Florida
- CVS
  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 Tuque
  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—East Campus
  Orlando, Florida
- Florida Hospital—South Campus
  Orlando, Florida
- Florida Hospital—Waterman
  Tavares, Florida
- Florida I.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
- Gardens 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
  Naples, Florida
- Health Care District of Palm Beach County
  West Palm Beach, Florida
- Health Care District of Palm
  Beach County—Delray
  Delray Beach, Florida
- Health Care District of Palm Beach
  County—Riviera Beach
  Riviera Beach, Florida
- Health First Infusion
  Riviera, Florida
- Health Park Medical Center
  Fort Myers, Florida
- Health Script Pharmacy
  Orlando, Florida
- Health South Doctors Hospital
  Coral Gables, Florida
- Health South Rehabilitation Hospital
  Miami, Florida
- Health South/Sunrise
  Rehabilitation Center
  Sunrise, Florida
- Helios Pain and Psychiatry Center
  Tampa, Florida
- Hialeah Hospital
  Hialeah, Florida
- HIMA
  Caguas, Puerto Rico
- Hogar San Miguel
  Ponce, Puerto Rico
- Holy Cross Hospital
  Fort Lauderdale, Florida
- Hospice of Palm Beach County
  West Palm Beach, Florida
- Hospice of the Florida Suncoast
  Largo, Florida
- Hospital Andres Grillasco
  Ponce, Puerto Rico

- Hospital Auxilio Mutuo
  San Juan, Puerto Rico
- Hospital Damas
  Ponce, Puerto Rico
- Hospital Dr. Pila
  Ponce, Puerto Rico
- Hospital Episcopal Cristo Redentor
  Guayama, Puerto Rico
- Hospital Interamericano de
  Medicina Avanzada
  Caguas, Puerto Rico
- Hospital Metropolitano
  Arecibo, Puerto Rico
- Hospital Oncologico
  San Juan, Puerto Rico
- Hospital Ramon
  Emeterio Betances
  Mayaguez, Puerto Rico
- Hospital San Cristobal
  Ponce, Puerto Rico
- Hospital San Francisco
  San Juan, Puerto Rico
- Hospital San Lucas II
  Ponce, Puerto Rico
- Hospital San Pablo
  Bayamon, Puerto Rico
- Hospital Universitario
  San Juan, Puerto Rico
- Humana Inc.
  Miramar, Florida
- Humana Health Plan
  Ponce, Puerto Rico
- Human Resource Health Center
  Miami, Florida
- Imperial Point Medical Center
  Fort Lauderdale, Florida
- Indian Health Service—Acomita
  San Fidel, New Mexico
- Indian Health Service
  Cherokee, North Carolina
- Indian Health Service
  Fort Thompson, South Dakota
- Indian Ridge Middle School
  Davie, Florida
- Indian River Memorial Hospital
  Vero Beach, Florida
- Infusion Technologies, Inc.—Jacksonville
  Jacksonville, Florida
- Infusion Technologies, Inc.
  North Miami, Florida
- Infusion Technologies, Inc.—Tampa
  Tampa, Florida
- Integral Pharmacy Services
  Doral, Florida
- International Center for Epilepsy
  Miami, Florida
- JFK Medical Center
  Atlantis, Florida
- Jackson Memorial Hospital
  Miami, Florida
- Jackson Memorial
  Long Term Care Center
  Miami, Florida
- Jackson South Community Hospital
  Miami, Florida
- James Haley VAMC Tampa
  Tampa, Florida
- Junior Achievement of South Florida
  Pompano Beach, Florida
- Junior Achievement of the Palm Beaches
  West Palm Beach, Florida
- Jupiter Medical Center
  Jupiter, Florida
- Kendall Regional Medical Center
  Miami, Florida
- Kindred Healthcare—Boca Raton
  Boca Raton, Florida
- Kindred Hospital—Coral Gables
  Coral Gables, Florida
- Kindred Hospital—Fort Lauderdale
  Fort Lauderdale, Florida
- Kindred Hospital—Hollywood
  Hollywood, Florida
- Kings Point Community Pharmacy
  Delray Beach, Florida
- Kmart Pharmacy
  Puerto Rico
- Lakeland Regional Medical Center
  Lakeland, Florida
- Lake Wales Medical Center
  Lake Wales, Florida

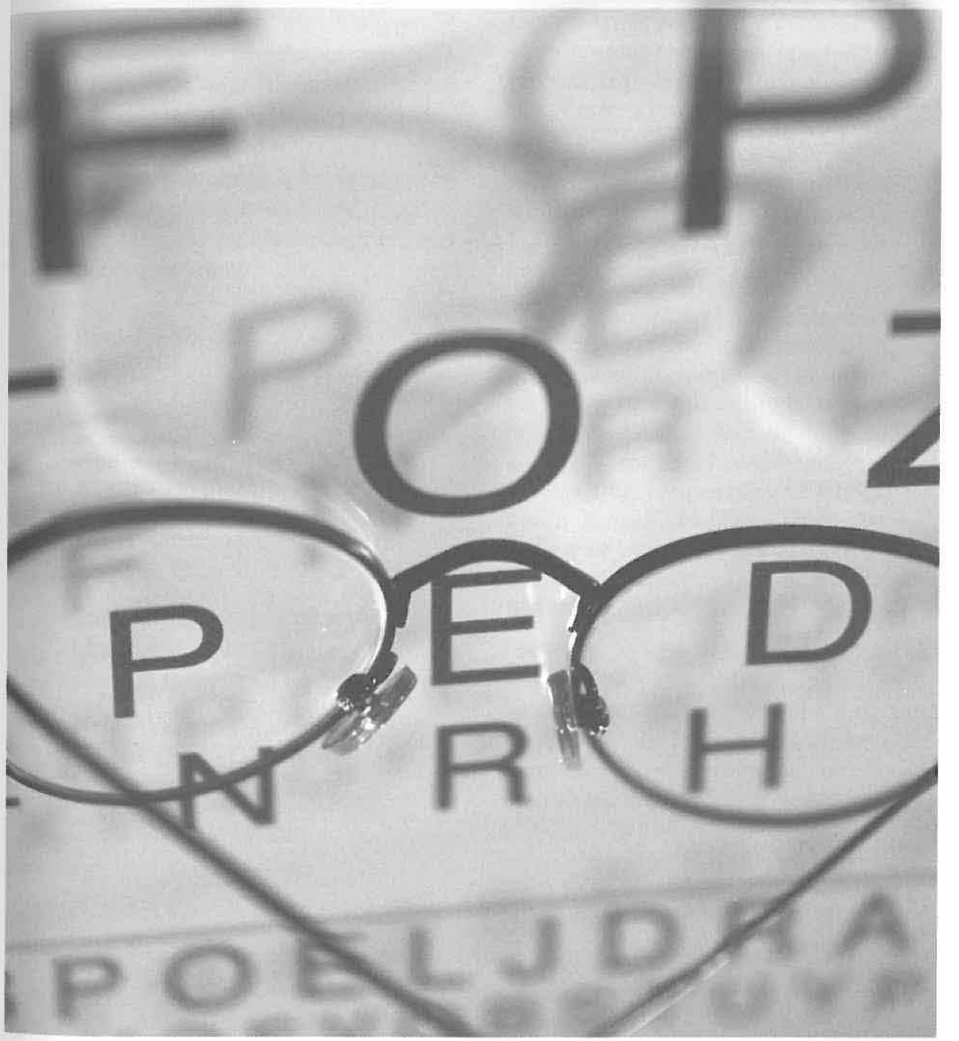
- Larkdale Elementary
  Lauderhill, Florida
- Lawnwood Pavilion
  Fort Pierce, Florida
- Lawnwood Regional Medical Center
  Fort Pierce, Florida
- Lee Memorial Hospital
  Fort Myers, Florida
- Leesburg Regional Medical Center
  Leesburg, Florida
- Lower Brule Health Center
  Pharmacy—Indian Health Service
  Lower Brule, South Dakota
- M.D. Anderson Cancer Center—Orlando
  Orlando, Florida
- Malcolm Randall Gainesville
  VA Medical Center
  Gainesville, Florida
- Mallinckrodt/Tyco Healthcare
  Fort Lauderdale, Florida
- Mallinckrodt/Tyco Healthcare
  Miami, Florida
- Manatee Memorial Hospital
  Bradenton, Florida
- Martin Memorial Medical Center
  Stuart, Florida
- Max Drug, Inc.
  Hollywood, Florida
- Mayaguez VA
  Mayaguez, Puerto Rico
- Mayo Clinic—Jacksonville
  Jacksonville, Florida
- Mease Dunedin Hospital
  Dunedin, Florida
- Medical Card Systems
  San Juan, Puerto Rico
- Medicap Pharmacies, Inc.
  Palm Springs, Florida
- Medicine Shoppe
  Dunedin, Florida
- Medicine Shoppe—Tampa
  Tampa, Florida
- Medicine Shoppe/Kings Drug Store
  Okeechobee, Florida
- Medistat Pharmacy Services
  Miami, Florida
- Memorial Hospital
  Miramar, Florida
- Memorial Hospital of Tampa
  Tampa, Florida
- Memorial Hospital Pembroke
  Pembroke Pines, Florida
- Memorial Hospital West
  Pembroke Pines, Florida
- Memorial Primary Care
  Hollywood, Florida
- Memorial Regional Hospital
  Hollywood, Florida
- Memorial South Center
  Hollywood, Florida
- Mental Health Association
  of Palm Beach County
  West Palm Beach, Florida
- Mercy Hospital
  Miami, Florida
- Metcare RX
  West Palm Beach, Florida
- Methodist Hospital, The
  Houston, Texas
- MHA of Broward—I'm Thumbody
  Lauderhill, Florida
- MHA of Broward—Listen to Children
  Lauderhill, Florida
- MHA of Broward—Thumbody, Too
  Lauderhill, Florida
- Miami Beach Community
  Health Center
  Miami Beach, Florida
- 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
- Naval Hospital
  Jacksonville, Florida
- Navarro's
  Florida
- NeighborCare Pharmacies
  Deerfield Beach, Florida
- Neighborhood Drugs
  Tamarac, Florida
- North Broward Medical Center
  Pompano Beach, Florida
- North Florida Regional Medical Center
  Gainesville, Florida
- North Ridge 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—WPB
  Palm Beach Gardens, Florida
- Oakwood Center of the Palm Beaches
  West Palm Beach, Florida
- Optima Infusion Pharmacy
  Dorado, Puerto Rico
- Option Care—Miami
  Miramar, Florida
- Option Care—Fort Myers
  Fort Myers, Florida
- Orange County Medical Clinic
  Orlando, Florida
- Orange Park Medical Center
  Orange Park, Florida
- Oriole Elementary School
  Lauderdale Lakes, Florida
- Orlando Regional Medical Center
  Orlando, Florida
- Orlando Regional South
  Seminole Hospital
  Longwood, Florida
- Orlando Regional St. Cloud Hospital
  St. Cloud, Florida
- Orlando VA Outpatient Clinic
  Orlando, Florida
- Osceola 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
  Weston, Florida
- Pine Island Drugs, Inc.
  Davie, Florida
- Plantation General Hospital
  Plantation, Florida
- Procare Pharmacy Care
  Miramar, Florida

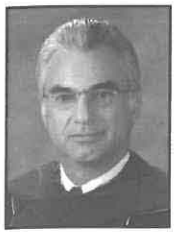
- Public Health Services
  Rockville, Maryland
- Publix
  Florida
- Raulerson Hospital
  Okeechobee, Florida
- Romano's Pharmacy
  Coral Springs, Florida
- San Jorge Children's Hospital
  Santurce, Puerto Rico
- San Juan VA Medical Center
  Bayamon, Puerto Rico
- San Lucas Hospital
  Ponce, Puerto Rico
- San Luis Pharmacy
  San Lorenzo, Puerto Rico
- San Pablo del Este (Fajardo)
  Fajardo, Puerto Rico
- Sand Lake Hospital
  Orlando, Florida
- Sandpiper Elementary School
  Sunrise, Florida
- Sarasota Memorial Hospital
  Sarasota, Florida
- Sarasota VA Primary Care Clinic
  Sarasota, Florida
- Sav-On Pharmacy #4466
  Port St. Lucie, Florida
- Schaefer Drugs
  Wellington, Florida
- ScotDrugs
  Fort Lauderdale, Florida
- Seventh Avenue Family Health Center
  Fort Lauderdale, Florida
- Sister Emmanuel Hospital
  Miami, Florida
- Skip's Pharmacy
  Boca Raton, Florida
- SkyeMed Pharmacy
  Pompano Beach, Florida
- South Florida State Hospital
  Pembroke Pines, Florida
- South Miami Hospital
  South Miami, Florida
- South Miami Pharmacy
  Miami, Florida
- South West Florida Medical Center
  Fort Myers, Florida
- Southern Medical Center
  Yauco, Puerto Rico
- Special Care Pharmacy Services
  San Juan, Puerto Rico
- Specialty Care Center
  Fort Lauderdale, Florida
- Specialty Pharmacy Services
  Caguas, Puerto Rico
- St. Joseph's Hospital
  Tampa, Florida
- St. Lucie Medical Center
  Port St. Lucie, Florida
- St. Luke's Hospital
  Ponce, Puerto Rico
- St. Luke's Memorial Hospital
  Jacksonville, Florida
- St. Luke's Memorial Hospital I
  Ponce, Puerto Rico
- St. Mary's Medical Center
  West Palm Beach, Florida
- St. Vincent's Medical Center
  Jacksonville, Florida
- StatScript Pharmacy
  Wilton Manors, Florida
- Stranahan High School
  Fort Lauderdale, Florida
- Sun Land Park Elementary School
  Fort Lauderdale, Florida
- Suncoast Pharmacy
  Boca Raton, Florida
- Super Farmacia Juana Diaz
  Juana Diaz, Puerto Rico
- Super Farmacia Nelia
  Sabana Grande, Puerto Rico
- Super Farmacia Rina
  Guayama, Puerto Rico
- SW Florida Regional Medical Center
  Fort Myers, Florida
- Tampa General Healthcare
  Tampa, Florida
- Target
  Florida
- Tequesta Drugs
  Tequesta, Florida

- Thomas E. Langley Medical Center
  Sumterville, Florida
- Town and Country Hospital
  Tampa, Florida
- Treasure Coast Hospital
  Stuart, Florida
- Tripler Army Medical Center
  Honolulu, Hawaii
- Ulti-Med Pharmacy Services
  Miami, Florida
- United Healthcare
  Sunrise, Florida
- United States Naval
  Hospital—Jacksonville
  Jacksonville, Florida
- United States Public Health Services
  Rockville, Maryland
- Universal Arts Pharmacy
  Hialeah, Florida
- University Community Hospital
  Tampa, Florida
- USCG Air Station Miami Clinic
  Opa-Locka, Florida
- VA Caribbean Healthcare System
  San Juan, Puerto Rico
- VA Central Office Pharmacy
  Benefits Management SHG
  Washington, D.C.
- Vargas Healthcare Management Group
  Wellington, Florida
- Vista Health Plan
  Sunrise, Florida
- Walgreens
  Florida
- Wal-Mart
  Florida
- Wal-Mart
  Puerto Rico
- Washington Elementary School
  Riviera Beach, Florida
- Well Care HMO
  Tampa, Florida
- Wellington Regional Medical Center
  West Palm Beach, Florida
- West Boca Medical Center
  Boca Raton, Florida
- West Palm Beach Veterans Affairs
  Medical Center
  West Palm Beach, Florida
- Westchester General Hospital
  Miami, Florida
- Westside Regional Medical Center
  Plantation, Florida
- Winn-Dixie
  Florida
- Winships Prescription Center
  North Palm Beach, Florida
- Your Druggist
  Coral Springs, Florida
- Youth Mentoring Program
  Fort Lauderdale, Florida

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 hour credits 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 2008–2009 (subject to change by the board of trustees without notice) is $18,885 for Florida residents and $24,050 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 Admission Program

Nova Southeastern University Health Professions Division has established a dual admission 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, please 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, pediatrics, 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 2008–2009 (subject to change by the board of trustees) is $15,585 for Florida residents and $19,510 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 in 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 2008–2009 (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			Lecture	Laboratory	Semester Hours
OPT	1011	Histology and Embryology	18	0	1.0
OPTC	1134	Gross Anatomy/Anatomy of the Head and Neck	54	36	4.0
OPTC	1233	Biochemistry	54	0	3.0
OPT	1323	Microbiology	54	0	3.0
OPT	1443	Theoretical Optics I	54	0	3.0
OPTL	1443	Theoretical Optics I Lab	0	36	1.0
OPT	1511	Psychophysical Methodology	18	0	1.0
OPT	1724	Optometric Theory and Methods I	36	0	2.0
OPTL	1724	Optometric Theory and Methods I Lab	0	72	2.0
OPT	1831	Contemporary Issues in Optometry	18	0	1.0
			Total Semester Hours:		**21.0**

FIRST YEAR—Winter Term			Lecture	Laboratory	Semester Hours
OPTC	2023	General Neuroanatomy	36	18	2.5
OPTC	2144	General Physiology	72	0	4.0
OPT	2223	Theoretical Optics II	54	0	3.0
OPTL	2223	Theoretical Optics II Lab	0	18	1.0
OPT	2323	Visual Optics	36	0	2.0
OPT	2422	Ocular Anatomy	36	0	2.0
OPT	2522	Visual Neurophysiology	36	0	2.0
OPT	2622	Ocular Motility	36	0	2.0
OPT	2724	Optometric Theory and Methods II	36	0	2.0
OPTL	2724	Optometric Theory and Methods II Lab	0	54	1.5
			Total Semester Hours:		**22.0**

SECOND YEAR—Summer Term			Lecture	Laboratory	Semester Hours
OPT	3122	Ocular Physiology	36	0	2.0
OPT	3344A	Psychophysics/ Monocular Sensory Processes I	36	0	2.0
			Total Semester Hours:		**4.0**

SECOND YEAR—Fall Term			Lecture	Laboratory	Semester Hours
OPTC	3033	General Pathology	54	0	3.0
OPTC	3244	General Pharmacology I	72	0	4.0
OPT	3344B	Psychophysics/Monocular Sensory Processes II	72	0	2.0
OPT	3434	Ophthalmic Optics I	54	0	3.0
OPTL	3434	Ophthalmic Optics I Lab	0	36	1.0
OPT	3533	Ocular Disease I: Anterior Segment	54	0	3.0
OPT	3624	Optometric Theory and Methods III	36	0	2.0
OPTL	3624	Optometric Theory and Methods III Lab	0	54	1.5
OPT	4322	Introduction to Binocular Vision	36	0	2.0
OPT	4951A	Community Outreach I	18	0	1.0
			Total Semester Hours:		**22.5**

SECOND YEAR—Winter Term			Lecture	Laboratory	Semester Hours
OPTC	4022	General Pharmacology II	27	0	1.5
OPT	4122	Ocular Pharmacology	27	0	1.5
OPT	4234	Ophthalmic Optics II	54	0	3.0
OPTL	4234	Ophthalmic Optics II Lab	0	36	1.0
OPT	4433	Anomalies of Binocular Vision I	54	0	3.0
OPTL	4433	Anomalies of Binocular Vision I Lab	0	36	1.0
OPT	4524	Optometric Theory and Methods IV	36	0	2.0
OPTL	4524	Optometric Theory and Methods IV Lab	0	54	1.5
OPT	4633	Ocular Disease II: Posterior Segment	54	0	3.0
OPT	4811	Epidemiology	18	0	1.0
OPT	4951B	Community Outreach II	18	0	1.0
		Total Semester Hours:			**19.5**

THIRD YEAR—Summer Term			Lecture	Laboratory	Semester Hours
OPT	7111	Primary Care Clinic I	0	80	2.5
OPT	7112	Clinic Conference	10	0	1.0
OPT	7151	Optical Services Rotation I	0	36	0.5
		Total Semester Hours:			**4.0**

THIRD YEAR—Fall Term			Lecture	Laboratory	Semester Hours
OPT	1612	Health Systems, Economics, Policy, and Ethics	18	0	1.0
OPT	5022	Anomalies of Binocular Vision II	36	0	2.0
OPTL	5022	Anomalies of Binocular Vision II Laboratory	0	36	1.0
OPT	5122	Contact Lenses I	36	0	2.0
OPTL	5122	Contact Lenses I Laboratory	0	36	1.0
OPT	5233	Ocular Disease III: Ocular/Systemic Eye Disease	5	0	3.0
OPT	5322	Clinical Medicine	36	0	2.0
OPTL	5322	Physical Diagnosis Laboratory	0	18	0.5
OPT	5411	Clinical Gerontology	18	0	1.0
OPT	7122	Primary Care Clinic II	0	144	2.5
OPT	7161	Optical Services Rotation II	0	36	0.5
		Total Semester Hours:			**16.5**

THIRD YEAR—Winter Term			Lecture	Laboratory	Semester Hours
OPT	6122	Contact Lens II	36	0	2.0
OPTL	6122	Contact Lenses II Laboratory	0	36	1.0
OPT	6233	Ocular Disease IV: Neuro-Optometry	54	0	3.0
OPT	6322	Rehabilitative Optometry: Low Vision	36	0	2.0
OPTL	6322	Rehabilitative Optometry Laboratory	0	36	1.0
OPT	6522	Practice Management	36	0	2.0
OPT	6633	Pediatric Optometry and Learning-Related Vision Problems	54	0	3.0
OPTL	6633	Pediatric Optometry and Learning-Related Vision Problems Laboratory	0	36	0.5
OPT	7132	Primary Care Clinic III	0	144	2.5
OPT	7171	Optical Services Rotation III	0	16	0.5
OPT	9998	Board Review	18	0	1.0
		Total Semester Hours:			**18.5**

FOURTH YEAR—Summer, Fall, Winter, and Spring Terms*			Lecture	Laboratory	Semester Hours
OPT	7146	Primary Care Clinical Externship	0	320	5.5
OPT	7214	Cornea and Contact Lens Externship	0	240	4.0
OPT	7224	Pediatric and Binocular Vision Externship	0	240	4.0
OPT	7233	Vision Rehabilitation and Geriatric Externship	0	160	2.5
OPT	7308	Medical and Surgical Care Clinical Externship	0	480	8.0
OPT	7408	Clinical Elective Externship	0	480	8.0
OPT	7501	Current Topics in Practice Management	18	0	1.0
		Fourth Year Total Semester Hours:			**33.0**

*** Four three-month terms—order of courses will vary.**

Extended Program Curriculum Outline

FIRST YEAR—Fall Term			Semester Hours
OPT	1011	Histology/Embryology	1.0
OPTC	1134	Gross Anatomy	4.0
OPTC	1233	Biochemistry	3.0
OPT	1323	Microbiology	3.0
OPT	1511	Psychophysical Methodology	1.0
OPT	1831	Contemporary Issues in Optometry	1.0
		Total Semester Hours:	**13.0**

FIRST YEAR—Winter Term			Semester Hours
OPT	1721	Clinical Optometric Procedures	1.0
OPTC	2023	General Neuroanatomy	2.5
OPTC	2144	General Physiology	4.0
OPT	2422	Ocular Anatomy	2.0
OPT	2522	Visual Neurophysiology	2.0
OPT	2622	Ocular Motility	2.0
		Total Semester Hours:	**13.5**

SECOND YEAR—Fall Term			Semester Hours
OPT	1443	Theoretical Optics I	3.0
OPTL	1443	Theoretical Optics I Lab	1.0
OPT	1724	Optometric Theory and Methods I	2.0
OPTL	1724	Optometric Theory and Methods I Lab	2.0
OPTC	3033	General Pathology	3.0
OPTC	3244	General Pharmacology I	4.0
		Total Semester Hours:	**15.0**

SECOND YEAR—Winter Term			Semester Hours
OPT	1612	Health Systems, Economics, Policy, and Ethics	1.0
OPT	2223	Theoretical Optics II	3.0
OPTL	2223	Theoretical Optics Lab	1.0
OPT	2323	Visual Optics	2.0
OPT	2724	Optometric Theory and Methods II	2.0
OPTL	2724	Optometric Theory and Methods II Lab	1.5
OPTC	4022	General Pharmacology II	1.5
OPT	4122	Ocular Pharmacology	1.5
OPT	4811	Epidemiology	1.0
		Total Semester Hours:	**14.5**

THIRD YEAR—Summer Term			Semester Hours
OPT	3122	Ocular Physiology	2.0
OPT	3344A	Psychophysics/ Monocular Sensory Processes I	2.0
		Total Semester Hours:	**4.0**

THIRD YEAR—Fall Term			Semester Hours
OPT	3624	Optometric Theory and Methods III	2.0
OPTL	3624	Optometric Theory and Methods III Lab	1.5
OPT	3533	Ocular Disease I: Anterior Segment	3.0
OPT	3434	Ophthalmic Optics I	3.0
OPTL	3434	Ophthalmic Optics I Lab	1.0
OPT	3344B	Psychophysics/Monocular Sensory Processes II	2.0
OPT	4322	Introduction to Binocular Vision	2.0
OPT	4951A	Community Outreach I	1.0
		Total Semester Hours:	**15.5**

THIRD YEAR—Winter Term			Semester Hours
OPT	4234	Ophthalmic Optics II	3.0
OPTL	4234	Ophthalmic Optics II Lab	1.0
OPT	4433	Anomalies of Binocular Vision I	3.0
OPTL	4433	Anomalies of Binocular Vision I Lab	1.0
OPT	4524	Optometric Theory and Methods IV	2.0
OPTL	4524	Optometric Theory and Methods IV Lab	1.5
OPT	4633	Ocular Disease II: Posterior Segment	3.0
OPT	4951B	Community Outreach II	1.0
		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

The following 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 1831—Current Issues
in Optometry
Introduces students to optometry's past, so they can better understand the present and future of the optometric profession. History, professional ethics, current practice modes, and professional organizations will be covered. (18-0-1)

OPT 2223—Theoretical Optics II
Continuation of Theoretical Optics I: Advanced Topics in Geometrical 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, dioptrics of the eye, stimulus to accommodation, retinal image size and quality, purkinje 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 competence in normal eye movement physiology and the ability to differentiate it from pathology in order to lead the student to adept 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. (36-0-2)

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 ophthalmoscopy, 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
Application and skills necessary to perform clinical testing using examination procedures stressed in OPT 3624. (0-54-1.5)

OPT 4951A—Community Outreach I
This course discusses the social and behavioral determinants of health and disease; cultural aspects in eye care; health promotion, education, and prevention; and community program planning, monitoring, and evaluation. (18-0-1)

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
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 will be discussed. Pertinent topics relating to enviromental vision will also be covered. (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, strabismic 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: flourescein angiography, ultrasonography; therapeutic modalities such as lasers. (54-0-3)

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 4951 B—Community Outreach II

Continuation of Community Outreach I (18-0-1)

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)

OPTL 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 pathophysiological process of various systemic diseases and their diagnosis and management. (36-0-2)

OPTL 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 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)

OPT 6322—Rehabilitative Optometry: Low Vision

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)

OPTL 6322—Rehabilitative Optometry: Low Vision Lab

Application and demonstration of concepts and material presented in Rehabilitative Optometry lecture OPT 6322. (0-36-1)

OPT 6522—Practice Management

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 capitation fees. (36-0-2)

OPT 6633—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)

OPTL 6633—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)

OPT 9998—Board Review (18-0-1)

Optometry Clinical Education

OPT 7111—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. (0-80-2.5)

OPT 7112—Clinic Conference

Adjunct to Primary Care Clinic I. Review and discussion of patient data leading to proper clinical diagnosis and patient management. Lectures and small group discussions emphasize integration of knowledge gained in didactic courses with clinical case examples. (10-0-1)

OPT 7122—
Primary Care Clinic II

Continuation of Primary Care Clinic I. (0-144-2.5)

OPT 7132—
Primary Care Clinic III

Continuation of Primary Care Clinic II. (0-144-2.5)

OPT 7146—Primary Care Clinical Externship

Student clinicians provide eye care in multidisciplinary setting under supervision. Emphasizes evaluations, diagnosis, and management of vision diseases and disorders. (0-320-5.5)

OPT 7151—
Optical Services 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)

OPT 7161—
Optical Services Rotation II

Continued application of the principles and procedures of ophthalmic dispensing integrated into practice in the optical service. (0-36-0.5)

OPT 7171—
Optical Services Rotation III

Enhancement and expansion of the principles and procedures learned in Rotations I and II. (0-16-0.5)

OPT 7214—Cornea and 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)

OPT 7224—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)

OPT 7233—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)

OPT 7308—Medical/Surgical Clinical Externship

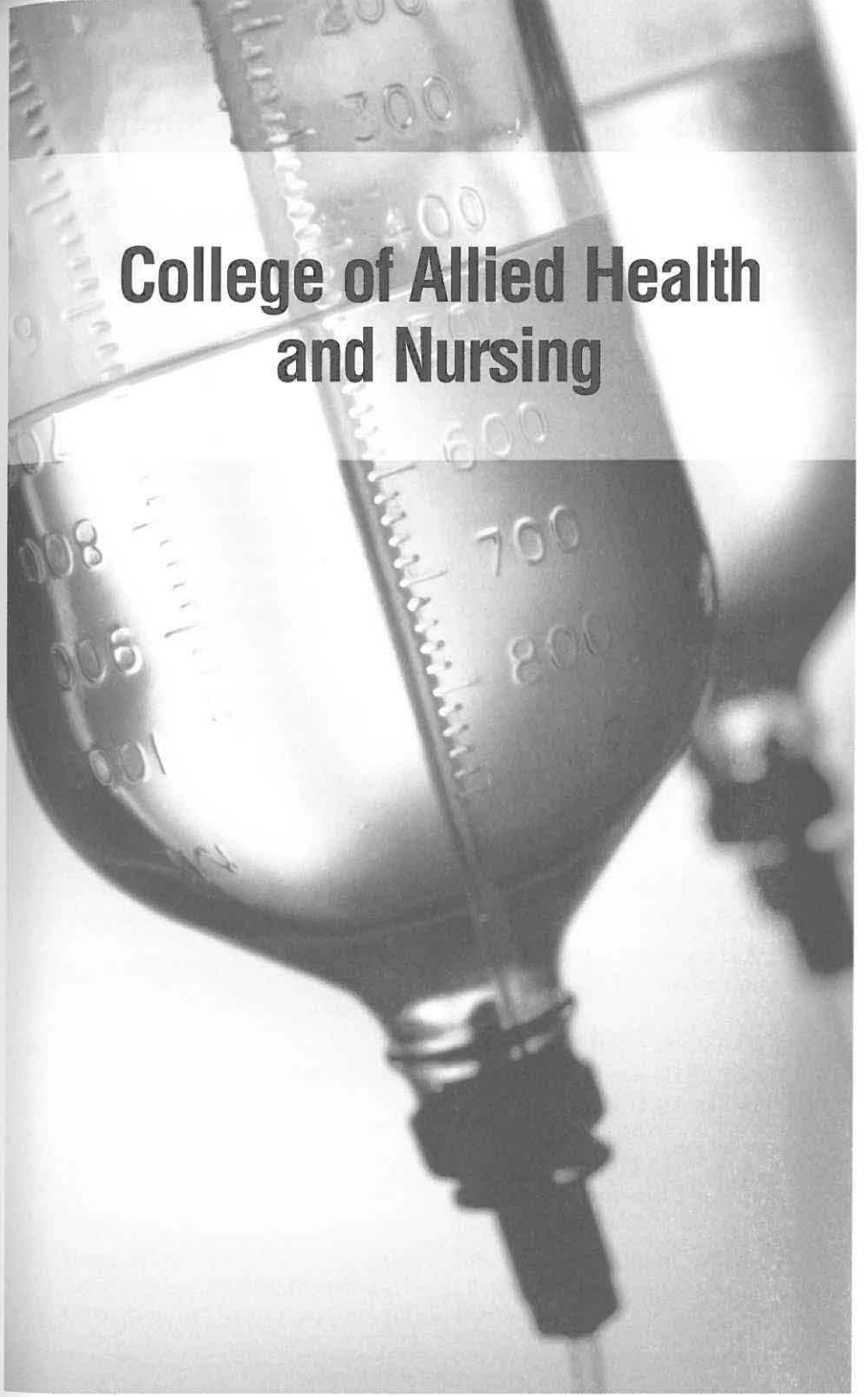
Diagnosis, management, and treatment of patients in a medical/surgical setting. Pre- and post-operative care, evaluation and comanagement of patients with systemic health anomalies and medical conditions such as glaucoma. Observation of medical eye care. (0-480-8)

OPT 7408—
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)

OPT 7501—Current Topics in Practice Management

Explore current practice options in optometry including: starting from scratch, purchasing a practice, or joining a practice. Learn the proper techniques for successful coding and billing in today's managed care economy. Understand the importance of patient communication, networking, community involvement, and third party participation. Analyze today's market and the student's personal financial goals to develop a plan for successful practice. (18-0-1)



College of Allied Health and Nursing

College of Allied Health and Nursing

Richard E. Davis,
PA-C, Ed.D.
Dean

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

Guy Nehrenz, Ed.D., RRT
Associate Dean, CAHN
Chair, Health Science Department

Anthony Dyda, M.P.A.S., D.H.Sc.
Associate Dean and Chair,
Distant Physician Assistant Programs

Diane Whitehead, R.N., M.S.N., Ed.D.
Associate Dean, Nursing Programs
Chair, Nursing Department

Stanley Wilson, PT, Ed.D., CEAS
Associate Dean, Rehab Clinics
Chair, Physical Therapy Department

Beth Harman, M.B.A.
Director of Administration

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

William Marquardt, M.A., PA-C
Chair, Physician Assistant Department—Fort Lauderdale

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

Patricia Dittman, B.S.N., M.S.N.
Director, Nursing Graduate Programs

Sandrine Gaillard-Kenney, M.A.
Associate Chair, Health Science Department
Director, Master of Health Science

Madeleine Hellman, M.H.M., Ed.D., PT
Director, Physical Therapy Doctor of Philosophy Program

Max Ito, Ph.D., OTR/L
Director, Occupational Therapy Doctoral Programs

Julie Keena, B.A., M.M.S.C./PA
Director, Physician Assistant Program—Naples

Patricia E. Kelly, PA-C, Ed.D.
Director, Doctor of Health Science Program

Christopher Mitchell, B.A., M.S.
Director, Bachelor of Health Science Program

Todd Rock, B.S., M.P.A.S.
Director, Physician Assistant Program—Orlando

Linda Strommen, M.S.N., R.N.
Director, R.N. to B.S.N.—Fort Myers Program

Robert S. Wagner, M.M.S., AA-C
Director, Master of Health Science—Anesthesiologist Assistant Specialization

Sally Weiss, Ed.D., R.N.
Director, R.N. to B.S.N.—Fort Lauderdale Program

Gale Woolley, Ed.D., A.R.N.P.
Director, Entry-Level R.N. 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
- Accelerated Dual Degree M.H.Sc./D.H.Sc.
- 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
- Doctor of Philosophy in Nursing

Occupational Therapy
- Master of Occupational Therapy
- Doctor of Occupational Therapy
- Doctor of Philosophy in Occupational Therapy

Physician Assistant
- Master of Medical Science in Physician Assistant

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 courses outlined in the curriculum of the 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, if they choose to adhere to the clinical supervisory requirements, 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 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 or bachelor's degrees in audiology. The 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 bachelor's or master's degree in audiology 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/aud*.

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, Florida
33329-9905.

4. copies of all professional certifications, registrations, licenses, or relevant credentialing materials

The audiology committee on admissions will not consider an application until all required fees, credentials, transcripts and recommendations have been received 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 student.

Personal Interviews

Completed applications are reviewed by the committee on admissions and invitations are extended for a personal interview to those applicants applying for the on-campus, entry-level Au.D. program who meet the initial admission criteria. Interviews for the on-campus post-bachelor's degree program are held on campus and provide the student an opportunity to meet faculty members and students and visit the campus.

Inquiries should be directed to

Audiology Admissions Counselor
Nova Southeastern University
3200 South University Drive
Fort Lauderdale, 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 2008–2009 postbachelor's on-campus doctor of audiology program is $18,375 (subject to change by the board of trustees without notice).

  Tuition for the United Kingdom Au.D. program is $500 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 34 credit hours. The postbachelor's program is 43 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		Credit Hours
AUD 5302	Acoustics and Instrumentation	2
AUD 5304	Anatomy and Physiology Audiology of the Auditory and Vestibular Mechanisms	3
AUD 5301	Diagnostics I: Audiological Diagnosis Across the Life Span	4
AUD 5601	Multisite Observation	1

YEAR 1—Semester 2: Winter		Credit Hours
AUD 5070	Research Methods I: Introduction	3
AUD 6402	Diagnostics II: Site of Lesion	3
AUD 5405	Overview of Amplification I	3
AUD 5405L	Amplification I Lab	1
AUD 5602	Clinic I	3

YEAR 1—Semester 3: Spring		Credit Hours
AUD 5303	Psychoacoustics and Speech Perception	3
AUD 5403	Introduction to Electrophysiology	3
AUD 5403L	Introduction to Electrophysiology Lab	1
AUD 6404	Auditory and Vestibular Pathologies	3
AUD 5603	Clinic II	3

YEAR 2—Semester 1: Fall		Credit Hours
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		Credit Hours
AUD 6605	Clinic IV	3
AUD 7100	Advanced Seminar in Amplification	3
AUD 7130	Pediatric Audiology	3

YEAR 2—Semester 3: Spring		Credit Hours
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		Credit Hours
AUD 6607	Internship I	3
AUD 7050	Research Methods II: Applications	3
AUD 7075	Counseling in Audiology	3

YEAR 3—Semester 2: Winter		Credit Hours
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		Credit Hours
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		Credit Hours
AUD 6075	Seminar in Ethics and Professionalism	1
AUD 6610	Externship I	6

YEAR 4—Semester 2: Winter		Credit Hours
AUD 6611	Externship II	6

YEAR 4—Semester 3: Spring		Credit Hours
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 5070— 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 5302—
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 5303—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 5304—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 5301—
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, classical site-of-lesion tests, test result interpretation, 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 5403—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 neurootologic diagnosis. Students are familiarized with procedures and interpretation for basic vestibular

assessment, including electronystagmography, rotational chair, computerized posturography, and behavioral evaluations. **(3 credits)**

AUD 5403L—Introduction to Electrophysiology Lab
This lab supplements AUD 5403, providing students with practical assignments. **(1 credit)**

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 5405—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 5405L—Amplification I Lab
This lab supplements AUD 5405, 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 5601—Multisite Observation
This course is designed to provide an introduction to clinical practice. Students observe patient evaluation, management, and treatment. **(1 credit)**

AUD 5602—Clinic I
Participation in supervised, basic audiological evaluations of patients and other clinical activities as assigned. Weekly meetings with supervisors and/or report writing required. **(3 credits)**

AUD 5603—Clinic II
Participation in supervised auditory and vestibular evaluation, management, and treatment. Weekly meetings with supervisors and/or report writing 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 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 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 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 they are 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 they are 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 they are 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 people 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 cochlear physiologic and auditory neurophysiologic evaluation procedures, including evoked responses for all latencies and otoacoustic emissions. Interpretation of test results will be discussed in relation to underlying anatomy and physiology. **(4 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 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 and evaluated. **(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)**

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, a written essay, letters of evaluation, and interviews. Strong candidates will also demonstrate concern for, and ability to work with, people of diverse backgrounds, as well as the ability to use judgment, insight, and reasoning. All applicants must complete a minimum of 40 volunteer hours in at least two different OT environments (e.g., pediatrics, geriatrics, hospitals, or private practice). 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 junior and/or senior level coursework) from a regionally accredited college or university. Students must have a cumulative GPA of 2.7 or higher on a 4.0 scale for the last two years of baccalaureate or master's degree study, and a prerequisite course average of 2.7 or better.

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—6 semester hours
- anatomy and physiology, including laboratory—4 semester hours
- human growth and development or developmental psychology (must cover infancy through aging)—3 semester hours
- statistics—3 semester hours
- physics with lab—3–4 semester hours
- biology with lab—3–4 semester hours
- must demonstrate basic computer and word processing competency

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 coursework, but who do not hold a baccalaureate degree, must complete the following prerequisites:

- psychology—6 semester hours
- anatomy/physiology, including lab—4 semester hours or anatomy with lab—4 semester hours and physiology with lab—3 semester hours
- human growth and development or developmental psychology (must cover infancy through aging)—3 semester hours
- statistics—3 semester hours
- humanities (art, music appreciation, literature, foreign language, history, philosophy, religion, linguistics, critical theory, classics)—9 semester hours
- English composition—6 semester hours
- physics with lab—3–4 semester hours
- biology with lab—3–4 semester hours
- social science (anthropology, sociology, geography, political science, government, economics, culture studies, gerontology, communications, recreation and leisure studies)—3 semester hours
- must demonstrate basic computer and word processing competency

Recommended Courses

The content of the following courses will also help to prepare you for the occupational therapy curriculum.

- public speaking—3 semester hours
- theories of personality—3 semester hours
- sociology—3 semester hours
- anthropology—3 semester hours
- logic/philosophy—3 semester hours
- kinesiology—3 semester hours

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) and obtain a score of 550 or higher.

The dean is empowered to evaluate the total qualifications of every student and to modify requirements in unusual circumstances.

Master of Occupational Therapy Application Procedure

Candidates for admission must submit or be responsible for submission of:

1. a completed application form along with a $50 non refundable application fee

2. three letters of evaluation from individuals such as academic instructors and professors, occupational therapists and other health professionals, work supervisors, or volunteer supervisors. Evaluations should be submitted on forms provided and not submitted in the form of a letter.

3. official GRE scores in all three areas

4. official college transcripts from all undergraduate or graduate institutions attended, sent to Nova Southeastern University Occupational Therapy Admissions Office directly from the institutions.

5. Test of English as a Foreign Language (TOEFL) scores if a foreign student.

All these materials must be sent directly to:

Nova Southeastern University
Enrollment Processing Services
Attn: College of Allied Health and Nursing—M.O.T.
3301 College Avenue
P.O. Box 299000
Fort Lauderdale, Florida
33329-9905

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 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 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, Florida 33314-7796.

Tuition and Fees

1. Anticipated tuition for 2008–2009 (subject to change by the board of trustees without notice) is $18,495 for Florida students and $20,495 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 $400. 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.

4. Deposit is $600. This fee is due eight weeks after acceptance or by May 1, whichever comes first, under the same terms as the acceptance fee.

The summer and fall semesters' 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 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 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

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.

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.

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 (110 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

Curriculum Outline for Master of Occupational Therapy Program

FIRST YEAR
Summer Semester

		Lecture	Laboratory	Semester Hours
OCT 5101	Historical and Theoretical Foundations of Occupational Therapy Practice	32	0	2
OCT 5110	Medical Terminology	16	0	1
ANA 5420	Anatomy	55	35	5
	Total Hours	**103**	**35**	**8**

FIRST YEAR
Fall Semester

		Lecture	Laboratory	Semester Hours
OCT 5011	Human Occupations Across the Life Span	32	32	3
OCT 5013	Creative Occupations	24	40	3
OCT 5121	Human Disorders Across the Life Span I	64	0	4
OCT 5822	Occupational Evaluation I	64	32	5
	Total Hours	**184**	**104**	**15**

FIRST YEAR
Winter Semester

		Lecture	Laboratory	Semester Hours
ANA 5533	Neuroanatomy	36	18	3
OCT 5015	Applied Occupations	16	32	2
OCT 5123	Human Disorders Across the Life Span II	64	0	4
OCT 5395	Psychiatry	32	0	2
OCT 5824	Occupational Evaluation II	48	32	4
	Total Hours	**196**	**82**	**15**

SECOND YEAR
Summer/Fall Semester

		Lecture	Laboratory	Fieldwork	Semester Hours
OCT 5132	Current Issues in Occupational Therapy I	48	0	0	3
AHN 5000	Introduction to Health Care Research	48	0	0	3
OCT 5343	Occupational Therapy Mental Health Practice	80	32	120	9
OCT 5243	Occupational Therapy with Children and Adolescents	80	32	120	9
OCT 5963	Fieldwork Issues I	16	0	0	1
	Total Hours	**272**	**64**	**240**	**25**

SECOND YEAR
Winter Semester

		Lecture	Laboratory	Fieldwork	Semester Hours
OCT 5133	Current Issues in Occupational Therapy II	48	0	0	3
AHN 5500	Statistical Methods for Health Care Research	48	0	0	3
OCT 5443	Occupational Therapy Physical Dysfunction/ Work Practice	80	32	80	8
OCT 5964	Fieldwork Issues II	16	0	0	1

Spring Semester

OCT 5643	Occupational Therapy with Older Adults	80	32	80	8
OCT 5133	Current Issues in Occupational Therapy (continued)				
OCT 5175	Research Methods for Occupational Therapy II (continued)				
	Total Hours	**272**	**64**	**160**	**23**

THIRD YEAR
Summer/Fall Semester

		Lecture	Laboratory	Fieldwork	Semester Hours
OCT 5981	Fieldwork Experience II (40 hours/week for 12 weeks)	0	0	480	12
OCT 5982	Fieldwork Experience II (40 hours/week for 12 weeks)	0	0	480	12
	Total Hours	**0**	**0**	**960**	**24**
	Total Semester Hours	**1,035**	**341**	**1,360**	**110**

Doctoral Programs in Occupational Therapy

The Occupational Therapy Department at NSU offers two postprofessional doctoral degrees: the advanced 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 with some on-campus time requirements. Applicants with a bachelor's or master's degree are eligible for admission to the Dr.OT program. A master's degree is required for the Ph.D. program. All applicants must have completed an occupational therapy entry-level program and be eligible for an occupational therapy practice license in the state of Florida. 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. This program joins practice concerns with applications and knowledge required for independent occupational therapy practice, program development, management, and leadership.

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. Foreign applicants must present the equivalent of a bachelor's degree and evidence of successful completion of an OT educational program approved by WFOT. 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*).

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 800 and an analytical writing score of 4.0 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.

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 6002—Introduction to Research Methods (3 semester hours)
- OCT 6005—Evidence-Based Practice and Critical Thinking in OT (3 semester hours)
- OCT 6006—Process of Discovery (1 semester hour)
- 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 6133—Advanced Policy Issues (3 semester hours)
- OCT 6302—Contextual Analysis (3 semester hours)
- OCT 6860—Creative Leadership (3 semester hours)
- electives—selected with doctoral program director approval to complement student's practice focus

Doctoral Tuition and Fees (Dr.OT)

1. Anticipated tuition for 2008–2009 (subject to change by the board of trustees without notice) is $500 per credit hour.

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 30 days prior to registration, under the same terms as the acceptance fee.

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.

Requirements for Graduation (Dr.OT)

In order to be eligible for the Dr.OT degree, students shall

- 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 paper and 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 60 semester credits of graduate work beyond the master's degree level is required, including a research residency and a dissertation. A majority of the coursework can be completed by distance format except for 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:

- HPH 7200—Research Ethics (3 semester hours)
- HPH 7300—Fundamentals of Biostatistics (3 semester hours)
- HPH 7310—Principles of Statistical Inference (3 semester hours)
- HPH 7400—Research Design (3 semester hours)
- OCT 6010—Theory Development for Models of Practice (3 semester hours)
- OCT 6101—The Health Professional as Academic Educator (3 semester hours)
- OCT 6170—Research Methods (Qualitative) (3 semester hours)
- OCT 6820—Applying Measurement Theory to Evaluation (2 semester hours)
- OCT 6860—Creative Leadership (3 semester hours)
- electives—selected with doctoral program director approval to complement student's practice focus
- OCT 7950—Research Residency (3–6 semester hours)
- OCT 7970—Doctoral Dissertation (6 or more semester hours)

Requirements for Graduation (Ph.D.)

In order to be eligible for the Ph.D. degree, students shall

- complete a minimum of 60 credits of graduate coursework that meets NSU doctoral program requirements within nine years of beginning the program
- complete the program of study required for the degree with a minimum overall GPA of 80 percent, and a minimum grade of 80 percent in all required coursework
- successfully complete candidacy examination within one year of completion of academic classes
- complete dissertation proposal and proposal defense
- obtain IRB approval to conduct dissertation study

- complete research residency
- complete dissertation study
- complete dissertation
- 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, Florida
33329-9905

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*).

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 to appear 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 (Ph.D.)

1. Anticipated tuition for 2008–2009 (subject to change by the board of trustees without notice) is $500 per credit hour.

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.

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 prosected 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. **(16-32-2)**

OCT 5101—Historical and Theoretical Foundations of Occupational Therapy Practice

This course is an overview of the history of occupational therapy's conception, chronology, evolution, and philosophical underpinnings. Emphasis is on learning how social, political, and legal contexts influenced the chronology, prominent people in the profession, and key events in our history. Students are also introduced to examples of theories, practice models, and frames of reference related to current and future occupational therapy practice. **(32-0-2)**

OCT 5110—Medical Terminology

Students learn use of medical terminology as a basis of understanding of 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)**

AHN 5000—Introduction to Health Care Research

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)**

AHN 5500—Statistical Methods for Health Care Research

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)**

ANA 5420—Anatomy

Details human anatomy. Laboratory activities consist of student teams studying prosected 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 II

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 6002—Introduction to Research Methods

Introduction to research methods applicable to evidence-based practice. **(45-0-3)**

OCT 6003—Capstone Residency

A 90-hour requirement in clinical or community experiences to expose students to advanced practice and/or policy. This residency may include experiences in basic research and/or program development. This residency is related to the OCT 6007 Evidence and Outcomes course and supports the capstone project. **(0-0-3)**

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—Process of Discovery

This first course taken in the Dr.OT Program focuses on self and professional identity. At the end of the semester, each student will have started a professional eportfolio that includes a Professional Development Plan. **(15-0-1)**

OCT 6007—Evidence and Outcomes

This is a culminating required course for students in the Dr.OT 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 6006 **(10-2-3)**

OCT 6010—Theory Development for Models of Practice

Presents occupational therapy frames of reference, models of practice, their theoretical development, research, and application. Includes study of historical antecedents, sociopolitical context, and key theorists, researchers, and developers. **(45-0-3)**

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, taxomies, 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 6105—Philosophy of Science

Surveys various approaches to scientific thought. Discusses the nature of science; empiricism; epistemology; history; and concepts of scientific thought and method, reasoning, and the application of logic. Examines the concepts of scientific method; scientific laws; causality; and prediction, confirmation, and induction. **(45-0-3)**

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 right 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 Capital 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—Professional Communication for the Health Professional

Apply principles of public relations and professional communication to promote occupational therapy and your practice. 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 (Qualitative)

This course presents an overview of qualitative 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 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 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)**

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 for Occupational Therapists

This course gives students an introduction for developing and operating a business (e.g., private practice). **(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 occupational therapy's role in wellness and health promotion, disability postponement, and prevention in general. Students critically examine various practice models with a view toward developing and refining 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 super-

vision 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 standpoints 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 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 39 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 four weeks. The programs culminate in approximately nine 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 classes. 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
P.O. 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 Admission Program

Nova Southeastern University Health Professions Division has established a dual admission 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 2008–2009 (subject to change by the Board of Trustees without notice) is $20,420 for Florida residents and $22,425 for out-of-state students per year (academic year as determined by registrar, three-year program).
- For part-time students, tuition for 2008–2009 and beyond, (subject to change by the Board of Trustees without notice) is $12,252 for Florida residents, and $13,455 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 including dress code and all *Student Handbook* 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		Credits
PHY 5400	Physiology	3
ANA 5420	Anatomy	5
PHT 5611	Introduction to Physical Therapy	3
PHT 5610	Clinical Application for Anatomy	1
		Total 12

FIRST YEAR—Fall Semester		Credits
PHT 6710	Clinical Skills I	3
PHT 6714	Pharmacology	3
PHT 6715	Kinesiology	3
PHY 6716	Medical Pathology for Physical Therapists	3
PHT 6705	Essentials of Exercise Physiology for Physical Therapists	2
		Total 14

FIRST YEAR—Winter Semester		Credits
PHT 6720	Clinical Skills II	3
PHT 6725	Cardiovascular and Pulmonary PT	3
PHT 6722	Integumentary PT	2
PHT 6701	Professional Development: Communication and Cultural Competence	2
ANA 5423	Neuroanatomy	3
PHT 6706	Tier IA Clinical Education	2
PHT 6700	Research: Introduction to Research Methods and Data Analysis	3
		Total 18

SECOND YEAR—Summer Semester		Credits
PHT 6810	Musculoskeletal I	2
PHT 6810L	Musculoskeletal I Lab	2
PHT 6815	Physical Agents	3
PHT 6822	Teaching and Learning in Physical Therapy	1
		Total 8

SECOND YEAR—Fall Semester		Credits
PHT 6820	Musculoskeletal II	3
PHT 6820L	Musculoskeletal II Lab	2
PHT 6816	Neuroscience	3
PHT 6817	Pediatrics	3
PHT 6802	Evidence-Based Practice	3
PHT 6811	Tier IB Clinical Education	2
		Total 16

SECOND YEAR—Winter Semester		Credits
PHT 6821	Musculoskeletal III	2
PHT 6821L	Musculoskeletal III Lab	2
PHT 6830	Neuromuscular I	3
PHT 6830L	Neuromuscular I Lab	2
PHT 6835	Medical Diagnostics for Physical Therapists	3
PHT 6831	Tier IC Clinical Education	1
		Total 13

THIRD YEAR—Summer Semester		Credits
PHT 6823	Professional Development: The Business of Physical Therapy	3
PHT 6914	Neuromuscular II	2
PHT 6914L	Neuromuscular II Lab	2
PHT 6915	Prosthetics and Orthotics	3
		Total 10

THIRD YEAR—Fall Semester		Credits
PHT 6920	Applied Clinical Decision Making	4
PHT 6903	Health Promotion, Disease Prevention, and Wellness	2
PHT 6904	Research Capstone Project	3
PHT 6911	Tier IIA Clinical Education Internship	4
		Total 13

THIRD YEAR—Winter/Summer Semester		Credits
PHT 6921	Tier IIB Clinical Education Internship	8
PHT 6931	Tier IIC Clinical Education Internship	4
PHT 6930	Wrap-up	2
		Total 14

ELECTIVE		Credits
PHT 6910	Independent Study	1–6
PHT 7410	Orthopedic Manual Therapy	5
PHT 7411	Strength and Conditioning Exam Preparation	2
PHT 7412	NPTE Preparation	2
PHT 7413	Lymphedema Certification	6

Part-Time Entry-Level Doctor of Physical Therapy Curriculum Outline

Note: course numbers, names, and sequence may vary

FIRST YEAR—Summer Semester		Credits
ANA 5415	Anatomy	5
PHY 5400	Physiology	3
PHT 5610	Clinical Anatomy	1
PHT 5611	Introduction to PT	3
	Total	**12**

FIRST YEAR—Fall Semester		Credits
PHT 6714	Pharmacology	3
PHY 6716	Medical Pathology for Physical Therapists	3
PHT 6705	Exercise Physiology	2
	Total	**8**

FIRST YEAR—Winter Semester		Credits
ANA 5423	Neuroanatomy	3
PHT 6701	Professional Development: Communication and Cultural Competence	2
PHT 6700	Research: Introduction to Research Methods	3
	Total	**8**

SECOND YEAR—Summer Semester		Credits
PHT 6822	Teaching and Learning in Physical Therapy	1
PHT 6823	Professional Development: The Business of Physical Therapy	3
	Total	**4**

SECOND YEAR—Fall Semester		Credits
PHT 6715	Essencials of Biomechanics and Kinesiology	3
PHT 6710	Clinical Skills I	3
	Total	**6**

SECOND YEAR—Winter Semester		Credits
PHT 6725	Cardiovascular and Pulmonary PT	3
PHT 6720	Clinical Skills II	3
PHT 6706	Tier IA Clinical Education	2
PHT 6722	Integumentary PT	2
	Total	**10**

THIRD YEAR—Summer Semester		Credits
PHT 6810	Musculoskeletal I	2
PHT 6810L	Musculoskeletal I Lab	2
PHT 6815	Physical Agents	3
	Total	**7**

THIRD YEAR—Fall Semester		Credits
PHT 6820	Musculoskeletal II	3
PHT 6820L	Musculoskeletal II Lab	2
PHT 6811	Tier IB	2
	Total	**7**

THIRD YEAR—Winter Semester		Credits
PHT 6821	Musculoskeletal III	2
PHT 6821L	Musculoskeletal III Lab	2
PHT 6835	Medical Diagnostics for Physical Therapists	3
	Total	**7**

FOURTH YEAR—Summer Semester		Credits
PHT 6915	Prosthetics and Orthotics	3
	Total	**3**

FOURTH YEAR—Fall Semester		Credits
PHT 6816	Neuroscience	3
PHT 6817	Pediatrics	3
PHT 6802	Evidence-Based Practice	3
	Total	**9**

FOURTH YEAR—Winter Semester		Credits
PHT 6830	Neuromuscular I	3
PHT 6830L	Neuromuscular I Lab	2
PHT 6831	Tier IC	1
	Total	**6**

FIFTH YEAR—Summer Semester (Full time)		Credits
PHT 6914	Neuromuscular II	2
PHT 6914L	Neuromuscular II Lab	2
	Total	**4**

FIFTH YEAR—Fall Semester		Credits
PHT 6920	Applied Clinical Decision Making	4
PHT 6903	Health Promotion, Disease Prevention, and Wellness	2
PHT 6904	Research Capstone Project	3
PHT 6911	Tier IIA Clinical Education Internship	4
	Total	**13**

FIFTH YEAR—Winter/Summer Semester		Credits
PHT 6921	Tier IIB Clinical Education Internship	8
PHT 6931	Tier IIC Clinical Education Internship	4
PHT 6930	Wrap-up	2
	Total	**14**

ELECTIVE		Credits
PHT 6910	Independent Study	1–6
PHT 7410	Orthopedic Manual Therapy	5
PHT 7411	Strength and Conditioning Exam Preparation	2
PHT 7412	NPTE Preparation	2
PHT 7413	Lymphedema Certification	6

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. It addresses the history of physical therapy, the *Guide to Physical Therapy Practice*, and medical terminology. Professional socialization begins through introduction to ethical and professional standards (including decision making, supervision, and delegation) and state and federal laws governing PT practice (including issues requiring advocacy). Certifications required for clinical practice such as CPR, AIDS, etc. will be acquired. Students are required to join the American Physical Therapy Association. **(3 credits)**

PHT 5610—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)**

PHT 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. **(3 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 6705—Essentials of Exercise Physiology

Describes the normal response to exercise and training on the cardiac, pulmonary, musculoskeletal, neural, and endocrine systems of the human body. It explains nutritional considerations as they relate to work performance. The various methods of training for increased strength, cardiovascular fitness, and endurance, and the effects of physical activities and work-related stress on the human organism will be discussed. It includes energy liberation, circulation and respiration, physical work capacity, physical training, energy cost of various activities, nutrition and performance, temperature regulation, factors affecting performance and fitness, and the physiology of various sport activities. **(2 credits)**

PHT 6720—Clinical Skills II

Presents models for clinical decision making including the patient care management model as presented in the *Guide to Physical Therapy Practice*. Students will learn to safely apply assessment and intervention techniques that address range of motion and strength deficits, pain and soft tissue dysfunction. Safe performance of psychomotor skills such as goniometric measurements, AROM exercises, MMT, tilt and standing table, superficial thermal modalities, and therapeutic massage techniques will be emphasized. **(3 credits)**

PHT 6725—Cardiovascular and Pulmonary PT

Provides an overview of the related pathologies 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 **Prerequisites:** PHT 6705 and PHT 6714 **(3 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. The 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 and practiced. The concepts of cultural competence related to heath care will also be explored. Discussions will include epidemiology and health care access issues as they relate to cultural barriers. **(2 credits)**

PHT 6700—Research: Introduction to Research Methods and Data Analysis

This course addresses global concepts of research. The role of theory in clinical research is included, and ethical issues in clinical research are explored. Students will be introduced to the principles of reliability, and validity of measurement, and will develop an understanding of the four levels of measurement: nominal, ordinal, interval, and ratio. In addition, the outline of the capstone project (Year 3 Fall Semester) will be introduced. The analysis part will address multiple areas of quantitative data analysis. Students will learn about descriptive statistics and measures of variability, as well as statistical inference (including Type 1 and Type 2 errors). In addition, students determine which statistical tools to apply to what kind of data, including the basic use of the SPSS statistical software. Students will learn about the various types of designs; the researcher's role in the process; and the procedures for data collection, data recording, and data analysis in qualitative research. In addition, students will address the verification steps, learn what triangulation is, and learn what the elements of the qualitative narrative are. **(3 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 presences, assessment, examination, screening, treatment planning, and performance of basic skill intervention. **(2 credits)**

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 6822—Teaching and Learning in Physical Therapy

Teaching is an integral part of physical therapy practice and one of the foundations of a doctoring profession. This course explores both the theoretical basis and the practical techniques related to: patient-related instruction, designing educational programs/in-services, evaluating program/teaching effectiveness, facilitating behavior change, creating professional presentations, and engaging in clinical education. Students will also explore factors that impact learning across the life span. **(1 credit)**

PHT 6820—Musculoskeletal II

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. **(3 credits)**

PHT 6820L—Musculoskeletal II Lab

Emphasizes the psychomotor and affective skills required when providing the associated musculoskeletal interventions addressed in PHT 6820—Musculoskeletal II. 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 6816—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 6817—Pediatrics

Management of infants, children, adolescents, and young adults with complex central nervous system (CNS) and multisystem disorders will be presented. Musculoskeletal impairments, neuropathology, examination, evaluation, physical therapy diagnosis, prognosis, and fundamental interventions will be stressed for a broad range of pediatric populations. Both acquired injuries and congenital disorders will be included. Assistive devices and technologies, adapted equipment (e.g., wheelchair prescription and seating), orthotics, and bracing for the pediatric client will be presented. Issues of supervision, delegation, legality/ethics, documentation, interdisciplinary team approaches, cultural concerns, and reimbursement based on settings are explored. Content is presented through lecture, lab, case studies, large and small group discussion, and observations of pediatric physical therapists. **(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 will formulate answerable clinical questions, conduct efficient literature searches, and critically appraise the research evidence. In addition, students will learn about the work of the Philadelphia Panel and APTA's Hooked on Evidence project, and the relationship of outcome measures to evidence-based practice. **(3 credits)**

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. **(2 credits)**

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. **(2 credits)**

PHT 6821L—
Musculoskeletal III Lab

Emphasizes the psychomotor and affective skills required when providing the associated lower extremity/lower quarter musculoskeletal interventions addressed in PHT 6820 Musculoskeletal III. It addresses relevant practice patterns 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 addresses examination and treatment of adults with neuromuscular disorders. Students apply knowledge from Neuroanatomy and Neuroscience to the clinical management of patients with neurological conditions. Neuromuscular I provides the foundational concepts and clinical reasoning for choosing tests and measures used during PT examination of the neurological patient. These include sensory and motor tests; examination of motor function, motor learning, and coordination; cranial nerves; functional mobility; self-care and activities of daily living; community function; arousal, attention, and cognition; and balance, gait, and disease-specific tests. The psychometric properties of tests and measures (reliability, validity, sensitivity, specificity) will be analyzed. The foundational concepts for procedural interventions related to neurorehabilitation will be addressed. These include indications, precautions, and contraindications, as well as evidence-based recommendations for therapeutic exercise; balance and gait retraining; manual techniques and facilitation; electric stimulation; mobility training; upper extremity reach, grasp, and manipulation training; positioning, supportive, and protective devices; wheelchairs; and community re-entry. **(3 credits)**

PHT 6830L—Neuromuscular I Lab

This course emphasizes the psychomotor skills required to perform tests/measures during the PT examination and procedural interventions used to treat patients with neurological impairments and activity restrictions. Students practice and receive feedback regarding therapeutic presence, history-taking skills, hand placement, administration of tests and self-report measures, performance of interventions, and the ability to provide accurate feedback to patients during motor learning tasks. **(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 practice of 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 presences, 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 integrates concepts from Neuroscience and Neuromuscular Systems I to engage students in the patient/client management of patients with neuromuscular dysfunction. Students are exposed to a variety of case studies, representing all adult neuromuscular practice patterns in the *Guide to Physical Therapist Practice*, to integrate and apply previously learned neuromuscular skills to patient scenarios. Emphasis is placed on clinical reasoning during all steps of patient/client management, the ability to apply evidence in practice, design and execution of patient/client-related instruction, delegation to support personnel, and documentation of all aspects of care. This class also addresses primary, secondary, and tertiary prevention for patients with neuromuscular conditions. **(2 credits)**

PHT 6914L—
Neuromuscular II Lab

This course is the laboratory component of Neuromuscular II. In it, students will perform all aspects of patient/client management including examination, evaluation, diagnosis, prognosis, development of a plan of care, procedural interventions, and outcome measurement. Students will apply these techniques to a variety of case studies, representing the scope of adult practice patterns in the *Guide to Physical Therapist Practice*. Neuromuscular II culminates in an intense, one-week laboratory experience, the Neurorehabilitation Institute (NI), in which students work with real patients who have complicated neuromuscular disorders in a faculty-supervised setting. Students are responsible for performing a thorough examination, writing a comprehensive plan of care, performing procedural interventions, providing patient instruction, and communicating with caregivers. **(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 the foundational and clinical science 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 profile. 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. **(3 credits)**

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. **(8 credits)**

PHT 6931—Tier IIC 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. **(4 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. **(2 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)**

PHT 7410—Orthopedic Manual Therapy

This course is a collaboration between the North American Institute of Orthopedic Manual Therapy (NAIOMT) and Nova Southeastern University (NSU). It uses the techniques of Cyriax's and other orthopedic experts for orthopedic medical screening, and the rationale for differential diagnosis and selection of manual and mechanical interventions. Advanced biomechanical assessment, and treatment of the lower quarter quadrant (the lumbar spine and lower limb) and upper quarter quadrant (the cervical spine and upper limb) using mobilization/manipulation and stabilization techniques will be taught and practiced. It is a hybrid course, combining online instruction for didactic material and a six-day intensive laboratory course with emphasis on psychomotor skills. Upon completion, students may sit for the Level II certification examination with NAIOMT. **(5 credits)**

PHT 7411—Strength and Conditioning Exam Preparation

This course will prepare the student to sit for the National Strength and Conditioning Association's Certified Strength and Conditioning Specialist® (CSCS) examination.

The CSCS is a nationally accredited certification awarded only after passing a rigorous scientific and practical examination. The CSCS preparation course is designed to provide participants with the knowledge and skills to design and implement safe and effective strength and conditioning programs. The course is taught in a hybrid format, combining independent learning, online instruction, and two days of laboratory and didactic instruction. Upon completion, students will be prepared to sit for the CSCS examination. **(2 credits)**

PHT 7412—NPTE Preparation

This course is an elective course that offers a comprehensive review of physical therapy concepts so as to prepare students for taking the National Physical Therapy Examination. It is a hybrid course, combining online and on-campus instruction in which students will identify test-taking skills and stress-reduction strategies and will review major content areas interspersed with practice examinations. The course is offered at the end of the student's clinical and didactic coursework. **(2 credits)**

PHT 7413—Lymphedema Certification

This course is offered in cooperation between Nova Southeastern University (NSU) and the Academy of Lymphatic Studies (ACOLS). Each course participant will be trained in the four components of Manual Lymph Drainage (Vodder Technique) and Complete Decongestive Therapy (MLD/CDT) and the appropriate management of lymphedema (primary and secondary) affecting the upper and lower extremities and other body parts. Upon completion of this course, participants will be able to differentiate between varieties of peripheral edemas and understand the medical indications and contraindications of MLD/CDT. Furthermore, participants will be able to establish a treatment plan for individuals with chronic extremity lymphedema and other conditions and perform the treatment accordingly. This course consists of 30 hours of home study and 105 hours of classroom instruction. **(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

- function as lifelong learners by engaging in reflective practice, critical inquiry, evidence-based practice, continuing education, and self-directed learning activities
- assume leadership roles within the profession of physical therapy through active participation, membership, research, teaching, and collaboration

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. Agencies that evaluate foreign courses for institution equivalency include:

· 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

Foreign Credentialing Commission
on Physical Therapy* (FCCPT)
511 Wythe Street
Alexandria VA 22314, USA

(703) 684-8406
www.fccpt.org

*This agency specializes in evaluation for U.S. PT licensure.

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
Office of Admissions
3301 College Avenue
P.O. Box 299000
Fort Lauderdale, Florida
33329-9905

- three letters of evaluation from persons who can evaluate the applicant's performance as a physical therapist and/or the applicant's ability for doctoral studies
- official GRE scores and TOEFL scores when appropriate

After an evaluation of credentials, qualified applicants may be interviewed. Students can transfer up to six credit hours from another accredited postprofessional program based on the assessment by the Office of Admissions or visit our Web site at *www.nova.edu/pt*.

Foreign Coursework

Undergraduate coursework taken at a foreign institution must be evaluated for U.S. institution equivalence. For more information, please call the Physical Therapy Admissions Office at (954) 262-1110.

Transition D.P.T. Tuition and Fees

Anticipated tuition for 2008–2009 is $450 per credit hour. Tuition is subject to change by the board of trustees without notice.

T-D.P.T. students who are members of the American Physical Therapy Association (APTA) will receive a 15 percent tuition discount each term (with written proof of membership).

The first term's tuition and fees are due on or before registration day. Tuition for each subsequent semester is due on or before the appropriate registration day.

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 completed 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—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 7225—Research Methods and Design (3 credits)
- PHT 7815–75—Patient/Client Management (4 credits).

Elective Courses (18 credits)

- PHT 7005—Payer 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 7015—The Therapist and Cultural Diversity (3 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 7225—Research Methods and Design (3 credits)
- PHT 7815–75—Patient/Client Management (4 credits)

Applicants with an M.P.T. degree from NSU or a doctoral degree: 6 classes (24 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

Through Administration, Consultation, and Supervision. **(4 credits)**

PHT 7415—Radiology and Pharmacology

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 diagnostic tests, including diagnostic imaging; augment information obtained from the physical therapy examination with information provided by the physician or physician 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, pharmacology, 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 the students in becoming medical diagnosticians, but rather to give the 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 practitioner'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 7225—Research Methods and Design

This course provides a review of quantitative and qualitative research methods, designs, and data analysis. Also included are principles of measurement (reliability and validity), biostatistics, and critical literature analysis. **(3 credits)**

PHT 7825–95—Patient/Client Management

Students expand their current scope of practice in one of seven practice areas. This allows the practitioner to direct his or her learning to a defined practice area using the elements of patient/client management, including examination (tests and measures), evaluation, diagnosis, prognosis and plan of care, interventions, and outcome assessment. Each Patient/Client Management course provides both didactic and clinical experiences to integrate theory with practice. Two days of intensive, hands-on training will occur midway through the semester. Students can further enhance skills in a particular practice area by taking an elective clinical residency. Students who take both PHT 7895 and PHT 7885 will be prepared to sit for the level II manual therapy examination with the North American Institute of Orthopedic Manual Therapy (NAIOMT). Any student can also take additional practice areas as electives. **(4 credits)**

- **PHT 7825—Patient/Client Management: Neuromuscular**
- **PHT 7835—Patient/Client Management: Family Practice and Women's Health**
- **PHT 7845—Patient/Client Management: Pediatric Practice**
- **PHT 7855—Patient/Client Management: Geriatric Practice**
- **PHT 7865—Patient/Client Management: Sports Medicine**
- **PHT 7875—Patient/Client Management: Administration and Management**
- **PHT 7895—Musculoskeletal Manual Therapy: Lower Quadrant (5 credits)**
- **PHT 7885—Musculoskeletal Manual Therapy: Upper Quadrant (5 credits)**

PHT 7005—Payer Systems

This course covers issues related to cost containment, managed care, and reimbursement as applied to the provision of physical therapy in multiple health care environments. Students are introduced to theories of health care reform, societal factors effecting reimbursement, and the concept of becoming a change agent. **(3 credits)**

PHT 7015—The Therapist and Cultural Diversity

This course explores how multicultural 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 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 educational 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 writing. **(3 credits)**

PHT 7055—Ethical and Legal Issues in Health Care I
This course covers ethical, moral, and legal issues affecting health 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 7905—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 provides students with 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 electromyographical 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 of 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; 1.8GHz 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 under graduate, 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

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

Doctoral Tuition and Fees

Anticipated tuition for 2008–2009 (subject to change by the board of trustees without notice) is $500 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.

Students holding an undergraduate degree in physical therapy with transferable credits will take up to 15 additional credit hours of required courses.

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 therapy practice. Students complete a written project on a selected topic or question. **(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 effect 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 6100. 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)**

PHT 7112—Research III: Measurement Issues in Physical Therapy Research

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 7113—Research IV: Advanced Methods and Design

The focus of this course is to introduce the research design and analysis that is involved in advanced and multivariate statistical methods. Topics include multiple and logistic regression, multivariate analysis of variance, factor analysis, discriminate analysis, and time series analysis. Single subject design and research synthesis will also be introduced. Emphasis is on understanding and applying statistical concepts and techniques to research data as well as developing the ability to critically analyze research methods used in the scientific literature. **(4 credits)***

PHT 7130—Reseach 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 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 home pages, 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 rapid 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

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 65,000 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 all states. PAs work in most medical specialities 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 PA's scope of practice is identified; that delegation of medical tasks is appropriate to the PA's 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 will be awarded 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 2.9 and a minimum science GPA of 2.9 on a 4.0 grading scale **in order for an application to be considered.**

Successful applicants in the past have typically had both cumulative and science GPAs of 3.2 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 (4 semester hours)
- 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 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)

4. 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 course of the applicant's choosing.

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 January 31. 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 2003 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

CASPA
P.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 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, 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 interview 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.

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. 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

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 FCAS bachelor of science and CAHN master of medical science (B.S./M.M.S.) degrees 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 2008–2009 (subject to change by the board of trustees without notice) is $22,440 for Florida residents and $23,170 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 credited to 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 this campus. No advanced placement, transfer of credit, or credit for experiential learning will be granted.

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 will be awared 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.

Curriculum Outline for the Master of Medical Science (M.M.S.) in Physician Assistant Program—Fort Lauderdale

Start Date: June 2007
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 2007)

		Lecture	Laboratory	Credit Hours
ANA 5420	Anatomy	55	38	5
PHS 5400	Physiology	54	0	3
PAC 5400	Clinical Pathophysiology	48	0	3
PAC 5000	Physical Diagnosis I	28	38	3
PAC 5002	Medical Terminology	4	14	1
PCO 5300	Biomedical Principles	18	0	1
PAC 5003	Fundamentals of Medical Imaging	18	0	1
PAC 5001	Introduction to the PA Profession	16	0	1
	Total Hours:	**241**	**90**	**18**

Second Semester—Fall (September–December 2007)

		Lecture	Laboratory	Credit Hours
MIC 5400	Microbiology	52	2	3
MMS 5404	Legal and Ethical Issues in Health Care	32	0	2
PAC 5100	Physical Diagnosis II	30	36	2
PCO 5400	Pharmacology I	38	0	2
PAC 5110	Clinical Medicine and Surgery I	112	0	7
PAC 5130	Clinical Laboratory Medicine I	20	4	1
AHN 5000	Introduction to Health Care Research	45	0	3
PAC 5229	Electrocardiography	30	6	2
	Total Hours:	**359**	**48**	**22**

Third Semester—Winter (January–May 2008)

		Lecture	Laboratory	Credit Hours
PAC 5200	Physical Diagnosis III	32	38	3
PAC 5210	Clinical Medicine and Surgery II	120	0	8
PAC 5310	Clinical Medicine and Surgery III	112	0	7
PAC 5131	Clinical Laboratory Medicine II	36	0	2
PCO 5410	Pharmacology II	72	0	4
MMS 5406	Cultural Issues and Disparities in Health Care	30	0	2
PAC 5311	Clinical Psychiatry	45	0	3
AHN 5500	Statistical Methods for Health Care Research	45	0	3
	Total Hours:	**492**	**38**	**32**

Fourth Semester—Summer II Advanced Didactic (June–July 2008)

		Lecture	Laboratory	Credit Hours
MMS 5460	Life Support Procedures and Skills	24	40	3
PAC 5510	Clinical Procedures and Surgical Skills	56	24	4
PAC 5129	Health Promotion and Disease Prevention	22	0	1
PAC 5006	PA and Health Care Dynamics	12	0	1
PAC 5010	Core Competencies	0	30	1
MMS 5410	Complementary Medicine and Nutrition	30	0	2
MMS 5407	Clinical Pharmacology	45	0	3
	Total Hours:	**189**	**94**	**15**

Clinical Curriculum—Second Year (August 2008–August 2009)

		Weeks	Contact Hours	Credit Hours
PAC 6304	Prenatal Care and Gynecology	6	270	6
PAC 6311	Internal Medicine	6	270	6
PAC 6313	Surgery	6	300	6
PAC 6315	Emergency Medicine	6	270	6
PAC 6317	Pediatrics	6	270	6
PAC 6318	Family Medicine	6	250	6
MMS 6401	Clinical Elective I	6	270	6
MMS 6402	Clinical Elective II	6	270	6
PAC 6308	Clinical Elective III	4	160	4
MMS 6500	Graduate Project			3
	Total Hours:		**2,330**	**55**

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, documentation, and domestic violence. **(32-0-2)**

MMS 5406—Cultural Issues and Disparities 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

At the completion of this course, students will be able to appropriately prescribe medications in various clinical settings. Preparation for appropriate prescribing and administration of medicines is accomplished by studying drug classifications, pharmacodynamic actions, and the rationale for therapeutic use of prescription and nonprescription medications. In addition, students will be able to describe the potential advantages and disadvantages of specific therapeutic regimens, universal indications and contraindications for usage, dosing schedules, and the relative cost of commonly prescribed medications. Students will administer a variety of medications using patient simulators and will observe the clinical response. Common errors involving prescription writing will be discussed and practical exercises will require students to accurately write prescriptions and treatment orders. **(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 adviser, students will use the skills acquired in Introduction to Health Care Research (AHN 5000) and Statistical Methods for Health Care Research (AHN 5550) to create a graduate project. The project features topics in clinical or administrative medicine and consists of a comprehensive literature review and evaluation and completion of a publishable-quality research project. 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 such as rural and underserved medicine, reimbursement for services rendered, quality assurance, federal health care programs, reduction of medical errors, 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 an OSCE-style practical examination. (0-30-1)

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. (30-36-2)

PAC 5110—Clinical Medicine and Surgery I

Etiology, clinical manifestations, appropriate diagnostic evaluation, and the management of selected disease entities. (112-0-7)

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 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. (36-0-2)

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. (32-38-3)

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 12-lead 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. (56-24-4)

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. (300-0-6)

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. (54-0-3)

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 65,000 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 specialities 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 offers an innovative program that lasts 27 months. Upon successful completion of study, students will earn a master of medical science (M.M.S.) in physician assistant degree. The 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, as well as M.M.S. courses including legal and ethical issues in health care, epidemiology and biostatistics, research methodology, cultural issues in health care, publication skills and medical research, complementary medicine and nutrition, and clinical pharmacology.

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 organic chemistry (3 semester hours)
- medical terminology (1 semester hour)
- electives (43 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)

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 March 31. 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
- DVD capability with CD-RW
- 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, XP, NT, or Vista
- Microsoft Office 2000 with PowerPoint, Word, and Excel minimum
- surge suppressor electrical outlet

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
PO 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 invitation for a personal interview. Interviews are conducted on the Nova Southeastern University Naples, Florida, campus and are by invitation only. Interviews will be held from August through May. An invitation to interview is not a guarantee of admission. Notice of acceptance or action by the COA will be 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
Department—Naples
2655 Northbrooke Drive
Naples, Florida 34119
Phone: (239) 591-4528, ext. 10,
or 800-541-6682
Fax: (239) 591-8331

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, some coursework is in progress or anticipated, please identify the courses on the supplemental application.

Transcripts

All applicants who are accepted must submit official transcripts of all coursework 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 with Hodges University—Naples

Nova Southeastern University's College of Allied Health and Nursing has established an articulation agreement with Hodges University 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 Hodges University 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 Hodges University 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
Hodges University
2655 Northbrooke Drive
Naples, Florida 34119
(239) 513-1122.

Tuition and Fees

- Anticipated tuition for 2008–2009 (subject to change by the board of trustees without notice) is $22,440 for Florida residents and $23,170 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.

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. All required rotations must be completed in the state of Florida. Each student should expect to complete at least one rotation in a rural or underserved area.

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 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 Master of Medical Science (M.M.S.) in Physician Assistant Program—Naples

Start Date: June
Length: 27 months
Degree: Master of Medical Science (M.M.S.) in Physician Assistant
Didactic: 14 months
Clinical: 13 months

First Semester—Summer (June–August)

		Lecture	Laboratory	Credit Hours
PAN 5000	Anatomy	55	38	5
PAN 5100	Physiology	54	0	3
PAN 5101	Clinical Pathophysiology	45	0	3
PAN 5300	Physical Diagnosis I	42	20	3
PAN 5400	History Taking and Communication Skills	18	0	1
PAN 5003	Fundamentals of Medical Imaging	18	0	1
PAN 5002	Introduction to the PA Profession	16	0	1
	Total Hours:	**248**	**58**	**17**

Second Semester—Fall (September–December)

		Lecture	Laboratory	Credit Hours
PAN 5200	Microbiology	45	0	3
MMS 5403	Legal and Ethical Issues in Health Care	45	0	3
PAN 5310	Physical Diagnosis II	36	32	3
PAN 5410	Pharmacology I	38	0	2
PAN 5500	Clinical Medicine and Surgery I	112	0	7
PAN 5600	Clinical Laboratory Medicine I	20	4	1
MMS 5421	Epidemiology/Biostatistics	45	0	3
	Total Hours:	**341**	**36**	**22**

Third Semester—Winter (January–May)

		Lecture	Laboratory	Credit Hours
PAN 5320	Physical Diagnosis III	60	40	5
PAN 5510	Clinical Medicine and Surgery II	120	0	8
PAN 5520	Clinical Medicine and Surgery III	112	0	7
PAN 5610	Clinical Laboratory Medicine II	32	0	2
PAN 5420	Pharmacology II	72	0	4
MMS 5409	Cultural Issues in Health Care	30	0	2
PAN 5540	Clinical Psychiatry	45	0	3
MMS 5423	Research Methodology	45	0	3
PAN 5006	Electrocardiography	18	4	1
	Total Hours:	**534**	**44**	**35**

Fourth Semester—Summer II Advanced Didactic (June–July)

		Lecture	Laboratory	Credit Hours
MMS 5461	Life Support Procedures and Skills	24	40	3
PAN 5560	Clinical Procedures and Surgical Skills	44	24	3
PAN 5008	Health Promotion and Disease Prevention	22	0	1
PAN 5009	PA and Health Care Dynamics	30	0	2
MMS 5413	Publication Skills and Medical Research	30	60	4
MMS 5411	Complementary Medicine and Nutrition	30	0	2
MMS 5419	Clinical Pharmacology	16	0	1
	Total Hours:	**196**	**124**	**16**

Clinical Curriculum—Second Year (August–August)

		Weeks	Contact Hours	Credit Hours
PAN 6350	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	Elective I	6	270	6
MMS 6421	Elective II	6	270	6
PAN 6380	Elective III	4	160	4
MMS 6601	Graduate Project	0	0	3
	Total Hours:	52	2,300	55

Curriculum is subject to change as directed by the department.

Physician Assistant—Naples Course Descriptions

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

*Core competency course

MMS 5403—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 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)**

MMS 5413—Publication Skills and Medical Research

The essential components of a well-written medical or research paper are presented. The process by which these papers are transformed into publications is described including the concepts of article preparation and revision, and the steps required for submission to a physician assistant medical journal. This course is designed to adequately prepare students to complete the Graduate Project (MMS 6500), which results in a written medical or research paper. **(32-60-4)**

MMS 5421—Epidemiology and Biostatistics in Health Care

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 6411—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 features topics in clinical or administrative medicine and consists of 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 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, and 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. (45-0-3)

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. (36-32-3)

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 6310—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)

PAN 6320—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)

PAN 6330—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)

PAN 6340—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. (240-0-6)

PAN 6350—Prenatal Care and Gynecology

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)

PAN 6360—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. (300-0-6)

PAN 6380—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)

Physician Assistant Department—Orlando

Physician assistants (PAs) serve as an essential component of a medical system that continues to strive to provide quality, affordable health care for all individuals. Their roles in the system will continue to grow as changes in health care indicate. Today, more than 65,000 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 in primary care settings, 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 49 percent through the year 2012.

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 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—Orlando offers n modern program that lasts 27 months. Upon successful completion of study, the student is awarded a master of medical science in physician assistant degree. The curriculum includes rigorous instructions in basic science subjects, followed by clinical medicine, physical diagnosis, clinical laboratory medicine, clinical pathophysiology, clinical procedures, surgical skills, electrocardiography and radiology, and psychiatry. The student also takes courses in the Master of Medical Science program including health care law and ethics, epidemiology and biostatistics, research methodology, cultural issues in health care, publication skills, and rural and underserved populations.

During the clinical year of study, the student participates in clinical rotations throughout the state of Florida. Required rotations include family medicine, internal medicine, pediatrics, gynecology and prenatal care, emergency medicine, dermatology, otorhinolaryngology, orthopedics, community medicine, and general surgery. The clinical year contains one elective rotation. 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—Orlando 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, which emphasizes primary medical care, yet will enable graduates to manifest competency and skill in a variety of clinical environments
- to inspire graduates to pursue lifelong learning
- to foster leadership qualities, which 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 2.7 and a minimum science GPA of 2.7 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 composition (3 semester hours)
- English literature (3 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 organic chemistry (3 semester hours)
- medical terminology (1 semester hour)
- 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)
- intro statistics (1 semester hour or more)

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 laptop computer and a printer. The computer must have the following minimum specifications:

- Pentium IV or equivalent, 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
- Wireless capability
- Combo DVD and RW drive
- Printer

The following are recommended features:

- 800 x 600 or higher video display
- Windows 2000, ME, XP, or NT
- Microsoft Office 2000 with PowerPoint, Word and Excel minimum
- Surge suppressor

Suggested option: 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. Applicants can also obtain CASPA packets 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 to (617) 612-2080 or (617) 926-3571.

The CASPA application may be submitted as early as April 16, the year prior to the admission cycle. The CASPA application deadline is January 15 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 February 15.

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 at the address below.

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

Phone: (954) 262-1109
Fax: (954) 262-2282

Your complete supplemental application must be received no later than February 15 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; your supplemental application; and the nonrefundable $50 application 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 $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 your application meets program criteria to warrant an invitation for a personal interview. Interviews are conducted at Nova Southeastern University's Orlando Student Educational Center, and are by invitation only. An invitation is not a guarantee of admission. Notice of acceptance or action by the COA will be on a "rolling" or periodic schedule; therefore, early completion of the application is in the best interest of the applicant.

Inquiries should be directed to:

Nova Southeastern University
Orlando Student Educational Center
Physician Assistant Department—Orlando
Coordinator of Student Services and Recruitment
4850 Millenia Blvd.
Orlando, Florida 32839-6012

Phone: (407) 264-5150
Fax: (407) 264-5140

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, some coursework is in progress or anticipated, please identify the courses on the supplemental application.

Transcripts

All applicants who are accepted must submit official transcripts of all coursework 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 with Florida Hospital College of Health Science and NSU's Orlando Student Educational Center

Nova Southeastern University's College of Allied Health and Nursing has established an articulation agreement with Florida Hospital College of Health Science 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 Florida Hospital College and a Master of Medical Science (M.M.S.) in Physician Assistant from 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 Florida Hospital College of Health Science 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
Florida Hospital College of Health Science
671 Winyah Drive
Orlando FL, 32803-1226
Phone: (800) 500-7747 or (407) 303-9798
Fax: (407) 303-9408

Tuition and Fees

- Tuition for 2008–2009 (subject to change by the board of trustees without notice): $22,440 for Florida residents and $23,170 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 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.

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.

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
- 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.

Remediation Policy

The Nova Southeastern University Physician Assistant Program—Orlando is an intense academic experience. Students will encounter both written and performance-based examinations. In specific courses, (Physical Exam/diagnosis, Clinical Medicine, and Surgery) all blocks of instruction must be successfully passed by the student in order to pass the entire course.

All students are notified in writing of their performance on every test. If a student fails to demonstrate the required competencies for a specific exam or block of instruction, certain actions will be taken. Students will receive written notification of their grades from the course director. The student will review the grade sheet and sign it. The student will meet with his or her academic adviser and/or the course director/instructor in order to discuss the academic situation and develop a plan for remediation of his or her academic deficiencies. Students will coordinate a retesting date with the course director and that will be within seven calendar days of the test failure. The student must be proactive in coordinating additional study/tutoring time before the retest.

If the student successfully passes the retest, the student will receive a score of 70 percent.

If the student fails to demonstrate mastery of the course objectives by failing the retest after remediation, the student's case will be forwarded to the Student Progress Committee for further review and possible academic and administrative action.

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, 7:30 a.m. to 4:30 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 Nova Southeastern University.

The clinical year is devoted to 13 months of clinical training with required clinical rotations in family medicine, internal medicine, emergency medicine, pediatrics, prenatal care/gynecology, general surgery, orthopedics, dermatology, otorhinolaryngology, and community medicine. The rotations are as follows:

- Emergency Medicine (four weeks)
- Family Medicine (eight weeks)
- Internal Medicine (eight weeks)
- Pediatrics (four weeks)
- Prenatal Care and Gynecology (four weeks)
- General Surgery (four weeks)
- Orthopedics (four weeks)
- Dermatology (four weeks)
- Otorhinolaryngology (four weeks)
- Community Medicine (four weeks)
- Elective (four weeks)
- Graduate Project

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 a greater student participation.

Upon completion of the course of study, students 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.

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 Master of Medical Science (M.M.S.) in Physician Assistant Program—Orlando

Start Date ..... June 2008

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)

		Lecture	Lab	Credit Hours
MPA 5406	Cultural Issues in Health Care	30	0	2
PAO 5000	Anatomy	55	38	5
PAO 5001	Pharmacodynamics	16	0	1
PAO 500	Introduction to the PA Profession	16	0	1
PAO 5003	Fundamentals of Medical Imaging	18	0	1
PAO 5005	Genetics	18	0	1
PAO 5100	Physiology	54	0	3
PAO 5300	Physical Diagnosis I	42	20	3
PAO 5400	History Taking and Communication Skills	18	0	1
	Total Hours:	**267**	**58**	**18**

Second Semester—Fall (September–December)

		Lecture	Lab	Credit Hours
MPA 5405	Legal and Ethical Issues in Health Care	45	0	3
MPA 5420	Epidemiology/Biostatistics in Health Care	45	0	3
PAO 5101	Clinical Pathophysiology	18	0	1
PAO 5200	Microbiology	45	0	3
PAO 5310	Physical Diagnosis II	20	36	2
PAO 5410	Pharmacology I	38	0	2
PAO 5500	Clinical Medicine and Surgery I	112	0	7
PAO 5600	Clinical Laboratory Medicine I	20	0	1
	Total Hours:	**343**	**36**	**22**

Third Semester—Winter (January–May)

		Lecture	Lab	Credit Hours
MPA 5422	Research Methodology	45	0	3
PAO 5006	Electrocardiography	18	4	1
PAO 5102	Clinical Pathophysiology II	18	0	1
PAO 5103	Clinical Pathophysiology III	16	0	1
PAO 5320	Physical Diagnosis III	60	40	5
PAO 5420	Pharmacology II	72	0	4
PAO 5510	Clinical Medicine and Surgery II	120	0	8
PAO 5520	Clinical Medicine and Surgery III	112	0	7
PAO 5540	Clinical Psychiatry	45	0	3
PAO 5610	Clinical Laboratory Medicine II	32	0	2
	Total Hours:	**538**	**44**	**35**

Fourth Semester—Summer II Advanced Didactic (June–July)

		Lecture	Lab	Credit Hours
MPA 5407	Clinical Pharmacology	16	0	1
MPA 5410	Complementary Medicine and Nutrition		30	0 2
MPA 5412	Publication Skills and Medical Research	30	60	4
MPA 5460	Life Support Procedures and Skills	24	40	3
PAO 5009	PA and Health Care Dynamics	30	0	2
PAO 5560	Clinical Procedures and Surgical Skills	44	24	3
PAO 5008	Health Promotion and Disease Prevention	22	0	1
	Total Hours:	**196**	**124**	**16**

Clinical Curriculum—Second Year (August–August)

		Weeks	Contact	Credit Hours
MPA 6401	Elective	4	160	4
MPA 6500	Graduate Project	0	0	3
PAO 6310	Emergency Medicine	4	200	4
PAO 6320	Family Medicine	8	340	8
PAO 6330	Internal Medicine	8	360	8
PAO 6340	Pediatrics	4	180	4
PAO 6350	Prenatal Care and Gynecology	4	180	4
PAO 6360	General Surgery	4	200	4
PAO 6370	Orthopedics	4	180	4
PAO 6380	Dermatology	4	160	4
PAO 6390	Otorhinolaryngology	4	180	4
PAO 6400	Community Medicine	4	160	4
	Total Hours:	52	2,300	55

Clinical Curriculum is subject to change as directed by the department.

Physician Assistant—Orlando Course Descriptions

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

*Core competency course

MPA 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)**

MPA 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)**

MPA 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. **(16-0-1)**

MPA 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 the 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)**

MPA 5412—Publication Skills and Medical Research

The essential components of a well-written medical or research paper are presented. The process by which these papers are transformed into publications is described, including the concepts of article preparation and revision and the steps required for submission to a physician assistant medical journal. This course is designed to adequately prepare students to complete the Graduate Project (MPA 6500), which results in a written medical or research paper. **(32-60-4)**

MPA 5420—Epidemiology and Biostatistics in Health Care

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 and provides basic skills on critical reading of medical literature, based on these concepts. **(45-0-3)**

MPA 5422—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)**

MPA 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), as well as Pediatric Advanced Life Support (PALS). **(24-40-3)**

MPA 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)**

MPA 6500—Graduate Project

With the guidance of a faculty adviser, students will use the skills acquired in Publication Skills and Medical Research (MPA 5412) to create a graduate project. The project features topics in clinical or administrative medicine and consists of 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)**

PAO 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)**

PAO 5001—Pharmacodynamics

This course will provide the student with a thorough understanding of the basic pharmacodynamic and pharmacokinetic principles. Emphasis will be on basic terminology, receptor theory, pathways, absorption, distribution, elimination, and pharmacological effects. **(16-0-1)**

PAO 5002—Introduction to the Physician Assistant Profession

Introduces key concepts regarding the PA profession including 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)**

PAO 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)**

PAO 5005—Genetics

This course will introduce principles of medical genetics applied to the clinical practice of medicine within the scope of practice of Physician Assistants. Discussions will include the role of genetics in medicine, the basic structure and behavior of genes, genetic basics of human disease, the human genome, and application of genetic science to cancer, genetics in clinical medicine for diagnosis, treatment, and ethical considerations. **(18-0-1)**

PAO 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)**

PAO 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)**

PAO 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. 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. **(30-0-2)**

PAO 5100—Physiology

Clinically relevant physiologic principles of the major organ systems covered in Clinical Anatomy. Normal physiologic processes of all major organ systems are emphasized in this course. **(54-0-3)**

PAO 5101—Clinical Pathophysiology

This course introduces the student to pathophysiologic concepts that form the biologic basis of disease. It builds on the knowledge gained in human anatomy and physiology courses. However, physiologic concepts will be reviewed and emphasized in order for the student to fully appreciate the progression from the normal physiologic state to the diseased state with its resultant clinical signs and symptoms. **(18-0-1)**

PAO 5102—Clinical Pathophysiology II

This course introduces the student to pathophysiologic concepts that form the biologic basis of disease. It builds on the knowledge gained in human anatomy and physiology courses. However, physiologic concepts will be reviewed and emphasized in order for the student to fully appreciate the progression from the normal physiologic state to the acute and chronic diseased state with its resultant clinical signs and symptoms. This course builds from PAO 5101. **(18-0-1)**

PAO 5103—Clinical Pathophysiology III

This course introduces the student to pathophysiologic concepts that form the biologic basis of disease. It builds on the knowledge gained in human anatomy and physiology courses.

However, physiologic concepts will be reviewed and emphasized in order for the student to fully appreciate the progression from the normal physiologic state to the acute and chronic diseased state with its resultant clinical signs and symptoms. The course builds on the discussions of general biologic and pathologic processes given in PAO 5101 and 5102. **(16-0-1)**

PAO 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)**

PAO 5300—Physical Diagnosis I*

Principles and skills required to perform a complete medical history and physical examination. Emphasizes normal physical findings. **(42-20-3)**

PAO 5310—Physical Diagnosis II*

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. Prerequisite: successful completion of PAO 5000 **(24-30-2)**

PAO 5320—Physical Diagnosis III*

Students 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. Prerequisite: successful completion of PAO 5100 **(60-40-5)**

PAO 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)**

PAO 5410—Pharmacology I

Understanding the basis for pharmacologic intervention in patient care is the foundation for treatment of disease. This course is an in-depth study of the pharmacodynamics of drugs used in the autonomic nervous, renal, and cardiovascular systems. Mechanisms of drug action, clinical uses, side effects, contraindications and drug interactions, and pharmacokinetic considerations for special patient populations will also be discussed. **(38-0-2)**

PAO 5420—Pharmacology II

Mechanisms of action, clinical uses, side effects, contraindications, drug interactions, and pharmacokinetics of drugs used 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)**

PAO 5500—Clinical Medicine and Surgery I

Etiology, clinical manifestations, appropriate diagnostic evaluation, and the management of disease entities in ophthalmology, otorhinolaryngology, dermatology, cardiology, pulmonology, and hematology/oncology. **(112-0-8)**

PAO 5510—Clinical Medicine and Surgery II

Etiology, clinical manifestations, appropriate diagnostic evaluation, and the management of common disease entities of major organ systems and primary care aspects of disease evaluation and treatment in gastroenterology, rheumatology, endocrinology, orthopedics, OB/GYN, geriatrics, and neurology. **(120-0-8)**

PAO 5520—Clinical Medicine and Surgery III

Etiology, clinical manifestations, appropriate diagnostic evaluation, and the management of disease entities of major organ systems. Lectures in primary care aspects of disease evaluation and treatment in pediatrics, nephrology, emergency medicine, and general surgery. **(112-0-7)**

PAO 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)**

PAO 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)**

PAO 5600—Clinical Laboratory Medicine I

Clinical laboratory use, 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)**

PAO 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)**

PAO 6310—Emergency Medicine

Required four-week rotation in hospital emergency department teaches students to recognize, assess, and treat acute and life-threatening clinical

problems. Emphasizes common primary care emergencies. (200-0-4)

PAO 6320—Family Medicine

Required eight-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. (340-0-8)

PAO 6330—Internal Medicine

Required eight-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. (360-0-8)

PAO 6340—Pediatrics

Required four-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. (180-0-4)

PAO 6350—Prenatal Care and Gynecology

Required four-week rotation in outpatient and/or inpatient settings teaches prenatal care, treatment, gynecological diagnosis, and management. Emphasizes primary care of the female patient including obstetrics. (180-0-4)

PAO 6360—General Surgery

Required four-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. (200-0-4)

PAO 6370—Orthopedics

The four-week clinical practicum is intentionally flexible to meet the variety of patients that are likely to present during the rotation. Lecture hours may occur during other than the scheduled period of the rotation in order to accommodate all PA students and instructors at the clinical site. Preceptorship is provided by an orthopedist credentialed at the clinical site. Primary emphasis will be on developing skills required to recognize and manage common problems seen in this specialty. Procedures and disease processes listed, for which the student has not had the opportunity for direct involvement, may be addressed by the preceptor through discussion, lecture, informal seminars, and reading assignments. Formal grading is required in this rotation. (180-0-4)

PAO 6380—Dermatology

This is a four-week rotation. The clinical practicum is intentionally flexible to meet the variety of patients that are likely to present during the rotation. Preceptorship is provided by a dermatologist credentialed at the clinical site. Primary emphasis will be on developing skills required to recognize and manage common problems seen in this specialty. Procedures and disease processes listed, for which the student has not had the opportunity for direct involvement, may be addressed by the preceptor through discussion, lecture, informal seminars, and reading assignments. (160-0-4)

PAO 6390—Otorhinolaryngology

This four-week clinical practicum is intentionally flexible to meet the variety of patients that are likely to present during the rotation. Lecture hours may occur during other than the scheduled period of the rotation in order to accommodate all PA students and instructors at the clinical site. Preceptorship is provided by an otolaryngologist credentialed at the clinical site. Primary emphasis will be on developing skills required to recognize and manage common problems seen in this specialty. Procedures and disease processes listed, for which the student has not had the opportunity for direct involvement, may be addressed by the preceptor through discussion, lecture, informal seminars, and reading assignments. Formal grading is required in this rotation. (180-0-4)

PAO 6400—Community Medicine

This required four-week rotation in community medicine is designed to give the student clinical experience in the long term care facility, primarily with the geriatric population, as well as experience with patients requiring psychiatric care. The student will gain an understanding of the skill sets needed for appropriate care/management of patients in this unique area of medicine. (160-0-4)

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.nccpa.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. A combined M.H.Sc./D.H.Sc. degree is an option also available.

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
- **Accelerated Dual Admission M.H.Sc/D.H.Sc.**—online with some residency requirements
- **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 1.00GHz or equivalent Macintosh processor
- 256MB RAM
- video and monitor capable of 1024 x 768 resolution or better
- CD-ROM drive
- full duplex sound card and speakers
- Internet connection with Internet service provider (DSL, cable, or satellite highly recommended)
- Windows XP or NT or MAC OS
- Microsoft Office 2000 or newer with PowerPoint, Word, and Excel minimum
- printer capability
- 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 offers an online postprofessional degree advancement program for graduates from associate's degree, diploma, or certificate programs in the health care field, including military-trained health care technicians, radiology technicians, ultrasound technicians, respiratory therapists, dental hygienists, etc. The online B.H.Sc. course of study is interdisciplinary and is designed to provide career and academic advancement for health care practitioners and deliver a well-rounded generalist curriculum. This program is designed to be completed entirely online, requiring no on-campus time, thus allowing the opportunity for members of numerous health care occupations to complete their undergraduate degree while continuing to work.

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 online 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

General Education Program Mission Statement

Incorporating dynamic resources and methods in various settings, the general education curriculum at NSU provides opportunities for learners to emerge as thoughtful and responsible citizens prepared for a competitive global environment.

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:

- composition (3 semester hours above COMP 1000—must be completed prior to matriculation into the program)
- mathematics (3 semester hours—above MATH 1000)
- humanities (6 semester hours)
- social and behavioral sciences (9 semester hours)
- natural and physical sciences (9 semester hours)

Total: 30 semester hours

Academic Requirements—Writing Across the Curriculum

Each undergraduate course includes written assignments, in the language of instruction, that make up at least 25 percent of the final course grade. Each course contains at least eight pages (approximately 2,000 words or their equivalent) of writing, with faculty members providing feedback on these assignments. Written assignments can include, but are not limited to, essays, summaries, memos, lesson plans, journal entries, lab reports, project proposals, progress reports, case studies, and project reviews.

General Education Program

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

General Education Program Framework

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

Using General Education Credits for Major and Minor Requirements

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

General Education Learning Outcomes

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

1. think critically by
   a. solving problems
   b. analyzing data and concepts
2. communicate clearly by
   a. speaking effectively
   b. listening effectively
   c. writing effectively
   d. reading effectively
   e. developing clear, coherent, and consistent interpretations
3. place ideas in their proper context
4. explain the key elements of a variety of cultural traditions

Admission Requirements

Prospective B.H.Sc. 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 midlevel clinicians, and allied health professionals with diverse education, work, and life experiences who have demonstrated capacity to pursue the course of study and increasingly responsible positions in health care. Areas of consideration

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 committee may be required (phone interview may be substituted). All interview expenses are the responsibility of the applicant.

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 (Only courses with a minimum GPA of 2.0 on a 4.0 scale may be considered for possible transfer of credit.)

   or

   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. Learning portfolios will be reviewed to determine the amount of credit given, if any, for prior learning only after an applicant has been accepted into the program.

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.

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 a 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 tilted: 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 *miletsky@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 mechanism, 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 PC or Apple Macintosh and a modem). New students receive an orientation and extensive online technical support online access, online tools and methods, and library resources.

Online interactive learning methods involve Web 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.

Technical Help

The Online Computing Help Desk of NSU's Office of Information Technology provides telephone and email support to NSU students and faculty and staff members. Support services include assistance with connecting to NSU's online computing systems; navigating through the WebCT system; resolving Personal Identification Number (PIN) issues; supporting wireless computing on campus; and configuring various software programs such as Microsoft Outlook, Netscape Navigator, and Internet Explorer. Contact the Help Desk by calling (954) 262-4357 or 800-541-6682, ext. 4357, or by emailing *help@nsu.nova.edu*.

Testing Services

Testing Services administers placement challenge exams in writing, mathematics, and chemistry for all NSU undergraduate students, as well as offering faculty make-up exams. Testing Services also administers other course equivalent examinations, such as College-level Examination Program (CLEP) tests, DANTES subject standardized tests, New York University Proficiency Testing in Foreign Languages, and the TECH 1110 exam. Test takers must present photo identification (e.g., NSU official ID, driver's license, or passport) prior to testing. All examinations are by appointment only. For more information about Testing Services or to schedule an appointment, call (954) 262-8374 or 800-338-4723, ext. 8374.

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 associates
- 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) 273-1338 fax
  www.jsilny.com
  info@jsilny.com

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

The B.H.Sc. program offers four start dates per year: January, April, July, and October. In order to be considered for January, applications musts be received by December 1. In order to be considered for April, applications musts be received by March 1. In order to be considered for July, applications musts be received by June 1. In order to be considered for October, applications musts be received by September 1. 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.

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 B.H.Sc. program director reserve the right to require the student's withdrawal at any time for the above-mentioned reasons.

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.

Application for graduation can be completed online by following the directions at the following Web site *www.nova.edu/cwis/registrar/instructions.html*.

Commencement

Attendance of graduation ceremonies is not a requirement for distance education students. It is, however, an option that the department encourages and that takes place once a year (in August).

Information regarding graduation ceremonies for the College of Allied Health and Nursing is posted at *www.nova.edu/cwis/hpdasa/graduation/*. This page explains general information and contains online forms that must be filled out.

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)

  Effective January 1, 2006

- 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.

A nondegree-seeking student who, after taking classes in the B.H.Sc. program, decides to apply to be a degree-seeking student may request a transfer of credits taken as a nondegree-seeking student in accordance with the transfer policy of the B.H.Sc. program.

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.

Address and Name Changes

NSU maintains student contact information through WebSTAR (*www.webstar.nova.edu*). This includes current mailing addresses and telephone numbers. Students should update their records in WebSTAR and notify their academic division if there is a change in their name and/or contact information.

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 Americans that demand is growing. The bachelor of health science course of study in vascular sonography at Nova Southeastern University is designed to train highly skilled and knowledgeable vascular technologists who are prepared to take leadership positions in diagnostic laboratories, clinical research, and education in the field of vascular sonography.

Program Objectives

- to graduate competent vascular technologists who are qualified to perform a variety of standard and specialized diagnostic vascular procedures
- to ensure that graduates are qualified to take and successfully pass the American Registry of Diagnostic Medical Sonography (ARDMS) registry examination in vascular technology
- to prepare graduates for future leadership roles in vascular laboratories and ultrasound departments
- to enhance the student's academic skills for pursuing research studies in the field of vascular sonography

Upon successful completion of the vascular sonography course of study, students are eligible to apply for admission to the master of health science (M.H.Sc.) and later the doctor of health science (D.H.Sc.) programs. 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.

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 modem.) 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 apply to the Bachelor of Health Science—Vascular Sonography (B.H.Sc.) course of study, a student must have completed 30 semester hours of general education coursework in prerequisites. Only courses with a minimum GPA of 2.0 on a 4.0 grading scale will be accepted.

Required General Education Coursework

- composition (3 semester hours—above COMP 1000)
- mathematics (3 semester hours—above MATH 1000, college algebra recommended)
- humanities (6 semester hours)
- social and behavioral sciences (9 semester hours)
- natural and physical sciences (9 semester hours—physics, 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.

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. 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.

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 scale 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.jsilny.com
  info@jsilny.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)
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.

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 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.

Online students have online 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.

Tuition and Fees

- $50 nonrefundable application fee
- $17,225 tuition per academic year
- $500 acceptance fee
- $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
- Applicants should have a specific plan for financing 24 months of professional education. This includes 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 hospital insurance plan through the university.

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 bachelor of health science—vascular sonography degree, students are required to

- complete general education, major, and elective requirements as specified by the program at time of admission, resulting in a minimum total of 126 semester hours
- attain a 2.0 cumulative grade point average
- 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
- attend rehearsal and graduation ceremonies

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

Required General Education Courses	Semester Hours
Composition*	3
Social and behavioral sciences	9
Humanities	6
Natural and physical sciences**	9
Mathematics***	3

General Education Subtotal: 30

* 3 COMP credits above COMP 1000
** physics, anatomy, and physiology recommended
*** 3 MATH credits above MATH 1000 (college algebra recommended)

Required Core B.H.Sc.—Vascular Sonography Courses		Semester Hours
BHS 3110	Health Care Ethics	3
BHS 3120	Introduction to Epidemiology	3
BHS 3130	Research and Design for Health Care	3
BHS 3150	Principles of Leadership	3
BHS 3155	Conflict Resolution in Health Care	3
BHS 3160	Health Policy	3
BHS 4000	Cultural Competency in Health Care	3
BHS 4100	Academic and Professional Writing	3
BHS 4110	Health Care and Aging	3
BSV 3100	Ultrasound Physics I/Lab	3
BSV 3200	Ultrasound Physics Review	1
BSV 3220	Introduction to Diagnostic Medical Sonography	2
BSV 3300	Cerebrovascular Testing/Lab	4
BSV 3400	Venous Testing/Lab	4
BSV 3500	Peripheral Arterial Testing/Lab	5
BSV 3600	Abdominal Vascular Testing/Lab	5
BSV 3700	Clinical Preparation and Review	4
FME 5105	Basic Life Support	1
BSV 4500	Clinical Externship I (16 weeks)	12
BSV 4600	Clinical Externship II (16 weeks)	12
BSV 4700	Clinical Externship III (16 weeks)	12
PHS 4904	Advanced Anatomy for Health Professions	4

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 2.5 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 and strategies for 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 4001—Individuals with Disabilities and Special Needs
With the continued graying of the American population and the extending life expectancy of individuals with disabilities, there are a growing number of individuals facing chronic life challenges. These individuals are consumers of health care. It is incumbent on health care providers to understand how different challenges affect a person's abilities. Topics of discussion include laws that impact services, the history of disability care, and specific disabilities and their impact on functioning. **(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 principle concepts and practices of sports medicine—including discussion of

prevention, diagnosis, treatment, and recovery. The major musculoskeletal portions of the body will be covered, major preventive measures will be studied, and the major sports injuries will be addressed. The course will identify the medical treatments associated with the major sports injuries. **(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 4100—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 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 topic 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 practitioners 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)**

BHS 4154—Effect of Hearing Impairment on Speech and Language

Phonologic, 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 5001—APA Writing Seminar

This course is designed to introduce students to the APA writing form and style. Students will be guided by an instructor in the use of the *APA Publication Manual* and the components of an APA-style academic paper and practicum and internship reports. All courses within the Department of Health Science require that all written assignments be submitted in APA form and style. **(3 semester hours)**

BSV 3100—Ultrasound Physics I/Lab

This course is designed to introduce the students to the fundamental principles of sound and ultrasound. Students will learn how sound is generated, transmitted, and reflected in soft tissue. In addition, students will learn the principles of Doppler and color flow physics, artifacts, quality assurance, and the

bio-effects and safety of diagnostic ultrasound testing. **(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 3220—Introduction to Diagnostic Medical Sonography
This course is designed as an introduction to diagnostic medical ultrasound and will provide the basis for the core courses in specific vascular exam modalities studied in the winter and summer terms. The course will, therefore, be primarily taught in the ultrasound training laboratory. It will focus on hands-on participation over lectures and will emphasize understanding of equipment, transducer manipulation, ergonomics, patient rapport, image production, and optimization. This course will also be strongly linked to the introduction to ultrasound physics course. **(2 semester hours)**

BSV 3700—
Clinical Preparation and Review
Clinical Preparation and Review is a course designed to review general medical anatomy and physiology, terminology, treatment, and surgical and nonsurgical options used in the treatment of patients with vascular disease. It is designed to reinforce the nontechnical/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 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)**

PHS 4904—Advanced Anatomy for the Health Professions
This course is a survey of human physiology including functional anatomy. It will be presented in an organ-system approach and will cover cellular physiology and the cardiovascular, renal, respiratory, gastrointestinal, endocrine, reproductive, and nervous systems. The course emphasizes the correlation between anatomical and functional, clinical application, and uses of anatomical terminology. Students apply these concepts in the anatomy laboratory setting using resources such as cadaver dissection, radiographs, MRI, CT, and scans. **(4 semester hours)**

Master of Health Science Program for Health Professionals

The Master of Health Science (M.H.Sc.) Program is a distance education program designed to provide health professionals the theoretical and academic training necessary to enhance career mobility and professional advancement.

Health professionals practicing today in urban and rural communities throughout the nation are highly recognized as valuable members of the health care team who make quality care more accessible while reducing costs. These health care professionals are playing a prominent and respected role in providing community medical service. 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. Prior health care experience is required. The M.H.Sc. degree is a postprofessional degree designed for health practitioners and clinicians from a wide variety of disciplines. The commonality exhibited by our students is the practice of a recognized health occupation that requires registration, certification, and/or licensure. The successful applicant's health profession emphasizes delivery of services to individuals. Some of these professions are physician assistant, physical therapist, dental hygienist, registered nurse, vascular sonographer, radiology technician, and respiratory therapist.

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, 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 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 academic year 2007–2008 is $275 per credit hour. Anticipated tuition for this program for 2008–2009 is $285 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 through the dean of the College of Allied Health and Nursing. Tuition, fees, and payment schedules are subject to change without notice. Master of Health Law courses offered through the Shepard Broad Law Center cost $545 per credit hour.

Application Procedures

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 the 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 equivalence. 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
  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 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 an average grade of B- or a GPA of 2.7 on a 4.0 scale
- 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.

Graduation ceremony attendance is not a requirement for distance education students. It is, however, an option that the department encourages and that takes place once a year (in August).

Students with a cumulative GPA of 3.7 or higher are eligible to receive the degree with honors. Students with a cumulative GPA of 4.0 are eligible to receive the degree with high honors.

Course of Study

The M.H.Sc. Program requires a minimum of 36 semester hours of study to be completed. This includes required core courses. All students are required to have individualized curriculum advisement upon acceptance.

Transfer of up to 6 credit hours of acceptable graduate study is permitted upon approval. These graduate courses must have a grade of B or better and must be approved by the M.H.Sc. program director and dean of the College of Allied Health and Nursing. The dean reserves the right to require, in special cases, more than the minimum of 36 semester hours. Transferred courses cannot have been credited toward a previous degree.

Classes are organized and based on accepted distance learning designs and formats.

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)		Credit Hours
MHS 5001	APA Writing Seminar	2
MHS 5205	Writing for Medical Publication	3
MHS 5501	Epidemiology and Biostatistics	3
MHS 5510	Research Methods	3
MHS 5521	Ethical Issues in Health Care	3
MHS 5530	Principles and Practice of Management in Health Care	3

Elective Courses (9 credits—choose three courses)		Credit Hours
MHS 5103	Principles of Advanced Life Support	3
MHS 5112	Bioterrorism and Weapons of Mass Destruction	3
MHS 5211	Contemporary Issues in Nutrition	3
MHS 5400	Directed Studies	1–9
MHS 5541	Health Care Systems and Conflict	3
MHS 5542	Health Care Education	3
MHS 5543	Educational Theories and Psychology	3
MHS 5544	Curriculum and Instruction in Health Care	3
MHS 5545	Assessment and Evaluation in Health Care	3
MHS 5546	Health Care Finance	3

Practical Courses (10 credits)		Credit Hours
MHS 5107	Internship	5
MHS 5207	Practicum	5

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)		Credit Hours
MHS 5001	APA Writing Seminar	2
MHS 5205	Writing for Medical Publication	3
MHS 5501	Epidemiology and Biostatistics	3
MHS 5510	Research Methods	3
MHS 5521	Ethical Issues in Health Care	3

Specialty Courses (12 credits)		Credit Hours
MHS 5211	Contemporary Issues in Nutrition	3
MHS 5801	Applied Anatomy for Kinesiology	3
MHS 5802	Sports Injury Rehabilitation Principles	3
MHS 5810	Certified Strength and Conditioning Specialist Preparation	3

Practical Courses (10 credits)		Credit Hours
MHS 5107	Internship	5
MHS 5207	Practicum	5

Higher Education Track Curriculum

Core Courses (14 credits)		Credit Hours
MHS 5001	APA Writing Seminar	2
MHS 5205	Writing for Medical Publication	3
MHS 5501	Epidemiology and Biostatistics	3
MHS 5510	Research Methods	3
MHS 5521	Ethical Issues in Health Care	3

Specialty Courses (12 credits)		Credit Hours
MHS 5542	Health Care Education	3
MHS 5543	Educational Theories and Psychology	3
MHS 5544	Curriculum and Instruction in Health Care	3
MHS 5545	Assessment and Evaluation in Health Care	3

Practical Courses (10 credits)		Credit Hours
MHS 5107	Internship	5
MHS 5207	Practicum	5

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)		Credit Hours
MHS 5001	APA Writing Seminar	2
MHS 5205	Writing for Medical Publication	3
MHS 5501	Epidemiology and Biostatistics	3
MHS 5510	Research Methods	3
MHS 5543	Principles and Practice of Health Care Management	3

Specialty Courses (12 credits offered through the Shepard Broad Law Center)		Credit Hours
MHL 1020	Legal Research Methods and Reasoning**	4
MHL 1060	Tort and Contract Law	3
MHL 2030	Risk Management	2
MHL 1030	Administrative Law	2
MHL 1040	Legal and Ethical Issues in Health Care	2
MHL 1090	Law Accreditation/Licensing	2
OR		
MHL 1080	Law of Patients Rights and Advocacy	2
MHL 2020	Legal Negotiation	2

Practical Courses (10 credits)		Credit Hours
MHS 5107	Internship	5
MHS 5207	Practicum	5

** includes a 1-credit, on-campus institute

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 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, 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. **(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 5546—Health Care Finance
This course introduces the fundamental theory and concepts of health care finance, focusing on relevant applications to a wide variety of health care settings. Emphasis will be place on the understanding of key issues in order to provide the tools necessary for clinicians to function within a health care environment. Concentration is on managerial, rather than production, accounting perspective. Major topics include principles of accounting, budgeting, analysis of financial statements, activity-based costing, responsibility accounting, and provider payment and reimbursement systems. The student will be required to prepare a formal paper on a health care finance topic. **(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 truism 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, to 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 populations. **(5 credits)**

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, genito-urinary surgery, vascular surgery, cardiac surgery, thoracic surgery, transplantation, and trauma. Clinical rotations include days, evenings, nights, weekends, and on-call—depending upon the rotation.

Nova Southeastern University's M.H.Sc.—Anesthesiologist Assistant course of study will prepare the student for the national certification exam administered by the National Board of Medical Examiners under the auspices of the National Commission for the Certification of Anesthesiologist Assistants. The certification process involves successfully completing the Certifying Examination for Anesthesiologist Assistants for initial certification, registration of continuing medical education credits every two years, and successful completion of the Examination for Continued Demonstration of Qualifications every six years.

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).

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

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 anesthesia care for all degrees of illness for the surgical patient.

Vision

The M.H.Sc.—Anesthesiologist Assistant 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 the following required courses)

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

- Anatomy and physiology
  2 semester hours

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 or AMD at 1.00 GHz or equivalent Macintosh processor
- 256 megabytes RAM
- video and monitor capable of 1024 x 768 resolution or better
- CD-ROM drive
- full duplex sound card and speakers
- Internet connection with Internet service provider (DSL, cable, or satellite highly recommended)
- 800 x 600 or higher resolution
- Windows XP or NT or MAC OS
- Microsoft Office 2000 with PowerPoint, Word, and Excel minimum
- printer capability

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 2008–2009 (subject to change by the board of trustees without notice): $26,485. 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 2008 application form, along with a $50 nonrefundable application fee, accepted July 1, 2007 to January 15, 2008

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

In order to be eligible to graduate with the M.H.Sc.—Anesthesiologist Assistant degree, 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 the degree is conferred

Anesthesiologist Assistant Curriculum

Start Date:	June 2008
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 2008–August 2008)

Course #	Course Name	Credit Hours
ANES 5001	Clinical Anesthesia I	1
ANES 5048	Medical Terminology	1
ANES 5621	Principle of Airway Management I	2
ANES 5081	Introduction to Clinical Anesthesia	2
ANES 5076	Physics of Anesthesia Practice	1
ANA 5420	Anatomy	5
PHS 5400	Physiology	3
ANES 5301	Anesthesia Laboratory I	1
MHS 5001	APA Writing Seminar	2
	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 2008–December 2008)

Course #	Course Name	Credit Hours
ANES 5002	Clinical Anesthesia II	3
ANES 5302	Anesthesia Laboratory II	2
ANES 5601	Applied Physiology for Anesthesia Practice I	3
ANES 5462	Pharmacology for Anesthesia I	2
ANES 5801	Principles of Instrumentation and Patient Monitoring I	2
ANES 5622	Principle of Airway Management II	2
MHS 5205	Writing for Medical Publication	3
	Total Credit Hours	17

Minimum clinical experience: 148 hours (anesthesia rotations in hospital)

Winter—Semester III (January 2009–May 2009)

Course #	Course Name	Credit Hours
ANES 5003	Clinical Anesthesia III	5
ANES 5463	Pharmacology for Anesthesia II	2
ANES 5303	Anesthesia Laboratory III	1
ANES 5602	Applied Physiology for Anesthesia Practice II	2
ANES 5328	ECG for Anesthesiologist Assistants	1
ANES 5901	Anesthesia Principle and Practices I	2
MHS 5510	Research Methods	3
MHS 5400	Directed Studies in Anesthesia I	3
	Total Credit Hours	**19**

Minimum clinical experience: 252 hours. (anesthesia rotations in hospital)

Summer—Semester IV (June 2009–August 2009)

Course #	Course Name	Credit Hours
ANES 5004	Clinical Anesthesia IV	3
ANES 5304	Anesthesia Laboratory IV	2
ANES 5802	Principles of Instrumentation and Patient Monitoring II	1
MHS 5107	Internship	5
MHS 5401	Directed Studies in Anesthesia II	3
ANES 5902	Anesthesia Principle and Practices II	3
MHS 5103	Principles of Life Support*	3
	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 2009–December 2009)

Course #	Course Name	Credit Hours
MHS 5207	Practicum—Senior Seminar in Anesthesia I*	5
ANES 6110	Anesthesia Review I	1
ANES 6001	Clinical Anesthesia V	13
MHS 5501	Epidemiology and Biostatistics	3
	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 2010–May 2010)

Course #	Course Name	Credit Hours
ANES 6120	Anesthesia Review II	1
ANES 6002	Clinical Anesthesia VI	15
MHS 5521	Ethical Issues in Health Care	3
	Total Credit Hours	**19**

Minimum clinical experience: 760 hours. (anesthesia rotations in hospital)

Clinical Year, Summer—Semester VII (June 2010–August 2010)

Course #	Course Name	Credit Hours
ANES 6130	Anesthesia Review III	1
ANES 6003	Clinical Anesthesia VII	11
MHS 5530	Principles of Health Care Management	3
	Total Credit Hours	**15**

Minimum clinical experience: 495 hours. (anesthesia rotations in hospital)
Curriculum is subject to change as directed by the deparment.

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 5621—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, oral 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 is a continuation of ANES 5621. 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, oral 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 5076—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 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 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. **(2 credits)**

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. **(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. **(2 credits)**

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, antidysrhythmics, calcium channel blockers, diuretics, anticoagulants, antihistamines, 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, antidysrhythmics, calcium channel blockers, diuretics, anticoagulants, antihistamines, and antimicrobials. **(2 credits)**

ANES 5601—Applied Physiology for Anesthesia Practice I

Pathophysiology in a systems approach—cardiovascular, pulmonary, renal, neuro, metabolic, and endocrine. Emphasizing hemodynamics, Starling forces, pulmonary responses, renal hemodynamics, temperature 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. **(3 credits)**

ANES 5602—Applied Physiology for Anesthesia Practice II

This course is a continuation of ANES 5601. Pathophysiology in a systems approach—cardiovascular, pulmonary, renal, neuro, metabolic, and endocrine. Emphasizing hemodynamics, Starling forces, pulmonary responses, renal hemodynamics, temperature 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 transthoracic 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 transthoracic 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. **(13 credits)**

ANES 6002—Clinical Anesthesia VI

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. **(15 credits)**

ANES 6003—Clinical Anesthesia VII

This course is a continuation of ANES 6002. 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 6110—Anesthesia Review I

Lectures, required readings, and discussions with faculty members, visiting faculty members, 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 faculty members, and current residents on clinical and research topics. Includes correlation of case management and complications. **(1 credit)**

ANES 6130—Anesthesia Review III

This course is a continuation of ANES 6120. Lectures, required readings, and discussions with faculty members, visiting faculty members, 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. **(5 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 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 populations. **(5 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: 866-328-5858
Fax: (850) 656-3038
email: *info@anesthetist.org*
www.anesthetist.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

Accelerated Dual-Degree M.H.Sc./D.H.Sc. Program

This accelerated dual-degree program was designed for accomplished, motivated health care practitioners educated at the bachelor's degree level who desire a clinically applicable, postprofessional, interdisciplinary doctoral degree. The program is specifically appropriate for those practitioners who have a strong desire to teach within the health disciplines at the graduate level or assume advanced professional and institutional leadership roles within the health care delivery system.

The combined M.H.Sc./D.H.Sc. degree provides rigorous academic exposure to a wide range of topics pertinent to clinicians, health administrators, and health professions educators. These topics include epidemiology, health care finance, statistics and research methods, conflict resolution, leadership studies, professional writing, health policy, global health issues, evidence-based medicine, medical informatics, and medical quality assurance/risk management. Students have the opportunity to engage in capstone research experiences and internships within their home community.

Graduates are equipped with the knowledge, skills, and experience to expand their professional roles in both clinical and nonclinical arenas. Study is primarily nonresidential, and uses state-of-the-art online course platforms that permit synchronous and asynchronous learning experiences. Students are required to attend two one-week, on-campus institutes during the doctoral portion of their studies.

This accelerated track permits the motivated student to earn both a master's and a doctoral degree from our respected, regionally accredited research institution. The 80 credits of course content earned can be completed with three–seven years of study.

M.H.Sc./D.H.Sc. Accelerated Program Facts

- total combined semester hours: 80
- 20 hours completed in the M.H.Sc. program
- 60 hours completed in the D.H.Sc. program
- M.H.Sc. degree awarded after completion of 42 credits
- M.H.Sc. courses all taught through distance learning
- D.H.Sc. courses taught through distance learning and at required on-campus summer institutes
- chat sessions and threaded discussions, a regular part of the program, promote student-professor and student-student interaction

Admissions Requirements

Prior to matriculation, applicants must have completed a bachelor's degree from a regionally accredited college or university. Applicants should demonstrate a cumulative bachelor's degree GPA at or above a 3.0 on a 4.0 scale Prior health care experience is required. The postprofessional M.H.Sc./D.H.Sc. dual-degree program is designed for health practitioners and clinicians from a wide variety of disciplines.

All applicants must show evidence of computer skills through coursework or self-study prior to the end of the first semester. Students may obtain instruction through the NSU microcomputer laboratory or other training facilities.

The university reserves the right to modify any requirement on an individual basis, as deemed necessary by the dean of the College of Allied Health and Nursing.

Tuition and Fees

Tuition for 2007–2008 (subject to change by the board of trustees without notice) is $275 per credit hour for M.H.Sc. courses and $475 per credit hour for D.H.Sc. courses. Tuition for 2008–2009 (subject to change by the board of trustees without notice) is $285 per credit for M.H.Sc. courses and $500 per credit for D.H.Sc. courses. An NSU student services fee of $750 is also required annually.

Application Procedures

Applicants for admission must submit to EPS, or be responsible for submission of,

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

2. two 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 the EPS.

World Education Services, Inc.
PO Box 745
Old Chelsea Station
New York, New York 10113-0745
(212) 966-6311

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

Educational Credential Evaluators
PO 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)

Complete applications and all admission documentation must be sent to

NOVA SOUTHEASTERN UNIVERSITY
Enrollment Processing Services (EPS)
College of Allied Health and Nursing
M.H.Sc./D.H.Sc. Accelerated Track
3301 College Avenue
PO Box 299000
Fort Lauderdale, Florida 33329-9905

Phone: (954) 262-1101
Fax; (954) 262-2282

Requirements for Graduation

To be eligible to receive the M.H.Sc. and D.H.Sc. degrees, students must

- be of good moral character
- satisfactorily complete the 20 credits in the M.H.Sc. and the 60 credits in the D.H.Sc. programs
- receive a recommendation by the M.H.Sc. and D.H.Sc. program directors to the dean of the College of Allied Health and Nursing

The M.H.Sc. degree can be delivered upon completion of 42 credits (the 20 credits of M.H.Sc. core courses, the D.H.Sc. Ethics and Research courses, and the D.H.Sc. Internship and Practicum courses.)

Computer Requirements

All students are required to have a computer with the following minimum specifications:

- Pentium or AMD at 1.00 GHZ or equivalent Macintosh processor
- 256 MB RAM
- video and monitor capable of 1024 X 768 resolution or better
- CD-ROM drive
- full duplex sound card and speakers
- Internet connection with Internet service provider (DSL, cable, or satellite highly recommended)
- Windows XP or NT or MAC OS
- Microsoft Office 2000 or newer with PowerPoint, Word, and Excel minimum
- Printer capability

COURSE OF STUDY

M.H.Sc. Degree Curriculum

Required MHS Courses (11 Credits)	
MHS 5001	APA Writing Seminar
MHS 5205	Writing for Medical Publication
MHS 5501	Epidemiology and Biostatistics
MHS 5530	Principles and Practice of Management in Health Care

MHS Elective Courses (choose three—9 Credits)	
MHS 5211	Contemporary Issues in Nutrition
MHS 5541	Health Care Systems and Conflict
MHS 5543	Educational Theories and Psychology
MHS 5544	Curriculum and Instruction in Health Care Education
MHS 5545	Assessment and Evaluation in Health Care Education
MHS 5400	Directed Studies
MHS 5546	Health Care Finance

Total credits completed in the M.H.Sc. program: 20

D.H.Sc. Degree Curriculum

Required DHS Courses (20 Credits)	
DHS 8010	Statistics and Research Methods
DHS 8040	Professionalism and Health Care Ethics
DHS 8190	Health Care Education
DHS 8080	Conflict Resolution
DHS 8170	Leadership in Health Care

Block 1 (three out of four required—12 Credits)
All four may be taken. If only three are chosen, one elective may substitute for the fourth required course.

DHS 8000	Professional Competencies in the Clinical Care of Diverse and Special Populations
DHS 8030	Community Health Promotion and Disease Prevention
DHS 8090	Health Policy
DHS 8110	Community/Environmental Health

Block 2 (4 Credits)
One required, the other may be omitted or used as an elective.

DHS 8400	Global Health Studies
HSP 9006	Evidence-Based Medical Practice
DHS 8750	Patient Safety and Medical Errors

Experiential (10 Credits)

DHS 8130	Internship
DHS 8140	Practicum

Electives (Choose three—12 Credits)
Can include any courses from Block 1 and 2 not counted toward core requirements

DHS 8120 Doctoral Analysis (2 Credits)

Total credits completed in the D.H.Sc. program: 60

COURSE DESCRIPTIONS

Master of Health Science

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 semester hours)**

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 semester hours)**

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 semester hours)**

MHS 5530—Principles 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 semester hours)**

MHS 5211—Contemporary Issues in Nutrition
The course 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 providers are asked to perform. **(3 semester hours)**

MHS 5541—Health Care Systems and Conflicts
This introductory course will assist learners to blend conflict resolution theories, models, and skills into realistic strategies that can be utilized in a health care setting. The attitudes, knowledge, and skills gained 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 of different cultural backgrounds, personalities, sex, positions of power, and agendas. Types of negotiation strategies to help move toward a collaborative situation will also be addressed. **(3 semester hours)**

MHS 5400—Directed Studies in Medical Science
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 semester hours)**

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 semester hours)**

MHS 5544—Curriculum and Instruction in Health Care Education

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 needs assessment, use of resources, implementation specification, material development, and assessment of instructional effectiveness. **(3 semester hours)**

MHS 5545—Assessment and Evaluation in Health Care Education

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 situation. **(3 semester hours)**

MHS 5546—Health Care Finance

This course introduces the fundamental theory and concepts of health care finance focusing on relevant applications to a wide variety of health care settings. Emphasis will be place on the understanding of key issues in order to provide the tools necessary for clinicians to function within a health care environment. Concentration is on managerial, rather than production, accounting perspective. Major topics include principles of accounting, budgeting, analysis of financial statements, activity-based costing, responsibility accounting, and provider payment and reimbursement systems. The student will be required to prepare a formal paper on a health care finance topic. **(3 semester hours)**

Doctor of Health Science

DHS 8010—Statistics and Research Methods (Summer Institute Course)

This course allows the student to develop understanding through critical analysis of the basic research methods used in health care. Students will be taught how to critically analyze medical information and perform effective literature reviews. Student will select a health care topic and do a review of the literature. The review will be at least 10 pages and will include a minimum of 20 references from books and journals. The student will utilize the NSU electronic library to get the references. Discussion boards are a required part of this course. **(4 semester hours)**

DHS 8040—Professionalism and 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 examines the core values and beliefs of medical professionalism. Methods of ethical analysis and a review of current case studies will be used in critical discussions of ethical dilemmas faced by health care personnel in areas such as cloning, organ transplantation, and the implications of the Human Genome Project. The student will explore the personal values, professional standards, and institutional guidelines that define the roles and responsibilities of the health care practitioner. The student will be required to choose an ethical or professionalism issue in health care and prepare a written paper on that subject. **(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. Chat sessions and discussion boards are a required portion of this course. **(4 semester hours)**

DHS 8080—Conflict Resolution in Health Care (Summer Institute)

This course examines and analyzes the nature and dynamics of human conflict within civil societies. Emphasis is placed upon 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)**

DHS 8170—Leadership in Health Care (Summer Institute)

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. **on-campus institute (4 semester hours)**

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 a cultural sensitivity 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 their impact on the health care system. Chat sessions and discussion boards are a required portion of this course. **(4 semester hours)**

DHS 8030—Community Health Promotion and Disease Prevention

This course develops the knowledge and skills needed to work with com-

munities to improve the 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. 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. Discussion boards are a required part of this course. **(4 semester hours)**

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 nonprofit and for-profit health care delivery systems. A critical 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 of what new directions managed care may go in and what the future of health care reform is. **(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 contact one of their senators or representatives for an environmental statement, and then write a critical analysis. **(4 semester hours)**

Block 2

DHS 8400—Global Health Studies

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)**

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)**

DHS 8750—Patient Safety and Medical Errors

Leadership plays a key role in adopting practices to promote patient safety, and leaders should have the skills necessary to be effective in the implementation of these practices. This course will focus on patient safety through a study of safety-oriented leadership, organizational culture, human factors, decision-making science, communication, and a systems approach to health care delivery. Current best practice models and the latest professional literature emphasizing patient safety will be featured. **(4 semester hours)**

DHS 8130—Internship

This course is the capstone of the program. The student will perform an internship at a community health care institution, clinic, educational facility, etc., that is approved by the D.H.Sc. program. The student should spend a minimum of 80 clock hours in the health promotion department. Health promotion activities should be critically analyzed. The student will complete a 20-page paper that describes the institution, defines the population served, analyzes the reimbursement options accepted, and details 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. D.H.Sc. faculty advisers must approve the practicum subject. 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 promotion topic, perform a literature review, and create a health promotion program that can be used for a community education program. An implementation and evaluation plan must be included in the final product. **(5 semester hours)**

DHS 8120—Doctoral Analysis

In this faculty-supervised project, the capstone of the program, the student will develop a paper (the final paper for the doctoral program). The basis of the paper will use the objectives from the core courses and one elective as guidelines and references. This will require research into 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. department and detailed methods to be used to deliver the proposed changes. **(2 semester hours)**

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 at or above a 3.0 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 G.P.A requirements of at least a 3.0 on a 4.0 scale (see item 2 above). Otherwise-qualified applicants (applicants who meet these G.P.A. 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 DHS 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 emphasize 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, professional and graduate 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
  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

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 2008–2009 D.H.Sc. program (subject to change by the board of trustees without notice): is $500 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—Competencies in the Clinical Care of Diverse and Special Populations
- DHS 8010—Statistics and Research Methods (on-campus institute)
- DHS 8030—Community Health Promotion and Disease Prevention
- DHS 8040—Professionalism and Health Care Ethics
- DHS 8090—Health Policy, Planning, and Management
- DHS 8095—Global Health Policy
- 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
- DHS 8800—Health Care Informatics
- 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—Competencies in the Clinical Care of Diverse and Special Populations
- DHS 8010—Statistics and Research Methods (on-campus institute)
- DHS 8030—Community Health Promotion and Disease Prevention
- DHS 8040—Professionalism and Health Care Ethics
- DHS 8090—Health Policy, Planning, and Management
- DHS 8095—Global Health Policy
- DHS 8100—Alternative and Complementary Medicine (elective)
- DHS 8110—Community Environmental and Occupational Health
- DHS 8120—Doctoral Analysis (capstone project)
- 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

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—Competencies in the Clinical Care of Diverse and Special 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—Professionalism and 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 8060—Health Nutrition

The focus of this course is on 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 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 8095—Global Health Policy

Globalization affects all sectors, including health care, and understanding key policy issues is essential in the study of global health. This course examines the health policy issues confronting international health organizations, financial institutions, governments, and specific populations. It reviews the processes that influence the development and implementation of policies and examines specific topics related to HIV/AIDS, conflict, infectious disease, smoking, concerns of food distribution, reproductive health/safety, and other global major health concerns. **(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. Chat sessions and discussion boards are a required portion of this course. **(4 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)**

DHS 8800—Health Care Informatics

The application of computers and technology in health care has become increasingly critical to patient care over the past two decades. There is no area of health care that does not rely on this discipline to some extent. This course explores the field of informatics and technology in health care. Emphasis will be placed on applications that directly impact health care delivery. Through assigned readings, a research paper, a special demonstration project, discussion board postings, and group chat sessions, the learner will be expected to demonstrate a broad knowledge of health care informatics, technology applications, and educational needs, as well as present his or her own experiences. **(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 resolution. The nature of peace, conflict, war, social justice, neutrality, third-party involvement, ethnicity, gender, and power is discussed. **Corequisite or Prerequisite:** CRHS 5000 and CRHS 5040 **(3 semester hours)**

CRHS 7020—Systems Design

An examination of concepts of dispute resolution systems design. The course includes the influence of organizational culture and prevailing social and cultural norms on the design and implementation of dispute resolution systems. This course explores dispute resolution systems for neighborhoods, religious organizations, ethnic groups, business associations, and other settings that have relatively clear boundaries and shared norms. **Prerequisite**: CRHS 5000 and CRHS 5040 **(3 semester hours)**

CARD 7040—Theories of Conflict and Conflict Resolution I

This course examines macro and micro theories from social science disciplines about the nature of conflict and various approaches to conflict resolution. **Corequisite or Prerequisite:** CRHS 5000 and CRHS 5040 **(3 semester hours)**

CARD 7050—Theories of Conflict and Conflict Resolution II

Continuation of CARD 7040. **Prerequisite:** CRHS 7040 **(3 semester hours)**

Research Track

HSP 9003—Biostatistics for the Health Sciences I

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:** DHS 8010 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, a post-M.S.N. certificate program, and a Ph.D. in nursing education. 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 five tracks—nursing education, business administration, health law, public/community health nursing, and health systems leadership. 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 (or equivalent quarter hours) of specific undergraduate coursework. This coursework may be completed at a community college or another university. Upon completion of the 30 semester hours, the student may apply to the nursing program.

The remainder of the 91 semester hours may be completed within seven terms (three terms per year) in the nursing program. Each term is a combination of didactic and clinical courses. The department requires matriculants to complete the entire program. Individual requests for advanced placement, transfer of credit, or credit for experiential learning will be reviewed in line with college requirements.

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 leaning 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.

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

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
- no Ds, Fs, or Ws in science courses
- 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 admission 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 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. Tuition for the 2008–2009 academic year (subject to change by the board of trustees without notice): $17,985 for Florida residents and $19,425 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	Semester Hours
Written communication— Any written communications course	3
Social behavioral sciences—One PSYC, one SOC, Human Growth and Development	9
Humanities—Any ARTS, HIST, HUMN, LITR, PHIL, or foreign language	3
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.	12
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)	3
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		Semester Hours
PHS 4904	Advanced Anatomy for Health Professions	4
NUT 3000	Nutrition for Health Professionals	3
BHS 3110	Health Care Ethics	3
BHS or Nursing Elective *		3
NUR 3000	The Nurse as a Scholar	3
NUR 3020	Theoretical Foundations of Nursing Practice	3
NUR 3029	Foundations of Health Assessment	3
NUR 3032	Foundations of Pathophysiology	3
NUR 3050	Applied Nursing Research	3
NUR 3130	Foundations of Professional Nursing Practice	6
NUR 3160	Introduction to Professional Nursing	3
NUR 3170	Nursing and Health Care Informatics	3
NUR 3180	Primary Concepts of Adult Nursing	6
NUR 3191	Pharmacological Basis for Nursing Interventions I	2
NUR 3192	Pharmacological Basis for Nursing Interventions II	2
NUR 3200	Biostatistics for Nursing Practice	3
NUR 3250	Concepts of Psychiatric-Mental Health Nursing	4
NUR 4020	The Nurse as a Leader and Manager	3
NUR 4030	The Business of Health Care	3
NUR 4110	Advanced Concepts of Adult Nursing II	6
NUR 4120	Advanced Concepts of Adult Nursing III	5
NUR 4130	Concepts of Maternal-Child Nursing and Families	5
NUR 4150	Concepts of Community-Based Nursing Practice	4
NUR 4160	Genetics for Nursing Practice	2
NUR 4180	Nursing Practicum	6
	Total Nursing Credits	**91**
	Total Degree Requirements	**121**

*Please see bachelor of health science course descriptions starting on page 305.

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 3029—Foundations of Health Assessment

This course introduces beginning students to the foundational health assessment skills emphasizing data collection among the five variables of Neuman's Systems Model. Students will be expected to use beginning assessment skills in identifying pertinent data as they relate to physiological, psychological, sociocultural, spiritual, and developmental variables. Students will use this data to identify stressors in assigned clients and develop appropriate nursing interventions 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 introduced. **(3 credits: 3 didactic/0 lab)**

NUR 3032—Foundations of Pathophysiology

This course introduces the student to concepts of pathophysiology—emphasizing the physiological variable—and incorporates the psychological, sociocultural, spiritual, and developmental variables included in the Neuman's Systems Model. The student will begin to integrate and apply pathophysiological concepts to client care. The focus will be on stressors that penetrate the lines of resistance and cause instability in the client system. Contemporary trends, legal and ethical issues, and health promotion concepts pertaining to pathophysiological stressors will be introduced. **(3 credits: 3 didactic/0 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 3192—Pharmacological Basis for Nursing Interventions II

This course applies basic principles of pharmacology and therapeutics necessary for nursing practice throughout the life span to specific client disorders. 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 cardiovascular, respiratory, neurological, and musculoskeletal disorders will be explored. **Corequisite** NUR 4110. **(2 credits: 2 didactic/0 clinical)**

NUT 3000—Nutrition for Health Professionals

This course explores the various nutrients, their sources, digestion, absorption, metabolism, interaction, storage, and excretion. Current research is presented against a background of basic nutritional concepts. Special emphasis is given to the role nutrition plays in the current health care delivery system and how nutrition can be implemented in health promotion and health maintenance. **(3 credits: 3 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 preventions/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 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: 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 heatlh and wellness and reduce symptomatology following a reaction to stressors. Contemporary trends in treatment and mental health promotion will be emphasized. The legal and ethical issues pertaining to intrapersonal, interpersonal, and extrapersonal stressors of the psychological variable will be discussed. Students will also reflect on their own behaviors and methods of communication. 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 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: 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 multisystem 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 and use of human and material resources. **(3 credits: 3 didactic/0 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/0 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
  33329-9905.

- 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 $495 per credit hour for academic years 2007–2008 and 2008–2009 (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

General Education	Semester Hours
Written communication— Any written communications course	3
Social behavioral sciences—One PSYC, one SOC, Human Growth and Development	9
Humanities—Any ARTS, HIST, HUMN, LITR, PHIL, or foreign language	3
Natural/physical sciences—Credit with R.N. license	12*
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)	3
Total General Education Credits	**30**

Cognate Courses		Semester Hours
PHS 4904	Advanced Anatomy and Physiology for Health Professions	4*
NUT 3000	Nutrition for the Health Professional	3*
BHS 3110	Health Care Ethics	3
BHS or Nursing Elective**		3
	Total Cognate Credits	**13**

Nursing Courses		Semester Hours
NUR 3000	The Nurse as a Scholar	3
NUR 3013	Transition to Professional Nursing	3
NUR 3020	Theoretical Foundations of Nursing Practice	3
NUR 3031	Pathophysiology	3
NUR 3030	Health Assessment	3
NRU 3200	Biostatistics for Nursing Practice	3
NUR 3170	Nursing and Health Care Informatics	3

NUR 3050	Applied Nursing Research	3
NUR 4020	The Nurse as a Leader and Manager	3
NUR 4030	The Business of Health Care	3
NUR 4150	Community-Based Nursing Practice	4
NUR 4160	Genetics for Nursing Practice	2
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 305.

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 students 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 preventions/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 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 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 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)**

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 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: 3 didactic/1 practicum)**

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. Five tracks are offered: education, business administration, health law, health systems leadership, 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. Health Law track prepares nurses for careers in areas such as legal nurse consulting, legal research, or long-term care facility administration/ownership. All students in M.S.N. tracks take 21 semester hours of core foundational nursing courses online. An additional 13 semester hours of coursework in areas of health law and regulation are taken online through the Shepard Broad Law Center. The M.S.N. Health Law track is the only M.S.N. track that requires the student to visit the campus. An initial summer week on campus serves as the prerequisite for subsequent online law center courses. Finally, 6 semester hours of nursing health law practicum and capstone project work conclude the program. Thus, a total of 42 semester hours are required to complete the M.S.N. health law track. Students in this track may choose to complete the dual degrees M.S.N./M.H.L. Contact the nursing department's graduate program director for information on the dual-degree option.

The M.S.N. health systems leadership track is designed for the working nurse executive. This track allows the student to meet professional aspirations and organizational commitments to accreditation, magnet status, and personal goals. All students in M.S.N. tracks take 21 semester hours of core foundational nursing courses online. An additional 15 semester hours of coursework in health systems leadership, taught by nursing department faculty members with advanced preparation and extensive experience in directing health systems, is taken online. Students who enter the M.S.N. program without a B.S.N. degree will be required to enroll in NUR 4900 (Bridge Course in Nursing Concepts) in the first semester of admission to the M.S.N. program. Students who have not completed an undergraduate statistics course must complete NUR 3200 with a C or better, complete the online Hawkes Leaning Systems

statistics courseware, and obtain a certificate of mastery of the content.

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 students are selected for admission based on application content, academic record, professional nursing licensure, and evaluation forms.

Admission to the M.S.N. program requires the following:

- a bachelor of science (B.S.) or a bachelor of arts (B.A.) degree from an accredited university
- a B.S./B.A. GPA of 3.0 on a 4.0 scale*
- current, active U.S. nursing licensure
- 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

*Students who enter the M.S.N. program without a B.S.N. will be required to enroll in NUR 4900 Bridge Course in Nursing Concepts in the first semester of admission to the M.S.N. program. Students who have not completed an undergraduate statistics course must complete NUR 3200, receiving a C or better.

Application Procedures

1. send signed application form, a writing sample, three evaluation (reference) forms, and a nonrefundable application fee of $50 to

   NOVA SOUTHEASTERN UNIVERSITY
   Enrollment Processing Services (EPS)
   College of Allied Health and Nursing
   Nursing Department Admissions
   3301 College Avenue
   P.O. Box 299000
   Fort Lauderdale, Florida 33329-9905

2. have official transcripts from each college and university you've attended sent directly to the EPS from school attended

3. submit proof of current, active, professional nursing (R.N.) licensure from the jurisdiction of the practicum (Licensure must remain current throughout the program.)

Tuition and Fees

Tuition for academic year 2007–2008 is $485 per credit hour. Tuition for academic year 2008–2009 is $500 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 Osteopatic 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

Students must complete all core M.S.N. nursing courses prior to enrolling in specialty nursing courses.

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.

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.

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

Courses of Study

The M.S.N. program offers five tracks of study: education, business administration, health law, health systems leadership, 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.

Curriculum Outline—M.S.N. Program

Core Courses		Semester Hours
NSG 5100	Advanced Theoretical Foundations in Nursing	3
NSG 5110	Nursing Research 1: Advanced Nursing Research	3
NSG 5120	Nursing Research 2: Utilization of Nursing Research	3
NSG 5130	Health Care Policy, Organization, and Finance	3
NSG 5140	Ethical, Legal, and Social Issues in Nursing	3
NSG 5220	Health Promotion and Disease Prevention	3
NSG 5340	Nurse Leadership Roles in Health Care Systems	3
	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		Semester Hours
NSG 5300	Nursing Curriculum Development	3
NSG 5310	Instructional Strategies for Nurse Educators	3
NSG 5320	Evaluation and Testing for Nurse Educators	3
NSG 5360	Nurse Educator Practicum	3
NSG 5500	Nursing Education Capstone Project	3
	Total Education Courses	**15**

In addition to the core M.S.N. courses, the following courses are required to complete the M.S.N. Public/Community Health Nursing track:

M.S.N. Public/Community Health Nursing Courses		Semester Hours
NSG 5280	Introduction to Public/Community Health Nursing	3
NSG 5480	Public/Community Health Nursing Practicum	3
NSG 5530	Public/Community Health Nursing Capstone Project	3
PUH 5430	Epidemiology*	3
PUH 5220	Environmental and Occupational Health*	3
PUH 5802	Epidemiological Surveillance*	3
PUH 5004	Public Health Grant Writing* OR	
PUH 5111	Public Health Issues of the Elderly* OR	
PUH 5500	School Health*	3
	Total Public/Community Health Nursing Courses	**21**

*These public/community health courses are to be completed through the College of Osteopathic Medicine's Master of Public Health Program prior to taking NSG 5480 and NSG 5530.

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		Semester Hours
NSG 5270	Nursing Entrepreneurship	3
NSG 5460	Nursing Business Administration Practicum	3
NSG 5510	Nursing Business Administration Capstone Project	3
GMPN 5001	Introductory Accounting*	3
GMPN 5008	Business Finance*	3
GMPN 5020	Managing Organizational Behavior*	3
GMPN 5012 GMPN 5030	21st Century Management Practices* or Managing Human Resources*	3
	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		Semester Hours
NSG 5470	Nursing Health Law Practicum	3
NSG 5520	Nursing Health Law Capstone Project	3
MHLN 1010	Institute for the Study of Health Law, Part I*	1
MHLN 1020	Legal Research, Methods, and Reasoning*	3
MHLN 1030	Administrative Law*	2
MHLN 1050	Law of Medicare and Medicaid*	3
MHLN 1080	Law of Patients' Rights and Advocacy*	2
MHLN 1090	Law of Accreditation and Licensing *	2
MHLN 2030	Law of Risk Management*	2
	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.

M.S.N. Health Systems Leadership Courses		Semester Hours
NSG 5230	Nursing Decision Making in Complex Health Systems	3
NSG 5240	Nursing Governance in Complex Health Systems	3
NSG 5250	Fiscal, Legal, and Information Management of Complex Health Systems	3
NSG 5490	Health Systems Leadership Nursing Practicum	3
NSG 5540	Heath Systems Leadership Nursing Capstone Project	3
	Total Health Systems Leadership Courses	15

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

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 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 2007–2008 is $485 per credit hour. Tuition for academic year 2008–2009 is $500 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. 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.

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.

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- applied toward completion of the program
- apply for the certificate
- have satisfactorily met all financial and library obligations
- receive a recommendation for the certificate by 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

Course #	Course Name	Semester Hours
NSG 5120	Nursing Research 2: Utilization of Nursing Research	3
NSG 5300	Nursing Curriculum Development	3
NSG 5310	Instructional Strategies for Nurse Educators	3
NSG 5320	Evaluation and Testing for Nurse Educators	3
NSG 5340	Nurse Leadership Roles	3
NSG 5360	Nurse Educator Practicum	3
	Total Courses	18

Doctor of Philosophy in Nursing Education (Ph.D.)

The Doctor of Philosophy in Nursing Education (Ph.D.) is an online degree program for graduates of accredited master of science programs who have a major in nursing and who hold registered nurse (R.N.) licensure.

The program is designed to prepare nurse scholars to conduct research supporting nursing education, to provide scholarly service at academic facilities and to the professional and health care communities as nurse educators, and to teach nurses and potential nurses in the academic and clinical setting. Graduates of the program will be able to assess, plan, implement, and evaluate teaching-learning strategies and use traditional, as well as advanced technological, educational strategies.

All students in the Ph.D. track take 9 credits of core courses within an interdisciplinary setting. Courses within the nursing department include: 12 credits of nursing science and nursing theory courses, 15 credits of advanced nursing research courses, 15 credits of higher education, and a minimum of 9 semester hours of dissertation.

For further information, call the nursing department at (954) 262-1512 or 800-356-0026, ext. 1512.

Admission Requirements

Prospective Ph.D. in nursing students are selected for admission based on application content, academic record, professional nursing licensure, and evaluation forms.

Admission to the Ph.D. program requires

- current, active United States R.N. license
- completion of an M.S. program with a major in nursing or an M.S.N. degree from an accredited program
- overall GPA of 3.5 in the candidate's master's or post-master's degree program in nursing
- an application, curriculum vita, a writing sample that should include an unpublished or published paper, two evaluation (reference) forms, and an application fee

Application Procedures

1. send signed application form, a writing sample, two evaluation (reference) forms, and the nonrefundable application fee of $50 to

   NOVA SOUTHEASTERN UNIVERSITY
   Enrollment Processing Services (EPS)
   College of Allied Health and Nursing
   Nursing Department Admissions
   3301 College Avenue
   P.O. Box 299000
   Fort Lauderdale, Florida 33329-9905

2. have official transcripts from each college and university you've attended sent directly to the EPS from the school attended
3. submit proof of current, active, professional nursing (R.N.) licensure, from the jurisdiction of the practicum (Licensure must remain current throughout the program.)

Tuition and Fees

Tuition for academic year 2007–2008 (subject to change by the board of trustees without notice) is $548 per credit hour and tuition academic year 2008–2009 (subject to change by the board of trustees without notice) is $600 per credit hour. An NSU service fee of $750 is required annually.

Curriculum Outline—Ph.D. Program		Semester Hours
NSG 7020	Bioethics	3
HPH 7300	Biostatistics I	3
HPH 7310	Biostatistics II	3
	Total Core Courses	**9**

Nursing Courses		Semester Hours
NSG 7000	Theory Development	3
NSG 7010	Philosophy of Science	3
NSG 7120	Health Care Policy	3
NSG 7230	Health Care Leadership	3
	Total Nursing Courses	**12**

Research Nursing Courses		Semester Hours
HPH 7400	Quantitative Research Design	3
NSG 7130	Qualitative Research	3
NSG 7160	Grant Writing and Publication	3
NSG 7210	Evidence-Based Evaluation	3
NSG 7310	Doctoral Seminar I	1
NSG 7320	Doctoral Seminar II	1
NSG 7330	Doctoral Seminar III	1
	Total Research Nursing Courses	**15**

Cognates		Semester Hours
NSG 7140	Theories of Education	3
NSG 7150	Instructional Design and Curriculum Development	3
NSG 7220	Higher Education Leadership	3
NSG 7240	Tests and Measurements	3
NSG 7250	Scholarship and Applied Research	3
	Total Cognates	**15**

Dissertation		Semester Hours
NSG 7340	Dissertation	9

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 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 5130—Health Care Policy, Organization, and Finance

This course is designed to provide present and future nurse leaders with an understanding of health care policy, organization, and finance. Students evaluate the quality of care in a variety of health care systems, recognizing

the relationship between these issues as essential components to improve client outcomes and eliminate health disparities. Political advocacy and the health policy change process will be explored. Acute care and community health care delivery systems will be analyzed from a leadership perspective. Management, budget, cost effectiveness, and fiscal accountability will be addressed. **(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 5230—Nursing Decision Making in Complex Health Systems

In this course, nurse executives will utilize the nursing process as the foundation for leadership activities in complex systems. Topics explored in this course include quality initiatives, trend analysis, evidence-based systems leadership, accreditation, and certification initiatives. Prerequisite: successful completion of all M.S.N. core nursing courses **(3 semester hours)**

NSG 5240—Nursing Governance in Complex Health Systems

This course assists nurse executives in exploring the topics of self-governance within health care systems, organizational advancement, politics, and policies. Students will focus on skills such as collaborating with boards and executive councils, human resource management, organizational labor and negotiations, positive work environments, and team building. Students will also analyze international, national, and state health care trends. Prerequisite: successful completion of all M.S.N. core nursing courses and NSG 5230 **(3 semester hours)**

NSG 5250—Fiscal, Legal, and Information Management of Complex Health Systems

Fiscal, legal, and information management components of complex

health systems will be explored in this advanced nursing leadership course. Topics for discussion will include fiscal decision making, justifications of expenditures, organizational systems, reimbursement aspects of various payment systems (profit, nonprofit, socialized/government), and health law. Students will also evaluate information systems for management, acuity, staffing, and communication. Prerequisite: Successful completion of all M.S.N. core nursing courses, NSG 5230, and NSG 5240 **(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 M.S.N. education track nursing courses except NSG 5500 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 nursing business administration. 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. business administration track except NSG 5510 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 5530 or have program director permission. **(3 semester hours)**

NSG 5490—Health Systems Leadership Nursing Practicum

Students will analyze, synthesize, and utilize knowledge from all prior courses to complete a nursing practicum in health systems leadership. 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 implementation will follow the agreement established among the student, program director, and faculty adviser. Prerequisite: Successful completion of all M.S.N. core nursing courses, NSG 5230, NSG 5240, and NSG 5250 **(3 semester hours)**

NSG 5500—Nursing Education 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 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 5510—Nursing Business Administration 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 business administration. 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. business administration courses except NSG 5460 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)**

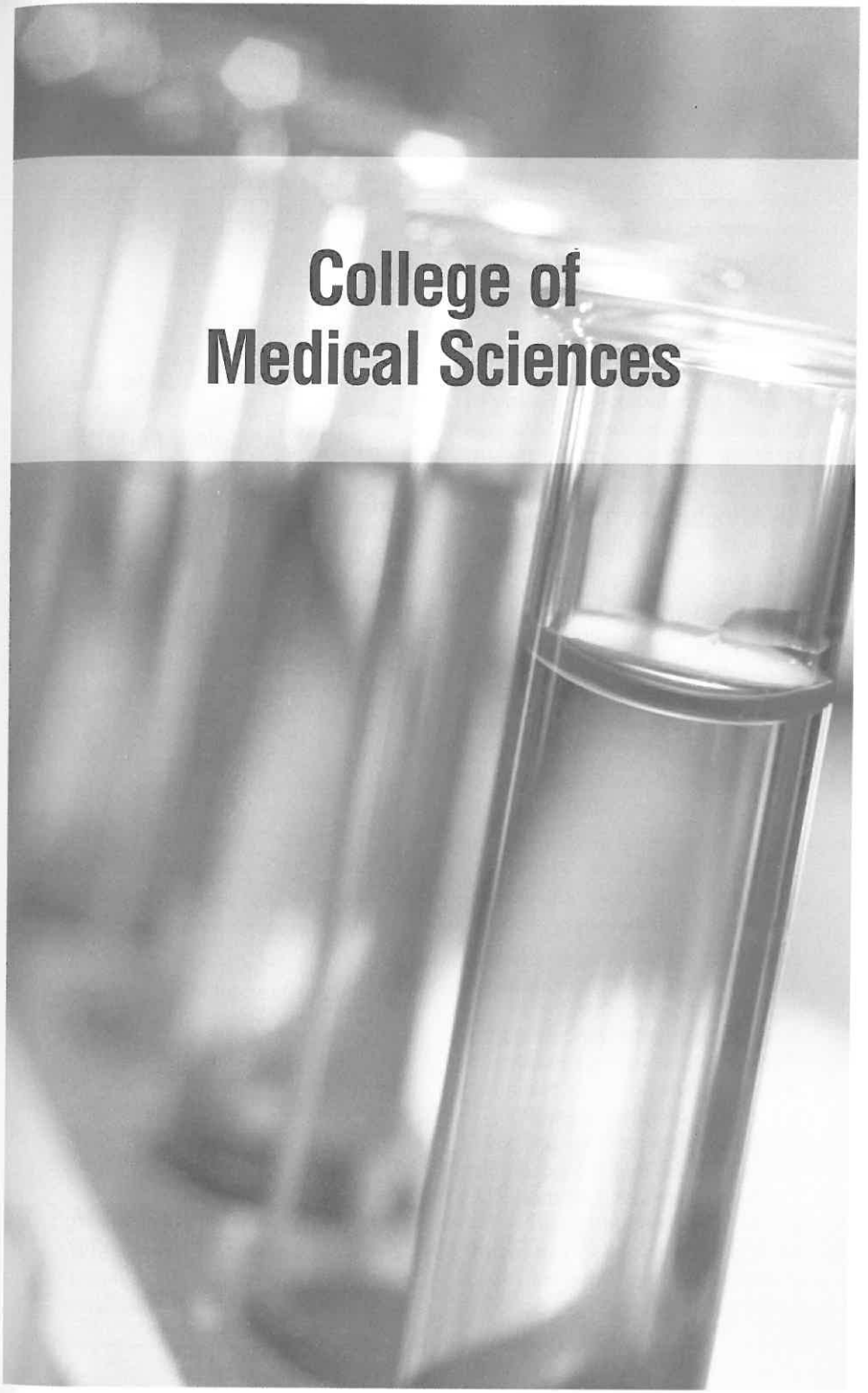
NSG 5530—Public/Community Health Nursing Capstone Project

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. Continual 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)**

NSG 5540—Health Systems Leadership Nursing Capstone

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 health systems leadership. Students will develop a learning contract with the program director and faculty adviser for a project that puts into practice knowledge and skills gained through the program. The capstone project includes an in-depth research paper, defended either on-campus or electronically. Continuous enrollment of 3 semester hours per semester is required until the completion of the project. Prerequisite: Successful completion of all M.S.N. core nursing courses, NSG 5230, NSG 5240, and NSG 5250 **(3 semester hours)**

For further information regarding the Ph.D. in nursing education program, contact Patricia W. Dittman, Ph.D.(c), R.N., CDE, by calling (954) 262-1974 or emailing *pdittman@nsu.nova.edu*



College of Medical Sciences

Harold E. Laubach,
B.S., M.S., Ph.D.
Dean

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 three 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-

sion 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 three years old

4. one letter of recommendation from a preprofessional advisory committee, or, if this does not exist, two letters may be substituted from instructors 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 employers 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 2008–2009 is $27,890. 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 microscope/lab 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

applicant is required to present adequate evidence that the factors that caused the prior poor academic performance have changed significantly so that there is reasonable expectation that the applicant can perform satisfactorily if permitted to resume his or her college study.

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 such other reasons as are deemed appropriate.

Graduation Requirements

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 HPD colleges. Students will enroll in the seminar course each semester.

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. 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.

Anatomy

Chairman and Professor: **G. R. Conover** | Professors: **L. Dribin, A. Mariassy, R. K. Yip** | Associate Professors: **C. Purvis, K. Tu** | Assistant Professor: **N. Lutfi** | Instructor: **D. McNally**

ANA 5500—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 5713—Histology

The study of microscopic and submicroscopic anatomy of the cells, tissues, and organs of the body combining lecture and laboratory. **(36-54-4)**

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. **(56-54-4.5)**

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)

Microbiology

Chairman and Professor: **H. Hada** | Professors: **D. Burris, H. E. Laubach** | Assistant Professor: **K. Davis**

MIC 1710—Dental Microbiology I
Basic aspects of infections of the oral cavity, oral microbial ecology, and normal flora involving bacteria, fungi, and viruses are covered. (54-0-3)

MIC 1711—Dental Microbiology II
Essential principles of innate and acquired immunity including the immune response at mucosal surfaces, immune dysfunctions, and transplantation immunology are presented. (36-0-2)

MIC 5727—Medical Microbiology
Comprehensive study of immunology and of disease producing micro-organisms. Covers the taxonomy, epidemiology, pathogenesis, diagnosis, and treatment of human pathogens. (126-0-7)

MIC 6700—Special Topics
Topics and hours to be arranged. (1 to 6 semester hours)

Pathology

Chairman and Professor: **W. A. Gibson** | Professor Emeritus: **D. C. Bergman** | Associate Professor: **B. C. Jones** | Assistant Professor: **A. B. Trif**

PTH 5500—General Pathology
The course is to provide the student with the basic pathologic processes of human disease, with a scientific foundation in etiology, pathogenesis, morphologic alterations, and effects of disease of the organ systems, and with an emphasis on bone pathology and relevant disease states that affect the orofacial region. (54-0-3)

PTH 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. Panavelil** | Assistant Professors: **M. Parker, 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 drugs. (48-0-3)

PCO 6700—Special Topics
Topics and hours to be arranged. (1 to 6 semester hours)

Physiology

Chairman and Associate Professor: **W. A. Schreier** | Professors: **H. N. Mayrovitz, S. Taraskevich** | Associate Professors: **A. Jimenez, 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)

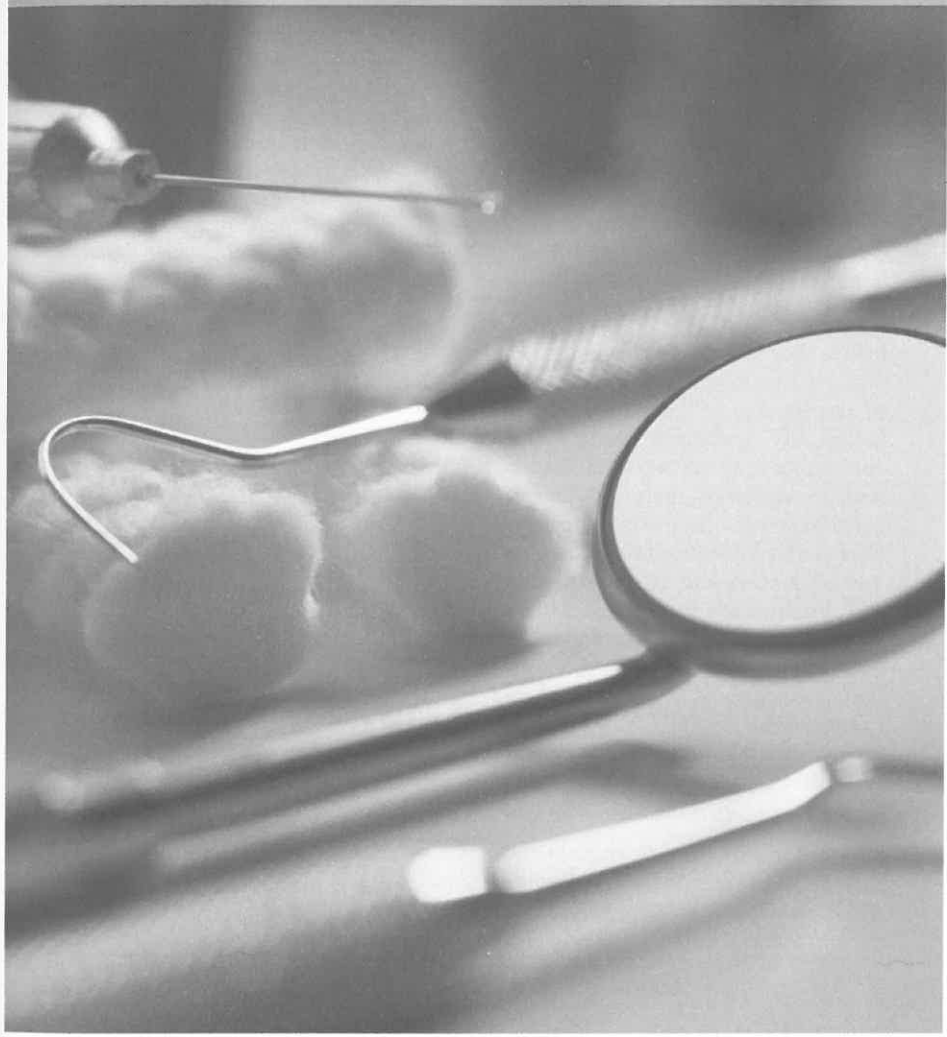
PHS 6700—Special Topics
Topics and hours to be arranged. (1 to 6 semester hours)

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



College of Dental Medicine

Robert Uchin, D.D.S.
Dean

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
Associate Dean for Academic and Financial Affairs

Peter Keller, D.D.S.
Executive Associate Dean
for Procurement and Facilities

Steven M. Kelner, D.M.D., M.S.
Associate Dean for
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

John Seeberg, D.M.D.
Assistant Dean for
Predoctoral Clinical Affairs

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 pub lic 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 70,500 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 simulaton 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 December 15, 2008, for the class entering August 2008. 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.adea.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

2. The applicant 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 applicants 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 NSU-CDM 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 2008–2009 (subject to change by the board of trustees without notice) is $40,045 for Florida residents and $42,750 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. 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 a 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 (85) on 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), College 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, 2008:

- 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, 2008:

1. one official transcript sent directly from each college, professional school, or university attended

   Transcripts must be sent directly from the institutions applicant attended 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. 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.w es.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.

2. The applicant must provide an official letter of graduation from the dean or designee of that institution, supporting the granting of the dental degree from that institution.

3. 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.

4. three letters of evaluation

   They may be completed by dental school faculty members who are well acquainted with the applicant's abilities or by individuals who can provide information relevant to the applicant's potential. All materials 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

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 applicant.

Tuition and Fees

- Anticipated tuition for 2008–2009 (subject to change by the board of trustees without notice) is $44,985.
- 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 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 $1000. 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 the electronic textbook program:

- first year—$1,850
- second year—$1,850
- third year—$1,250
- fourth year—$900

Students should anticipate the following approximate expenses for instruments, equipment, and NSU-specific laptop computer

- first year—$10,800
- second year—$7,650
- third year—$2,300
- fourth year—$2,000

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, readmission and other academic and student policy issues are described in the College of Dental Medicine *Predoctoral Student Handbook*, which is 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 passed 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.

2007–2008 Curriculum Outline

Calculations based on an 18-week semester (subject to change)

SUMMER 2007—D2		Contact	Laboratory	Credit Hours
CDM 2000	National Board Dental Examination Part I Review	6	0	1
CDM 2050	Endodontics Laboratory (continued in Fall 2007—D2)			
CDM 2060	Endodontics Lecture (continued in Fall 2007—D2)			
CDM 2201	Operative Dentistry Lecture (continued from Winter 2007—D1)	15	0	1
CDM 2211	Operative Dentistry Laboratory (continued from Winter 2007—D1)	0	45	1
CDM 1016	Clinical Experience Rotation II (continued from Winter 2007—D1)	1	15	1
CDM 2005	Craniofacial Growth and Development	8	0	0.5
CDM 2501	Periodontology III Clinic (continued in Fall 2007—D2)			
CDM 2125	Pathology II	19	0	1
CDM 2185	IDG Clinical Periodontology Orientation	2	8	0.5

SUMMER 2007—D3		Contact	Laboratory	Credit Hours
CDM 3500	Clinical Restorative Dentistry I (continued in Fall 2007—D3)			
CDM 3410	Clinical Fixed Prosth. I (continued in Fall 2007—D3)			
CDM 3411	Clinical Removable Prosth. I (continued in Fall 2007—D3)			
CDM 3501	Clinical Periodontology V (continued in Fall 2007—D3)			
CDM 3621	Clinical Endodontics (continued in Fall 2007—D3)			
CDM 3507	Clinical OMFS Rotation I (continued in Fall 2007—D3)			
CDM 3525	Clinical Pediatric Dentistry Rotation I (continued in Fall 2007—D3)			
CDM 3650	Clinical Radiology Rotation I (continued in Fall 2007—D3)			
CDM 3200	Laboratory and Clinical Applications of Occlusion	8	10	0.5
CDM 3300	Operative Dentistry II	6	0	0.5

SUMMER 2007—D4		Contact	Laboratory	Credit Hours
CDM 4501	Clinical Periodontology VII (continued in Fall 2007—D4)			
CDM 4500	Clinical Restorative Dentistry IV (continued in Fall 2007—D4)			
CDM 4410	Clinical Fixed Prosth. IV (continued in Fall 2007—D4)			
CDM 4411	Clinical Removable Prosth. IV (continued in Fall 2007—D4)			
CDM 4621	Clinical Endodontics (continued in Fall 2007—D4)			
CDM 4505	Clinical Emergency Rotation I (continued in Fall 2007—D4)			
CDM 4507	Clinical OMFS Rotation IV (continued in Fall 2007—D4)			
CDM 4525	Clinical Pediatric Dentistry Rotation II (continued in Fall 2007—D4)			
CDM 4650	Clinical Radiology Rotation II (continued in Fall 2007—D4)			
CDM 4040	National Board Dental Examination Part II Review Course (continued in Fall 2007—D4)			
CDM 4222	Laser Dentistry (Elective)	18	0	1

FALL 2007—D1		Contact	Laboratory	Credit Hours
CDM 1000	Anatomy Lecture/Laboratory	56	48	5
CDM 1025	Dental Biochemistry and Nutrition	54	0	4
CDM 1030	Histology	36	54	4
CDM 1050	Ethics and Professionalism	18	0	1
CDM 1070	Periodontology I	18	0	1
CDM 1080	Dental Anatomy Laboratory	0	108	2
CDM 1090	Dental Anatomy Lecture	36	0	2
CDM 1100	Dental Biomaterials I Lecture	18	0	1
CDM 1015	Clinical Experience Rotation I	2	8	0.5
CDM 1110	Microbiology	45	0	3
CDM 1250	Virtual Reality Dental Simulation Laboratory	0	6	0.5

WINTER 2008—D1

		Contact	Laboratory	Credit Hours
CDM 1010	Cariology	18	0	1
CDM 1230	Dental Biomaterials Laboratory	0	12	1
CDM 1111	Immunology	30	0	2
CDM 1120	Physiology	72	0	4
CDM 1130	Neuroanatomy Lecture/Laboratory	36	18	3
CDM 1135	Multidisciplinary Introduction to Record Keeping	5	27	1
CDM 1160	Oral Histology	36	0	2
CDM 1180	Periodontology II	18	0	1
CDM 1185	Introduction to Clinical Periodontology	0	8	0.5
CDM 1200	Operative Dentistry Lecture	20	0	1.5
CDM 1210	Operative Dentistry Laboratory	0	72	1.5
CDM 1220	Occlusion I Lecture	24	0	1.5
CDM 1221	Occlusion I Laboratory	0	39	1.5
CDM 1016	Clinical Experience Rotation II (continued in Summer 2008—D2)			
CDM 1125	Pathology I	31	0	2

FALL 2007—D2

		Contact	Laboratory	Credit Hours
CDM 2010	Pharmacology I	72	0	4
CDM 2030	Periodontology III	18	0	1
CDM 2040	Pharmacology, Analgesia, and Local Anesthesia I	18	0	1
CDM 2050	Endodontics Lecture (continued from Summer 2007—D2)	24	0	1.5
CDM 2060	Endodontics Laboratory (continued from Summer 2007—D2)	0	93	2
CDM 2070	Fixed Prosthodontics I Lecture	36	0	2
CDM 2080	Fixed Prosthodontics I Laboratory	0	108	2
CDM 2081	Introduction to Pediatric Dentistry	18	0	1
CDM 2085	Introduction to Special Needs Dentistry	18	0	1
CDM 2090	Removable Partial Prosthodontics Lecture	36	0	2
CDM 2100	Removable Partial Prosthodontics Laboratory	0	108	2
CDM 2101	Dental Biomaterials II Lecture	18	0	1

CDM 2110	Radiology I	18	27	2
CDM 2280	Internal Medicine for Dentists	18	0	1
CDM 2501	Periodontology III Clinic (continued from Summer 2007—D2)	1	12	1
CDM 2505	Radiology Preclinical Laboratory I (continued in Winter 2008—D2)			

WINTER 2008—D2

		Contact	Laboratory	Credit Hours
CDM 2102	Dental Biomaterials II Laboratory	0	18	1
CDM 2120	Oral and Maxillofacial Diagnosis I	18	0	1
CDM 2130	Pharmacology II	54	0	3
CDM 2140	Introduction to Oral Medicine	18	0	1
CDM 2150	Oral and Maxillofacial Surgery I	18	27	2
CDM 2160	Periodontology IV	18	0	1
CDM 2170	Pharmacology, Analgesia, and Local Anesthesia II	18	0	1
CDM 2180	Pediatric Dentistry Lecture	36	0	2
CDM 2190	Pediatric Dentistry Laboratory	0	54	1
CDM 2200	Orthodontics Lecture/Laboratory	36	36	3
CDM 2220	Complete Denture Prosthodontics Lecture	36	0	2
CDM 2230	Complete Denture Prosthodontics Laboratory	0	36	1
CDM 2241	Discipline-Integrated Comprehensive Care I	18	0	1
CDM 2250	Endodontics Clinical Lecture	18	0	1
CDM 2260	Fixed Prosthodontics II Lecture	18	0	1
CDM 2270	Fixed Prosthodontics II Laboratory	0	72	2
CDM 2502	Periodontology IV Clinic	0	0	1.5
CDM 2505	Radiology Preclinical Laboratory I (continued from Fall 2007—D2)	0	9	1

SPRING 2008—D2

CDM 2999	Clinic Prerequisite Review	20	70	2

FALL 2007—D3		Contact	Laboratory	Credit Hours
CDM 3010	Oral and Maxillofacial Diagnosis II	18	0	1
CDM 3020	Oral Medicine	18	0	1
CDM 3030	Periodontology V	18	0	1
CDM 3040	Oral and Maxillofacial Surgery II Lecture	18	0	1
CDM 3120	Implant Restorative Dentistry Lecture	18	0	1
CDM 3130	Cosmetic Dentistry Lecture/Laboratory	18	30	3
CDM 3240	Discipline-Integrated Comprehensive Care II	18	0	1
CDM 3411	Clinical Removable Prosth. II (continued from Summer 2007—D3) (continued in Winter 2008—D3)			
CDM 3410	Clinical Fixed Prosth. II (continued from Summer 2007—D3)	0	0	7
CDM 3500	Clinical Restorative Dentistry II (continued from Summer 2007—D3) (continued in Winter 2008—D3)			
CDM 3501	Clinical Periodontology V (continued from Summer 2007—D3) (continued in Winter 2008—D3)			
CDM 3507	Clinical OMFS Rotation II (continued in Winter 2008—D3)			
CDM 3525	Clinical Pediatric Dentistry Rotation I (continued in Winter 2008—D3)			
CDM 3621	Clinical Endodontics I			
CDM 3605	Orthodontic Clinical Comanagement Program I (continued in Winter 2008—D3)			
CDM 3650	Clinical Radiology Rotation I (continued in Winter 2008—D3)			

WINTER 2008—D3		Contact	Laboratory	Credit Hours
CDM 3011	Oral and Maxillofacial Diagnosis III	18	0	1
CDM 3021	Common Oral Conditions	18	0	1
CDM 3080	Behavioral Science	36	8	2
CDM 3090	Introduction to the Dental Profession	18	0	1
CDM 3140	Special Needs Dentistry	18	0	1

CDM 3241	Discipline-Integrated Comprehensive Care III	36	0	2
CDM 3221	Advanced Clinical Occlusion	18	0	1
CDM 3501	Clinical Periodontology VI (continued from Fall 2007—D3)	0	0	2
CDM 3530	Evidence-Based Dentistry in Clinical Practice	18	0	1
CDM 3500	Clinical Restorative Dentistry III (continued from Fall 2007—D3)	0	0	10
CDM 3411	Clinical Removable Prosth. III (continued from Fall 2007—D3)	0	0	11
CDM 3420	Clinical Fixed Prosth. III	0	0	4
CDM 3060	TMD	18	0	1
CDM 3507	Clinical OMFS III (continued from Fall 2007—D3)	0	50	1
CDM 3525	Clinical Pediatric Dentistry Rotation II (continued from Fall 2007—D3)	0	12	1
CDM 3621	Clinical Endodontics I	0	12	1
CDM 3650	Clinical Radiology Rotation I (continued from Fall 2007—D3)	0	42	2
CDM 3605	Orthodontic Clinical Comanagement Program II (continued from Fall 2007—D3)	0	30	1

FALL 2007—D4		Contact	Laboratory	Credit Hours
CDM 4040	National Board Dental Examination Part II Review Course	6	0	1
CDM 4240	Discipline-Integrated Comprehensive Care IV	18	0	1
CDM 4060	Practice Management I	18	0	1
CDM 4170	Oral Manifestations of Disease	18	0	1
CDM 4500	Clinical Restorative Dentistry V (continued in Winter 2008—D4)			
CDM 4410	Clinical Fixed Prosth. V (continued in Winter 2008—D4)			
CDM 4411	Clinical Removable Prosth. V (continued in Winter 2008—D4)			
CDM 4621	Clinical Endodontics II	20	0	1
CDM 4650	Clinical Radiology II (continued in Winter 2008—D4)			
CDM 4120	Regional Board Prep Course (continued in Winter 2008—D4)			
CDM 4501	Clinical Periodontology VII (continued in Winter 2008—D4)			
CDM 4503	Clinical Periodontology Rotation (continued in Winter 2008—D4)			

CDM 4505	Clinical Emergency Rotation II (continued in Winter 2008—D4)			
CDM 4507	Clinical OMFS Rotation V	0	0	1
CDM 4525	Clinical Pediatric Dentistry Rotation II (continued in Winter 2008—D4)			
CDM 4611	Community Dentistry Rotation I (continued in Winter 2008—D4)			
CDM 4999	Advanced Techniques in Pain and Anxiety Control	18	0	1
CDM 400H	Honors Endodontics (continued in Winter 2008—D4)			
CDM 410H	Honors Pediatric Dentistry (continued in Winter 2008—D4)			
CDM 4404H	Oral Medicine Honors (continued in Winter 2008—D4)			
CDM 414H	Honors Program in Orthodontics and Facial Orthopedics (continued in Winter 2008—D4)			
CDM 412H	Honors Prosthodontics (continued in Winter 2008—D4)			
CDM 403E	Advanced Elective in Endodontics (continued in Winter 2008—D4)			

WINTER 2008—D4		Contact	Laboratory	Credit Hours
CDM 4111	Practice Management II	18	0	1
CDM 4120	Regional Board Prep Course	0	72	1
CDM 4501	Clinical Periodontology VIII	0	0	2
CDM 4600	Clinical Restorative Dentistry VI	0	0	11
CDM 4621	Clinical Endodontics II	0	28	1
CDM 4410	Clinical Fixed Prosth. VI	0	0	11
CDM 4411	Clinical Removable Prosth. VI	0	0	11
CDM 4020	Clinical Oral Medicine Case Presentations	18	0	1
CDM 4503	Clinical Periodontology Rotation II (continued from Fall 2007—D4)	0	20	1
CDM 4505	Clinical Emergency Rotation III (continued from Fall 2007—D4)	0	45	1
CDM 4507	Clinical OMFS Rotation VI	0	0	1
CDM 4525	Clinical Pediatric Dentistry Rotation IV (continued from Fall 2007—D4)	0	0	2

CDM 4611	Community Dentistry Rotation II (continued from Fall 2007—D4)	0	0	1
CDM 4650	Clinical Radiology II (continued from Fall 2007—D4)	0	42	1
CDM 400H	Honors Endodontics (continued from Fall 2007—D4)	10	0	1
CDM 414H	Honors Program in Orthodontics and Facial Orthopedics (continued from Fall 2007—D4)	36	0	2
CDM 4404H	Oral Medicine Honors (continued from Fall 2007—D4)	48	0	1
CDM 412H	Honors Prosthodontics (continued from Fall 2007—D4)	54	0	1
CDM 403E	Advanced Elective in Endodontics (continued from Fall 2007—D4)	14	0	0.5
CDM 420E	Oral Radiosurgery Application in Clinical Practice (Elective)	4	8	0.5

College of Dental Medicine Course Descriptions

INTERDISCIPLINARY BIOMEDICAL SCIENCES

Anatomy—Chair and Professor: **G. R. Conover** | Professors: **L. Dribin, A. Mariassy, R. K. Yip** | Associate Professors: **C. Purvis, K. Tu** | Assistant Professor: **N. Lufti** | Instructor: D. McNally

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.

Behavioral Science—Assistant Professor: **A. Fins**

CDM 3080—Behavioral Science
This course provides dental students with interviewing strategies, commu-

nication skills and an introduction to the theories and research pertaining to anxiety with specific interventions geared to reduce tension and fear. Students will be exposed to various interviewing and communication techniques as well as theories regarding the etiology of anxiety. Students will gain familiarity with psychological and physiological indices of arousal. It is the goal of this course to acquaint dental students with well established interventions including progressive muscle relaxation, systematic desensitization, biofeedback, hypnosis, and the relationship of anxiety/stress to pain syndromes.

Biochemistry—Chair and Professor: **R. E. Block** | Professors: **E. E. Groseclose, 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** | Associate Professor: **B. Jones** | Assistant Professor: **A.B. Trif**

CDM 1125 and 2125—Pathology I and II
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. Panavelil** | 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. Zagvazdin**

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.

CARIOLOGY AND RESTORATIVE DENTISTRY

Chair and Professor: **D. Antonson** | Associate Professors: **A. Brodie, N. Feigenbaum** | Assistant Professors: **H. Bass, C. Bleich, P. Filker, P. Fleisher, A. Galka, C. Galperin, R. Jacobson, E. Kilinc, J. Kodish-Stav, H. Lehrer, L. Levin, P. Papatzimas, M. Pasciuta, P. Pugliese, H. Quinton, R. Ramer, J. Schiuma, M. Schweizer, J. Seeberg, R. Vogel, N. Zarr** | Adjunct Faculty: **S. Berger, M. Butler, J. Cegielski, R. Cohen, E. Fellows, M. Georgescu, T. Gonzalez, Li. Gutierrez, H. Levine, N. Levy, S. Marks, E. Migliorati, J. Nullman, S. Perlow, J. Reed, R. Stanton, J. Wallach** | Visiting Lecturer: **D. Rolfe**

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 Experience 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 may have the opportunity to implement these skills while assisting D3 and D4 students in the CDM predoctoral clinics.

CDM 1016—Clinical Experience 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 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. The lecture course presents the topic of diagnosis and treatment of various lesions and other hard tissue defects, principles of direct restorative dentistry, and fundamental concepts in the practice of restorative dentistry. This course, in conjunction with the laboratory course, provides the foundation for the student to utilize the same knowledge and techniques that will be used in clinical application.

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. This virtual reality-type environment stresses small-group learning and basic principles and procedures in tooth preparation.

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 2241—Discipline-Integrated Comprehensive Care I

This course provides formal lectures and interactive participation to help prepare students to deal with their patients from the standpoint of diagnosis and treatment planning. The lectures will guide students through the thought process necessary in the development of workable treatment plans. The emphasis will be on exposing students to the approach used in our clinic of providing patients with the options of optimal, alternative treatment planning for health and emergency diagnostic or recall treatment plans. The lectures will emphasize the phase approach to treatment planning and will include the concept of decisional analysis. The course will provide orientation and training to guide students through the computer process of collating and recording patient oral health information into the AxiUm software system.

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 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 3300—Operative Dentistry II

This lecture and laboratory course addresses topics that will be beneficial to students entering the clinic for the first time. Topics will include more complex restorations performed alone and in conjunction with prosthetics, the management of caries based on risk assessment, the concept of minimally invasive dentistry, and finding solutions to complicated dental situations. This course builds on the foundation provided by the Operative Dentistry I lecture and laboratory courses, CDM 1200 and CDM 1210. The course will also provide those skills enabling students to assimilate knowledge from all disciplines and begin to create treatment plans for cases.

CDM 3500—Clinical Restorative Dentistry I

The student will incorporate the knowledge gained from prior studies

while treating patients in the dental clinics. The student will develop the essential skills necessary for comprehensive patient care including diagnosis and oral medicine, periodontology, endodontics, orthodontics, restorative dentistry, oral surgery, pediatric dentistry, radiology, and emergency dental care, all under the direct supervision of the faculty.

CDM 4040—National Board Part II Prep Course

This course consists of a lecture series that presents an overview of the subjects included in the National Board Dental Examination Part II for fourth-year students. The course presents didactic material related to operative dentistry, pharmacology, prosthodontics, oral surgery, orthodontics, pediatric dentistry, endodontics, periodontology, oral pathology, radiology, and behavioral science.

CDM 4120—Regional Board Preparation Course

This course consists of a lecture and laboratory series that presents an overview of useful clinical techniques for students who will be taking various regional board dental examinations. The course presents didactic material as well as hands-on clinical simulation of examination parameters for procedures included in various regional board exams. Successful completion of this course should assist students taking regional board exams, but does not guarantee a passing grade on any regional board examination taken by a student.

CDM 4222—Laser Dentistry (Elective)

The curriculum for the basic level of education in laser usage includes device instruction with demonstrated exposure—didactic and hands-on knowledge. Hands-on exercises will 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 II

COMMUNITY DENTISTRY

Chair: **D. Ede-Nichols** | Assistant Professor **L. Sakarais, E. Shehadeh, F. Slavichak, B. Waterman** | Adjunct Faculty: **M. Brothers, R. Cantor, J. Carle, C. Fasano, C. Freidman, L. Gillmore, D. Rodrigez, R. Urbino** | Guest Lecturer: **T. Hottel** |

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 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 residencies will prepare the student for opportunities of specialty study or employment opportunities. Both

business and personal financial planning/investing are considered in these courses.

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 medical chart, responding to requests for dental consult, and the behavioral management issues of treating those with special needs.

DIAGNOSTIC SCIENCES

Chair and Professor: **M. Siegel** | Vice Chair and Professor: **P. Bradley** | Professors: **G. Conover, C. Migliorati, H. Remnick** | Associate Professor: **I. Velez** | Assistant Professors: **J. Arenas, S. Caplan, P. Levine** | Adjunct Professors: **J. Bloch, D. Meisel, D. Stern**

CDM 1160—Oral Histology

Oral histology is the basis of clinical dentistry. Students will be able to understand the logic and underlying basis for the restorative and surgical procedures they are about to be taught. After graduation they will be able to evaluate new clinical procedures by seeing if they, too, have a sound histologic base. The student will know the microanatomy of the structures that make up the oral cavity as well as the clinical procedures that depend on them for their success. Uses blackboard, Kodachrome slides, and many models. Frequent reviews that require student participation will reinforce the didactic material. The Kodachrome slides that have been presented in the lectures have been duplicated and are held in the school library.

CDM 2110—Radiology I

Lecture course with a preclinical laboratory exercise, in order to prepare the student for the performance of clinical oral and maxillofacial radiology technique. Infection control and safety for operator and patient is stressed.

CDM 2120—Oral and Maxillofacial Diagnosis I

Lecture and demonstration course covers extraoral techniques with special emphasis on digital imaging. Lectures cover radiographic interpretation of developmental anomalies, caries, periodontal disease, periapical disturbances, and other anomalies.

CDM 2140—Introduction to Oral Medicine

Didactic course builds on and incorporates the knowledge base gained in the basic medical sciences. Focuses on a comprehensive medical history and physical examination of the head and neck, evaluation of medical laboratory tests, management of the medically compromised patient, medical emergencies, and requirements of the Occupational Safety and Health Administration.

CDM 2280—Internal Medicine for Dentists

This lecture course will expose D2 students to the applied principles of diagnosis of the medically complex patient and the translation of these principles into clinical practice. Students will be exposed to lectures given in a review of systems format. All lectures will present a specific system/disorder with emphasis on definition, epidemiology, pathophysiology and complications, clinical presentation, medical management, and dental management. Concepts of antibiotic premedication and medical consultation will be introduced. Each lecture will reinforce previously encountered concepts of pathology and physiology, translate these concepts into a clinical venue, and then apply dental management techniques that are necessary to safely manage patients in a clinical practice.

CDM 2505—Radiology Preclinical Laboratory

Preclinical laboratory course to prepare the student in intraoral and extraoral radiographic techniques. The student will demonstrate basic clinical skills in the fundamentals of dental radiography while producing an acceptable radiographic examination on a manikin. The importance of operator and patient protection standards when using ionizing radiation is emphasized.

CDM 3010—Oral and Maxillofacial Diagnosis II

Didactic course focuses on the etiology, clinical, histologic, and radiographic appearance and treatment of specific disease entities involving the head and neck. Differential diagnosis is emphasized, giving clinical relevance to the discipline.

CDM 3011—Oral and Maxillofacial Diagnosis III

Continuance of CDM 3010, Oral Pathology I, didactic course focuses on the etiology, clinical, and histologic appearance and treatment of specific disease entities involving the head and neck. Differential diagnosis is emphasized, giving clinical relevance to the discipline.

CDM 3020—Oral Medicine

Didactic course continues and builds on the knowledge base gained in the basic medical sciences and Oral Medicine I. A comprehensive study of both hard and soft tissue lesions manifesting in the oral cavity and related head and neck structures is presented.

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 3650—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

Chair, Associate Professor, and Postgraduate Program Director: **K. Namerow** | Professors: **S. Kelner, S. Oliet, R. Uchin** | Associate Professors: **S. Kuttler, P. Murray, R. Seltzer** | Assistant Professors: **R. Gelman, A. Lloyd, I. Moldauer** | Adjunct Faculty: **J. Barros, S. Berman, M. Flax, G. Heinsen, A. Helfer, R. Herman, A. Lane, V. Manjarres, G. Mitchell, L. Mitchell, B. Porras, R. Powell, T. Roud, J. Satovsky, J. Silberman, A. Skidmore, J. Slingbaum, R. Zelikow** | Postdoctoral Program Associate Director: **I. Moldauer**

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 2250—Endodontics Clinical Lecture

This course serves to enhance the knowledge and understanding beyond the basic concepts for predoctoral students. The students' ability to apply these concepts to their own patients and to recognize

situations that are beyond their skills, thus requiring referrals, are developed and emphasized.

CDM 3621—Clinical Endodontics I

Junior dental students are taught clinical endodontic treatment of single-rooted and multirooted teeth (premolars and molars). This includes diagnosing a tooth with pulpal problems as well as sequencing of endodontic treatment in the treatment plan. Proper documentation in the treatment record, anesthesia techniques, patient management, and root canal therapy are also discussed.

CDM 4621—Clinical Endodontics II

Senior dental students display proficiency and knowledge of anesthetic techniques, patient management, and endodontic treatment of single-rooted and multirooted teeth (premolars and molars). They also manage endodontic emergencies. The completion of competency requirements demonstrates that students have reached the level of "safe starter" to treat basic endodontic cases in the practice of general dentistry.

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: **S. McClure** | Adjunct Professors: **E. Blanck, D. Feinerman, K. Friedman, L. Garvar, K. Kaner, M. Krohn, H. Richman, P. Richman, D. Smith, J. Stevens, S. Stewart, G. Wayne** | Visiting Professors: **B. Epker, S. Guttenberg, M. Pikos** | Adjunct Faculty: **M. Ladov, A. Ospina, A. Sclar, T. Splaver**

CDM 2040—Pharmacology, Analgesia, and Local 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 and Maxillofacial 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—Pharmacology, Analgesia, and Local 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 and Maxillofacial 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 orthogenic 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, Professor, and Director of Postgraduate Orthodontics: **J. Kronmiller** | Associate Director of Postgraduate Orthodontics and Assistant Professor: **J. Godel** | Director of Predoctoral Orthodontics and Assistant Professor: **O. Sotsky** | Adjunct Faculty: **M. Cardenas, K. Douglas, S. Real Figueroa, A. Kapit, S. Kessel, N. Le, B. Matza, M. Meister, V. Rothman, R. Singer, D. Tartakow** | Visiting Professors: **J. Dana, Z. Davidovich, R. Isaacson, S. Rosenstein**

CDM 2005—Craniofacial Growth and Development

This course is intended to be a preliminary course in the 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** | Interim Director for Postgraduate Pediatric Dentistry and Associate Professor: **William Trevarthan** | Professor: **F. Garcia-Godoy,** | Assistant Professors: **H. Beaver, J. Larumbe, J. Vargas,** | Adjunct Professors: **D. Arnold, J. Bazos, Y. Gomez-Ruane, G. Pyser, R. Sherman, E. Stelnicki, P. Werner**

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 in: 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 D3 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 in: 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

PERIODONTOLOGY

Chairman, Associate Professor, and Director of Postdoctoral Periodontology: **W. Parker** | Associate Professor: **J. Ganeles** | Assistant Professors: **S. Galperin, M. Hernandez, M. Roth,** | Instructor: **K. DeMonaco, L. Heintskill** | Adjunct Associate Professors: **M. Forrest, L. Garfinkel** | Adjunct Assistant Professors: **N. Dalal, N. DeTure, S. Drukteinis, R. Eisenberg, I. Freedman, I. Garazi, I. Ginsburg, D. Glassman, M. Gordon, A. Horowitz, F. Montamarta, F. Norkin, L. Ostroff, M. Rosenbluth, T. Segal, S. Stern** | Adjunct Instructors: **S. Alpert, R. Charin, N. Dowd, L. Fuller, M. Guertin, L. Hochman, J. Kagan, M. Morato, D Paz, N. Powell, S. Salzman, S. Sanders, J. Weiner, S. Weinstein** | Visiting Professor: **S. Stahl**

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 1180—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 microbiota, 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 mannequins in simulation lab and then with their classmates.

CDM 2030—Periodontology III
Review of normal structures: anatomic and histologic. The earliest gingival inflammatory lesion: clinical signs and symptoms. Gingivitis: clinical features, underlying etiology, microbial shifts, and diagnosis and rationale for treatment. Clinical, microbiologic, and histologic alterations in response to local irritants, host responses, inflammation and loss of attachment. The gingival and periodontal abscess, the gingival lesion in AIDS, necrotizing ulcerative gingivitis, and herpetic gingivostomatitis.

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 maintenance procedures for establishing prolonged gingival health.

CDM 2185—IDG Clinical Periodontology Orientation

CDM 2501—
Periodontology III Clinic
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 2502—Periodontology IV Clinic
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, D2 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 3030—Periodontology V
Treatment planning and options available for the treatment of early to moderate periodontitis. Etiology, histopathology, and treatment of refractory periodontitis, early periodontitis, and localized juvenile periodontitis.

CDM 3501—
Clinical Periodontology V
The purpose of this year in periodontology is to provide students 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 4501—
Clinical Periodontology VII
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 proper sequences and effective periodontal treatment plan, focusing on early to moderate periodontisis. Students will be exposed to protocols relative to implant maintenance. In addition, students will correlate interrelationships of periodontal medicine relative to low birth weight babies, cardiovascular disease, osteoporosis, and diabetes.

CDM 4503—Clinical Periodontology Rotation
The purpose of this year in periodontology is to provide students with the opportunity to assist periodontal surgical procedures at the postgraduate periodontics level. Students will be exposed to different modalities of periodontal surgical procedures.

PROSTHODONTICS

Chair and Associate Professor: **S. Siegel** | Professors: **J. Antonelli, S. Askinas, T. Hottel, F. Kohler, J. Thompson** | Associate Professors: **S. Antonson, A. Gotlieb, L. Krasne** | Assistant Professors: **R. Castellon, M. Golberg, N. Guzman, J. Hauptman, J.M. Hervas, C.J. Hsu, F. Jimenez, M.V. Lim, H. Lippman, S. Rauchwerger, M. Romer** | Adjunct Faculty: **R. Acosta-Ortiz, S. Berger, C. Drago, J. Gartner, M. Greenberg, M. Helfman, D. Herskowich, D. Jackson, F. Knoll, A. Konis, A. Korczynski, M. Mendelson, M. Mikhail, E. Neuwirth, M. Platt, M. Pomerantz, M. Radu, M.V. Rampertaap, T.V. Rangarajan, D. Rolfe, D. Roy, R. Sanchez, D. Seitlin, R. Selz, B. Shipman, Z. Staller, E. Tobon, D. Wessel** | Director and Professor of Postgraduate Prosthodontics: **B. Goldman**

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. They will understand 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 medicine.

CDM 2070/CDM 2080—
Fixed Prosthodontics I
Lecture/Laboratory
These courses prepare students to appropriately use the terminology, instrumentation, and psychomotor skills associated with tooth preparation and provisionalization of single and multiple unit cast fixed prosthodontic restorations.

CDM 2090/CDM 2100—
Removable Partial Prosthodontics
Lecture/Laboratory
These courses provide fundamental technical knowledge, concepts, and skills to appropriately diagnose, treatment plan, and restore oral conditions that require replacement of lost teeth and their associated structures using removable partial 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
These courses prepare students to appropriately use the terminology and gain the fundamental technical knowledge, principles, and skills to replace lost teeth and their associated structures with complete 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 Dentistry
Lecture
This course is one of comparative implantology, which emphasizes the biological background related to implant systems. Demonstrations and case presentations will be provided. Evidence-based studies are 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 clinic-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, II
Clinical experience consists of preparing and placing anterior and posterior fixed partial dentures and 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, II, 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 3420—Clinical Fixed
Prosthodontics III
Clinical experience consists of preparing and placing anterior and posterior fixed partial dentures and 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 3530—Evidenced-Based
Dentistry in Clinical Practice
This lecture series presents historical aspects of the development of critical thinking in health care. The course 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 methodology.

CDM 4410—
Clinical Fixed Prosthodontics IV, V, VI
Clinical experience consists of preparing and placing anterior and posterior fixed partial dentures and 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 4411—Clinical Removable 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 412H—Honors Prosthodontics (Fall 2007 and Winter 2008)

Advanced students with a high interest in prosthodontics attend advanced prosthodontic seminars and gain advanced experience in clinical prosthodontics, treating more complex patients.

CDM 420E—Oral Radiosurgery Lecture and Laboratory

Students will understand the physics of radiosurgery, histological changes in tissues where electrosurgery is used, indications for the use, postoperative cares, and the use of the electrosurgery unit. This course applies the principles and techniques learned by using the electrosurgery unit on actual tissue.

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.

D.O./D.M.D. Collaborative Degree Program

In order to address the access to care issues and meet the needs of underserved populations, Nova Southeastern University's College of Dental Medicine and College of Osteopathic Medicine have structured a curriculum that provides students with an opportunity to receive a D.M.D. (Doctor of Dental Medicine) and D.O. (Doctor of Osteopathic Medicine) degree. This D.O./D.M.D. Collaborative Degree Program is symbiotic with the missions of both schools. Graduates of the dual program will provide health care that will address preventive medicine and general dentistry, as well as access to care issues, and meet the needs of rural and underserved populations.

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 two D.D.S./Ph.D.s and three basic science Ph.D.s on the full-time faculty. Recently, two new research faculty members have been hired. 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 oral and maxillofacial surgery.

These programs are supervised by board-certified and educationally qualified dental specialists.

Lectures, seminars, and multidisciplinary conferences related to patients and their dental treatment, as well as in research, are conducted. Students also serve as instructors in the predoctoral laboratory and clinic. An original research project must be completed by each student. Upon successful completion of the program requirements, trainees receive certificates in their respective specialties.

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.

CDM 5106—Advanced Systemic Oral Medicine and Pharmacology

This course expands on the predoctoral education regarding the topic of oral medicine. The seminars will discuss current and classic literature to help refine the skills of students in interpreting a medical history and dental management of medically complex patients.

Additionally, postdoctoral students are required to take didactic and clinical courses within their respective area of specialization throughout their training.

Postdoctoral Specialties

Postdoctoral Endodontics

The postdoctoral program in endodontics is a 24-month certificate program that balances clinical experience with didactic instruction in the relevant basic and clinical sciences.

The clinical portion of the program is microscopically oriented, providing the student with modern concepts of endodontic treatment including rotary NiTi instrumentation, electronic apex locators, guided tissue regeneration, ultrasonic instrumentation, and use of digital radiography.

Joint conferences with other disciplines provide the student with a well-rounded basis to diagnose and treat conditions in the head and neck region.

The didactic portion of the program includes a core curriculum designed to provide all postdoctoral students with a basic interdisciplinary education and a detailed endodontic 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 rigors 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 South Florida.

Students are trained in hospital and operating room protocol including the use of general anesthetics.

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 prosthetics. 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 an accredited Advanced Education in General Dentistry (AEGD) residency program. The AEGD program is based in an eight-chair clinic at the North Miami Beach (NMB) campus with an optional second year devoted primarily to special needs dentistry at the main campus. The didactic portion of the program includes a core science curriculum designed to provide all postdoctoral students with an advanced interdisciplinary education and a detailed general practice curriculum for the AEGD students. Various off-site rotations are included to expand the range of experiences available. The program does not charge tuition and offers no stipends. Professional liability insurance is provided.

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 concomitantly. 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, 2008:

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.

4. The applicant must provide an official letter of graduation from the dean or designee of that institution, supporting the granting of the dental degree from that institution.

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:

1. official National Board scores. Please request the secretary of the National Board of Dental Examiners to forward all scores of the dental boards. The National Board is located at 211 East Chicago Avenue, Chicago, Illinois, 60611. Applicants who have not taken the National Boards must submit a letter of explanation.

2. three letters of recommendation are required. They must be completed by dental school faculty members who are well acquainted with the applicant's abilities or by individuals who can provide information relevant to the applicant's potential.

Upon receipt of the completed application and the required credentials, the director of each postdoctoral program along with the Committee on Admissions will select applicants for interview and those selected will be notified in writing. Not all applicants will be granted an interview. All applicants who are admitted to the college must be interviewed, but an invitation to appear for an interview should not be construed as evidence of acceptance.

All materials 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

Postdoctoral Tuition and Fees

- Tuition for all postdoctoral programs for 2008–2009 (subject to change by the board of trustees without notice) is $35,595. 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 Faculty

Health Professions Division Faculty

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

Raúl R. Cuadrado
Dean Emeritus, College of Allied Health and Nursing
Professor, Public Health
S.B., Yale University, 1961
B.S., Yale University, 1961
M.P.H., Yale University, 1963
Dr.P.H., University of Michigan, 1968
Ph.D., Honoris Causa in Health, Universidad Central del Este, 2000

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
B.S. (Pharm.), University of Wyoming, 1954
M.S., University of Wyoming, 1959
Ph.D., University of Arizona, 1973

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
D.O., Philadelphia College of Osteopathic Medicine, 1946
Fellow, American Osteopathic College of Proctology

Michael A. Longo
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 Surgeons

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
B.A., University of Hawaii, 1961
B.S., University of Puget Sound, 1963
M.Ed., University of Florida, 1968
M.A., Southern Methodist University, 1982
Ph.D., Southern Methodist University, 1986
Fellow, American Occupational Therapy Association

Seymour Oliet
Emeritus Dean and Professor, Endodontics
D.D.S., University of Pennsylvania College of Dental Medicine, 1953
CT— University of Pennsylvania, 1955
Fellow, American Association of Endodontics
Fellow, American College of Dentists
Fellow, International College of Dentists
Fellow, American Association of Advancement of Sciences
Fellow, Royal Society of Health (British)
Fellow, International Association Dental Research
Fellow, Philadelphia College of Surgeons

Robert L. Perraud
Emeritus Professor, Family Medicine
B.S., Kent State University, 1950
D.O., Kirksville College of Osteopathic Medicine, 1954

Charles B. Radlauer
Emeritus Professor, Surgery
M.D., George Washington University College of Medicine, 1961
Fellow, American College of Surgeons

Carol Niman Reed
Emeritus Professor, Occupational Therapy
B.S., University of Iowa, 1968
M.S., University of Texas, 1977
Ed.D., Nova Southeastern University, 1998
Fellow, American Occupational Therapy Association

Arthur Snyder
Emeritus Professor, Osteopathic Principles and Practice
D.O., Philadelphia College of Osteopathic Medicine, 1944

Sigmund Stahl
Emeritus Associate Dean and Professor, Dental Medicine
D.D.S., University of Minnesota School of Dentistry, 1947
M.S., University of Illinois, 1949
Fellow, American Association for the Advancement of Science
Fellow, American College of Dentists
Fellow, American Academy of Periodontology

Full-time Faculty

Stephen Abel
Assistant Dean, Extramural Affairs
Assistant Professor, Diagnostic Sciences
B.A., Harvard University, 1974
D.D.S., New York University, 1978
CT— Periodontology, M.S., University of Minnesota, 1982

Paul Abplanalp
Professor, Optometry
Ph.D., Massachusetts Institute of Technology, 1968
O.D., New England College of Optometry, 1977

Renee B. Alexis
Assistant Professor, Obstetrics and Gynecology
B.S., Jacksonville University, 1989
M.D., University of Maryland School of Medicine, 1996

Laura M. Amon
Associate Chair and Assistant Professor, Physician Assistant Studies
B.S./P.A., Saint Francis College, 1989
M.S., Alderson-Broaddus College, 1995
Fellow, American Academy of Physician Assistants

Deborah Amster
Assistant Professor, Optometry
B.S., State University of New York, 1997
O.D., New England College of Optometry, 2001

Holly Anderson
Assistant Professor, Pharmacy Practice
A.A., University of South Florida, 1978
B.S., University of Georgia, 1981
Pharm.D., Nova Southeastern University, 1999

Paula L. Anderson-Worts
Associate Professor, Family Medicine
Assistant Professor, Public Health
B.S., University of Miami, 1988
D.O., Nova Southeastern University College of Osteopathic Medicine, 1994
M.P.H., Nova Southeastern University, 2001

Shane Angus
Assistant Professor, Health Science
B.A., University of California at Berkeley, 1997
M.S., Case Western Reserve University, 1999

John Antonelli
Professor, Prosthodontics
D.D.S., New York University College of Dentistry, 1976
Diplomate, American Board of Special Care Dentistry, 2004
M.S., Nova Southeastern University, 2005

Donald Antonson
Chair, Cariology and Restorative Dentistry
D.D.S., Loyola University, 1970
M.Ed., University of Florida, 1981

Sibel Antonson
Associate Professor, Prosthodontics
D.D.S., University of Hacettepe, 1992
Ph.D., University of Hacettepe, 1999
M.B.A., Nova Southeastern University, 2007

Barbara Arcos
Assistant Professor, Family Medicine
B.S., University of Florida, 1980
D.O., Nova Southeastern University College of Osteopathic Medicine, 1994

Evelyn Arellano
Predoctoral Director and Assistant Professor, Oral and Maxillofacial Surgery
D.D.S., Universidad Central de Venezuela, 1996
CT—Oral Surgery, Fundacion Universitaria San Martin—Colombia
M.S., Nova Southeastern University, 2006

Graciela Armayor
Assistant Professor, Pharmacy Practice
Pharm.D., University of Florida, 1987
M.S., Nova Southeastern University, 2006

Barbara Austen
Assistant Professor, Physician Assistant Studies
B.S., University of Nebraska Medical Center, 1994
M.P.A.S., University of Nebraska Medical Center, 1999
Fellow, Florida Academy of Physician Assistants
Fellow, Society of Army Physician Assistants

Michael Bacigalupi
Assistant Professor, Optometry
B.A., University of Houston, 1991
O.D., University of Houston, 1993

Annette Bade
Assistant Professor, Optometry
B.A., Emory University, 1987
O.D., Southeastern University of the Health Sciences, 1993

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
D.O., Philadelphia College of Osteopathic Medicine, 1959
Fellow, American College of Osteopathic Obstetricians and Gynecologists

Barbara Barrett
Assistant Professor, Nursing
B.B.A., City University of New York, 1981
B.S.N., Barry University, 1992
M.S.N., A.R.N.P., Florida International University, 2001

Mary Bartuccio
Assistant Professor, Optometry
O.D., Nova Southeastern University, 1997

Herbert Bass
Assistant Professor, Cariology and Restorative Dentistry
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

Cherylyn 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

Ronald M. Bekic
Assistant Professor, Family Medicine
B.S., Gannon University, 1996
D.O., Nova Southeastern University College of Osteopathic Medicine, 2004

Sandra Benavides
Assistant Professor, Pharmacy Practice
Pharm.D., University of California, 2001

Eulogio Besada
Associate Professor, Optometry
O.D., University of Houston, 1989

Glenn E. Bigsby III
Medical Director and Associate Professor, Physician Assistant Studies
B.S., Iowa State University, 1963
D.O., Des Moines University's College of Osteopathic Medicine and Surgery, 1967
Board Certified by American Osteopathic Board of Family Practice
Qualifications in Geriatrics, American Osteopathic Board of Family Practice
Fellow, American College of Osteopathic Family Physicians

Gregory Black
Assistant Professor, Optometry
O.D., Indiana College of Optometry, 1996

Mary T. Blackinton
Director, T-D.P.T. Program and Associate Professor
B.S./P.T., University of Maryland, 1983
M.S., Nova University, 1991
Ed.D., Nova Southeastern University, 2000

Cyril Blavo
Professor, Public Health
Professor, Pediatrics
B.S., Abilene Christian University, 1979
M.S., Abilene Christian University, 1980
D.O., Texas College of Osteopathic Medicine, 1984
M.P.H. and T.M., Tulane University School of Public Health and Tropical Medicine, 1988
Fellow, American College of Osteopathic Pediatricians

Charles Bleich
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., University of Pennsylvania, 1960

Jeffrey M. Bleicher
Associate Professor, Nephrology

B.S., Muhlenberg College, 1973
D.O., Des Moines University College of Osteopathic Medicine, 1976

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

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
M.D., University of London, 1989
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

Natasha Bray
Instructor, Internal Medicine
B.S., University of Tulsa, 1999
D.O., Oklahoma State University College of Osteopathic Medicine, 2003

James O. Breen
Assistant Professor, Family Medicine
M.D., Jefferson Medical College, 1988
B.A., University of Virginia, 1993

Abby Brodie
Assistant Dean, Curriculum and Educational Affairs
Associate Professor, Cariology and Restorative Dentistry
B.S., University of Massachusetts, 1979
D.M.D., University of Pennsylvania, 1983
Fellow, American College of Dentists, 2007
Fellow, International College of Dentists, 2007

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 State 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
M.S., University of Pittsburgh, 1979
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

Maryann Cabrera
Instructor, Preventive Medicine
M.D., Escuela de Medicina Juan N. Corpas, 1993

Diane Calderon
Assistant Professor, Optometry
O.D., Pennsylvania College of Optometry, 2003

José Calderon
Assistant Professor, Pharmacy
B.S., University at Albany, 1977
M.D., Harvard Medical School, 1982

Pablo J. Calzada
Associate Professor, Family Medicine
Assistant Professor, Public Health
Assistant Dean for Clinical Operations
D.O., Southeastern University College of Osteopathic Medicine, 1993
M.P.H., University of South Florida, 2001

W. Grady Campbell
Assistant 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
M.S., Nova Southeastern University, 2006

Marianela Cardenas
Assistant Professor, Orthodontics
D.D.S., Central University of Venezuela, 1998
Orthodontics Certificate, Intercontinental University, 2003

Ingrid D. Carter
Instructor, Sports Medicine
B.S., Florida State University, 1995
D.O., Western University Health Sciences College of Osteopathic Medicine, 2002

Manuel Carvajal
Professor, Pharmaceutical and Administrative Sciences
B.A., Florida Atlantic University, 1966
M.S.A., University of Florida, 1969
Ph.D., University of Florida, 1974

Kay L. Case
Assistant Professor, Physician Assistant Studies
B.S., University of Wisconsin—River Falls, 1971
B.S./P.A., University of Wisconsin—LaCrosse, 2000
Fellow, American Academy of Physician Assistants
Fellow, Florida Academy of Physician Assistants

Terrence Case
Program Director, Vascular Sonography
Assistant Professor
P.A., Dartmouth Medical School, 1974
B.A., Goddard College, 1979
M.Ed., Harvard University, 1980

Ana Maria Castejon
Assistant Professor, Pharmaceutical and Administrative Sciences
Ph.D., Central University of Venezuela, 1997

Rafael Castellon
Assistant Professor, Prosthodontics
D.D.S., University of Guadalajara, 1997
M.S., University of Minnesota, 2002

Ming-Shun Samuel Cheng
Assistant Professor, Physical Therapy
B.S., National Taiwan University, 1993
M.S. Massachusetts General Hospital Institute of Health Professions, 1999
Sc.D., Boston University, 2004

Rebecca M. Cherner
Assistant Professor, Family Medicine
B.S., University of Alabama, 1993
D.O., Nova Southeastern University College of Osteopathic Medicine, 1997

Patricia Cisarik
Assistant Professor of Optometry
O.D., Pennsylvania College of Optometry, 1987
Ph.D., University of Houston, 2005

Jodi Clark
Assistant Professor, Health Science
B.S., University of Miami, 1992
M.D., University of Miami, 1996
M.P.H., Florida International University, 2003

Michelle Clark
Assistant Professor, Pharmaceutical and Administrative Sciences

B.A., Florida Atlantic University, 1990
M.S., University of South Florida, 1995
Ph.D., University of South Florida, 1996

Kevin Clauson
Assistant Professor, Pharmacy Practice
Pharm.D., University of Tennessee, 1995

Melissa J. Coffman
Assistant Professor, Physician Assistant Studies
B.S., Long Island University, 1997
M.P.A., New York University, 2002
Fellow, American Academy of Physician Assistants

Peter M. Cohen
Assistant Professor, Family Medicine
B.A., University of South Florida, 1981
D.O., Southeastern University College of Osteopathic Medicine, 1993

Stanley Cohen
Professor, Humanities
B.S., Rutgers University, 1950
M.Ed., Temple University, 1955
Ed.D., Temple University, 1965

Carolyn Coleman
Instructor, Periodontology
R.D.H., Ohio State University, 1979
M.S., Barry University, 1985

Gary Conover
Director, College of Dental Medicine, Radiology
Professor, Diagnostic Sciences
D.D.S., Temple University, 1966
CT—Oral and Maxillofacial Radiology, Medical University of South Carolina, 1972
Diplomate, American Board of Oral and Maxillofacial Radiology, 1981

Gerald Conover
Director, College of Dental Medicine, Radiology
Professor and Chair, Anatomy
B.S., University of Michigan, 1964
M.S., University of Michigan, 1967
Ph.D., University of Michigan, 1969

Theresa Conte
Assistant Professor, Nursing
A.D.N./A.S., Miami Dade Community College, 1979
B.S.N., Florida International University, 1996
M.S.N., Florida Atlantic University, 1999

Albert E. M. Coombs
Clinical Director, Assistant Professor
B.S., George Washington University, 1981
B.S./P.A., George Washington University, 1984
M.A., Beaver College, 1992
Fellow, American Academy of Physician Assistants
Fellow, American Counseling Association

Rachel Anastasia Coulter
Associate Professor, Optometry
B.A., Duke University, 1983
O.D., Pennsylvania College of Optometry, 1991
Fellow, American Academy of Optometry
Fellow, College of Optometrists in Vision Development

Melanie Crandall
Associate Professor, Optometry
B.S., Southern College of Optometry, 1977
O.D., Southern College of Optometry, 1977
M.B.A., Nova Southeastern University, 2000

Luigi Cubeddu
Professor, Pharmaceutical and Administrative Sciences
M.D., Central University of Venezuela, 1964
Ph.D., University of Colorado, 1974

Jolanta Czerwinska
Assistant Professor, Director of Educational Technology
M.A., University of Gdansk, 1981
M.A., Ball State University, 1984
Ph.D., University of Gdansk, 1993

Karen Daniel
Associate Professor, Pharmacy Practice

Pharm.D., University of Florida College of Pharmacy, 1994

Kelley L. Davis
Assistant Professor, Microbiology
B.A., University of Kansas, 1997
Ph.D., University of Missouri, 2003

Margaret Davis
Assistant Professor, Nursing
B.S., Troy State University, 1982
M.A., University of Phoenix, 1996
M.S.N., University of Phoenix, 2002

Richard E. Davis
Dean, College of Allied Health and Nursing
Associate Professor, Physician Assistant Studies
B.S./P.A., University of Oklahoma, 1981
M.S., Troy State University, 1984
Ed.D., Nova Southeastern University, 2001
Fellow, American Academy of Physician Assistants

Hilda M. DeGaetano
Associate Professor, Pediatrics
B.S., New York Institute of Technology, 1988
D.O., New York College of Osteopathic Medicine, 1992

Joseph S. DeGaetano
Associate Professor, Family Medicine
B.A., New York Institute of Technology, 1988
D.O., New York College of Osteopathic Medicine, 1992
M.S., Nova Southeastern University, 2006

Kimberly Demonaco
Instructor, Periodontology
R.D.H., University of Pittsburgh, 1989

Marcia Derby
Assistant Professor, Nursing
B.S.N., Florida Atlantic University, 2000
M.S.N, University of Phoenix, 2005

Teryl Ann Dever
Assistant Professor, Audiology
B.A., Wichita State University, 1999
M.S., Lamar University, 2002
Au.D., Pennsylvania School of Audiology, 2006

Lisa M. Deziel-Evans
Executive Associate Dean, Professional Program
Associate Professor, Pharmacy Practice
B.S. (Pharm.), Mercer University School of Pharmacy, 1983
Pharm.D., Mercer University School of Pharmacy, 1984
Ph.D., Nova Southeastern University, 2000
Fellow, American Society of Health-System Pharmacists

Morton A. Diamond
Medical Director and Professor, Physician Assistant Studies
Professor, Public Health
A.B., Cornell University, 1959
M.D., State University of New York, 1963
Fellow, American College of Physicians
Fellow, American College of Cardiology
Fellow, American Heart Association

Patricia Dittman
Director and Assistant Professor, Nursing
B.S.N., Salve Regina University, 1981
M.S.N., Florida Atlantic University, 1995
Ph.D., Florida Atlantic Unversity, 2007

Jon H. Dodds
Assistant Professor, Public Health
B.S., State University of New York, 1969
M.Ed., Temple University, 1971
Ph.D., Syracuse University, 1975
M.P.H., University of Miami, 1991

Rachelle Dorne
Associate Professor, Occupational Therapy
B.S., University of Wisconsin, 1975
M.Ed., University of Washington, 1979
Ed.D., Tennessee State University, 2004

Lori B. Dribin
Assistant Dean for Student Affairs
Professor, Anatomy
B.A., Northwestern University, 1972

M.S., Northwestern University, 1973
Ph.D., Northwestern University, 1975

Saulius Drukteinis
Assistant Professor, Periodontology
D.M.D., Tufts University, 1999
M.S., University of Alabama, 2003
CT—Periodontology, University of Alabama, 2003

Sandee Dunbar
Chair and Professor, Occupational Therapy
B.S., Loma Linda University, 1982
M.S., New York University, 1983
D.P.A., Nova Southeastern University, 2002

Anthony J. Dyda, Jr.
Associate Dean, Off-Campus Programs
Chair, Department of Distant PA Programs
Interim Program Director, PA Program—Orlando
B.A., Point Park College, 1979
B.S./P.A., United States Air Force/ Oklahoma University, 1981
M.P.A.S., University of Nebraska Medical Center, 1997
D.H.Sc., Nova Southeastern University, 2006
Fellow, American Academy of Physician Assistants
Fellow, Florida Academy of Physician Assistants

Martha S. Echols
Assistant Dean for Medical Education
Assistant Professor, Internal Medicine
B.A., Cleveland State University, 1973
M.Ed., Ashland University, 1991
Ph.D., Ohio University, 1998

Diane Ede-Nichols
Associate Professor and Chair, Community Dentistry
D.M.D., Fairleigh Dickinson University College of Dental Medicine, 1987
M.H.L., Nova Southeastern University, 2004

Alexandra Espejo
Assistant Professor, Optometry
O.D., Pennsylvania College of Optometry, 1996

Rogerio S. Faillace
Assistant Professor, Pediatrics
M.D., Fluminense Federal University, 1987
B.S.N., Barry University, 1992

Tracy Favreau
Instructor, Internal Medicine
B.S., Nova Southeastern University, 1996
D.O., Nova Southeastern University College of Osteopathic Medicine, 2001

Greg Fecho
Assistant Professor, Optometry
O.D., Nova Southeastern University, 2000

Norman Feigenbaum
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., Temple University, 1965
Fellow, American Academy of Cosmetic Dentistry

Harvey A. Feldman
Professor, Physician Assistant Studies
B.A., University of Pennsylvania, 1963
M.D., University of Pennsylvania, 1967
Fellow American College of Physicians
American Society of Nephrology.

Maria I. Fernandez
Professor, Preventive Medicine
Professor, Public Health
B.A., Florida International University, 1978
M.A., Michigan State University, 1981
Ph.D., Michigan State University, 1986

Raymond G. Ferrero III
Assistant Professor, Family Medicine
Assistant Professor, Public Health
B.A., Florida State University, 1991
J.D., Nova Southeastern University, 1995

Phyllis Filker
Assistant Professor, Cariology and Restorative Dentistry

D.M.D., University of Florida, 1980

Richard Finkel
Assistant Professor, Pharmaceutical and Administrative Sciences
B.S. (Pharm.), University of Florida, 1956
Pharm.D., Southeastern University College of Pharmacy, 1992

C. Richard Finley
Associate Professor, Physician Assistant Studies
B.S.P.A., University of Oklahoma, 1982
M.P.A.S., University of Nebraska, 1998
Ed.D. Nova Southeastern University, 2006
Fellow, American Academy of Physician Assistants
Fellow, Florida Academy of Physician Assistants

Jay M. Fleisher
Associate Professor, Public Health
B.S., Richmond College, 1974
M.S. College of Staten Island, 1977
M.S., Columbia University, 1990
Ph.D., New York Institute of Environmental Medicine, 1994

Rosebud Foster
Professor, Community Medicine, Public Health, and Community Dentistry
B.S.N., Meharry Medical College, 1956
M.S.N., Wayne State University, 1960
Ed.D., University of Miami, 1976

Barry Frauens
Assistant Professor, Optometry
B.S., Wilkes College, 1985
O.D., Nova Southeastern University, 1997

Barry Freeman
Chair and Professor, Audiology
B.S., Boston University, 1967
M.S., Emerson College, 1970
Ph.D., Michigan State University, 1975

Erica Freidland
Assistant Professor, Audiology
B.S., University of Florida, 1990
M.S., Vanderbilt University, 1992
Au.D., Nova Southeastern University, 2001

Elizabeth Frenzel-Shepherd
Director, Experiential Education
Assistant Professor, Pharmacy Practice
B.S. (Pharm.), Long Island University 1980
M.B.A., Florida International University, 1987

Deborah (Kathy) Fuller
Assistant Professor, Pharmaceutical and Administrative Sciences
B.S., University of Miami, 1980
Pharm.D., Nova Southeastern University, 1998

Patricia A. Gaffney
Assistant Professor, Audiology
B.A., The George Washington University, 2001
M.S., University of Pittsburgh, 2003
Au.D., University of Pittsburgh, 2005

Rashondia E. Gaines
Assistant Professor, Cariology and Restorative Dentistry
Director of Faculty Practice
B.A., Hampton University, 1994
D.D.S., Virginia Commonwealth University/Medical College of Virginia School of Dentistry, 1998
CT—AEGD, University of Missouri—Kansas City School of Dentistry, 1999

Sandrine Gaillard-Kenney
Assistant Professor and Director, Master of Health Science Program
B.A., Universite de la Sorbonne Nouvelle, 1995
M.A., Universite de la Sorbonne Nouvelle, 1997
M.A., Universite de la Sorbonne Nouvelle, 1998

Clark D. Galin
Executive Liaison, Implant Dentistry
Executive Director, Continuing Education
Associate Professor, Periodontology
D.D.S., Indiana University School of Dentistry, 1972
CT—University of Illinois, 1974
Fellow, American College of Dentists

Audrey Galka
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., New York University, 1980

Colpan K. Galperin
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., University of Istanbul, 1960
CT, New York University, 1964

Samuel Galperin
Assistant Professor, Periodontology
D.D.S., Universidad Nacional de Colombia, 1958
CT—New York University, 1964
Fellow, Dental Staff in Clinical Pedodontia

Alice Gandell
Clinical Instructor, Occupational Therapy
B.S., University of Illinois, 1965
M.S.M.F.P., Nova Southeastern University, 1998

Nathalie Garbani
Assistant Program Director
Assistant Professor, Health Science
B.S., Emmanuel College, 1990
M.S., University of Massachusetts—Lowell, 2001

Franklin Garcia-Godoy
Associate Dean for Research
Professor, Pediatric Dentistry
Professor, Cariology and Restorative Dentistry
D.D.S., University of Santo Domingo, 1976
M.S., University of Illinois, 1979
CT—Pediatric Dentistry, University of Illinois, 1979

David M. Gazze
Clinical Assistant Professor, Pharmaceutical and Administrative Sciences
B.S., University of Pittsburgh, 1980
Ph.D., University of Pittsburgh, 1987

Richard Gelman
Assistant Professor, Endodontics
D.M.D., University of Pittsburgh, 1971
CT—Endodontics, Medical College of Virginia, 1979

William A. Gibson
Professor and Chair, Pathology
B.A., Ohio State University, 1951
M.A., Ohio State University, 1952
D.D.S., Ohio State University, 1956
M.D.S., Tuffs University, 1961
Ph.D., Georgetown University, 1975

Nadine Girgis
Assistant Professor of Optometry
O.D., Indiana University, 2003

Mark L. Glover
Associate Professor, Pharmacy Practice
B.S., North Carolina State University, 1985
B.S., University of North Carolina, 1988
Pharm.D., University of North Carolina, 1994

Jeffrey Godel
Director, Postgraduate Programs
Assistant Professor, Orthodontics
D.D.S., Howard University, 1980

Marvin J. Golberg
Assistant Professor, Prosthodontics
D.D.S., University of Maryland, 1956

Barry M. Goldman
Professor and Director, Postgraduate Prosthodontics
D.D.S., Emory University, 1964
M.S., University of Texas—Baylor College of Dentistry, 1972
CT—Prosthodontics, Houston VA Hospital, 1972
Diplomate, American Board of Prosthodontics, 1975

Laurel A. Gorman
Associate Professor, Pharmacology
B.S., University of Florida, 1986
Ph.D., Louisiana State Medical School, 1994

N. Scott Gorman
Professor, Optometry
O.D., Southern College of Optometry, 1973
M.S., Nova Southeastern University, 1994
Ed.D., Nova Southeastern University, 2003
Fellow, American Academy of Optometry

Anton Gotlieb
Associate Professor, Prosthodontics
B.A., Syracuse University, 1969
D.D.S., Temple University School of Dentistry, 1973
M.S., Nova Southeastern University, 2005
Fellow, International College of Dentists, 2002
Fellow, American College of Dentists, 2006

A. Alvin Greber
Professor, Internal Medicine
B.A., University of Pennsylvania, 1954
D.O., Philadelphia College of Osteopathic Medicine, 1958
Fellow, American College of Osteopathic Internists

Edye Elizabeth Groseclose
Professor, Biochemistry
Assistant Professor, Public Health
B.S., University of Miami, 1965
Ph.D., University of Miami School of Medicine, 1978

Robert C. Grosz
Professor, Physician Assistant Studies
Professor, Public Health
B.A., Adelphi University, 1964
M.S., Adelphi University, 1966
Ed.D., Nova University, 1974

Nestor Guzman
Assistant Professor, Prosthodontics
D.D.S., Universidad Javeriana Bogota Colombia, 1983
D.M.D., Nova Southeastern University, 2004

Howard S. Hada
Assistant Dean for Academic Affairs
Professor and Chair, Microbiology
B.A., University of Texas, 1974
M.S., University of Texas, 1977
Ph.D., University of Houston, 1981

Teri Hamill
Associate Professor, Audiology
B.A., University of Central Florida, 1982
M.S., Florida State University, 1983
Ph.D., Florida State University, 1986

Janet K. Hamstra
Assistant Professor, Internal Medicine
B.A., Calvin College, 1980
M.S., California State University, 1987
Ed.D., University of California, 1996

Delia Harper-Celestine
Assistant Professor, Public Health
B.S., Brooklyn College City University of New York, 1991
M.P.H., New York University School of Education, 1997

Patrick Hardigan
Associate Professor, Public Health
B.S., Ferris State College, 1987
M.B.A., University of Wyoming, 1991
Ph.D., University of Wyoming, 1996

Betty-Jean Harris
Assistant Dean, Experiential Education and Student Services
B.Sc., Philadelphia College of Pharmacy and Science, 1975
Pharm.D., Nova Southeastern University College of Pharmacy, 1994

Robert T. Hasty
Assistant Professor, Internal Medicine
B.S., University of Miami, 1996
D.O., Nova Southeastern University College of Osteopathic Medicine, 2000

Joel Hauptmann
Assistant Professor, Prosthodontics
D.D.S., Columbia University, 1964
Fellow, American College of Dentists
Fellow, International College of Dentists

Madeleine A. Hellman
Director and Associate Professor, PT Ph.D. Program
B.S.P.T., Florida International University, 1980
M.H.M., St. Thomas University, 1990
Ed.D., Nova Southeastern University, 2001

Maria Hernandez
Assistant Professor, Pharmaceutical and Administrative Sciences
B.S., Simon Bolivar University, 1977
Ph.D., University of Michigan, 1984

Maria A. Hernandez
Postdoctoral Associate Program Director and Assistant Professor, Periodontology
D.D.S., University of Carabobo, Valencia-Venezuela, 1998
CT—Periodontics, University of Pennsylvania, School of Medicine, 2003
Implant Fellowship, University of Pennsylvania, School of Medicine, 2004

Jorge Hervas
Assistant Professor, Prosthodontics
D.D.S., Central University of Ecuador

Cheryl J. Hill
Professor, Physical Therapy
B.S./P.T., Medical College of Virginia, 1973
M.S., Nova Southeastern University, 1979
Ph.D., Nova Southeastern University, 2001

Gary R. Hill
Assistant Professor, Internal Medicine
A.A., Brookdale Community College, 1971
B.S., Glassboro State College, 1973
D.O., Philadelphia College of Osteopathic Medicine, 1984

Lauren Hojdilla
Assistant Professor, Anesthesiologist Assistant
B.A., Case Western Reserve University, 2001
M.S., Case Western Reserve University, 2003

Peter Holub
Assistant Professor, Health Science
B.A., University of California—Berkeley, 1979
B.S., California College of Podiatric Medicine, 1982
D.P.M., California College of Podiatric Medicine, 1984
M.S., Pennsylvania State University, 2002

Timothy Hottel
Executive Associate Dean, Academic and Financial Affairs
Professor, Prosthodontics
D.D.S., Case Western Reserve University, 1973
M.S., Case Western Reserve University, 1975
Fellow, American College of Dentists, 2002

James T. Howell
Professor, Rural Medicine
Professor, Public Health
B.S., St. John's University, 1962
M.D., New York Medical College, 1966
M.P.H., Harvard University School of Public Health, 1972

Myron Howell
Associate Professor, Family Medicine
B.S. (Pharm.), Philadelphia College of Pharmacy and Science, 1959
D.O., Philadelphia College of Osteopathic Medicine, 1963

Chiu-jen Hsu
Assistant Professor, Prosthodontics
B.D.S., China Medical College, Taichung, Taiwan, 1988
D.D.S., New York University, 1992
CT—AEGD, Lutheran Medical Center, 1993

CT—Postgraduate Prosthodontics Program, Columbia University, 1995
CT—Maxillofacial Prosthodontics Fellowship, Bronx VA Medical College, 1996

Charles Huang
Assistant Professor, Pediatric Dentistry
Ph.D., Columbia University, 2001

Max Ito
Director and Associate Professor, Occupational Therapy Doctoral Programs
B.S., University of Oklahoma, 1978
M.S., Kansas State University, 1981
Ph.D., University of Texas at Austin, 1994

Lawrence E. Jacobson
Professor, Neurology
B.S., Ursinus College, 1953
D.O., Chicago College of Osteopathic Medicine, 1962

Robert Jacobson
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., University of Pennsylvania, 1960

Pamela B. Jaffey
Associate Professor, Physician Assistant Studies
A.B., Columbia University, 1981
M.D., New York Medical College, 1986
Fellow, American Society of Clinical Pathologists

Andrea Janoff
Assistant Professor, Optometry
O.D., New England College of Optometry, 1986

Sherman Jew
Instructor, Preventive Medicine
D.O., Kansas City University of Medicine and Biosciences, 2005

Bai-Chuan Jiang
Professor, Optometry
B.S., Fuuan University, 1966
M.S., Shanghai Institute of Physiology, 1982
Ph.D., Shanghai Institute of Physiology, 1986

Ana M. Jimenez
Associate Professor, Physiology
B.S., Barry University, 1993
Ph.D., University of Miami, 2000

Diane John
Assistant Professor, Nursing
B.S.N., Florida Atlantic University, 2001
M.S.N., Florida Atlantic University, 2003

Kenneth E. Johnson
Associate Professor, Obstetrics/Gynecology
Associate Professor, Public Health
B.S., Florida State University, 1981
D.O., Southeastern University College of Osteopathic Medicine, 1991

Broderick Jones
Associate Professor, Pathology
B.S., Tuskegee University, 1979
M.S., Tuskegee University, 1982
M.D., University of Miami, 1992

Alan G. Kabat
Associate Professor, Optometry
B.A., Rutgers University, 1986
B.S., Pennsylvania College of Optometry, 1987
O.D., Pennsylvania College of Optometry, 1990

Steven Kaltman
Chair and Professor, Oral and Maxillofacial Surgery
D.M.D., University of Pittsburgh, 1973
M.D., University of Health Sciences, Antigua, 2000

Pamela Kasyan-Itzkowitz
Assistant Professor, Occupational Therapy
B.A., University of Florida, 1993
M.S., Florida International University, 1997

Julie B. Keena
Program Director and Associate Professor, Physician Assistant Studies
B.A., Agnes Scott College, 1985
M.M.Sc./P.A., Emory University, 1987
Fellow, American Academy of Physician Assistants

Peter Keller
Executive Associate Dean of Procurement and Facilities
Associate Professor, Cariology and Restorative Dentistry
D.D.S., New York University College of Dentistry, 1967
Fellow, International College of Dentists
Fellow, American College of Dentists, 1998

Patricia E. Kelly
Associate Professor, Health Science
Director, Doctor of Health Science Program
B.A., State University of New York—Binghamton, 1973
P.A., Stanford University Medical Center, 1980
M.H.S., University of California, 1982
Ed.D., Nova Southeastern University, 2000

Steven Kelner
Associate Dean of Institutional Affairs
Professor, Endodontics
D.M.D., University of Pennsylvania, 1979
CT—Endodontics, University of Pennsylvania, 1986
M.S. Marketing, Roosevelt University, 1996

Brianna Kent
Assistant Professor, Health Science
B.S.N., University of St. Thomas, 1979
M.S., University of Houston, 1984
Ph.D., Nova Southeastern University, 2006

Stanley Kessel
Assistant Professor, Orthodontics
D.D.S., Ohio State University, 1946
CT— Orthodontics, Ohio State University, 1950

Nile Khanfar
Assistant Professor, Pharmacy Science
B.S., Northwestern State University, 1987
M.B.A., University of Louisiana, 2001
Ph.D., University of Louisiana, 2005

Evren Kilinc
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., Ege University, 1998
Ph.D., Ege University, 2006

David L. King
Assistant Professor, Physiology
B.S., Virginia Commonwealth University, 1977
M.A., University of North Carolina—Greensboro, 1979
B.S., University of North Carolina—Wilmington, 1992
B.A., University of North Carolina—Wilmington, 1992
Ph.D., University of South Florida, 2000

Jodi Kodish-Stav
Director, Informatics
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., Emory University, 1982
Fellow, Academy of General Dentistry

Frederick Kohler
Professor, Prosthodontics
D.D.S., Temple University School of Dentistry, 1957
Fellow, International College of Dentistry

Morey Kolber
Assistant Professor
B.H.S., University of Miami, 1993
M.S.P.T., University of Miami, 1995
Ph.D., Nova Southeastern University, 2007

David Kotun
Clinical Director and Assistant Professor, Physician Assistant Studies
B.S., Oklahoma University, 1985
M.S., University of Nebraska, 1998
Fellow, American Academy of Physician Assistants

Fellow, Florida Academy of Physician Assistants
Fellow, Society of Air Force Physician Assistants
Fellow, American College of Clinicians

Lawrence Krasne
Associate Professor, Prosthodontics
D.D.S., St. Louis University, 1954
Fellow, International College of Dentistry
Fellow, Royal Society of Health

Sheama Krishnagiri
Associate Professor, Occupational Therapy
B.S., University of California—Los Angeles, 1986
M.A., University of Southern California, 1989
Ph.D., University of Southern California, 1994

Jan E. Kronmiller
Chairman and Professor, Orthodontics
B.S., Ohio State University, 1978
D.D.S., Ohio State University, 1978
CT—Pediatric Dentistry, Oregon Health and Science University, 1980
CT—Orthodontics, University of Connecticut, 1991
Ph.D., University of Connecticut, 1991
Fellow, American College of Dentists, 1995
Fellow, International College of Dentists, 1996

Marina Kulick
Instructor, Preventive Medicine
M.D., Samara State Medical University, 1986

Andrew M. Kusienski
Assistant Professor, Osteopathic Principles and Practice
B.S., St. Joseph University, 1996
D.O., Lake Erie College of Osteopathic School of Medicine, 2001

Sergio Kuttler
Assistant Dean for Advanced Education Programs
Associate Professor, Endodontics
D.D.S., Universidad Tecnologica de Mexico, D.F., 1978
CT— Endodontics, University of Southern California, 1984
Fellow, International College of Dentists

Carlos Ladeira
Assistant Professor, Physical Therapy
B.S. PT, Universidade Federal de Minas Gerais, 1987
M.S. PT, University of Alberta, 1991
Ed.D., Nova Southeastern University, 2007

L. Leanne Lai
Associate Professor, Pharmaceutical and Administrative Sciences
B.S. (Pharm.), Kaohsiung Medical College, Taiwan, 1990
Ph.D., University of Maryland, 1996

Elaine D. Lara
Assistant Professor, Prosthodontics
D.M.D. equivalent degree, Odontologo, Universidad Central de Venezuela, 1999
CT—Prosthodontics, Nova Southeastern University, 2003

Jose Larumbe
Assistant Professor, Pediatric Dentistry
D.D.S., Universidad Tecnologica de Mexico, D.F., 1975
CT—Pediatric Dentistry, University of Boston, 1979

Cynthia Last
Professor, Behavioral Science
Ph.D., State University of New York at Albany, 1982

Harold E. Laubach
Dean, College of Medical Sciences
Professor, Microbiology
Professor, Public Health
B.S., Southwestern Oklahoma State University, 1968
M.S., Oklahoma State University, 1975
Ph.D., Oklahoma State University, 1977

Janet Leasher
Assistant Professor, Optometry
O.D., Pacific University, 1986
M.P.H., Tulane University, 1999

Susan Ledbetter
Assistant Professor, Family Medicine
Assistant Professor, Geriatrics
B.A., University of Florida, 1992
D.O., Philadelphia College of Osteopathic Medicine, 1999

Harry Lehrer
Assistant Professor, Cariology and Restorative Dentistry
D.M.D., University of Florida, 1984

Roni Cohen Leiderman
Affiliated Professor, Child Development Specialist
B.S., Boston University, 1972
M.S., Lesley College, 1974
Ph.D., Nova University, 1986

Sean Leonard
Assistant Professor/Psychometrician, Pharmaceutical and Administrative Sciences
B.A., Miami University, 1993
M.S., Nova Southeastern University, 1995
Ph.D., Nova Southeastern University, 2001

Simon Leung
Assistant Professor, Pharmacy Practice
B.S. (Pharm.), University of Toledo, 1994
M.S. Pharm., University of Toronto, 1999
Pharm.D., University of Cincinnati, 2001

Lawrence Levin
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., Fairleigh Dickinson University, 1965

Leonard A. Levy
Professor, Family Medicine
Professor, Public Health
B.A., New York University, 1956
D.P.M., New York College of Podiatric Medicine, 1961
M.P.H., Columbia University School of Public Health, 1967

Charles Lewis
Assistant Professor, Health Science
B.A., Newberry College, 1969
P.A., Duke University, 1971
M.P.H., University of South Carolina School of Public Health, 1982

Marie Valentine Lim
Assistant Professor, Prosthodontics
D.M.D., University of Pennsylvania, 1993
M.S.D., University of Washington, 2000

Fred Lippman
Chancellor, Health Professions Division
Professor, Community Medicine
Professor, Public Health
B.S. (Pharm.), Columbia University College of Pharmacy, 1958
Ed.D., Nova Southeastern University, 2003

Hal Lippman
Assistant Dean, Admissions and Student Affairs
Assistant Professor, Prosthodontics
D.D.S., University of New York, 1975

Bini Litwin
Associate Professor, Physical Therapy
B.S./P.T., State University of New York, 1966
M.B.A., Barry University, 1990
Ph.D., Nova Southeastern University, 2005

Adam Lloyd
Assistant Professor, Endodontics
B.D.S., University of Wales College of Medicine, 1994
M.S., Baylor College of Dentistry, Texas A&M Health Science Center, 2001
CT—Endodontics, Baylor College of Dentistry, 2001

David S. Loshin
Dean, College of Optometry
Professor, Optometry
B.S., Rochester Institute of Technology, 1971
M.S., Ohio State University, 1974
O.D., Ohio State University, 1975

Ph.D., Ohio State University, 1977
Fellow, American Academy of Optometry

Jennie Q. Lou
Professor, Internal Medicine
Professor, Public Health
B.H.Sc., McMaster University, 1984
M.D., Shanghai Medical University, 1987
M.Sc., McMaster University, 1992

Carla A. Luque-Rey
Associate Professor, Pharmaceutical and Administrative Sciences
Pharm.D., Nova Southeastern University College of Pharmacy, 1994

Nicholas Lutfi
Assistant Professor, Anatomy
B.S., Central University of Venezuela, 1981
M.S., Barry University, 1996
D.P.M., Barry University, 1997

Barbara J. MacDougall
Assistant Professor, Nursing
A.D.N., Miami-Dade Community College, 1984
B.S.N., University of Miami, 1989
M.S.N., Florida International University, 1994

Thomas MacFarland
Associate Professor, Health Science
B. S., Western Kentucky University, 1973
M.S., Western Kentucky University, 1982
Ed.D., Nova University, 1986

Caridad Machado
Assistant Professor, Pharmacy Practice
A.A., Miami Dade Community College, 1996
Pharm.D., Nova Southeastern University, 2000

Andrés Malavé
Dean, College of Pharmacy
Professor, Pharmaceutical and Administrative Sciences
B.S., University of Puerto Rico, 1972
M.S., Purdue University, 1981
Ph.D., Purdue University, 1983

Lillian Arce-De Malavé
Clinical Assistant Professor, Pharmaceutical and Administrative Sciences
Pharm.D., Nova Southeastern University, 2001

Maria Mandese
Instructor, Optometry
O.D., NSU College of Optometry, 2006

Maria Maniscalco
Assistant Professor, Pharmacy Practice
B.S., St. John's University, 1977
Pharm.D., St. John's University, 2002

Andrew T. Mariassy
Professor, Anatomy
Assistant Professor, Public Health
B.S., University of California, 1969
M.S., University of California 1972
Ph.D., University of California, 1980

Julie Marin
Academic Facilitator, Pharmacy
B.S., UPR Rio Piedras Campus, 1985
Pharmacy Technician, National College Bayamón, Puerto Rico, 1988
Pharm.D., Nova Southeastern University, 2006

Jehan Marino
Assistant Professor, Pharmacy Practice
Pharm.D., Northeastern University, 2004

William H. Marquardt
Chair and Associate Professor, Physician Assistant Department
B.S., University of Nebraska, 1976
M.A., Central Michigan University, 1979
Fellow, American Academy of Physician Assistants

Harvey N. Mayrovitz
Professor, Physiology
B.S., Drexel University, 1962
M.S., Drexel University, 1966
Ph.D., University of Pennsylvania, 1974

Joseph P. McCain
Professor, Oral and Maxillofacial Surgery
D.M.D., University of Pittsburgh, 1975
CT—General Practice Residency, University of Miami, 1976
CT—Oral and Maxillofacial Surgery, University of Miami, 1979
Fellow, American Association of Oral and Maxillofacial Surgeons, 1979
Diplomate, American Board of Oral and Maxillofacial Surgeons, 1984

Odoo K. McCallum
Assistant Professor, Physician Assistant Studies
B.S., Florida International University, 2000
M.P.H., Maastricht University, 2004

Heather McCarthy
Instructor, Sports Medicine
B.S., Florida Southern College, 1999
D.O., Nova Southeastern University College of Osteopathic Medicine, 2004

Shawn McClure
OMFS Director of Research
D.M.D., Temple University, 1999
M.D., State University of New York, 2002

Marc E. McCollaum
Assistant Professor, Physician Assistant Studies
P.A., Western University of Health Sciences, 1996
B.S., Excelsior College, 2000
Fellow, American Academy of Physician Assistants
Fellow, Florida Academy of Physician Assistants
Fellow, Urological Association of Physician Assistants

Arnold Melnick
Professor, Pediatrics
Professor, Public Health
Professor, Medical Communications
A.B., Temple University, 1941
D.O., Philadelphia College of Osteopathic Medicine, 1945
M.A., Temple University, 1948
M.Sc., Philadelphia College of Osteopathic Medicine, 1953
Fellow, American College of Osteopathic Pediatricians
Fellow, American College of Osteopathic Obstetricians and Gynecologists

Gary J. Merlino
Assistant Professor, Internal Medicine
B.A., University of South Florida, 1986
D.O., Southeastern University College of Osteopathic Medicine, 1992

Miriam Metzner
Assistant Professor, Pharmacy Practice
Pharm.D., University of Missouri, 1998

Cesar Migliorati
Director and Professor, Diagnostic Sciences
D.D.S., University of Sao Paulo, Brazil, 1972
M.S., University of California, 1984

Bokyung Min
Assistant Professor, Pharmacy Practice
B.S., Hyosung Women's University, 1993
Pharm.D., University of Kentucky, 2001

Christopher Mitchell
Assistant Professor and Director, Bachelor of Health Science Programs
B.A., Lynchburg College, 1989
M.S., Nova Southeastern University, 1999

Mary Ellen Mitchell-Rosen
Assistant Professor, Nursing
B.S.N., University of Delaware, 1977
M.S.N., University of Phoenix, 2001

Bertram Moldauer
Associate Director, Postdoctoral Endodontics
Assistant Professor, Endodontics
D.M.D., Nova Southeastern University, 2003

Morton J. Morris
Professor, Orthopedic Surgery
Professor, Community Medicine
Professor, Public Health

B.A., Temple University, 1952
D.O., Kirksville College of Osteopathic Medicine, 1956
J.D., University of Miami School of Law, 1981
Fellow, American Osteopathic Academy of Orthopedics
Fellow, American College of Osteopathic Surgeons
Fellow, College of American Quality Assurance and Utilization Review Physicians
Fellow, American College of Legal Medicine

Peter Murray
Director, Biological Research
Associate Professor, Endodontics
Ph.D., University of Birmingham, 2000

Perla Najman
Assistant Professor, Optometry
B.A., Universidad de las Americas, 1976
O.D., Nova Southeastern University, 1999

Kenneth Namerow
Chair and Associate Professor, Endodontics
D.D.S., Fairleigh Dickinson University, 1985
CT— Endodontics, Columbia University, 1972

Howard Neer
Professor, Family Medicine
B.A., Miami University, 1949
D.O., Chicago College of Osteopathic Medicine, 1954
Fellow, American College of Osteopathic Family Physicians

Guy M. Nehrenz
Associate Dean, College of Allied Health and Nursing
Chair and Associate Professor, Health Sciences Department
B.S., University of St. Francis, 1989
M.A., University of Phoenix, 1992
Ed.D., Nova Southeastern University, 1995

Maryke Neiberg
Assistant Professor, Optometry
O.D., New England College of Optometry, 1998

Michael Nichols
Assistant Director and Assistant Professor, Anesthesiologist Assistant
B.S., University of Dayton, 1998
M.S., Case Western Reserve University, 2000

Leah Nof
Professor, Physical Therapy
M.S., University of Wisconsin, 1978
Ph.D., Florida State University, 1994

Romer A. Ocanto
Chair and Associate Professor, Pediatric Dentistry
M.S.P.H., Boston University, 1984
M.Ed., University of Florida, 1985
D.D.S., Creighton University, 2000
Fellow, American College of Dentists, 2007

Terry Ogilby
Associate Professor, Nursing
B.S.N., University of South Florida, 1990
M.S.N., University of South Florida, 1994
M.P.H., University of South Florida, 1998
Ph.D., Capella University, 2004

Pamela R. Oliver
Associate Professor, Optometry
O.D., State University of New York, 1990
M.S., Nova Southeastern University, 1998

Robert Oller
Professor, Family Medicine
Professor, Public Health
B.A., University of California, 1965
D.O., Kirksville College of Osteopathic Medicine, 1969

Hamid Omidian
Assistant Professor, Pharmaceutical and Administrative Sciences
B.S., Tehran Polytechnique University, 1987
M.S., Tehran Polytechnique University, 1990
Ph.D., Brunel University, 1997

William Orr
Assistant Professor, Anesthesiologist Assistant
B.S., Albany State, 1993
M.M.Sc., Emory University, 1996

Blanca Ortiz
Assistant Professor, Pharmacy Practice
B.S., University of Puerto Rico, 1993
M.S., University of Puerto Rico, 1998
Pharm.D., Nova Southeastern University, 2003

Frances Ortiz
Assistant Professor, Pharmacy Practice
Pharm.D., Nova Southeastern University, 2000
M.B.A., Nova Southeastern University, 2001

Jonette Owen
Assistant Professor, Audiology
B.A., Loyola College, 1983
M.A., Towson State University, 1986
Au.D., Pennsylvania College of Optometry, School of Audiology, 2003

Edward E. Packer
Associate Professor, Pediatrics
B.A., Rutgers University, 1971
D.O., Philadelphia College of Osteopathic Medicine, 1976

David S. Pallister
Assistant Professor, Occupational Therapy
B.S., Wagner College, 1982
M.A., New York University, 1995
J.D., Rutgers School of Law, 2006

Thomas A. Panavelil
Associate Professor, Pharmacology
B.S., University of Kerala, India, 1979
M.Sc., National Dairy Research Institute, India, 1983
Ph.D., University of Miami School of Medicine, 1998

Naushira Pandya
Associate Professor, Geriatrics
Associate Professor, Internal Medicine
M.D., University College & Middlesex Medical School, 1979

Frederick A. Paola
Medical Director and Associate Professor, Physician Assistant Studies
B.S., State University of New York at Stony Brook, 1980
M.D., Yale University School of Medicine, 1984
Diplomate, American Board of Internal Medicine, 1987
J.D., New York University, 1991

Panayotis Papatizimas
Assistant Professor, Periodontology
D.D.S., Virginia Commonwealth University, 1991

Judith Parker
Associate Professor, Occupational Therapy
B.S., Adelphi University, 1975
M.S., Columbia University, 1979
O.T.D., Creighton University, 2004

Michael Parker
Assistant Professor, Pharmacology
B.A., University of San Diego, 1990
Ph.D., University of Miami School of Medicine, 1999

William Parker
Chair, Director, and Associate Professor, Periodontology
D.D.S., Medical School of Virginia School of Dentistry, 1977
CT—Periodontics, Naval Postgraduate Dental School, Maryland, 1984
Diplomate, American Board of Periodontology, 1989

Marianna Pascuita
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., University of Venezuela, 1998

Kyrus E. Patch
Assistant Professor, Physician Assistant Studies
B.S./P.A., Alderson-Broaddus College, 1977

M.S., Alderson-Broaddus College, 2007
Fellow, American Academy of Physician Assistants
Fellow, Florida Academy of Physician Assistants

Arnie Patrick
Assistant Professor, Optometry
B.A., Brooklyn College, 1975
O.D., Nova Southeastern University College of Optometry, 1994

Michael M. Patterson
Professor, Osteopathic Principles and Practice
B.A., Grinnell College, 1964
Ph.D., University of Iowa, 1969

Nicole Patterson
Assistant Professor, Optometry
B.A., Loras College, 1998
O.D., Southern College of Optometry, 2002

Cathy Peirce
Assistant Professor, Occupational Therapy
B.S., Ohio State University, 1974
M.A., University of Southern California, 1984
Ph.D., Nova Southeastern University, 2002

John C. Pellosie, Jr.
Assistant Professor, Preventive Medicine
D.O., Philadelphia College of Osteopathic Medicine, 1978
M.P.H., University of Texas School of Public Health, 1984

Alina M. Perez
Assistant Professor, Public Health
B.S., Florida Medical College, 1985
M.S.W., Barry University, 1988
J.D., University of Miami, 1996

Stephen Pfister
Associate Professor, Physical Therapy
B.S., University of Wisconsin, 1993
M.S., University of Pittsburgh, 1998

Joseph J. Pizzimenti
Associate Professor, Optometry
B.A., Drew University, 1985
O.D., Illinois College of Optometry, 1989
Fellow, American Academy of Optometry

Brian Portnoy
Associate Professor, Dermatology
B.S., University of Florida, 1988
D.O., New York University, 1992
Fellow, American College of Dentists
Fellow, American Association of Oral and Maxillofacial Surgeons
Fellow, American Dental Society of Anesthesiology
Fellow, American College of Oral and Maxillofacial Surgeons

Mara Poulakos
Assistant Professor, Pharmacy Practice
B.S. (Pharm.), University at Buffalo, 1999
Pharm.D., University at Buffalo, 2000

Charles Powell
Associate Professor, Pharmacology
B.S., Florida State University, 1983
M.S., Florida A&M University, 1988
Ph.D., Florida A&M University, 1996

Peter R. Pugliese
Clinical Instructor, Cariology and Restorative Dentistry
B.S., Ohio State University, 1960
D.D.S., Ohio State University College of Dentistry, 1964

Cheryl Purvis
Associate Professor, Anatomy
B.S., University of South Carolina, 1986
Ph.D., University of Kentucky College of Medicine, 1998

Harvey Quinton
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., Howard University, 1978

John Rafalko
Associate Professor, Physician Assistant Studies
B.S., Towson State University, 1984

A.A./P.A., Essex Community College, 1986
M.S., Towson State University, 1992
Fellow, American Academy of Physician Assistants

Robert Ramer
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., New Jersey College, 1965

Mary Ann Ramirez
Assistant Professor, Pharmaceutical and Administrative Sciences
Pharm.D., Texas Tech University, 2002

Wanda Ramos
Assistant Professor, Health Science
B.S., University of Puerto Rico, 1982

Sarah Ransdell
Associate Professor, Allied Health and Nursing
B.A., University of Kentucky, 1983
M.S., University of Florida, 1985
Ph.D., University of Florida, 1987

Hugh G. Rappa
Academic Director and Professor, Physician Assistant Studies
B.S., Queens College, 1978
M.D., University of Padua, Italy, 1991
Fellow, American Association of International Physicians
Fellow, American Educators of Radiological Sciences

Appu Rathinavelu
Chair and Associate Professor, Pharmaceutical and Administrative Sciences
B.S., University of Madras, 1978
M.S., University of Madras, 1980
M.Phil., University of Madras, 1981
Ph.D., University of Madras, 1985

Sergio Rauchwerger
Assistant Professor, Prosthodontics
D.D.S., Universidad Central de Venezuela, 1995
M.M.Sc., Harvard University, 2000

Kimberly Kay Reed
Associate Professor, Optometry
B.S., Auburn University, 1986
O.D., University of Alabama College of Optometry, 1990
Fellow, American Academy of Optometry

Lewis Reich
Associate Professor, Optometry
O.D., University of California at Berkeley College of Optometry, 1988
M.S., Pennsylvania College of Optometry, 1990
Ph.D., University of Houston, 1999
Fellow, American Academy of Optometry

Charles E. Reigel, Jr.
Professor and Chair, Pharmacology
B.A., Northeast Louisiana University, 1975
M.S., Northeast Louisiana University, 1978
Ph.D., Northeast Louisiana University, 1983

José A. Rey
Associate Professor, Pharmaceutical and Administrative Sciences
Pharm.D., University of Florida College of Pharmacy, 1991

Sherrol Reynolds
Assistant Professor, Optometry
B.A., University of Florida, 1991
O.D., Nova Southeastern University, 1996

Elysa Roberts
Assistant Professor, Occupational Therapy
B.A., Syracuse University, 1990
M.S., Florida International University, 1994
Ph.D., Nova Southeastern University, 2001

Gisela Robles
Assistant Professor, Pharmacy Practice
B.S., University of Texas, 1995
Pharm.D., University of New Mexico, 2001

Todd Rock
Assistant Professor, Physician Assistant Studies
B.S., Wayland Baptist University, 1991
B.S., University of Nebraska School of Medicine, 1994
M.P.A.S., University of Nebraska School of Medicine, 1997
Fellow, American Academy of Physician Assistants
Fellow, Veterans Caucus, American Academy of Physician Assistants

Jacqueline Rodena
Assistant Professor, Optometry
O.D., Nova Southeastern University, 2004

Cecilia F. Rokusek
Professor, Family Medicine
B.A., Mount Marty College, 1975
M.S., University of Nebraska, 1976
Ed.D., University of South Dakota, 1983

Mark A. Romer
Assistant Director, Predoctoral Clinics
Assistant Professor, Prosthodontics
D.D.S., Medical College of Virginia, 1970
Fellow, American College of Dentists, 2002
Fellow, International College of Dentists, 2004

Irving Rosenbaum
Executive Dean for Administration and Provost, Health Professions Division
Professor, Public Health
B.A., State University of New York at Buffalo, 1971
M.P.A., University of New York, 1974
D.P.A., Nova University, 1984
Ed.D., Nova Southeastern University, 2006

Rebecca Rosenthal
Associate Professor, Physical Therapy
B.S. PT, Sargent College, 1976
M.S., University of Michigan, 1978
J.D., Nova University, 1990

Mark Roth
Assistant Professor, Periodontology
D.D.S., New York University, 1967
CT—Periodontics, New York University, 1975

Linda S. Rouse
Assistant Professor, Optometry
O.D., Illinois College of Optometry, 1991
Fellow, American Academy of Optometry

Marcella Rutherford
Associate Professor, Nursing
B.H.S., Florida Atlantic University, 1990
M.B.A., Florida Atlantic University, 1997
M.S., Florida Atlantic University, 2003
Ph.D., Florida Atlantic University, 2007

Jay M. Rumsey III
Associate Professor, Optometry
B.S., University of West Florida, 1969
O.D., University of Houston, 1979
Fellow, American Academy of Optometry

Steven J. Sager
Assistant Professor, Physician Assistant Studies
B.S./P.A., University of Nebraska, 1992
M.P.A.S., University of Nebraska, 1998
Fellow, American Academy of Physician Assistants

Leonard Sakrais
Assistant Professor, Community Dentistry
D.D.S., New York University, 1945

Diane L. Sanders
Assistant Professor, Geriatrics
B.S., University of Florida, 1997
D.O., University of Health Sciences College of Osteopathic Medicine, 2003

Mark Sandhouse
Associate Professor, Osteopathic Principles and Practice
B.S., University of Miami, 1981

D.O., Southeastern University College of Osteopathic Medicine, 1988

Nisaratana Sangasubana
Assistant Professor, Pharmaceutical and Administrative Sciences
B.S., Chulalongkorn University School of Pharmacy, 1993
M.S., University of Wisconsin—Madison School of Pharmacy, 2002
Ph.D., University of Wisconsin—Madison School of Pharmacy, 2003

Richard Saul
Associate Professor, Audiology
B.A., University of Florida, 1973
M.A., Florida Atlantic University, 1976
Ph.D., State University of New York at Buffalo, 1983

Tamer Cem Sayin
Assistant Professor, Endodontics
D.D.S., Hacerrepe University, 2000
Ph.D., Hacerrepe University, 2007

Judith P. Schaffer
Assistant Professor, Family Medicine
B.A., Boston University, 1976
D.O., West Virginia School of Osteopathic Medicine, 1985

Scott Schatz
Professor, Optometry
Assistant Professor, Public Health
B.Sc., Suffolk University, 1973
M.Sc., Old Dominion University, 1975
Ph.D., University of Massachusetts, 1981
O.D., New England College of Optometry, 1991
Fellow, American Academy of Optometry

Debbie Glasser Schenk
Affiliated Professor, Child Development Specialist
B.A., Wellesley College, 1987
M.S., Nova Southeastern University, 1991
Ph.D., Nova Southeastern University, 1996

Zoeanne Schinas
Assistant Professor, Optometry
O.D., Nova Southeastern University, 2004

James Schiuma
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., New York University College of Dentistry, 1965

Wayne A. Schreier
Associate Professor, Physiology
B.S., Southern Illinois University, 1977
M.S., University of California—Los Angeles, 1987
Ph.D., University of California—Los Angeles, 1991

Mark Schweizer
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., University of Maryland, 1982

Andrea Sciberras
Assistant Professor, Internal Medicine
B.S., Cornell University, 1997
D.O., Kirksville College of Osteopathic Medicine, 2003

Sandi D. Scott-Holman
Assistant Professor, Family Medicine
B.S., Barry University, 1976
D.O., Southeastern University College of Osteopathic Medicine, 1993

Matthew Seamon
Assistant Professor, Pharmacy Practice
A.S., Nassau Community College, 1992
B.A., Florida Atlantic University, 1994
Pharm.D., University of Michigan, 1998

John Seeberg
Assistant Dean, Predoctoral Clinics
Director of Clinics
Assistant Professor, Cariology and Restorative Dentistry
D.M.D., University of Pennsylvania, 1969

Kenneth Seger
Associate Professor, Optometry
B.S., University of California—Berkeley, 1973
O.D., University of California—Berkley, 1975

M.Sc., University of Manchester, 1982
Fellow, American
Academy of Optometry

Robert Seltzer
Director of Predoctoral Endodontics
Associate Professor, Endodontics
D.M.D., University of Pennsylvania, 1972
CT—Endodontics,
University of Pennsylvania, 1976

Josephine Shallo-Hoffmann
Professor, Optometry
M.A., Rutgers University, 1978
Ph.D., Rutgers University, 1984

Eric C. Shamus
Associate Professor, Osteopathic Principles and Practice
B.S., Florida International University, 1992
M.S., Lynn University, 1997
Ph.D., Lynn University, 2001

Daniel E. Shaw
Associate Professor, Family Medicine
B.S., University of Florida, 1974
M.Ed., University of Florida, 1975
Ed.S., University of Florida, 1978
Ph.D., University of Florida, 1981

Diana Shechtman
Associate Professor, Optometry
O.D., Nova Southeastern University
College of Optometry, 1998

Eyad Shehadeh
Clinical Assistant Professor, and Director Community Dentistry
D.D.S., Damascus University, 1999
CT—AEGD, Nova
Southeastern University, 2004

Michael Siegel
Professor and Chair, Diagnostic Sciences
D.D.S. Baltimore College of Dental Surgery, 1979
CT—Prosthodontics, Baltimore College of Dental Surgery, University of Maryland, 1992
M.S., University of Maryland, 1995
Fellow, Academy of General Dentistry, 1986
Fellow, American College of Dentists, 2000
Fellow, Pierre Fauchard Academy, 2001
Fellow, International College of Dentists, 2006

Sharon Siegel
Chair and Associate Professor, Prosthodontics
D.D.S., Baltimore College
of Dental Surgery, 1979
CT—Prosthodontics, Baltimore College of Dental Surgery, University of Maryland, 1992
M.S., University of Maryland, 1995
Fellow, Academy of General Dentistry, 1986
Fellow, American College of Dentists, 2000
Fellow, Pierre Fauchard Academy, 2001
Fellow, International College of Dentists, 2006

Anthony J. Silvagni
Dean, College of Osteopathic Medicine
Professor, Family Medicine
Clinical Professor, Pharmacy Practice
Professor, Public Health
B.S. (Pharm.), Philadelphia College of Pharmacy and Science, 1963
M.S. (Pharm.), Philadelphia College of Pharmacy and Science, 1966
Pharm.D., Philadelphia College of Pharmacy and Science, 1970
D.O., Philadelphia College of Osteopathic Medicine, 1982
Fellow, American College of Osteopathic Family Physicians
Fellow, American Foundation for Pharmaceutical Education

John Silver
Assistant Professor, Nursing
B.S.N., Florida Atlantic University, 1998
M.S.N., Florida Atlantic University, 1999

Stanley L. Simpson
Associate Professor, Family Medicine

B.S., Temple University, 1959
D.O., Philadelphia College of
Osteopathic Medicine, 1974

Devada Singh
Assistant Professor, Pharmacy Practice
B.S. (Pharm.), Arnold & Marie Schwartz College of Pharmacy, 1995
Pharm.D., Arnold and Marie
Schwartz College of Pharmacy, 2000

Feroza Sircar-Ramsewak
Academic Facilitator, Pharmaceutical and Administrative Sciences
B.S., Long Island University, 1973
M.S., St. John's University, 1980
Pharm.D., Albany College of Pharmacy, 2004

Frank Slavichak
Assistant Professor and Director, Community Dentistry
D.D.S., Ohio State University, 1977

Samuel K. Snyder
Associate Professor, Nephrology
A.B., Princeton University, 1973
D.O., Philadelphia College of
Osteopathic Medicine, 1980

Donald Sokolik
Assistant Professor and Medical Director, Anesthesiologist Assistant
B.A., Washington University, 1968
M.D., Emory University, 1971

Lisa Soontupe
Associate Professor, Nursing
B.S.N., State University
of New York, 1975
M.A., New York University, 1983

Brenda Soto-Torres
Assistant Professor, Pharmaceutical and Administrative Sciences
B.S., University of
Puerto Rico, 1989
M.P.H.E., University of
Puerto Rico, 1993
Ph.D., University of
Missouri–Columbia, 1998

Oscar Sotsky
Assistant Professor, Orthodontics
D.D.S., New York University, 1955
M.S., New York University, 1989
Fellow, Pierre Fauchard Society

Joseph W. Sowka
Professor, Optometry
B.S., Cornell University, 1985
B.S., Pennsylvania College
of Optometry, 1987
O.D., Pennsylvania College of
Optometry, 1989
Fellow, American Academy of Optometry

Neil Spielholz
Professor, Oral and Maxillofacial Surgery
Ph.D., New York University, 1972

Debra C. Steinkohl
Assistant Professor, Family Medicine
Assistant Professor, Public Health
B.S./B.A., University of Florida, 1984
M.H.S.A., Florida International
University, 1985

Debra Feingold Stern
Assistant Professor, Physical Therapy
Assistant Professor, Public Health
B.S./P.T., State University
of New York at Buffalo, 1974
M.S.M., Rollins College, 1977
D.B.A., Nova Southeastern
University, 2003

Sabrina Stern
Assistant Professor, Nursing
B.A., University State of New York, 1990
M.S.N., University of Phoenix, 2005

Linda Strommen
Program Director and Assistant Professor, Nursing
B.S.N., College of St. Benedict's, 1983
M.S.N., St. Joseph's College, 2002

Gabriel P. Suciu
Associate Professor, Public Health
Ph.D., Romanian Academy, 1999

M.S.P.H., University of South Carolina of Public Health, 2001

P. Stephen Taraskevich
Professor, Physiology
B.A., University of California — Los Angeles, 1967
M.A., University of California — Los Angeles, 1969
Ph.D., University of California — Los Angeles, 1973

Yin Tea
Assistant Professor, Optometry
B.S., University of California— Los Angeles, 1995
O.D., Southern California College of Optometry, 1999

David L. Thomas
Professor, Surgery
Professor, Public Health
A.B., University of Miami, 1966
M.D., University of Miami School of Medicine, 1970
J.D., Stetson University College of Law, 1995

Wendy Thomson
Assistant Professor, Nursing
B.S.B.A., University of Florida, 1982
B.S.N., Barry University, 1996
M.S.N., Florida Atlantic University, 2003

Carelis Torres
Academic Facilitator, Pharmacy
Pharm.D., Nova Southeastern University, 2006

Rolando Torres
Assistant Professor, Pharmacy Practice
A.A., University of Puerto Rico, 2000
Pharm.D., Nova Southeastern University, 2005

William Trevarthen
Associate Professor, Pediatric Dentistry
D.M.D., University of Louisville, 1963
CT—Pediatric Dentistry, Children's Hospital, 1972
Diplomate, American Board of Pediatric Dentistry, 1990

Almos Bela Trif
Assistant Professor, Pathology
M.D., University of Medicine and Pharmacy, Romania, 1976
J.D., University Al I. Cuza Iasi, Romania, 1984
Ph.D., University of Medicine and Pharmacy, 1995

Khin M. Tu
Associate Professor, Anatomy
M.B.B.S., University of Mandalay, Myanmar, 1965
M.Ch., University of Liverpool, Great Britain, 1972
Fellow, Royal Australian College of Surgery
Fellow, Royal College of Surgery, Edinburgh, Scotland
Fellow, Royal College of Surgery, Great Britain

Julie Tyler
Associate Professor, Optometry
O.D., Indiana University, 1996

Robert Uchin
Dean, College of Dental Medicine
Professor, Endodontics
D.D.S., Temple University School of Dentistry, 1957
Diplomate, American Board of Endodontics
Fellow, American Association of Endodontics
Fellow, American College of Dentists, 1982
Fellow, International College of Dentists, 1983

Jorge Varela
Academic Facilitator/Instructor, Pharmaceutical and Administrative Sciences
B.S., University of Florida, 1983
B.S., University of Florida, 1985
Pharm.D., University of Florida, 1989

Jorge Vargas
Assistant Professor, Pediatric Dentistry
D.M.D., Nova Southeastern University, 2003

Richard C. Vause, Jr.
Academic Director and Assistant Professor, Physician Assistant Studies
B.S., Saint Joseph's University, 1974
B.S./P.A., Hahnemann University Medical College, 1978
M.P.A.S., University of Nebraska, 2000
D.H.Sc., Nova Southeastern University, 2004
Fellow, American Academy of Physician Assistants
Fellow, College of Physicians of Philadelphia

Ines Velez
Associate Professor and Director, Diagnostic Sciences
D.D.S., COC Columbia, 1979
CT—University of Florida, 1984
M.S., Universidad de los Andes Bogota, 1989
M.S., Academy of Laser Dentistry USA, 1997
Diplomate, American Board of Oral and Maxillofacial Pathology, 2000
Fellow, American Academy of Oral Pathology, 1984

Mislady Velez
Internal and External Professional Affairs Officer/Assistant Professor, Pharmacy
A.A., City University of New York, Herbert H. Lehman College, 1977
B.S., Florida International University, 1981
M.S., Florida International University, 1983

K.V. Venkatachalam
Professor, Biochemistry
B.S., Washington State University, 1983
M.S., Washington State University, 1985
Ph.D., Texas A&M, 1991

Rick Vogel
Assistant Professor, Cariology and Restorative Dentistry
D.D.S, New York University, 1979

Lori Vollmer
Assistant Professor, Optometry
B.A., University of South Florida, 1990
O.D., Nova Southeastern University, 2002

Heidi Wagner
Associate Professor, Optometry
B.S., Ohio State University, 1984
O.D., Ohio State University, 1986
Fellow, American Academy of Optometry

Robert Wagner
Director and Assistant Professor, Anesthesiologist Assistant
B.S., Florida A&M University, 1987
M.M.Sc., Emory University, 1991

Elaine M. Wallace
Professor, Osteopathic Principles and Practice
B.S., University of Mississippi, 1976
D.O., University of Health Sciences College of Osteopathic Medicine, 1980
M.S., University of Kansas, 2003

Donald Walters
Associate Professor, Pharmacology
B.S., St. Louis College of Pharmacy, 1980
Ph.D., University of Louisville, 1986

Jacob C. Warren
Assistant Professor, Preventive Medicine
Assistant Professor, Public Health
B.S., Georgia Southern University, 2002
B.S., Georgia Southern University, 2003
Ph.D., University of Miami, 2006

Barry Waterman
Assistant Professor, Community Dentistry
D.M.D., Tufts University, 1976

Sally A. Weiss
Director and Professor, Nursing
B.S.N., American University, 1972
M.S.N., University of Miami, 1986
Ed.D., Florida International University, 1997

Mark Wescott
Academic Director/Assistant Professor, Physician Assistant Studies
B.S., University of Nebraska School of Medicine, 1992

B.S., University of Nebraska School of Medicine, 1997
M.P.A.S., University of Nebraska, 1997
Fellow, American Academy of Physician Assistants

Albert W. Whitehead
Assistant Dean for Student and Administrative Services, College of Osteopathic Medicine
Assistant Professor, Family Medicine
B.S., University of Nevada, 1985
D.M.D., University of Pittsburgh, 1990
M.Ed., University of Pittsburgh, 1994
M.B.A., University of Pittsburgh, 1998

Diane Whitehead
Associate Dean, College of Allied Health and Nursing
Chair and Professor, Nursing Department
B.S.N., Florida State University, 1966
M.S.N., University of Miami, 1986
Ed.D., Florida International University, 1997

Margaret L. Wilkinson
Assistant Professor, Community Medicine
Assistant Professor, Public Health
M.A., Michigan State University, 1967
Ph.D., Kent State University, 1989

J. Keith Williams
Assistant Professor, Physician Assistant Studies
B.A., Western Connecticut State University, 1976
B.S., University of Florida, 1983
M.P.A.S., University of Nebraska, 2005
Fellow, American Academy of Physician Assistants

Virginia Williamson
Assistant Professor, Nursing
B.S.N., William Carey College, 1992
M.S.N., University of Southern Mississippi, 1997

Stanley H. Wilson
Associate Dean, College of Allied Health and Nursing
Chair and Associate Professor, Department of Physical Therapy
B.S. PT, Howard University, 1981
M.S., St. Thomas University, 1984
Ed.D., Florida International University, 2000

William Wolowich
Assistant Professor, Pharmacy Practice
B.Sc. (Pharm.), University of Manitoba, 1988
Pharm.D., State University of New York at Buffalo, 1993

Ralph Wood
Assistant Professor, Family Medicine
B.S., West Liberty State College, 1978
D.O., West Virginia School of Osteopathic Medicine, 1982

Christopher E. Woodruff
Associate Professor, Optometry
B.S., Ohio State University, 1981
O.D., Ohio State University, 1986
Fellow, American Academy of Optometry

Albert D. Woods
Associate Professor, Optometry
B.A., Western Washington University, 1982
M.S., Florida Institute of Technology, 1986
B.S., Pennsylvania College of Optometry, 1987
O.D., Pennsylvania College of Optometry, 1990
Fellow, American Academy of Optometry

Gale Woolley
Director and Professor, Nursing
B.S.N., University of Rhode Island, 1972
M.S.N., Adelphi University, 1976
Ed.D., Florida International University, 1989

Chin-yu Wu
Associate Professor, Occupational Therapy
B.S., National Taiwan University, 1991
M.A., New York University, 1995
Ph.D., New York University, 1999

Robin Wucher
Assistant Professor, Nursing
A.D.N., Miami Dade Community College, 1976
B.S.N., Florida International University, 1979
M.S.N., University of Miami, 1983

Maria L. Yataco
Clinical Assistant Professor, Internal Medicine
M.D., Cayetano Heredia University, 1988

Rick K. Yip
Professor, Anatomy
B.S., Southern Illinois University, 1975
M.S., University of Arkansas, 1980
Ph.D., Medical College of Wisconsin, 1985

Yuri Zagvazdin
Associate Professor, Physiology
B.S., Tyumen State University, 1982
Ph.D., Sechenov Institute of Evolutionary Physiology & Biochemistry, National Academy of Sciences, 1989

Antonia Zapantis
Assistant Professor, Pharmacy Practice
A.A., Broward Community College, 1997
Pharm.D., Nova Southeastern University, 2001

Norman Zarr
Assistant Professor, Cariology and Restorative Dentistry
D.D.S., University of Tennessee, 1969

Steven B. Zucker
Professor, Family Medicine
Professor, Public Health
Professor, Community Dentistry
B.A., University of Pennsylvania, 1969
D.M.D., University of Connecticut School of Dental Medicine, 1973
M.Ed., University of Hartford, 1973

Adjunct/Clinical/Visiting Faculty

Stephen D. Aaron
Clinical Assistant Professor, Orthodontics
D.M.D., Fairleigh Dickinson University College of Dental Medicine, 1976

Mick Abae
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Fairleigh Dickinson University, 1977
M.S., Fairleigh Dickinson University, 1979
M.D., New York Medical College, 1984

Nuzhat A. Abbasi
Clinical Assistant Professor, Internal Medicine
M.D., Fatima Jinnah Medical College, 1973

Omar Abdo
Clinical Assistant Professor, Restorative Dentistry
D.D.S., University of Jordan, 1992

Ibrahim Abi-Rafeh
Clinical Assistant Professor, Psychiatry
B.S., American University of Beirut, 1983
M.D., Universidad Tecnologica de Santiago, 1986

Michael A. Abrahams
Clinical Assistant Professor, Orthopedic Surgery
B.S., University of Bristol, 1970
M.D., University of the West Indies, 1974

Susan Abramson
Visiting Assistant Professor, Research
Ph.D., University of Miami, 1994

John L. Abt
Clinical Associate Professor, Family Medicine
B.A., Boston University, 1979
D.O., New York College of Osteopathic Medicine, 1983

Anthony A. Abouhanna
Clinical Assistant Professor, Family Medicine
B.S., University of South Florida, 1992
D.O., Nova Southeastern University College of Osteopathic Medicine, 2002

Miguel A. Acevedo-Segui
Clinical Assistant Professor, Family Medicine
B.S., University of Puerto Rico, 1984
M.D., University of Puerto Rico School of Medicine, 1988

Felix N. Acholonu
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., City College of New York, 1976
M.S., Columbia University, 1976
M.D., State University of New York College of Medicine, 1981

Ronald T. Ackerman
Clinical Assistant Professor, Obstetrics and Gynecology
B.A., Hofstra University, 1974
M.D., Medical Universidad de Guadalajara, 1978

Rodolfo Acosta
Adjunct Assistant Professor, Prosthodontics
D.D.S., University of Valle, 1992

Manuella Adrian
Adjunct Assistant Professor, Public Health
B.A., McGill University, 1968
M.Sc., University of Pittsburgh, 1973

Sultan S. Ahmed
Clinical Associate Professor, Family Medicine
M.D., Dacca University, Bangladesh, 1978
P.A., Bayley Seton Hospital, 1988

Jorge L. Ajuria
Clinical Assistant Professor, Nephrology
B.A., University of Rochester, 1987
M.D., Temple University School of Medicine, 1998

Asfa S. Akhtar
Clinical Assistant Professor, Family Medicine
B.S., University of Alabama, 1994
D.O., Nova Southeastern University College of Osteopathic Medicine, 2000

Palghat M. Alamelu
Clinical Assistant Professor, Pediatrics
M.D., University of Calcutta, 1969
D.C.H., University of Calcutta, 1973
D.T.C., Liverpool, 1982

Lourdes A. Alamo
Clinical Assistant Professor, Pediatrics
M.D., Ponce School of Medicine, 1995

Arthur L. Albers
Clinical Assistant Professor, Urology
B.A., University of South Florida, 1976
D.O., Philadelphia College of Osteopathic Medicine, 1980

Oscar A. Alea
Clinical Assistant Professor, Pediatrics
Premed, Miami Dade Community College, 1982
M.D., Universidad Central del Este, 1986

Mary Alkire
Adjunct Faculty Member, Nursing
B.S.N., Northern Michigan University, 1973
M.S.N., University of Minnesota, 1978
Ed.D., University of Minnesota, 1999

Joseph D. Allgeier
Clinical Assistant Professor, Family Medicine
B.S., St. Bonaventure University, 1990
D.O., Philadelphia College of Osteopathic Medicine, 1994

Alina M. Alonso
Clinical Assistant Professor, Preventive Medicine
B.S., Barry University, 1978
M.D., Universidad Autonoma de Ciudad Juarez, 1984

Noel Alonso
Clinical Assistant Professor, Pediatrics
B.A., University of Miami, 1992
M.S., Barry University, 1994
M.D., St. George's University School of Medicine, 1998

Raul Alonso
Clinical Assistant Professor, Cardiology
M.D., University of Miami School of Medicine, 1995

Alexander H. Alperovich
Clinical Assistant Professor, Internal Medicine
M.D., Kaunas University Medical School, 1982

Barnet I. Alpert
Clinical Associate Professor, Family Medicine
B.S., Brooklyn College, 1963
D.O., Chicago College of Osteopathic Medicine, 1967

Donald H. Altman
Clinical Professor, Pediatrics
A.B., Washington University, 1946
B.S., University of Missouri, 1948
M.D., University of Tennessee, 1950

Lynda Altman
Clinical Assistant Professor, Family Medicine
B.S., Adelphi University, 1980
M.D., Ross University School of Medicine, 1986

Israel Alvarez
Clinical Associate Professor, Internal Medicine
M.D., Universidad Autonoma de Santo Domingo, 1965

Raul A. Alvarez
Clinical Assistant Professor, Internal Medicine
M.D., Universidad de Cadiz, 1983

Carl Amko
Clinical Assistant Professor, Surgery
M.D., Mahidol University, 1968

Vibhuti A. Ansar
Clinical Assistant Professor, Family Medicine
M.D., American University of the Caribbean School of Medicine, 2001

Maryellen Antonetti
Adjunct Assistant Professor, Physician Assistant Studies
Adjunct Assistant Professor, Public Health
B.S./P.A., Nova Southeastern University College of Allied Health, 1996
M.P.H., Nova Southeastern University College of Allied Health, 1996
Fellow, American Academy of Physician Assistants

Alberto Aran
Clinical Associate Professor, Optometry
B.S., Spring Hill College, 1976
M.D., Tulane University, 1982

Marc A. Arel
Clinical Assistant Professor, Pediatrics
M.D., University of Miami School of Medicine, 1977
B.A., University of Miami, 1992

Joseph J. Arena
Clinical Assistant Professor, Internal Medicine
M.D., St. George's University School of Medicine, 1987

Jorge Arenas
Adjunct Assistant Professor, Diagnostic Sciences
D.D.S, Colegio Odontologico Colombiano, 1983
D.M.D., Nova Southeastern University, 2006

Lucien Armand
Clinical Assistant Professor, Surgery
M.D., Universite D'Haiti, 1964

Dan Arnold
Clinical Assistant Professor, Pediatric Dentistry
D.D.S., University of Kentucky College of Dentistry, 1968
M.S., University of Nebraska, 1970

Frances Aronovitz
Adjunct Faculty Member, Nursing
B.S.N., University of Texas, 1973
M.S., Florida International University, 1975
M.S.N., University of Miami, 1981
Ph.D., University of Miami, 1984

Jose F. Arrascue
Clinical Assistant Professor, Nephrology
M.D., Cayetano Medical University, 1973

Samuel W. Askinas
Adjunct Professor, Prosthodontics
D.D.S., New York University School of Dentistry, 1949
CT—Prosthodontics, University of Texas, 1960
Fellow, International College of Dentists
Fellow, American College of Prosthodontists
Fellow, American College of Dentists

Steven L. Attermann
Clinical Assistant Professor, Internal Medicine
B.S., Union College, 1979
D.O., University of Medicine and Dentistry of New Jersey, 1984

George P. Azar, Jr.
Clinical Assistant Professor, Pulmonary Medicine
B.A., Villanova University, 1978
M.D., Ross University School of Medicine, 1984

Hanan Azer
Adjunct Faculty, Physician Assistant Studies
A.A., Lehigh Carbon Comunity College, 1996
Pharm.D., Temple University, 2000
Consultant Pharm Degree, University of Florida, 2001

Kara Bacchus
Clinical Assistant Professor, Optometry
B.S., Stetson University, 1991
O.D., Southern College of Optometry, 1995

Barbara Bajaj
Physical Therapy
B.S. PT, Northeastern University, 1972
M.S. PT, University of Miami, 1994

Matt Dane Baker
Adjunct Faculty Member, Health Science
B.S., Drexel University, 1983
CT—Physician Assistant, Drexel University, 1983
B.A., Richard Stockton College, 1983
M.S., St. Joseph's University
D.H.Sc., Nova Southeastern University, 2007

Cathy M. Balbin
Clinical Assistant Professor, Anesthesiology
D.O., Southeastern University College of Osteopathic Medicine, 1987

Sergio Balcaza
Clinical Instructor, Psychiatry
M.D., San Marcos University School of Medicine, 1978

Gilda Baldwin
Adjunct Assistant Professor, Health Science
M.M.S., Nova Southeastern University, 2002
D.H.Sc., Nova Southeastern University, 2006

Emilio Balius
Clinical Assistant Professor, Optometry
O.D., University of Houston College of Optometry, 1991

Enrique E. Ballestas
Clinical Associate Professor, Obstetrics and Gynecology
M.D., Universidad Nacional, 1963
M.P.H., Columbia University School of Public Health, 1975

Anaisys M. Ballesteros
Clinical Assistant Professor, Family Medicine
B.S., Florida International University, 1994

D.O., Texas College of Osteopathic Medicine, 1999

Brian A. Ballot
Clinical Assistant Professor, Psychiatry
B.S., Tulane University, 1981
M.D., St. Louis University School of Medicine, 1986

Venkataraman Balu
Clinical Assistant Professor, Cardiology
M.D., University of Madras School of Medicine, 1966

Roxanne Bamond
Clinical Assistant Professor, Family Medicine
B.A., University of Florida, 1984
M.S., Nova Southeastern University, 1994
Ph.D., Nova Southeastern University, 2000

Ahmed H. Barhoush
Clinical Assistant Professor, Obstetrics and Gynecology
M.D., University of Cairo, 1966

Elizabeth J. Barice
Clinical Assistant Professor, Preventive Medicine
Adjunct Assistant Professor, Public Health
B.S., University of Florida, 1963
M.D., Stanford University, 1976
M.P.H., Harvard University, 1980

Luis Barreras
Clinical Assistant Professor, Hematology/Oncology
B.S., University of Florida, 1976
M.D., University of Miami, 1981

Joseph Barros
Clinical Assistant Professor, Endodontics
D.D.S., Emory University School of Dentistry, 1987

Luis F. Barroso
Clinical Assistant Professor, Pulmonary Medicine
B.S., Havana University, 1957
D.O., College of Osteopathic Medicine and Surgery, 1969

Terrence J. Barry
Clinical Assistant Professor, Orthopedic Surgery
A.B., Harvard College, 1952
M.D., Cornell University Medical College, 1963

Nabil A. Barsoum
Clinical Associate Professor, Family Medicine
M.D., Cairo University, 1972

Hal J. Bashein
Clinical Assistant Professor, Urology
B.S., University of Georgia, 1981
D.O., Southeastern University College of Osteopathic Medicine, 1986

Robert J. Bass
Clinical Associate Professor, Obstetrics and Gynecology
B.A., State University of New York, 1985
M.D., Wayne State University School of Medicine, 1988

Roy G. Bassett, Jr.
Clinical Assistant Professor, Family Medicine
B.S., Mississippi State University, 1980
D.D.S., Louisiana School of Dentistry, 1989
M.D., Louisiana State University School of Medicine, 1993

Alan S. Bassin
Clinical Assistant Professor, Surgery
B.A., Vanderbilt University, 1989
M.D., University of Miami School of Medicine, 1994

Dipesh Batra
Clinical Assistant Professor, Pediatrics
M.D., Government Medical College and Hospital, 1994

Patricia A. Baumann
Clinical Assistant Professor, Orthopedic Surgery
B.S., Cornell University, 1987
M.S., University of Miami, 1990
D.O., Nova Southeastern University College of Osteopathic Medicine, 1994

Michael W. Bays
Clinical Assistant Professor, Internal Medicine
B.S., Ferris State University, 1978
D.O., Michigan State University, 1986

John Bazos
Clinical Assistant Professor, Pediatric Dentistry
D.M.D., Temple University School of Dentistry, 1978

Jeffrey M. Behrens
Clinical Assistant Professor, Internal Medicine
B.S., State University of New York, 1973
M.D., New York Medical College, 1976

Carlos Bejar
Clinical Assistant Professor, Nephrology
M.D., Universidad Central del Este, 1987

Lorena Bejar
Clinical Assistant, Optometry
O.D., Nova Southeastern University, 2004

Francisco E. Belette
Clinical Assistant Professor, Hematology/Oncology
B.S., Haverford College, 1982
M.D., University of Illinois, 1986

Michael D. Bell
Clinical Assistant Professor, Surgery
B.A., Cornell University, 1981
M.D., Dartmouth Medical School, 1985

Maria B. Bello
Clinical Assistant Professor, Family Medicine
M.D., Universidad of Valladolid, 1990

Roberta Benefield
Clinical Assistant Professor, Family Medicine
ARNP, University of Miami, 1977

Alyn L. Benezette
Clinical Assistant Professor, Neurology
B.S., Michigan State University, 1978
D.O., Michigan State University College of Osteopathic Medicine, 1981

Shaughn C. Bennett
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1974
M.S., Florida International University, 1982
D.O., Southeastern University College of Osteopathic Medicine, 1986

Robert L. Bentz II
Clinical Associate Professor, Ophthalmology
B.S., Ohio State University, 1974
D.O., Philadelphia College of Osteopathic Medicine, 1978

Don H. Bercuson
Clinical Assistant Professor, Internal Medicine
B.S., Northwestern University, 1971
M.D., University of Miami School of Medicine, 1975

Stephen Berger
Adjunct Assistant Professor, Cariology and Restorative Dentistry
D.D.S., Georgetown University, 1973

Eric S. Berke
Clinical Assistant Professor, Internal Medicine
M.D., University of Michigan, 1976

Charles Berlin
Adjunct Professor, Audiology
B.A., Brooklyn College
M.S., Brooklyn College
Ph.D., Brooklyn College

Arthur L. Berman
Clinical Instructor, Internal Medicine
B.A., Washington and Jefferson College, 1977
D.O., Kirksville College of Osteopathic Medicine, 1981

Jodie Berman
Adjunct Faculty, Health Science
B.A., University of Central Florida, 1998
M.S., Nova Southeastern University, 2003

Stuart Berman
Adjunct Faculty
D.D.S., Fairleigh Dickinson University, 1966

Rebekah A. Bernard
Clinical Assistant Professor, Family Medicine
B.A., University of Florida, 1995
M.D., University of Miami School of Medicine, 1999

Jack Berne
Clinical Assistant Professor, Pediatric Dentistry
D.D.S., Emory University, 1962

Sandra Bertman
Clinical Associate Professor, Medical Humanities
B.A., Vassar College, 1958
Ed.M., Boston University, 1964
Ph.D., The Union Institute, 1988

Charles A. Bevis
Clinical Assistant Professor, Orthopedic Surgery
B.S., Florida State University, 1963
M.D., Bowman Gray School of Medicine, 1969

Donald Beyers
Clinical Assistant Professor, Optometry
O.D., Southern College of Optometry, 1993

Michael M. Bibliowicz
Clinical Assistant Professor, Otorhinolaryngology
B.S., University of Florida, 1979
D.O., Ohio University College of Osteopathic Medicine, 1984

Daniel R. Bieda
Clinical Assistant Professor, Family Medicine
B.A., University of Washington, 1987
D.O., Nova Southeastern University College of Osteopathic Medicine, 1997

Tony Bien-Aime
Clinical Assistant Professor, Family Medicine
M.D., State University of Haiti, 1983

Philippe A. L. Bilger
Adjunct Assistant Professor, Public Health
B.S., Emory University, 1977
D.D.S., Emory University School of Dentistry, 1981
M.P.H., University of Miami School of Medicine, 1991

David N. Bimston
Clinical Assistant Professor, Surgery
B.A., Washington University, 1988
M.D., New York University School of Medicine, 1992

Benham Birgani
Clinical Assistant Professor, Family Medicine
B.A., The Union Institute, 1988
D.O., Southeastern University College of Osteopathic Medicine, 1993

Allan J. Birnbaum
Clinical Assistant Professor, Internal Medicine
B.A., Rutgers State University, 1975
D.O., College of Osteopathic Medicine and Surgery, 1979

Richard D. Birnberg
Clinical Assistant Professor, Family Medicine
B.A., New York University, 1954
M.D., Chicago Medical School, 1959

Wayne Bizer
Clinical Professor, Ophthalmology
B.A., University of Louisville, 1966
D.O., Chicago College of Osteopathic Medicine, 1972
Fellow, American Osteopathic College of Ophthalmology

Eugene Blanck
Clinical Assistant Professor, Oral and Maxillofacial Surgery
D.D.S., University of Pennsylvania, 1959

Tammy L. Blankenship
Adjunct Assistant Professor, Public Health
B.S., Morehead State University, 1983
M.S., Morehead State University, 1985
M.D., University of South Alabama, 1994
M.P.H., Uniformed Services University, 1999

Winston D. Bliss
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Union College, 1987
M.D., Washington University School of Medicine, 1991

Jonathan Bloch
Clinical Assistant Professor, Diagnostic Sciences
D.M.D., Washington University School of Dental Medicine, 1985

Juergen H. Bludau
Clinical Assistant Professor, Internal Medicine
B.S., Ursinus College, 1982
M.D., The Royal College of Surgeons, 1987

Barry M. Blumenthal
Clinical Assistant Professor, Family Medicine
B.S., Touro College, 1978
Ph.D., Columbia Pacific University, 1984
D.O., Nova Southeastern University, 1991

Edgar Bolton
Clinical Professor, Pulmonary Medicine
B.S., Central Michigan University, 1965
D.O., Philadelphia College of Osteopathic Medicine, 1969

Robert L. Boltuch
Clinical Assistant Professor, Family Medicine
B.A., Duke University, 1980
D.O., New England College of Osteopathic Medicine, 1984

Daniel Boone
Clinical Instructor, Family Medicine
B.S., University of Georgia, 1986
D.O., Nova Southeastern University College of Osteopathic Medicine, 2000

Fortuna Borrego
Adjunct Faculty Member, Nursing
B.S.N., Florida International University, 1997
M.S.N., University of Phoenix, 2001

Steven Borzak
Clinical Associate Professor, Cardiology
A.B., Oberlin College, 1980
M.D., University of Illinois College of Medicine, 1984

Kenneth Boyle
Clinical Assistant Professor, Optometry
B.S., University of Florida, 1984
M.B.A., University of Florida, 1989
O.D., Nova Southeastern University College of Optometry, 1994

Bradley J. Bradford
Clinical Professor, Pediatrics
B.S., Fordham University, 1968
M.D., University of Maryland School of Medicine, 1972

Victoria Brandi
Adjunct Faculty, Health Science
B.S., Pace University, 1980
B.S., State University of New York—Stonybrook, 1982
M.S., Saint Francis University, 1999

Howard Braverman
Clinical Associate Professor, Optometry
B.S., University of Miami, 1968
O.D., University of Houston, 1972

Stanley Braverman
Clinical Associate Professor, Optometry
B.S., University of Miami, 1968
M.D., University of Miami School of Medicine, 1972

Thomas Brickenden
Adjunct Professor, Pharmaceutical and Administrative Sciences
M.B.A., University of Miami, 1981
J.D., University of Miami, 1998

Ginge Brien
Clinical Assistant Professor, Internal Medicine
B.S., Florida International University, 1990
M.D., Sackler School of Medicine, 1995

Richard J. Brietstein
Clinical Professor, Geriatrics
B.S., Long Island University, 1967
D.P.M., Ohio College of Podiatric Medicine, 1971

William J. Brooks
Clinical Associate Professor, Osteopathic Principles and Practice
D.O., Chicago College of Osteopathic Medicine, 1980

Kevin Broome
Clinical Assistant, Optometry
O.D., Nova Southeastern University, 1998

Karl S. Brot
Clinical Assistant Professor, Family Medicine
M.D., University of Toronto, 1977

Marshall Brothers
Adjunct Assistant Professor, Community Dentistry
D.D.S., New York University, 1954

Juanita M. Brown
Clinical Assistant Professor, Family Medicine
B.S., Florida Southern College, 1982
D.O., Southeastern University College of Osteopathic Medicine, 1991

William E. Bruno, Jr.
Clinical Associate Professor, Pediatrics
B.S., University of Miami, 1964
M.D., University of Miami School of Medicine, 1968

John R. Bucholtz
Clinical Assistant Professor, Family Medicine
B.A., Washington and Jefferson College, 1978
D.O., Philadelphia College of Osteopathic Medicine, 1982

Allan Burch
Adjunct Assistant Professor, Community Dentistry
D.D.S., Medical College of Virginia, 1967

Janine E. Burgher-Jones
Clinical Assistant Professor, Family Medicine
B.S., Georgia State University, 1982
M.D., Medical College of Georgia, 1986

Cathy A. Burnweit
Clinical Assistant Professor, Surgery
B.A., Dartmouth College, 1977
M.D., Harvard Medical School, 1981

Lisa L. Burroughs
Clinical Assistant Professor, Pediatrics
B.S., University of the Virgin Islands, 1993
M.D., Boston University School of Medicine, 1998

Darin L. Bush
Clinical Assistant Professor, Family Medicine
B.S., University of New England, 1995
D.O., University of New England College of Osteopathic Medicine, 2000

Rathna Bushan
Clinical Assistant Professor, Pediatrics and Rural Medicine
M.D., University of Kerala, 1972

Louis J. Butera
Clinical Assistant Professor, Neurology
B.S., Temple University, 1967

D.O., Philadelphia College of Osteopathic Medicine, 1978

Mark Butler
Adjunct Faculty, Cariology and Restorative Dentistry
D.D.S., New York University, 1966

James J. Byrne
Clinical Instructor, Internal Medicine
B.A., Rutgers University, 1969
D.O., Philadelphia College of Osteopathic Medicine, 1974

Alberto Caban-Alemany
Clinical Assistant Professor, Pediatrics
M.D., Universidad Central del Este, 1980

Angel R. Cadig
Clinical Assistant Professor, Pediatrics
B.S., The Ohio State University, 1972
M.D., University of Zaragoza, 1979

Ann Calabro-Raimondi
Clinical Assistant Professor, Internal Medicine
B.S., St. John's University, 1982
M.D., New York University School of Medicine, 1986

George L. Caldwell, Jr.
Clinical Assistant Professor, Orthopedic Surgery
M.D., Bowman Gray School of Medicine, 1988

Richard H. Callari
Clinical Assistant Professor, Otolaryngology
B.A., Boston University, 1981
M.D., Medical College of Virginia, 1985

Aldo A. Calvo
Clinical Instructor, Family Medicine
B.A., Florida International University, 1992
D.O., Nova Southeastern University College of Osteopathic Medicine, 1996

Eric S. Cameron
Clinical Assistant Professor, Pediatrics
B.A., Washington Square College, 1967
M.D., State University of New York, 1971

Maureen Campbell
Clinical Assistant Professor, Family Medicine
B.A., University of South Florida, 1985
D.O., Southeastern University College of Osteopathic Medicine, 1986

Ronald Cantor
Adjunct Assistant Professor, Community Dentistry
D.D.S., Medical College of Virginia, 1960

G. Patricia Cantwell
Clinical Professor, Pediatrics
B.S., College of St. Elizabeth, 1974
M.D., Wake Forest University, 1981

Michelle Caputo
Clinical Assistant, Optometry
B.S., University of Delaware, 1984
O.D., Pennsylvania College of Optometry, 1989

Mariaelena P. Caraballo
Clinical Assistant Professor, Family Medicine
B.S., University of Miami, 1981
D.O., Nova Southeastern University College of Osteopathic Medicine, 1998

Alberto Cardelle
Adjunct Faculty, Health Science
B.S., Tulane University, 1986
M.S., Boston University, 1989
Ph.D., University of Miami, 1999

Lyssette Cardona
Adjunct Assistant Professor, Public Health
B.S., University of Puerto Rico, 1979
M.D., University of Puerto Rico Medical School, 1983
M.P.H., Tulane University School of Public Health and Tropical Medicine, 1988
M.H.S.A., Barry University, 2005

Jerry Carle
Adjunct Assistant Professor, Periodontics, Community Dentistry
D.D.S., New York University, 1958

Maria J. Carreon
Clinical Assistant Professor, Infectious Disease
B.S., University of the Philippines, 1979
M.D., University of the Philippines College of Medicine, 1983

Eddy H. Carrillo
Clinical Assistant Professor, Surgery
M.D., La Universidad de San Carlos, 1977

Randy Carter
Clinical Assistant Professor, Optometry
O.D., University of Indiana, 1983

Alberto A. Casaretto
Clinical Assistant Professor, Internal Medicine
B.A., Tufts University, 1991
M.D., Tufts University School of Medicine, 1995

James H. Caschette
Clinical Associate Professor, Otorhinolaryngology
B.A., University of Buffalo, 1959
D.O., Philadelphia College of Osteopathic Medicine, 1963

Chris Castello
Clinical Assistant Professor, Optometry
O.D., Nova Southeastern University, 1997

Thomas A. Castillenti
Clinical Assistant Professor, Surgery
B.A., Washington and Jefferson College, 1976
D.P.M., Illinois College of Podiatric Medicine, 1980
D.O., Chicago College of Osteopathic Medicine, 1984

Robert R. Castillo
Clinical Instructor, Psychiatry
B.A., National Institute of Panama, 1958
M.D., National University of Mexico School of Medicine, 1968

Vicente L. Castro
Clinical Assistant Professor, Urology
M.D., University of Honduras Medical School, 1968

Jaroslaw Cegielski
Adjunct Faculty, Cariology and Restorative Dentistry
B.S., University of Nebraska, 1996
D.M.D, Nova Southeastern University, 2002

Kerry E. Chamberlain
Clinical Assistant Professor, Hematology/Oncology
B.S., Oral Roberts University, 1979
D.O., Kirksville College of Osteopathic Medicine, 1983

Joseph C. Chan
Clinical Associate Professor, Infectious Disease
B.A., University of California College of Letters and Sciences, 1973
M.D., University of California School of Medicine, 1977

Suzette A. Chandler
Clinical Instructor, Internal Medicine
B.S., University of Maryland, 1972
D.O., Philadelphia College of Osteopathic Medicine, 1996

Igor Chaplik
Clinical Assistant Professor Dermatology
B.S., University of Miami, 1994
D.O., Nova Southeastern University College of Osteopathic Medicine, 2000

Ronnie Charin
Adjunct Hygenist, Periodontology
R.D.H., Fairleigh Dickinson University, 1967

Louis B. Chaykin
Clinical Associate Professor, Internal Medicine
B.A., Temple University, 1957
M.D., Temple University School of Medicine, 1961

Hope M. Chema
Clinical Assistant Professor, Family Medicine
M.D., Far Eastern University, 1989

Yat-Min Chen
Clinical Assistant Professor, Obstetrics and Gynecology
M.D., National Taiwan University, 1981

Eric S. Chenven
Clinical Assistant Professor, Urology
B.A., Brandeis University, 1992
M.D., Albert Einstein College of Medicine, 1996

C. Lynn Chevalier
Adjunct Faculty Member, Health Science
B.S., College of St. Rose, 1977
M.S., The State University at Albany, 1980
Graduate Certificate in Public Health, University of North Carolina—Chapel Hill, 2001
M.P.H., University of Massachusetts—Amherst, 2004
D.H.Sc., Nova Southeastern University, 2007

Joseph I. Chi
Clinical Instructor, Internal Medicine
B.S., Tulane University, 1984
D.O., Tulane School of Medicine, 1988

Michael A. Chizner
Clinical Professor Cardiology
B.A., New York University, 1970
M.D., Cornell University Medical College, 1974

Rajiv R. Chokshi
Clinical Assistant Professor, Internal Medicine
M.B.B.S., B.J. Medical College, 1976

Nicholas M. Cifelli
Clinical Assistant Professor, Family Medicine
B.A., Rutgers University, 1964
M.D., George Washington University, 1968

Stephen J. Cina
Clinical Professor, Pathology
B.A., Johns Hopkins University, 1988
M.D., Vanderbilt University School of Medicine, 1992

John Clarke
Clinical Assistant Professor, Oral Surgery
D.M.D., University of Louisville, 1966

Frederick W. Clarkson
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1966
D.O., Kirksville College of Osteopathic Medicine, 1970

Joshua Cleland
Adjunct Faculty, Ph.D. Program, Physical Therapy
B.S., Notre Dame College, 1998
M.P.T., Notre Dame College, 2000
Ph.D., Nova Southeastern University, 2006

William L. Cody
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Memphis State University, 1972
M.D., University of Tennessee Center of Health Sciences, 1982

Julio Coello
Clinical Assistant Professor, Obstetrics and Gynecology
B.M.H., Ciclo Educativo Tarquil, 1967
M.D., Saint James Catholic University of Guayaquil, 1975

Jules J. Cohen
Clinical Assistant Professor, Family Medicine
B.A., Temple University, 1961
D.O., Philadelphia College of Osteopathic Medicine, 1965

Ronald A. Cohen
Adjunct Assistant Professor, Cariology and Restorative Dentistry
D.D.S., New York University, 1975

Steven D. Cohen
Clinical Assistant Professor, Internal Medicine
M.D., Loyola Stritch School of Medicine, 1974

Steven W. Cohen
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1987
D.O., Nova Southeastern University College of Osteopathic Medicine, 1991

Victoria Coleman-Miller
Clinical Assistant Professor, Preventive Medicine
B.A., Marymount College, 1973
J.D., Nova University, 1987

Douglas Colman
Clinical Assistant Professor, Family Medicine
B.S., Michigan State University, 1975
D.O., Des Moines College of Osteopathic Medicine & Surgery, 1978

Viviana Colmegna
Clinical Assistant Professor, Psychiatry
M.D., National University of La Plata, 1982

Robert Comperatore
Clinical Associate Professor, Surgery
M.D., University of Buenos Aires, 1971

Alex R. Constantinescu
Clinical Associate Professor, Pediatrics
M.D., Medical Institute Timisoara, 1985

Jennifer M. Contin
Clinical Assistant Professor, Family Medicine
M.D., Instituto Universitario de Ciencias, 1998

Robert B. Contrucci
Clinical Associate Professor, Otorhinolaryngology
B.S., St. John's University, 1976
D.O., Philadelphia College of Osteopathic Medicine, 1980

Gail Austin Cooney
Clinical Assistant Professor, Neurology
B.A., Wesleyan University, 1974
M.D., Mayo Medical School, 1978

Joseph C. Corcoran
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., University of Florida, 1981
D.O., Nova Southeastern University College of Osteopathic Medicine, 1986

Loreta Costa
Adjunct Faculty, Health Science
B.A., Florida Atlantic University, 2001
M.S., Nova Southeastern University, 2003

Arthur M. Cowden II
Clinical Assistant Professor, Family Medicine
D.O., Nova Southeastern University College of Osteopathic Medicine, 1985

Gary J. Cowen
Clinical Assistant Professor, Internal Medicine
B.A., University of Pennsylvania, 1969
M.D., University of Miami School of Medicine, 1974

David Cox
Clinical Assistant Professor, Anesthesiology
B.A., University of South Florida, 1986
D.O., Southeastern University College of Osteopathic Medicine, 1990

Linda S. Cox
Clinical Assistant Professor, Internal Medicine
B.A., Boston University College of Liberal Arts, 1978
M.D., Northwestern University School of Medicine, 1985

Shawn H. Cox
Clinical Assistant Professor, Family Medicine
B.S., Oakwood College, 1995
M.D., University of Tennessee, 1999

Eridia Coy
Adjunct Faculty Member, Nursing

B.S.N., Florida International University, 1990
M.S.N., University of Phoenix, 2000

Richard A. Crocco
Clinical Assistant Professor, Psychiatry
B.S., Ohio State University, 1959
M.D., Ohio State University Medical School, 1963

Brian J. Cross
Clinical Instructor, Orthopedic Surgery
B.S., Westminster College, 1992
D.O., Ohio University College of Osteopathic Medicine, 1996

Stella Cross
Clinical Assistant Professor, Family Medicine
A.D.N., Union University, 1971
B.S.N., University of Alabama, 1975
M.S.N., Medical College of Georgia, 1977
Ph.D., Southwest University, 1990

William T. Crow
Clinical Professor, Family Medicine
D.O., Texas College of Osteopathic Medicine, 1987

Robert S. Csere
Clinical Assistant Professor, Surgery
A.B., Rutgers College, 1972
D.O., University of Health Sciences College of Osteopathic Medicine, 1976

Marc E. Csete
Clinical Assistant Professor, Internal Medicine
B.S., Boston University, 1979
M.D., University of Miami School of Medicine, 1983

Robert Cueli
Clinical Assistant Professor, Nephrology
M.D., Autonoma University, 1982

Ramon Cuevas-Trisan
Clinical Assistant Professor, Osteopathic Principles and Practice
B.S., Tulane University School of Engineering, 1988
M.D., University of Puerto Rico School of Medicine, 1992

Robert F. Cullen, Jr.
Clinical Associate Professor, Pediatrics
B.A., College of the Holy Cross, 1959
M.D., Seton Hall College of Medicine and Dentistry, 1963

John P. Cunha
Clinical Assistant Professor, Family Medicine
B.S., Rutgers University—Cook College, 1993
D.O., University of Health Sciences College of Osteopathic Medicine, 1998

Linda Cupo
Adjunct Faculty Member, Nursing
B.S.N., Florida International University, 1995
M.S.N. /A.R.N.P, Florida International University, 1997

Mike Cusnir
Clinical Assistant Professor, Hematology/Oncology
M.D., Pontificia Universidad Javeriana, 1994

Beverly C. Cypen-Greenberg
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1973
M.S., University of North Carolina, 1975
D.O., Des Moines Osteopathic College of Medicine & Surgery, 1979

Albert Dabbah
Clinical Assistant Professor, Surgery
B.A., University of Maryland, 1982
M.S., University of Maryland, 1984
M.D., University of Maryland School of Medicine, 1987

Nilesh Dalal
Clinical Assistant Professor, Periodontology
D.M.D., Nova Southeastern University, 2000

Harold L. Dalton
Clinical Assistant Professor, Physical Medicine and Rehabilitation
B.S., University of Florida, 1986
M.S., University of Florida, 1988
D.O., Nova Southeastern University College of Osteopathic Medicine, 1996

Jesse Dana
Visiting Lecturer, Orthodontics
D.D.S., University of Nebraska, 2002
CT—Orthodontics, Nova Southeastern University, 2005

Randy Danielsen
Adjunct Faculty, Health Science
B.S., University of Utah, 1978
M.P.A.S., University of Nebraska, 1997
Ph.D., The Union Institute, 2002

Marco Danon
Clinical Associate Professor, Pediatrics
M.D., Universidad Nacional de Colombia, 1967

Brad L. Dansky
Clinical Assistant Professor, Psychiatry
B.S., University of Connecticut, 1980
M.D., University of the Health Sciences School of Medicine, 1984

Douglas W. David
Clinical Assistant Professor, Family Medicine
B.S., Ohio State University, 1977
M.S., Ohio State University, 1980
D.O., Ohio University College of Osteopathic Medicine, 1987

Enrique D. Davila
Clinical Associate Professor, Hematology/Oncology
B.S., Gimnasi Campestre, 1965
M.D., National University of Colombia, 1972

Edward Davis
Clinical Assistant Professor, Neurology
B.S., Purdue University, 1972
D.O., Philadelphia College of Osteopathic Medicine, 1978

Jeanmarie Davis
Clinical Assistant Professor, Optometry
O.D., Nova Southeastern University, 2001

Lance G. Davis
Clinical Instructor, Pathology
B.A., Chaminade University, 1978
M.D., American University of the Caribbean, 1987

Robert Davis
Clinical Assistant Professor, Optometry
O.D., Pennsylvania College of Optometry, 1970

Mark H. Dawson
Clinical Assistant Professor, Family Medicine
M.D., Louisiana State University School of Medicine, 1976
M.B.A., Louisiana State University, 1995

Juan M. D'Brot
Clinical Assistant Professor, Pulmonary Medicine
Cayetano Heredia University Medical School, 1980

Hector M. Delgado
Clinical Assistant Professor, Family Medicine
B.S., Florida International University, 1985
D.O., Southeastern University College of Osteopathic Medicine, 1990

Pallavi B. Deliwala
Clinical Assistant Professor, Pediatrics
M.D., Seth G.S. Medical College, 1969

Pasquale Dell'Api
Clinical Assistant Professor, Family Medicine
B.A., Florida Atlantic University, 1986
D.O., Southeastern University College of Osteopathic Medicine, 1992

Jorge Del Toro
Clinical Assistant Professor, Pediatrics
B.S., University of Puerto Rico, 1978
M.D., University of Puerto Rico School of Medicine, 1982

Alejandro Del Valle
Clinical Assistant Professor, Internal Medicine
B.S., Boston University Sargent College of Allied Health Profession, 1997
D.O., New York College of Osteopathic Medicine, 2001

Brian DenBeste
Clinical Assistant Professor, Optometry
O.D., Illinois College of Optometry, 1980

William Denton
Adjunct Instructor, Optometry
O.D., Michigan College of Optometry, 2000

James A. Derrenbacker, Jr.
Clinical Assistant Professor, Family Medicine
B.A., University of South Florida, 1980
M.S., University of South Florida, 1983
D.O., Texas College of Osteopathic Medicine, 1990

Alfred A. DeSimone
Clinical Assistant Professor, Orthopedic Surgery, Sports Medicine
M.D., University of Miami, 1989

Lesly Desrouleaux
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., City University of New York, 1977
M.D., Albert Einstein College of Medicine, 1981

Christopher DeTure
Clinical Assistant Professor, Periodontology
D.M.D., University of Florida, 1996

Steven Devack
Adjunct Faculty, Prosthodontics
D.D.S., Howard University, 1972

Karl Marx Dhana
Clinical Assistant Professor, Internal Medicine
M.D., University of Miami School of Medicine, 1988
B.S., Florida International University, 1993

Jose Diaz
Adjunct Faculty, Endodontics
D.D.S., Universidad Central del Este, Dominican Republic, 1982
CT—Endodontics, Nova Southeastern University College of Dental Medicine, 1999

Leslie E. Diaz
Clinical Assistant Professor, Internal Medicine
M.D., Universidad Central del Este, 1985

Maria A. Diaz
Clinical Instructor, Internal Medicine
B.S., Barry University, 1988
Pharm.D., University of Florida, 1992
D.O., Nova Southeastern University College of Osteopathic Medicine, 1998

Tony Diaz
Clinical Instructor, Orthopedic Surgery
B.A., University of Miami, 1988
D.O., Nova Southeastern University College of Osteopathic Medicine, 1992

Brucha L. Dickenson
Clinical Assistant Professor, Pathology
M.D., Universidad Nacional de Colombia, 1977

Robert L. DiGiovanni
Clinical Assistant Professor, Internal Medicine
B.A., The Johns Hopkins University, 1978
D.O., Kirksville College of Osteopathic Medicine, 1982

Allan J. Dinnerstein
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Tufts University, 1960
M.D., Albert Einstein College of Medicine, 1964

Oliver R. DiPietro
Clinical Assistant Professor, Internal Medicine
B.S., McGill University, 1976
M.D., University of Sherbrooke Medical School, 1980

Arthur L. Diskin
Clinical Associate Professor, Family Medicine
B.S., University of Miami, 1974
M.D., University of Miami School of Medicine, 1979

Jordan J. Ditchek
Clinical Assistant Professor, Radiology
B.S., Massachusetts Institute of Technology, 1991
M.D., Cornell University Medical College, 1995

Karen Dodge
Clinical Assistant Professor, Preventive Medicine
B.S., Florida Atlantic University, 1991
M.S.W., Florida International University, 1993
Ph.D., Florida International University, 1997

Michelle A. Doldren
Adjunct Assistant Professor, Public Health
B.S., Howard University, 1999
M.P.H., University of South Florida, 2001

Theresa Doolittle
Adjunct Faculty Member, Physician Assistant Studies
B.A., University of California, 1982
M.H.P., Northeastern University, 1986

David W. Dorton
Clinical Assistant Professor, Dermatology
B.S., University of South Florida, 1986
D.O., Nova Southeastern University College of Osteopathic Medicine, 1991

James Doty
Clinical Assistant Professor, Surgery
B.S., University of Massachusetts, 1992
M.D., Boston University School of Medicine, 1996

Barry Doublestein
Clinical Assistant Professor, Family Medicine
Southeast Regional Coordinator, Nova Southeastern University College of Osteopathic Medicine
B.A., Albion College, 1976
M.A., Northeast Missouri State University, 1986

Kevin Douglas
Assistant Professor, Orthodontics
D.M.D., University of Alabama, 1997
M.S., Nova Southeastern University, 2006
CT—Orthodontics, Nova Southeastern University, 2006

Marilyn Douglas
Clinical Instructor, Occupational Therapy
B.S., University of Florida, 1990

Jeffrey A. Downing
Clinical Assistant Professor, Family Medicine
B.A., Saint Anselm College, 1993
D.O., Philadelphia College of Osteopathic Medicine, 1997

Martin J. Drost
Clinical Assistant Professor, Internal Medicine
B.S., Iowa State University, 1990
M.D., Southern Illinois University School of Medicine, 1994

Robert H. Dudley
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1993
M.D., University of Miami School of Medicine, 1997

Michael Dufek
Clinical Associate Professor, Optometry
B.S., Pennsylvania State University, 1983
O.D., Pennsylvania College of Optometry, 1987

James R. Duke
Clinical Assistant Professor, Internal Medicine
M.D., Tulane University School of Medicine, 1960

Federico Dumenigo
Clinical Assistant Professor, Internal Medicine
M.D., University of Salamanca, 1965

Stephanie Duncan-Garcia
Clinical Assistant Professor, Family Medicine
B.A., Immaculata College, 1995
D.O., Philadelphia College of Osteopathic Medicine, 1999

Scott J. Dunkin
Clinical Assistant Professor, Obstetrics and Gynecology
B.A., Central College, 1977
D.O., College of Osteopathic Medicine and Surgery, 1980

Richard Dycus II
Adjunct Faculty, Physician Assistant Studies
B.S., Stetson University, 1993
M.S., Barry University, 1995
D.O., Nova Southeastern University, 2000

John Dziadul
Adjunct Instructor, Optometry
O.D., Pennsylvania College of Optometry, 1986

Pamela Ebmeier
Clinical Assistant Professor, Optometry
O.D., University of Missouri at St. Louis, 1992
Pharm.D., University of Puerto Rico College of Pharmacy, 1998

John Echternach
Adjunct Professor, Ph.D. Program, Physical Therapy
B.S., Westchester University, 1953
M.S., University of Maryland, 1965
Ed.D., College of William and Mary, 1976

Emad E. Ekladios
Clinical Assistant Professor, Family Medicine
M.D., Ain Shams University, 1980

David Eldred
Clinical Assistant Professor, Optometry
O.D., Nova Southeastern University College of Optometry, 1997

Richard A. Elias
Clinical Assistant Professor, Cardiology
M.D., Columbia University, 1955

Aparna Eligeti
Clinical Assistant Professor, Obstetrics and Gynecology and Rural Medicine
B.S., University of Florida, 1993
M.D., University of Florida College of Medicine, 1997

Trevor E. Elmquist
Clinical Assistant Professor, Ophthalmology
B.A., University of South Florida, 1974
M.S., University of South Florida, 1977
D.O., University of Health Sciences College of Osteopathic Medicine, 1981

Nabil El Sanadi
Clinical Associate Professor, Family Medicine
B.A., Case Western Reserve University, 1976
M.D., Ohio State University, 1979

Norbert N. Engelman III
Clinical Assistant Professor, Family Medicine
B.S., Ohio State University, 1984
D.O., Ohio University College of Osteopathic Medicine, 1990

Glenn H. Englander
Clinical Assistant Professor, Internal Medicine
B.S., State University of New York at Buffalo, 1977
M.D., University of Vermont, 1982

Christine Englestad
Clinical Instructor, Preventive Medicine

B.S., University of Maryland, 1973
M.S., Florida Atlantic University, 2001

Matthew Enright
Adjunct Faculty, Health Science
B.S., Rochester Institute of Technology, 1997
B.S., Atlantic Institute of Oriental Medicine, 2002
M.S., Atlantic Institute of Oriental Medicine, 2002

Rudy Escarri
Clinical Assistant Professor, Internal Medicine
M.D., University of Miami School of Medicine, 1993

David Esguerra
Clinical Assistant Professor, Dermatology
B.A., Emory University, 1992
D.O., University of New England College of Osteopathic Medicine, 1997

Stephen S. Estes
Clinical Assistant Professor, Obstetrics and Gynecology and Rural Medicine
B.A., University of the South, 1967
M.D., University of Tennessee, 1970

Felix A. Estrada
Clinical Associate Professor, Pediatrics
B.S., Peruvian University, 1966
M.D., Peruvian University, 1973

Helen Ewing
Adjunct Associate Professor, Health Science
B.S.N., University of Calgary, 1990
M.S.N., University of Calgary, 1995
D.H.Sc., Nova Southeastern University, 2004

David Fabry
Adjunct Professor, Audiology
B.S., University of Minnesota, 1983
M.S., University of Minnesota, 1985
Ph.D., University of Minnesota, 1988

Laura Falco
Adjunct Assistant Professor, Optometry
B.S., State University of New York, 1995
O.D., State University of New York, 1999
Fellow, American Academy of Optometry

Judith R. Farrar
Clinical Assistant Professor, Family Medicine
B.A., Franklin & Marshall College, 1975
M.S., University of Rochester School of Medicine and Dentistry, 1980
Ph.D., University of Rochester School of Medicine and Dentistry, 1982

Carmine Fasano
Adjunct Clinical Instructor, Community Dentistry
D.D.S., Columbia University, 1952

Ronald B. Fauer
Clinical Assistant Professor, Urology
B.A., Franklin and Marshall College, 1966
M.D., Columbia University College of Physicians and Surgeons, 1970

Sue Fee
Adjunct Faculty Member, Nursing
B.S.N., University of South Florida, 1990
M.S.N., University of South Florida, 1994

David Feinerman
Clinical Assistant Professor, Oral and Maxillofacial Surgery
D.M.D., Harvard University School of Dental Medicine, 1988
M.D., University of Connecticut School of Medicine, 1992
CT—Oral and Maxillofacial Surgery, University of Connecticut, 1993

Arthur L. Feldman
Clinical Associate Professor, Family Medicine
D.O., Philadelphia College of Osteopathic Medicine, 1951
Fellow, American College of Osteopathic Family Physicians

Michael D. Feldman
Clinical Assistant Professor, Family Medicine

B.S., Temple University
Pharmacy School, 1983
D.O., Southeastern University
College of Osteopathic Medicine, 1987

Edward Fellows
Clinical Assistant Professor, Cariology and Restorative Dentistry
D.D.S., McGill University, 1962

Berta G. Ferman
Clinical Assistant Professor, Preventive Medicine
M.D., College of Medical Science, 1976
M.P.H., University of Miami, 1990

K. Ranjit Fernando
Clinical Assistant Professor, Internal Medicine
M.D., University of Ceylon, 1968

Lisa A. Ferreira
Clinical Assistant Professor, Pediatrics
B.A., College of Holy Cross, 1984
D.O, Philadelphia College of Osteopathic Medicine, 1989

Bradley S. Feuer
Clinical Professor, Family Medicine
B.S., University of Miami, 1980
D.O., New York College of Osteopathic Medicine, 1986
J.D., University of Miami
School of Law, 1990

Charles Ficco
Clinical Assistant Professor, Optometry
B.A., The Colorado College, 1989
O.D., Nova Southeastern University
College of Optometry, 1995

Steven Fields
Clinical Associate Professor, Internal Medicine
B.A., Brown University, 1978
M.D., Hahnemann University, 1982

Sergio Real Figueroa
Assistant Professor, Orthodontics
Dentistry, University of Catolica, Columbia, 1991
Orthodontics, University of Catolica, Argentina, 1995

Howell Findley
Adjunct Instructor, Optometry
O.D., University of Alabama
College of Optometry, 1981

Allen Finkelstein
Clinical Assistant Professor, Family Medicine
D.O., West Virginia College of Osteopathic Medicine, 1981

Mark S. Finkelstein
Clinical Assistant Professor, Radiology
B.A., University of Miami, 1976
D.O., Philadelphia College of Osteopathic Medicine, 1980

Ana I. Fins
Visiting Assistant Professor, Behavioral Science
M.S., University of Miami, 1990
Ph.D., University of Miami, 1994

Diane Fiore
Adjunct Faculty, Health Science
B.S, Florida Atlantic University, 1992
M.P.H., Florida Atlantic University, 1998

Lee Fischer
Clinical Assistant Professor, Family Medicine
B.S., University of Illinois, 1968
M.D., University of Illinois, 1972

Marsha J. Fishbane
Clinical Assistant Professor, Pediatrics
Adjunct Assistant Professor, Public Health
B.S., Pennsylvania State University, 1970
M.D., Jefferson Medical College, 1972

Mark Fisher
Adjunct Instructor, Optometry
O.D., Illinois College of Optometry, 1982

Mark S. Fishman
Clinical Assistant Professor, Physical Medicine and Rehabilitation
B.A., Clark University, 1997
D.O., New York College of Osteopathic Medicine, 2001

Ronald D. Flaster
Clinical Assistant Professor, Pediatrics
M.D., Universidad Central Del Este School of Medicine, 1983

Michael Flax
Clinical Associate Professor, Endodontics
D.D.S., Georgetown University School of Dentistry, 1980
Diplomate, American Board of Endodontics

Paul Fleisher
Adjunct Assistant Professor, Cariology and Restorative Dentistry
D.D.S., Northwestern University, 1965

Ignacio L. Fleites
Clinical Assistant Professor, Surgery
M.D., Universidad de Salamanca, 1973

Douglas E. Flemons
Clinical Professor, Family Medicine
M.A., University of British Columbia, 1986
Ph.D., Nova Southeastern University, 1989

Melvyn R. Fletcher
Clinical Assistant Professor, Pediatrics
B.S., University of Puerto Rico, 1964
M.D., University of Puerto Rico
School of Medicine, 1968

Frank Foderaro
Adjunct Faculty, Health Science
B.S., Marietta College, 1985
D.C., Southern California University of Health Science, 1989
M.S., National University, 1999

Julie Formoso-Onofrio
Clinical Assistant Professor, Internal Medicine
M.D., Universidad Central del Este, 1980

Larry Forness
Adjunct Faculty, Health Science
A.B., University of Notre Dame, 1968
B.A., LaSalle Extension University, 1974
M.A., Duke University, 1972
M.B.A, LaSalle University, 1989
LL.M, Washington University
School of Law, 1997

Mark Forrest
Clinical Associate Professor, Periodontology
D.M.D., New York University
College of Dentistry, 1967

Gregory A. Foster
Clinical Assistant Professor, Family Medicine
B.A., Haverford College, 1950
M.D., Emory University
School of Medicine, 1986

Carmen B. Fox
Adjunct Assistant Professor, Public Health
B.S.P.A., Nova Southeastern University, 1996
M.P.H., Nova Southeastern University, 1996
Fellow, American Academy of Physician Assistants

Gregory Fox
Clinical Assistant Professor, Family Medicine
D.O., University of Osteopathic Medicine and Health Sciences, 1990

Jonathan Fox
Clinical Assistant Professor, Family Medicine
B.A., Florida International University, 1979
D.O., University of Osteopathic Medicine and Health Sciences, 1983

Kevin B. Fox
Clinical Assistant Professor, Family Medicine
B.A., Florida International University, 1983

D.O., Southeastern University
College of Osteopathic Medicine, 1987

Morry S. Fox
Clinical Assistant Professor,
Family Medicine
R.Ph., St. Louis College of Pharmacy, 1951
D.O., Kirksville College of
Osteopathy and Surgery, 1956

Richard L. Fox
Clinical Assistant Professor
Internal Medicine
B.S., Michigan State University, 1991
D.O., Michigan State University College
of Osteopathic Medicine, 1995

Susan Fox
Clinical Assistant Professor,
Obstetrics and Gynecology
B.A., Florida International
University, 1976
D.O., University of Osteopathic
Medicine and Health Sciences, 1979

M. Jane Foye
Clinical Assistant Professor,
Family Medicine
B.A., Florida State University, 1969
D.O., Nova Southeastern University
College of Osteopathic Medicine, 1988

Rosalyn R. Frazier
Adjunct Instructor, Public Health
B.S., DePaul University, 1991

Ira Freedman
Clinical Assistant Professor,
Periodontology
D.M.D., University of Pennsylvania
College of Dental Medicine, 1982

Samuel M. Freedman
Clinical Assistant Professor, Pediatrics
B.A., University of Miami, 1984
M.D., University of South Florida, 1988

Christopher Frey
Adjunct Instructor, Optometry
O.D., Nova Southeastern University, 1997

Charlie Friedman
Clinical Assistant Professor,
Community Dentistry
D.M.D., Tufts University, 1955

Kurt Friedman
Clinical Assistant Professor,
Oral and Maxillofacial Surgery
D.D.S., Medical College of
Virginia School of Dentistry, 1975

Sabrina Friedman
Adjunct Faculty Member, Nursing
B.S.N., University of Phoenix, 1994
M.S.N./A.R.N.P., University of Southern
California, 1996
Ed.D., Nova Southeastern University,
2005

Robert Frilen, Jr.
Clinical Assistant Professor, Surgery
B.A., West Virginia University, 1974
D.O., Kirksville College of
Osteopathic Medicine, 1978

Martin J. Frisosky
Clinical Assistant Professor, Surgery
B.A., Michigan State University, 1969
M.A., Wayne State University, 1972
D.O., Kansas City College of
Osteopathic Medicine, 1979

Jason H. Frost
Clinical Associate Professor,
General Surgery
D.O., New York College
of Osteopathic Medicine, 1987

Jarrod M. Frydman
Clinical Assistant Professor,
Family Medicine
B.S., University of Florida, 1995
D.O., Lake Erie College of
Osteopathic Medicine, 1999

Michael L. Funk
Adjunct Assistant Professor,
Physician Assistant Studies
B.S./P.A., Nova Southeastern
University, 1996
M.P.H., Nova Southeastern
University, 1996

Fellow, American Academy of
Physician Assistants

Michelle D. Gagnon-Blodgett
Clinical Assistant Professor,
Geriatrics
B.A., Florida International
University, 1992
M.S., Nova Southeastern University, 1995
Psy.D., Nova Southeastern University, 1998

Michael A. Galin
Clinical Assistant Professor,
Otolaryngology
B.S., University of Massachusetts, 1994
D.O., Nova Southeastern University
College of Osteopathic Medicine, 1998

Lisa Galluzzo
Clinical Assistant Professor, Optometry
B.S., Adelphi University, 1990
O.D., State University of New York, 1993

Jose E. Gamez
Clinical Instructor, Psychiatry
B.S., Colegio Javier, 1975
M.D., Universidad de Panama, 1982

Alice Gandell
Adjunct Faculty,
Occupational Therapy
B.S., University of Illinois at Chicago, 1964

Jeffrey Ganeles
Clinical Assistant Professor,
Periodontology
D.M.D., Boston University Goldman
School of Graduate Dentistry, 1983

Richard Gans
Adjunct Professor, Audiology
B.A., University of Tampa, 1972
M.S., University of South Florida, 1978
Ph.D., Ohio State University, 1983

Anasuya G. Gaonkar
Clinical Assistant Professor, Pediatrics
B.A., Southern Illinois University, 1973
M.S., Southern Illinois University, 1975
M.D., Kamatak University, 1983

Isaac Garazi
Clinical Assistant Professor,
Periodontology
D.M.D., Boston University Goldman
School of Graduate Dentistry, 1983

Onelio Garcia, Jr.
Clinical Associate Professor, Surgery
M.D., Autonomous University
of Guadalajara, 1978

Delores R. Garcia-Chung
Clinical Assistant Professor,
Internal Medicine
M.D., University of the West Indies, 1981

Robert A. Gardner
Clinical Assistant Professor, Surgery
M.D., State University of New York
Medical Center, 1962
B.A., University of Rochester, 1966

Meir Gare
Clinical Assistant Professor, Cardiology
B.S., Hebrew University of Jerusalem, 1987
M.D., Hebrew University of Jerusalem, 1992

Leonard Garfinkel
Clinical Assistant Professor, Periodontology
D.D.S., Georgetown University School of
Dentistry, 1971

Frank J. Gargiulo
Adjunct Assistant
Professor, Public Health
B.C.E., University of Florida, 1965
M.S.E., University of Florida, 1968
M.P.H., University of Miami, 1992

Judith Gartner
Assistant Professor, Prosthodontics
D.M.D., Nova Southeastern
University, 2001

Lanny Garver
Clinical Assistant Professor,
Oral and Maxillofacial Surgery
D.M.D., University of Pennsylvania, 1967

Roman Gastesi
Clinical Assistant Professor,
Hematology/Oncology

B.S., Marianao Institute, 1953
M.D., University of Madrid, 1962

Harris Gellman
Clinical Professor, Orthopedic Surgery
B.S., Temple University, 1974
M.D., Temple University Medical School, 1979

Barry Gelman
Clinical Assistant Professor, Pediatrics
B.S., University of Miami, 1984
M.D., University of Florida College of Medicine, 1988

Michael Georgescu
Adjunct Faculty, Cariology and Restorative Dentistry
D.M.D., Boston University, 1987

Edward L. German
Clinical Instructor, Pediatrics and Rural Medicine
B.S., Florida A&M University, 1990
M.D., Meharry Medical Center, 2001

Michael F. Gervasi
Clinical Assistant Professor, Family Medicine
B.A., Florida Atlantic University, 1983
D.O., Southeastern University College of Osteopathic Medicine, 1987

Gamal M. Ghoniem
Clinical Professor, Urology
M.D., University of Alexandria, 1974

Joseph A. Giaimo
Clinical Assistant Professor, Pulmonary Medicine
B.S., Ursinus College, 1983
D.O., Philadelphia College of Osteopathic Medicine, 1987

F. Gary Gieseke
Clinical Assistant Professor, Surgery
A.B., Vanderbilt University, 1957
M.D., University of Indiana Medical School, 1961

Evelyn Gil
Adjunct Faculty, Cariology and Restorative Dentistry
D.D.S., Colegio Odontologico Colombiano, 1990

Mark Gilbert
Clinical Assistant Professor, Diagnostic Sciences
D.M.D., Fairleigh Dickinson University, 1983

David R. Gilchrist
Clinical Instructor, Family Medicine
B.S., University of Florida, 1992
D.O., Nova Southeastern University College of Osteopathic Medicine, 1998

Lewis Gillmore
Adjunct Faculty, Community Dentistry
D.D.S., New York University, College of Dentistry, 1955

Stuart Gindoff
Clinical Associate Professor, Optometry
B.A., Rockford College, 1970
B.S., Illinois College of Optometry, 1971
O.D., Illinois College of Optometry, 1973

Ira Ginsberg
Clinical Assistant Professor, Periodontics
D.D.S., New York University, 1971
CT—Periodontics, New York University, 1974

Elisa Ginter
Clinical Associate Professor, Family Medicine
B.S., Michigan State University, 1982
D.O., Michigan State University College of Osteopathic Medicine, 1986

Carrie A. Gittings
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1997
M.D., University of Miami School of Medicine, 2002

Lloyd D. Gladding
Clinical Assistant Professor, Family Medicine
B.S., Muhlenberg College, 1973
D.O., Philadelphia College of Osteopathic Medicine, 1977

David Glassman
Clinical Assistant Professor, Periodontology
D.D.S., Medical College of Virginia School of Dentistry, 1966

Paul S. Glassman
Clinical Assistant Professor, Family Medicine
D.O., University of Health Sciences College of Osteopathic Medicine, 1961

Wagih W. Gobriel
Clinical Assistant Professor, Anesthesiology, Pain Medicine
M.D., Ain Shams University, 1985

Sangita A. Gogate
Clinical Assistant Professor, Family Medicine
B.S., Otterbein College, 1986
D.O., University of Osteopathic Medicine and Surgery, 1993

Robert G. Gold
Clinical Assistant Professor, Urology
B.S., Tulane University College of Arts and Sciences, 1977
M.D., Tulane University School of Medicine, 1981

Dean R. Goldberg
Clinical Instructor, Surgery
B.A., University of Miami, 1989
D.O., Nova Southeastern University College of Osteopathic Medicine, 1995

Eric Goldberg
Clinical Instructor, Surgery
B.A., Villanova University, 1971
M.D., Temple University, 1976

Matthias Goldstein
Adjunct Assistant Professor, Health Science
B.A., University of Maryland, 1989
B.T.L., Ner Israel Rabbinical College, 1990
B.S., The George Washington University, 1997
M.P.A.S., University of Nebraska, 1998
D.H.Sc., Nova Southeastern University, 2005

Mitchell Goldstein
Clinical Assistant Professor, Family Medicine
B.S., Northern Illinois University, 1974
D.O., Chicago College of Osteopathic Medicine, 1978

Yedda M. Gomes-Ruane
Clinical Associate Professor, Pediatric Dentistry
D.D.S., Temple University School of Dentistry, 1966

Domingo Gomez
Clinical Associate Professor, Family Medicine
B.S., University of Florida, 1968
M.D., University of Madrid, 1975

Luis E. Gomez
Clinical Assistant Professor, Family Medicine
B.A., Cornell University, 1984
M.D., Mount Sinai School of Medicine, 1993

Faustino Gonzalez
Clinical Instructor, Internal Medicine
M.D., Universidad Central Del Este, 1982

Miguel Angel Gonzalez
Clinical Assistant Professor, Obstetrics and Gynecology
M.D., Universidad Central, 1968

Richard Gonzalez
Clinical Assistant Professor, Pediatrics
B.S., University of Maryland, 1977
D.O., Philadelphia College of Osteopathic Medicine, 1981

Rosemary Gonzalez
Clinical Assistant Professor, Optometry
B.S., Florida International University, 2000
O.D., Illinois College of Optometry, 2005

Tulia Gonzalez
Adjunct Clinical Instructor, Cariology and Restorative Dentistry
D.M.D., University Colegio Odontologico Colombiano, 1987

Kimberlee Goode
Adjunct Faculty Member, Nursing
B.S., Grand Rapids Baptist College, 1987
M.S.N., University of Phoenix, 2006

Alen E. Gordon
Clinical Instructor, Surgery
M.D., Temple University Medical School, 1957

Antonio M. Gordon
Clinical Professor, Internal Medicine
M.S., University of Miami, 1969
Ph.D., Florida State University, 1973
M.D., Emory University, 1975

Jean S. Gordon
Clinical Associate Professor, Family Medicine
B.A., University of Maine, 1983
M.D., Jefferson Medical College, 1987

Mark W. Gordon
Clinical Associate Professor, Surgery
B.S., Ursinus College, 1963
M.D., Jefferson Medical College, 1967

Michael Gordon
Adjunct Assistant Professor, Periodontics
D.M.D., University of Pennsylvania, 1965

Jay S. Gottlieb
Clinical Associate Professor, Otorhinolaryngology, Dermatology
B.S., University of Michigan, 1974
D.O., University of Health Sciences, 1977

Tamer Gozleveli
Clinical Assistant Professor, Family Medicine
B.S., University of West Florida, 1977
D.O., Southeastern University College of Osteopathic Medicine, 1987

Michael Graubert
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Emory University, 1987
M.D., Emory University School of Medicine, 1991

Mark Greenberg
Clinical Assistant Professor, Prosthodontics
D.D.S., Temple University, 1968

David Greene
Adjunct Faculty, Prosthodontics
D.D.S., New York University, 1951

Sharon L. Greene
Clinical Instructor, Preventive Medicine
B.S., Florida State University, 1983

Jerome A. Greenspan
Clinical Professor, Surgery
D.O., Philadelphia College of Osteopathic Medicine, 1954

Jonathan M. Greer
Clinical Assistant Professor, Internal Medicine
A.B., Oberlin College, 1979
M.D., University of Florida College of Medicine, 1983

Robert C. Greer, IV
Clinical Assistant Professor, Family Medicine
B.S., Texas Christian University, 1973
D.O., Philadelphia College of Osteopathic Medicine, 1977
Fellow, American College of Osteopathic Family Physicians

Margaret I. Grell
Clinical Assistant Professor, Pediatrics
B.S., University of the West Indies, 1980
M.D., University of the West Indies, 1986

Lawrence R. Grobman
Adjunct Professor, Audiology

B.S., Haverford College
M.D., University of Miami
Neurotology Fellowship, University of Zurich

Martin B. Grossman
Clinical Associate Professor, Surgery
B.S., Muhlenberg College, 1966
M.D., Chicago Medical School, 1970

Jeffrey Grove
Clinical Associate Professor, Family Medicine
B.S., Florida Southern College, 1986
D.O., Southeastern University College of Osteopathic Medicine, 1990

Vito Guario
Clinical Associate Professor, Optometry
B.S., University of South Florida, 1984
O.D., Southern College of Optometry, 1988

Ralph Guarneri
Clinical Assistant Professor, Surgery
B.A., SUNY at Stony Brook, 1978
M.D., State University of New York College of Medicine, 1985

Georges C. Guerrier
Clinical Assistant Professor, Pediatrics
M.D., State University of Haiti School of Medicine and Pharmacy, 1980

Kettley Guerrier
Clinical Assistant Professor, Family Medicine
M.D., State University of Haiti School of Medicine and Pharmacy, 1980

Manjit S. Gulati
Clinical Assistant Professor, Nephrology
M.D., Ranchi University, 1979

Gregory G. Gulick
Clinical Instructor, Internal Medicine
D.O., Nova Southeastern University College of Osteopathic Medicine, 2003

Robert J. Guliner
Clinical Professor, Ophthalmology
B.A., Hunter College, 1970
D.O., University of Health Sciences College of Osteopathic Medicine, 1974

Neena Gupta
Clinical Assistant Professor, Family Medicine
B.S., Iowa State University, 1976
D.O., University of Osteopathic Medicine and Surgery, 1983

Paul A. Guzman
Clinical Instructor, Psychiatry
M.D., Universidad Central Del Este School of Medicine, 1983

Martin E. Hale
Clinical Assistant Professor, Orthopedic Surgery
B.A., Columbia University, 1974
M.D., State University of New York at Buffalo, 1980

Charles Halfpenny
Clinical Assistant Professor, Internal Medicine
B.S., Drexel University, 1959
M.D., Hahneman Medical College, 1963

John Halpern
Clinical Assistant Professor, Family Medicine
B.A., State University of New York—Binghamton, 1980
D.O., New York College of Osteopathic Medicine, 1985

Edward W. Halpren
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., State University of New York—Albany, 1977
D.O., New York College of Osteopathic Medicine, 1982

Maxine E. Hamilton
Clinical Assistant Professor, Internal Medicine
M.D., University of the West Indies, 1982

Usama A. Hanhan
Clinical Assistant Professor, Pediatrics

M.D., University of Jordan
Medical School, 1983

Andrew J. Hanly
Clinical Assistant Professor, Surgery
M.D., University College
Galway Medical School, 1991

Dennis E. Hanney
Clinical Assistant Professor, Cardiology
B.A., Hofstra University, 1971
M.A., Hollins College, 1972
D.O., Kirksville College of
Osteopathic Medicine, 1976

Andrew Hano
Clinical Assistant Professor,
Hematology/Oncology
B.A., Northwestern University, 1973
D.O., College of Osteopathic
Medicine and Surgery, 1977

Ryan Hargreaves
Clinical Assistant Professor, Optometry
O.D., New England College
of Optometry, 1996

John N. Harker
Clinical Assistant Professor,
Orthopedic Surgery
D.O., Southeastern University
College of Osteopathic Medicine, 1989

Charles L. Harkness
Clinical Assistant Professor,
Family Medicine
B.S., University of Notre Dame, 1972
M.S., University of Wisconsin, 1974
D.O., Chicago College of
Osteopathic Medicine, 1978

Carlos J. Haro
Clinical Assistant Professor, Family
Medicine
B.S., University of Miami, 1998
M.S., Nova Southeastern University, 1999
D.O., Nova Southeastern University
College of Osteopathic Medicine, 2003

Jon F. Harrell
Clinical Assistant Professor, Surgery
B.A., George Williams College, 1974
D.O., Chicago College of
Osteopathic Medicine, 1978

Richard M. Harrell
Clinical Assistant
Professor, Endocrinology
A.B., University of North Carolina, 1975
M.D., University of North Carolina, 1979

Jonathan B. Harris
Clinical Assistant Professor, Neurology
B.A., University of Chicago, 1974
M.D., University of Pennsylvania, 1982

Philip L. Harris
Clinical Assistant Professor, Surgery
B.S., Muhlenberg College, 1978
M.D., Pennsylvania State University
College of Medicine, 1982

Michael A. Harry
Clinical Assistant Professor,
Family Medicine
M.D., University of the West Indies, 1976

Jeanette L. Hartzell
Adjunct Instructor, Public Health
B.A., Old Dominion University, 1977
M.S., Old Dominion University, 1979

Kay E. Haw
Adjunct Assistant Professor, Health
Science
B.S.N., Towson State University, 1993
M.S., Central Michigan University, 1999
D.H.Sc., Nova Southeastern University,
2006

Anna Hayden
Clinical Associate Professor,
Community Medicine
B.S., Seton Hall University, 1983
D.O., University of the Health Sciences
College of Osteopathic Medicine, 1988

Steve Heiden
Clinical Assistant Professor, Optometry
O.D., University of California
College of Optometry, 1972

J. Michael Heider
Clinical Assistant Professor, Cariology
and Restorative Dentistry
D.D.S., Ohio State University, 1987

Gretchen Heinsen
Clinical Assistant Professor, Endodontics
D.D.S., University of Puerto Rico
School of Dentistry, 1982

Allen Helfer
Adjunct Assistant
Professor, Endodontics
D.D.S., Columbia University, 1961

Murry Helfman
Adjunct Faculty, Prosthodontics
D.D.S., New York University, 1959

David C. Hellman
Clinical Assistant Professor
D.O., Southeastern University College of
Osteopathic Medicine, 1988

Charles H. Hennekens
Clinical Professor, Preventive Medicine
B.S., Queens College, 1963
M.D., Cornell University
Medical College, 1967
M.S., Harvard School
of Public Health, 1973
Dr.P.H., Harvard School
of Public Health, 1975

Christel Henseler
Adjunct Assistant Professor, Health
Science
M.S., Florida International University, 1990
Ph.D., Florida International University,
2003

Frederick N. Herman
Clinical Assistant Professor, Surgery
M.D., University of Miami School of
Medicine, 1977

Richard Herman
Adjunct Faculty, Endodontics
D.D.S., New York University, 1966

Carlos E. Hernandez
Clinical Instructor, Pediatrics
M.D., Universidad Autonoma
de Guadalajara, 1988

Manuel Hernandez
Clinical Instructor, Family Medicine
B.A., Temple University, 1994
M.D., University of Pittsburgh
School of Medicine, 2000

David Herskowich
Clinical Assistant Professor,
Prosthodontics
D.M.D., Columbia University
School of Dental and Oral Surgery, 1988

Leslie K. Herzog
Clinical Assistant
Professor, Family Medicine
B.A., University of Miami, 1982
D.O., Southeastern University
College of Osteopathic Medicine, 1987

Daniel R. Higgins
Clinical Assistant Professor, Surgery
B.S., Massachusetts Institute
of Technology, 1977
M.D., University of Pennsylvania
School of Medicine, 1980

Bobby W. Hill
Clinical Assistant Professor,
Family Medicine
B.A., LaGrange College, 1973
D.O., Kansas City College of
Osteopathic Medicine, 1976

Stuart Himmelstein
Clinical Assistant Professor,
Internal Medicine
M.D., Hahnemann University
School of Medicine, 1987

John P. Hirt
Clinical Assistant Professor,
Family Medicine
B.A., Cornell University
College of Arts and Sciences, 1994
D.O., Nova Southeastern University
College of Osteopathic Medicine, 1998

Thomas Hoffman, Jr.
Clinical Assistant Professor,
Internal Medicine

B.S., University of Notre Dame, 1986
M.D., University of Miami
School of Medicine, 1990

Richard A. Holtz
Clinical Associate Professor, Surgery
B.A., Upsala College, 1963
D.O., Chicago College of
Osteopathic Medicine, 1968

Robert B. Holtzman
Clinical Assistant Professor, Surgery
B.A., Columbia University, 1976
M.D., City College
of New York, 1980

Anthony A. Hood
Clinical Assistant Professor,
Obstetrics/Gynecology
B.S., University of Texas, 1985
M.D., University of Texas Southwestern
Medical School, 1989

Allen Horowitz
Clinical Assistant Professor,
Periodontology
D.D.S., University of Michigan
School of Dentistry, 1968

Firaz R. Hosein
Clinical Assistant Professor,
Internal Medicine
B.S., Barry University, 1996
D.O., Nova Southeastern University
College of Osteopathic Medicine, 2000

Donald C. Howard
Clinical Assistant Professor,
Family Medicine
B.A., University of
South Florida, 1980
D.O., Southeastern University
College of Osteopathic Medicine, 1985

Jeff Huang
Clinical Assistant Professor, Optometry
B.S., University of California at Irvine, 2000
O.D., University of California at Berkeley,
School of Optometry, 2005

Jimmy C. Huang
Clinical Assistant Professor, Family
Medicine
B.S., Cornell University, 1995
D.O., Nova Southeastern University
College of Osteopathic Medicine, 2001

George M. Hudson
Clinical Assistant Professor,
Family Medicine
B.A., University of Kansas, 1976
D.O., Philadelphia College of
Osteopathic Medicine, 1989

Frank P. Hull
Clinical Assistant Professor,
Pulmonary Medicine
M.D., University of Pretoria, 1990

William C. Hulley
Clinical Associate Professor, Neurology
B.S., University of Pittsburgh, 1968
D.O., Kirksville College of
Osteopathic Medicine, 1972

James R. Hulls
Clinical Assistant
Professor, Family Medicine
M.D., Ohio State University, 1973

Michael Hung
Clinical Assistant Professor, Optometry
O.D., University of Houston
College of Optometry, 2001

Joseph S. Hurst
Clinical Assistant Professor, Family
Medicine
B.A., University of Mississippi, 1981
M.D., The Chicago Medical School, 1992

Handre Hurwit
Clinical Assistant
Professor, Internal Medicine
M.D., Ross University, 1982

Yasmin Hussain-Qureshi
Clinical Assistant Professor, Osteopathic
Principles and Practice
B.S., Victoria University, 2000
M.S., Victoria University, 2002

M.P.T., Florida International University,
2006

Albert Ing
Clinical Assistant Professor,
Cardiology
M.D., American University of the
Caribbean School of Medicine, 1984

Deborah E. Ingram
Clinical Assistant Professor, Pediatrics
B.S., University of Georgia, 1994
M.D., Medical College of Georgia, 1998

Lalitha G. Iyer
Clinical Assistant Professor,
Family Medicine
M.D., Madurai Medical College, 1968

Richard A. Jablonski
Clinical Assistant
Professor, Ophthalmology
B.A., Eastern Michigan University, 1970
D.O., Chicago College of
Osteopathic Medicine, 1974

Rosemary Jackson
Clinical Assistant Professor,
Family Medicine
B.S., Mercer University, 1978
M.P.H., University of North Carolina, 1980
M.D., University of North Carolina, 1989

Mario Jacomino
Clinical Assistant Professor, Pediatrics
B.S., University of Puerto Rico, 1984
M.D., Ponce School of Medicine, 1988
M.P.H., University of South Florida, 1999

Mohsin Jaffer
Clinical Associate Professor,
Family Medicine
M.D., R.N.T. Medical College, 1979

Mudit Jain
Clinical Assistant
Professor, Endocrinology
M.B.B.S., Sawai Man Singh
Medical College, 1991

Sandeep Jain
Clinical Assistant Professor,
Pulmonary Medicine
M.D., SMS Medical College, 1988

Gregory J. James
Clinical Professor, Family Medicine
Adjunct Associate Professor,
Public Health
B.A., University of South Florida, 1983
D.O., Southeastern University
College of Osteopathic Medicine, 1988
M.P.H., Nova Southeastern University
College of Allied Health, 1997

Maury A. Jayson
Clinical Assistant Professor, Urology
B.S., Tufts University, 1986
M.D., Jefferson Medical College, 1990

Kenneth S. Jeffers
Clinical Assistant Professor,
Orthopedic Surgery
B.S., State University of
New York at Stony Brook, 1984
M.D., University of Illinois College of
Osteopathic Medicine, 1992

Ian P. Jeffries
Clinical Associate Professor, Pediatrics
B.A., Dublin University, 1967
M.D., Dublin University, 1969

Francisco Jimenez
Adjunct Clinical Instructor,
Prosthodontics
D.M.D., University of Puerto Rico, 1974
CT—Prosthodontics,
University of Puerto Rico, 1976

Barron William Johnson
Clinical Assistant Professor, Pediatrics
B.S., University of the West Indies, 1977
D.O., University of the West Indies, 1982

James R. Johnson
Clinical Assistant Professor, Radiology
A.B., University of Michigan, 1972
D.O., Chicago College of
Osteopathic Medicine, 1978

Lyn A. Johnson
Clinical Assistant Professor, Family Medicine
D.O., Kansas City University of Medicine and Biosciences, 1990

Michelle Johnson
Clinical Assistant Professor, Family Medicine
Adjunct Assistant Professor, Public Health
B.S., Florida International University, 1988
D.O., Nova Southeastern University College of Osteopathic Medicine, 1994

Jeffery Joy
Clinical Adjunct Instructor, Optometry
O.D., University of Indiana College of Optometry, 2001

Scott L. Kalina
Clinical Assistant Professor, Internal Medicine
B.S., Union College, 1974
M.D., Autonomous University of Guadalajara, 1979

Amita Kamireddy
Clinical Assistant Professor, Internal Medicine
M.D., Osmania Medical College, 1977

Daniel R. Kanell
Clinical Assistant Professor, Orthopedic Surgery, Sports Medicine
M.D., University of Pittsburgh School of Medicine, 1965

Steven L. Kanner
Clinical Associate Professor, Internal Medicine
B.S., Muhlenberg College, 1975
D.O., College of Osteopathic Medicine and Surgery, 1979

David M. Kanter
Clinical Assistant Professor, Pediatrics
A.B., Indiana University, 1975
M.D., Indiana University School of Medicine, 1979
M.B.A., University of Florida, 2001

Arthur Kapit
Clinical Assistant Professor, Orthodontics
D.D.S., Medical College of Virginia School of Dentistry, 1970
M.S.D., Boston University Goldman School of Graduate Dentistry, 1972

Daniel B. Kaplan
Clinical Associate Professor, Family Medicine
B.A., Temple University, 1973
D.O., Philadelphia College of Osteopathic Medicine, 1973

Marshall M. Kaplan
Clinical Assistant Professor, Urology
B.S., University of Illinois, 1963
M.D., Loyola University, 1967

Roland D. Kaplan
Clinical Associate Professor, Family Medicine
B.S, University of Miami, 1982
D.O., Nova Southeastern University College of Osteopathic Medicine, 1990

Marc G. Kaprow
Clinical Assistant Professor, Internal Medicine
B.A., University of South Florida, 1992
D.O., Nova Southeastern University College of Osteopathic Medicine, 2001

Helena J. Karnani
Clinical Assistant Professor, Family Medicine
M.D., Birmingham University Medical School, 1980

Irwin J. Kash
Clinical Assistant Professor, Pediatrics
B.S., University of Illinois, 1965
M.D., University of Illinois Medical School, 1969

Cindy H. Katanick
Clinical Assistant Professor, Family Medicine
B.S., Michigan State University, 1980

D.O., University of Health Sciences College of Osteopathic Medicine, 1985

Charles H. Kates
Clinical Associate Professor, Family Medicine
A.B., Indiana University, 1961
D.D.S., Indiana University, 1965

Michael J. Katin
Clinical Associate Professor, Radiology
B.A., University of Pennsylvania College of Arts and Sciences, 1969
M.D., University of Pennsylvania Medical School, 1972

Steven H. Katz
Clinical Assistant Professor, Family Medicine
B.A., State University of New York—Binghamton, 1990
M.D., State University of New York Health Science Center at Brooklyn, 1995

Ronald B. Kaufman
Clinical Professor, Cardiology
B.S., University of Wisconsin, 1953
D.O., Chicago College of Osteopathic Medicine, 1957
Fellow, American College of Osteopathic Internists

David J. Kay
Clinical Assistant Professor, Otolaryngology
B.A., Yeshiva University, 1992
M.D., University of Pennsylvania School of Medicine, 1997
M.P.H, University of Pittsburgh, 2004

Sonia F. Kay
Visiting Assistant Professor, Occupational Therapy
B.S., University of Florida, 1975
M.H.S., University of Florida, 1976
Ph.D., Nova Southeastern University, 2001

Walter J. Kay
Clinical Assistant Professor, Family Medicine
B.S., Providence College, 1973
D.O., Kirksville College of Osteopathic Medicine, 1977

Scott D. Kazdan
Clinical Assistant Professor, Orthopedic Surgery
B.S., Tulane University, 1985
D.O., Nova Southeastern University College of Osteopathic Medicine, 1991

Todd J. Kazdan
Clinical Assistant Professor, Family Medicine
B.A., Florida International University, 1995
D.O., Philadelphia College of Osteopathic Medicine, 1999

Bronya Keats
Adjunct Professor, Audiology
Ph.D., Australian National University, 1976

Jeffrey G. Keiser
Adjunct Professor, Public Health
B.A., Florida Atlantic University, 1991
B.S., Florida Atlantic University, 1993

Scott T. Keller
Clinical Assistant Professor, Family Medicine
A.B., West Virginia University, 1975
D.O., West Virginia School of Osteopathic Medicine, 1979

Brian D. Kelly
Clinical Assistant Professor, Cardiology
B.A., University of Delaware, 1979
D.O., Kirksville College of Osteopathic Medicine, 1983

Karen T. Kennedy
Clinical Assistant Professor, Anesthesiology
B.S., Eckerd College, 1988
D.O., Nova Southeastern University College of Osteopathic Medicine, 1992

Daniel Kesden
Clinical Assistant Professor, Internal Medicine

B.A., University of Chicago, 1966
M.D., University of Miami, 1971

Kevin J. Kessler
Clinical Assistant Professor, Orthopedic Surgery, Sports Medicine
M.D., University of Health Sciences Chicago Medical School, 1987

William T. Keweshan
Clinical Associate Professor, Family Medicine
B.S., Villanova University, 1966
D.O., Philadelphia College of Osteopathic Medicine, 1970

Husman Khan
Clinical Assistant Professor, Internal Medicine
M.D., Agra University, 1972
M.P.H., Florida International University, 1994

Richard C. Kidd
Clinical Assistant Professor, Family Medicine
B.S., Michigan University, 1965
D.O., Kirksville College of Osteopathic Medicine, 1970

Richard D. Kimmel
Clinical Assistant Professor, Surgery
B.A., Emory University, 1980
D.O., Philadelphia College of Osteopathic Medicine, 1984

Steven C. Kimmel
Clinical Assistant Professor, Rheumatology
B.A., University of Pennsylvania, 1982
M.D., New York University School of Medicine, 1986

Mary J. King
Clinical Assistant Professor, Internal Medicine
B.A., University of South Florida, 1991
D.O., Kirksville College Osteopathic Medicine, 1995

Sandford H. Kinne
Clinical Assistant Professor, Geriatrics
D.O., Western University of Health Sciences, 1990

James R. Kinney, Sr.
Clinical Assistant Professor, Family Medicine
B.S., Youngstown State University, 1975
D.O., Kansas City College of Osteopathic Medicine, 1979

Debra F. Kirsch
Clinical Assistant Professor, Psychiatry
B.A., Rice University, 1984
M.D., Baylor College of Medicine, 1988

William D. Kirsh
Clinical Associate Professor, Family Medicine
Adjunct Professor, Public Health
B.S., Florida State University, 1981
D.O., Southeastern University College of Osteopathic Medicine, 1985
M.P.H., Johns Hopkins University, 1988

Karen S. Klapper
Clinical Assistant Professor, Family Medicine
B.A., Wesleyan University, 1980
D.O., Chicago College of Osteopathic Medicine, 1985

Francis J. Kleeman
Clinical Assistant Professor, Urology
B.A., Yale College, 1956
M.D., Yale University School of Medicine, 1960

Harvey S. Kleiner
Clinical Associate Professor, Family Medicine
B.A., Indiana University, 1967
M.S., Indiana University, 1969
M.S., Indiana University Medical Center, 1979
D.O., Southeastern University College of Osteopathic Medicine, 1987

Steven Z. Kleinman
Clinical Instructor, Urology
B.S., Long Island University, 1961

M.D., Chicago Medical School, 1966

Kenneth M. Kniaz
Clinical Assistant Professor, Family Medicine
B.A., Boston College, 1977
M.H.A., George Washington University School of Health Care Administration, 1981

Frederick Knoll
Clinical Assistant Professor, Community Dentistry
D.D.S., Case Western Reserve University School of Dentistry, 1971

Howard S. Koch
Clinical Assistant Professor, Internal Medicine
B.S., University of Miami, 1972
M.D., University of Miami School of Medicine, 1976

Sheldon Konigsberg
Clinical Assistant Professor, Internal Medicine
M.P.H., Harvard School of Public Health, 1975
M.D., Columbia University College of Physicians and Surgeons, 1975

Allen Konis
Adjunct Assistant Professor, Prosthodontics
D.D.S., New York University, 1989

Barbara Kornblau
Professor, Occupational Therapy
Assistant Professor, Public Health
B.S., University of Wisconsin, 1977
J.D., University of Miami School of Law, 1984
Fellow, American Occupational Therapy Association

Lori I. Kostin-Rosenberg
Clinical Assistant Professor, Psychiatry
B.A., Rutgers College, 1985
M.D., University of Medicine and Dentistry of New Jersey, 1989

Wayne R. Kotzker
Clinical Assistant Professor, Nephrology
B.A., Brandeis University, 1990
M.D., University of Medicine and Dentistry of New York, 1994

Perry Krichmar
Clinical Assistant Professor, Cardiology
B.S., State University of New York, 1982
M.S., Long Island University, 1983
M.D., Spartan Health Science University, 1986

Alberto J. Kriger
Clinical Assistant Professor, Pediatrics
B.A., Brandeis University, 1979
M.D., Columbia University College of Physicians and Surgeons, 1983

Melvin Krohn
Clinical Assistant Professor, Oral and Maxillofacial Surgery
D.M.D., Harvard School of Dentistry, 1970

Merrill A. Krolick
Clinical Assistant Professor, Cardiology
B.S., Rensselaer Polytechnic Institute, 1981
D.O., New York College of Osteopathic Medicine, 1985

Michael E. Krutchik
Clinical Assistant Professor, Dermatology
B.S., Florida State University, 1984
D.O., Southeastern University College of Osteopathic Medicine, 1988

Robert J. Kudelko
Clinical Assistant Professor, Radiology
B.S., Truman University, 1967
D.O., Kirksville College of Osteopathic Medicine, 1971

Sudhira A. Kulatunga
Clinical Assistant Professor, Pediatrics
M.D., St. George's University School of Medicine, 1990

Savita Kumar
Clinical Assistant Professor, Preventive Medicine
M.D., Meerut University, 1971
M.P.H., University of Miami School of Public Health, 1980
M.B.A., Florida Atlantic University, 1995

William J. Kuzbyt
Clinical Assistant Professor, Psychiatry
B.A., Marquette University, 1982
M.S., University of Baltimore, 1987

Marvin LaDov
Adjunct Faculty, Oral and Maxillofacial Surgery
D.D.S., Temple University, 1961

Teofilo R. Lama
Clinical Assistant Professor, Surgery
M.D., Universidad Estatal de Guayaquil, 1990

Ernesto Lamadrid
Clinical Instructor, Family Medicine
B.S., University of Puerto Rico, 1985
M.D., Universidad Nacional Pedro Henriquez Urena, 1992

Peter Lamelas
Clinical Instructor, Emergency Medicine
M.D., Universidad Central del Este, 1981
M.B.A., Nova University, 1993

Jane I. Lamp
Clinical Assistant Professor, Family Medicine
B.S., Ohio Northern University, 1993
M.D., Medical College of Ohio, 1997

Arthur Lane
Clinical Assistant Professor, Endodontics
D.D.S., University of Tennessee College of Dentistry, 1965

David M. Lang
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1986
D.O., Southeastern University College of Osteopathic Medicine, 1991

Terry Langford
Clinical Assistant Professor, Family Medicine
D.O., University of Health Sciences College of Osteopathic Medicine, 1997

Alicja Langner
Clinical Assistant Professor, Pediatrics and Rural Medicine
M.D., Medical University of Gdansk, 1966

Michael A. Langone
Clinical Assistant Professor, Orthopedic Surgery
B.S., University of Miami, 1979
M.D., University of Health Science, The Chicago Medical School, 1985

Albert J. LaTorra
Clinical Professor, Surgery
B.S., St. Joseph College of Indiana, 1954
D.O., Chicago College of Osteopathic Medicine, 1961

Alison A. Lauber
Clinical Assistant Professor, Family Medicine
B.A., Keuka College, 1975
M.D., Medical College of Georgia, 1979

Gerald J. Lavandosky
Clinical Assistant Professor, Pediatrics
B.S., Virginia Tech, 1986
M.D., Eastern Virginia Medical School, 1990

Clara H. Lawhead
Clinical Instructor, Preventive Medicine
B.S., University of Florida, 1978
M.S., Florida State University, 1989

Alan K. Lazar
Clinical Assistant Professor, Orthopedic Surgery
M.D., New York Medical College, 1976

Nhat M. Le
Clinical Assistant Professor, Orthodontics
D.M.D., University of Florida, 1996

Douglas Leder
Clinical Assistant Professor, Ophthalmology
B.A., Rutgers College, 1978
D.O., University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine, 1983

David Lederman
Adjunct Faculty, Oral Medicine
D.M.D., University of Pennsylvania, 1996

H. Wayne Lee
Clinical Assistant Professor, Family Medicine
B.S., University of Arkansas, 1965
M.D., University of Arkansas Medical Center, 1969

Noah J. Lee
Clinical Assistant Professor, Family Medicine
B.S., University of Miami, 1997
D.O., Nova Southeastern University College of Osteopathic Medicine, 2002

Alex Leeds
Clinical Assistant Professor, Family Medicine
D.O., College of Osteopathic Medicine and Surgery, 1975

Richard F. Leedy, Jr.
Clinical Professor, Family Medicine
D.O., Philadelphia College of Osteopathic Medicine, 1964
M.Sc., Meharry Medical College, 1998

Alan S. Lefkin
Clinical Assistant Professor, Internal Medicine
B.S., Syracuse University, 1979
M.D., St. Georges University School of Medicine, 1983

Christine Legler
Adjunct Associate Professor, Health Science
B.S./PA-C, Hahnemann University, 1976
M.S., University of Pittsburgh, 1981
D.H.Sc., Nova Southeastern University, 2004

Fermin Leguen
Adjunct Assistant Professor, Public Health
M.D., Havana University, 1978
M.P.H., Johns Hopkins University School of Public Health, 1998

Andrew S. Lepoff
Clinical Assistant Professor, Surgery
B.S., Villanova University, 1982
D.O., Southeastern University College of Osteopathic Medicine, 1986

Barry Lerner
Clinical Instructor, Geriatrics
A.B., Boston University, 1965
M.D., University of Rome, 1970

Keith J. Lerner
Clinical Assistant Professor, Internal Medicine
B.A., Boston University, 1980
M.D., Boston University School of Medicine, 1980

Richard S. Levene
Clinical Assistant Professor, Family Medicine
B.S., Syracuse University, 1984
D.O., New York College of Osteopathic Medicine, 1988

Richard Levin
Clinical Assistant Professor, Urology
B.A., Clark University, 1985
M.D., George Washington University, 1989

Ronald H. Levin
Clinical Assistant Professor, Internal Medicine
B.A., Clark University, 1969
M.D., George Washington University School of Medicine, 1973

William Levin
Clinical Associate Professor, Family Medicine
B.S., Philadelphia College of Pharmacy and Science, 1954
D.O., Philadelphia College of Osteopathic Medicine, 1958

Arthur R. Levine
Clinical Associate Professor, Internal Medicine
B.A., University of Michigan, 1959
D.O., Chicago College of Osteopathic Medicine, 1965

Philip Levine
Assistant Professor, Diagnostic Sciences
D.D.S., University of Tennessee, 1962

Larry K. Levinson
Clinical Assistant Professor, Family Medicine
B.S., Pennsylvania State University, 1981
D.O., Philadelphia College of Osteopathic Medicine, 1985

Norman Levy
Clinical Assistant Professor, Cariology and Restorative Dentistry
D.D.S., Maryland University, 1974

Frederick T. Lewis
Clinical Assistant Professor, Psychiatry
B.S., Pennsylvania State University, 1979
D.O., Southeastern University College of Osteopathic Medicine, 1986

Martin G. Lewis
Clinical Professor, Pathology
M.D., University of London, 1968

Mary Lewis
Adjunct Faculty Member, Nursing
B.S.N., University of Wisconsin,1973
M.B.A., International College, Fort Myers, 1993
M.S.N./A.R.N.P., Barry University, 2000
Ed.D., University of Central Florida, 2005

Robert J. Lewis
Clinical Associate Professor, Pathology
D.O., Philadelphia College of Osteopathic Medicine, 1962

Peter Liane
Clinical Assistant Professor, Optometry
O.D., Ohio State University College of Optometry, 1974

Steven Licata
Clinical Assistant Professor, Family Medicine
B.A., Florida Atlantic University, 1993
D.O., Nova Southeastern University College of Osteopathic Medicine, 1997

Craig H. Lichtblau
Clinical Assistant Professor, Physical Medicine and Rehabilitation
M.D., American University of the Caribbean, 1985

Greg Lieb
Clinical Assistant, Optometry
B.S., Saint Francis University, 1995
O.D., New England College of Optometry, 1999

Mark E. Lieberman
Clinical Assistant Professor, Family Medicine
B.S., University of Miami, 1982
M.D., University of Miami School of Medicine, 1986

Felix S. Linetsky
Clinical Associate Professor, Osteopathic Principles and Practice
P.A., Odessa Medical College, 1966
M.D., Vorenezh Medical Institute, 1975

Richard M. Linn
Clinical Assistant Professor, Surgery
A.B., Brown University, 1980
M.D., New York University College of Medicine, 1984

Steven R. Linzer
Clinical Assistant Professor, Family Medicine
B.S., State University of New York, 1982
D.O., University of Health Sciences College of Osteopathic Medicine, 1986

Bernard Loeffke
Adjunct Professor, Public Health
B.S., U.S. Military Academy at West Point, 1957
M.A., Middlebury College, 1967
Ph.D., University of Miami, 1972

B.S.P.A., Nova Southeastern University College of Allied Health, 1997

Jeffrey S. Lombard
Clinical Associate Professor, Urology
B.S., Waynesburg College, 1976
D.O., Philadelphia College of Osteopathic Medicine, 1980

Deborah Longwill-Fox
Clinical Assistant Professor, Dermatology
B.A., George Washington University, 1984
D.O., Southeastern University College of Osteopathic Medicine, 1988

Armando J. Lopez
Clinical Instructor, Pediatrics
B.S., University of Puerto Rico, 1970
M.D., University of Zaragoza, 1976

Maria Lopez
Clinical Assistant Professor, Infectious Disease
B.S., University of Puerto Rico, 1987
M.D., Universidad Central Del Caribe School of Medicine, 1995

Rene L. Lopez-Guerrero
Clinical Assistant Professor, Pediatrics
B.S., University of Miami, 1973
M.B.A., Florida International University, 1977
M.D., Universidad Tecnologica de Santiago, 1983

Alan Louis
Clinical Assistant Professor, Pediatrics
M.D., University of Florida College of Medicine, 1966
B.S., University of Florida, 1992

Ramesh R. Loungani
Clinical Professor, Cardiology
M.D., Bangalore Medical College, 1977

Shantha R. Loungani
Clinical Assistant Professor, Neurology
M.D., Pt. JNM Medical College, 1980

Robert Love
Clinical Assistant Professor, Optometry
O.D., Pennsylvania College of Optometry, 1998

Robert Lovinger
Clinical Assistant Professor, Preventive Medicine and Pediatrics
M.D., University of Miami, 1969

Thomas W. Lowe
Clinical Associate Professor, Obstetrics and Gynecology
B.S., Texas A&M University, 1974
M.D., University of Texas Southwestern Medical Center, 1978

Etta L. Lowery
Clinical Associate Professor, Anesthesiology
B.S., Concord College, 1978
D.O., West Virginia School of Medicine, 1983

Glen D. Lowery
Clinical Associate Professor, Surgery
B.S., Southern Oklahoma State University, 1975
D.O., Oklahoma College of Osteopathic Medicine, 1978

Robert M. Luber
Clinical Assistant Professor, Family Medicine
B.A., Lehigh University, 1973
D.O., Philadelphia College of Osteopathic Medicine, 1977

Harry Lumerman
Adjunct Faculty, Oral Medicine
D.D.S., New York University, 1961

Jorge O. Luna
Clinical Associate Professor, Family Medicine
B.S., Aquinas College, 1970
D.O., Michigan State University, 1977

Thomas M. Macaluso
Clinical Assistant Professor, Psychiatry
B.A., Lafayette College, 1983

M.D., University of Medicine and Dentistry of New Jersey, 1987

Sonia P. Madrazo-Rico
Clinical Assistant Professor, Pediatrics
M.D., Universidad de Monterrey, 1986

Mario M. Magcalas
Clinical Assistant Professor, Pulmonary Medicine
B.S., University of Santo Tomas, 1982
M.D., University of Santo Tomas, 1986

Donald C. Maharty
Clinical Assistant Professor, Family Medicine
B.S., University of Scranton, 1989
D.O., Philadelphia College of Osteopathic Medicine, 1993

Maria Mahmoodi
Clinical Assistant Professor, Family Medicine
B.S., Metropolitan State College, 1990
M.D., University of Colorado Health Sciences Center, 1994

Brian Mahony
Clinical Adjunct Instructor, Optometry
O.D., Pennsylvania College of Optometry, 1985

Mary R. Mailloux
Clinical Assistant Professor, Family Medicine
B.A., University of Miami, 1987
M.D., Johns Hopkins University School of Medicine, 1991

Deepa M. Makhijani
Clinical Assistant Professor, Family Medicine
B.S., H & H Katak Institute of Science, 1966
M.D., Lady Hardings Medical College, 1975
M.P.H., New York Medical College, 1988

Jean M. Malecki
Clinical Professor, Preventive Medicine
Adjunct Professor, Public Health
B.S., Fairfield University, 1975
M.D., New York Medical College, 1979
M.P.H., University of Miami School of Medicine, 1985

Vinod K. Malik
Clinical Assistant Professor, Anesthesiology
B.S., College Hissar, 1980
M.D., Medical College Rohtak, 1986

Ophelia J. Mall
Clinical Assistant Professor, Pediatrics
M.D., Dow Medical College, 1968

Ronald M. Mall
Clinical Assistant Professor, Family Medicine
B.A., University of Illinois, 1970
M.S., Southern Illinois University, 1971
D.O., Chicago College of Osteopathic Medicine, 1975

Jere J. Mammino
Clinical Assistant Professor, Internal Medicine
B.S., Albright College, 1978
D.O., Philadelphia College of Osteopathic Medicine, 1982

Michael Mandese
Clinical Assistant Professor, Optometry
O.D., Nova Southeastern University, 1996

Susan G. Manella
Clinical Assistant Professor, Family Medicine
B.S., Pennsylvania State University, 1978
D.O., Philadelphia College of Osteopathic Medicine, 1983

Basil Mangra
Clinical Assistant Professor, Internal Medicine
B.S., Roosevelt University, 1983
M.D., University of Illinois, 1989

Vivian Manjarres
Adjunct Clinical Assistant Professor, Endodontics
D.D.S., Universidad Javeriana Bogota Colombia, 1992

CT—Endodontics,
Baylor College of Dentistry, 1997

Gene F. Manko
Clinical Assistant Professor, Obstetrics/Gynecology
B.S., University of Pennsylvania, 1968
M.D., University of Pennsylvania, 1972

Constantine A. Mantz
Clinical Assistant Professor, Oncology
B.S., Loyola University of Chicago, 1990
M.D., University of Chicago, 1995

Jassett A. Maragh
Clinical Assistant Professor, Pediatrics
M.D., University of the West Indies, 1987

Alberto A. Marante
Clinical Assistant Professor, Pediatrics
B.A., University of South Florida, 1978
M.D., Universidad CETEC, 1981

James Marbourg
Clinical Assistant Professor, Optometry
O.D., University of Alabama School of Optometry, 1977

David Marcus
Clinical Associate Professor, Pediatrics
B.S., Tulane University, 1977
M.D., Tulane University, 1981

Gary L. Marder
Clinical Assistant Professor, Dermatology
B.A., New York University, 1977
D.O., University of Health Sciences College of Osteopathic Medicine, 1983

Michelle Markley
Clinical Assistant Professor, Surgery
M.D., University of Miami School of Medicine, 1990

Michael Markou
Clinical Assistant Professor, Family Medicine
B.S., University of South Florida, 1987
D.O., Kirksville College of Osteopathic Medicine, 1991

Stanley W. Marks
Clinical Assistant Professor, Surgery
B.A., C. W. Post College of Long Island University, 1969
M.D., Howard University College of Medicine, 1973

Stewart N. Marks
Adjunct Professor, Cariology and Restorative Dentistry
D.D.S., New York University, 1976
M.S., Nova Southeastern University, 2004

Homer L. Marquit
Clinical Assistant Professor, Pediatrics
B.S., Rensselaer Polytechnic Institute, 1968
M.D., University of Miami School of Medicine, 1972

Jill Marrotte
Clinical Assistant Professor, Optometry
O.D., New England College of Optometry, 1985

Santiago E. Martinez
Clinical Assistant Professor, Internal Medicine
M.D., Universidad Autonoma de Santo Domingo, 1982

Walter C. Martinez
Clinical Associate Professor, Pediatrics
B.S., San Marcos University, 1960
M.D., San Marcos University, 1967

Rosario L. Martinez-Angel
Clinical Instructor, Pediatrics
B.S., University of South Florida, 1992
M.D., Ponce School of Medicine, 1997

Daniel Martinez-Urtarte
Clinical Assistant Professor, Family Medicine
M.D., Universidad Autonoma de Santo Domingo, 1981

Richard Martinoff
Adjunct Assistant Professor, Biomedical Informatics
B.S., University of Illinois, 1995

M.D., University of Illinois College of Medicine, 1999

Robert Marx
Visiting Professor, Oral Surgery
D.D.S., Northwestern University, 1971

Eugene L. Mascarenhas
Clinical Assistant Professor, Cardiology
M.D., Grant Medical College, 1966

Thomas H. Matese, Jr.
Clinical Assistant Professor, Family Medicine
B.S., Villanova University, 1984
D.O., University of Health Sciences College of Osteopathic Medicine, 1988

Mitchell F. Matez
Clinical Assistant Professor, Surgery
B.A., Rutgers College, 1982
D.O., Philadelphia College of Osteopathic Medicine, 1986

Barry I. Matza
Clinical Assistant Professor, Orthodontics
D.M.D., Tufts University School of Dental Medicine, 1973

Mitchell D. Maulfair
Clinical Assistant Professor, Family Medicine
D.O., Philadelphia College of Osteopathic Medicine, 1977

Troy C. Maurer
Clinical Instructor, Sports Medicine
B.A., Purdue University, 1989

Denby Matthews
Adjunct Faculty, Prosthodontics
D.D.S., Ohio State University, 1969

Dane L. Maxfield
Clinical Associate Professor, Internal Medicine
B.A., Northwestern University, 1968
D.O., Kirksville College of Osteopathic Medicine, 1972

John P. May
Clinical Assistant Professor, Internal Medicine
B.S., University of Notre Dame, 1984
M.D., Loyola University Stritch School of Medicine, 1988

Martin M. May
Clinical Assistant Professor, Orthopedic Surgery
B.A., Syracuse University, 1969
M.D., Chicago Medical School, 1974

Laura L. Mays
Adjunct Faculty, Physician Assistant Studies
B.S., Butler University, 2001

Cynthia A. Mayer
Clinical Assistant Professor, Internal Medicine
B.S., University of Florida, 1973
D.O., West Virginia School of Osteopathic Medicine, 1986

Joseph C. Mazzola
Clinical Assistant Professor, Family Medicine
B.S., Georgia State University, 1995
D.O., Chicago College of Osteopathic Medicine, 1999

William H. McAfee
Clinical Assistant Professor, Family Medicine
B.A., University of Virginia, 1966
M.S., Medical University of South Carolina, 1970
Ed.D., University of South Carolina, 1979

Daniel P. McBath
Clinical Assistant Professor, Family Medicine
B.A., St. Leo College, 1984
D.O., Southeastern University College of Osteopathic Medicine, 1990

Paul A. McCarthy
Clinical Instructor, Preventive Medicine
B.A., Canisius College, 1978
M.A., Syracuse University, 1989

John McClane III
Clinical Assistant Professor, Optometry
B.S., University of Florida, 1975
O.D., Illinois College of Optometry, 1979

Frederick J. McClimans
Clinical Assistant Professor, Orthopedic Surgery
D.O., Kirksville College of Osteopathic Medicine, 1981

Malcolm H. McDonald
Clinical Associate Professor, Surgery
B.S., Michigan State University, 1965
D.O., Michigan State University, 1969

David A. McInnes
Clinical Associate Professor, Family Medicine
A.B., William Jewell College, 1977
M.D., University of Missouri, 1981
M.Ed., University of Southern California, 2001

Bruce J. McIntosh
Clinical Assistant Professor, Pediatrics
B.A., Emory University, 1966
M.D., University of Florida School of Medicine, 1970

Judith McKay
Adjunct Faculty, Health Science
B.A. The American University, 1973
M.A., Kean University, 1979
J.D., Emory University, 1983
Ph.D., Nova Southeastern University, 2002

Sonya V. McKee
Clinical Assistant Professor, Psychiatry
B.A., Wayne State University, 1986
M.D., Wayne State University, 1990

Michael J. McKenzie
Clinical Assistant Professor, Family Medicine
B.S., Virginia Commonwealth University, 1992
M.D., Universidad Iberoamericana School of Medicine, 1999

Archie McLean
Clinical Associate Professor, Community Medicine
A.B., Bowdoin College, 1977
M.P.H., University of South Carolina, 1978
D.O., Southeastern University College of Osteopathic Medicine, 1988

John McSoley
Clinical Assistant Professor, Optometry
O.D., New England College of Optometry, 1991

Clyde Meckstroth
Clinical Assistant Professor, Surgery
B.S., University of Florida, 1981
D.O., Nova Southeastern University College of Osteopathic Medicine, 1985
M.H.A., University of Florida, 2003

Mary Mehta
Clinical Assistant Professor, Pediatrics
B.A., Austin College, 1983
M.D., University of Texas Medical Branch, 1987

Dan H. Meirson
Clinical Assistant Professor, Dermatology
B.S., University of Michigan, 1982
M.D., Ohio State University, 1986

Deborah Meisel
Adjunct Assistant Professor, Diagnostic Sciences
D.D.S., University of Illinois, 1979
M.M.Sc., Harvard University of Oral Medicine, 1985

Malcolm Meister
Adjunct Professor, Orthodontics
D.D.S., New York University College of Dentistry, 1955
M.S.M., Florida International University, 1981
J.D., Nova Southeastern University, 1995

Barbara Ann Melzer
Adjunct Professor, Ph.D. Program Physical Therapy
B.S., University of North Dakota, 1972
M.S. University of Minnesota, 1976

Ph.D., University of Texas at Austin, 1989

Karen Memoli
Clinical Assistant Professor, Optometry
O.D., Nova Southeastern University, 1999

Avishai Mendelson
Clinical Assistant Professor, Internal Medicine
B.S., University of Florida, 1988
M.D., University of Miami School of Medicine, 1993

Benny Menendez
Clinical Assistant Professor, Family Medicine
M.D., University of Puerto Rico, 1986
D.O., New York College of Osteopathic Medicine, 1989

Richard J. Menendez
Clinical Associate Professor, Family Medicine
B.S., Tulane University, 1979
M.D., University of Puerto Rico Medical School, 1983

Roxanna M. Menendez
Clinical Assistant Professor, Pediatrics
B.S., University of Miami, 1991
D.O., Western University of the Health Sciences, 1996

Carlos E. Mercado
Clinical Assistant Professor, Family Medicine
M.D., Universidad Metropolitana, 1988

Erica Migliorati
Assistant Professor, Periodontology
D.D.S., University of Sao Paulo, Brazil, 1973

Mongi Mikhail
Clinical Assistant Professor, Prosthodontics
D.D.S., Louisiana State University, 1984

Richard A. Miller
Clinical Assistant Professor, Dermatology
B.S., University of Michigan, 1978
D.O., Michigan State University, 1984

Barry M. Miskin
Clinical Assistant Professor, Surgery
M.D., New York Medical College of New Rochester, 1981

Glen Mitchell
Clinical Assistant Professor, Endodontics
D.D.S., Northwestern University, 1991

Lauren Mitchell
Clinical Assistant Professor, Endodontics
D.D.S., Northwestern University, 1992

Tony A. Mitchell
Clinical Assistant Professor, Internal Medicine
B.S., Murray State University, 1969
M.S., Memphis State University, 1974
M.D., University of Tennessee Center for the Health Sciences, 1977
M.P.H., University of South Florida, 1991

Rakesh K. Mittal
Clinical Associate Professor, Pediatrics
Premed, Delhi College, 1972
M.D., University College of Medical Sciences, 1978

Marie-Evelyne Moise
Clinical Assistant Professor, Internal Medicine
M.D., University of Brussels, 1980

Shahida P. Moizuddin
Clinical Assistant Professor, Preventive Medicine
M.D., Gandhi Medical College, 1973
M.P.H., Tulane School of Public Health, 1987

Ronald K. Molinet
Clinical Assistant Professor, Internal Medicine
B.A., Yale University, 1955
M.D., New York Medical College, 1959

Tony Momeni
Clinical Assistant Professor, Family Medicine

B.S., University of Florida, 1988
D.O., Southeastern University College of Osteopathic Medicine, 1993

Harris H. Mones
Clinical Associate Professor, Community Medicine
D.O., University of Osteopathic Medicine and Health Sciences, 1979

Francisco Montamarta
Clinical Assistant Professor, Periodontology
D.D.S., New York University, 1996

Carroll L. Moody
Clinical Associate Professor, Cardiology
M.D., University of Louisville, 1967

M. Fernando D. J. Moraflores
Clinical Assistant Professor, Pediatrics
M.D., Universidad San Carlos de Guatemala, 1982

Glenn Moran
Clinical Associate Professor, Family Medicine
B.A., Florida Atlantic University, 1982
D.O., Southeastern University College of Osteopathic Medicine, 1988

Marc Morganstine
Clinical Professor, Community Medicine
B.S., Moravian College, 1965
D.O., Philadelphia College of Osteopathic Medicine, 1969
M.S., Southeastern University, 1979

Richard Morris
Clinical Assistant Professor, Optometry
O.D., Southern College of Optometry, 1986

Louis T. Morrison
Clinical Assistant Professor, Family Medicine
B.S., University of Miami, 1979
M.S., Louisiana State University, 1982
M.D., University of Texas Medical School, 1989

Linda S. Morse
Clinical Assistant Professor, Family Medicine
B.A., Indiana University, 1977
D.O., Oklahoma State University College of Osteopathic Medicine, 1982
M.P.H., Tulane University, 1984

Reinhard W. Motte
Clinical Instructor, Pathology
M.D., Wayne State University, 1992

Deborah A. Mulligan
Clinical Professor, Pediatrics
B.A., University of San Francisco, 1976
M.D., University of California Los Angeles, 1982

Duaine D. Murphree
Clinical Assistant Professor, Family Medicine
B.S., University of South Alabama, 1977
M.D., University of South Alabama, 1983
M.S., Wake Forest University, 1991

Suzanne C. Murphy
Clinical Assistant Professor, Internal Medicine
B.S., Villanova University, 1988
M.D., Albany Medical College, 1992

Roy C. Musoff
Clinical Assistant Professor, Internal Medicine
B.S., City College of New York, 1980
M.D., Universidad del Noreste, 1986

Elizabeth M. Mutch
Clinical Assistant Professor, Family Medicine
M.D., University of Manchester, 1968

Emanuel Naccarato
Clinical Assistant Professor, Cardiology
B.S., St. John's University, 1979
M.D., Universidad Del Noreste, 1983

Ralph G. Nader
Clinical Assistant Professor, Cardiology
B.A., University of Pennsylvania, 1980

M.D., Northwestern University Medical School, 1984

Michael H. Nahmad
Clinical Professor, Surgery
B.S., University of New Mexico, 1960
M.D., Tulane Medical School, 1964

Joseph J. Namey, Jr.
Clinical Associate Professor, Internal Medicine
B.S., Gannon University, 1983
D.O., Southeastern University College of Osteopathic Medicine, 1987

James A. Napier, Jr.
Clinical Assistant Professor, Family Medicine
B.A., University of Michigan, 1970
D.O., College of Osteopathic Medicine and Surgery, 1974
J.D., Stetson University College of Law, 1984

Luis F. Narvaez
Clinical Assistant Professor, Family Medicine
M.D., Universidad del Valle, 1984

Neil A. Natkow
Clinical Professor, Family Medicine
A.B., Indiana University, 1968
D.O., University of Health Sciences College of Osteopathic Medicine, 1972

Rajkumar M. Nebhrajani
Clinical Assistant Professor, Surgery
M.D., Topiwala National Medical College, 1979

Joe A. Nelson
Clinical Assistant Professor, Family Medicine
B.S., Florida Southern College, 1979
D.O., University of Osteopathic Medicine and Health Sciences, 1984

Kathryn Nelson
Clinical Assistant Professor, Optometry
B.A., Gustavus Adolphus College, 2000
O.D., Indiana University School of Optometry, 2004

Beverly Y. Nelson-Curtis
Clinical Professor, Pediatrics
B.A., Herbert Lehman College, 1976
M.S., New York University, 1978
M.D., State University of New York, 1982

Edward Neuwirth
Clinical Assistant Professor, Prosthodontics
D.D.S., New York University College of Dentistry, 1960

Steven Newman
Clinical Assistant Professor, Optometry
O.D., Nova Southeastern University, 1996

Emanuel Newmark
Clinical Professor, Ophthalmology
B.S., Rutgers University College of Pharmacy, 1959
M.D., Duke University School of Medicine, 1966

Nam Q. Nguyen
Clinical Assistant Professor, Internal Medicine
B.A., Florida Atlantic University, 1994
D.O., Nova Southeastern University College of Osteopathic Medicine, 1999

Sonny V. Nguyen
Clinical Assistant Professor, Internal Medicine
M.D., Jefferson Medical College, 1999

Thuy-Lan Nguyen
Clinical Adjunct Instructor, Optometry
O.D., Nova Southeastern University College of Optometry, 2002

Thy-Lan Nguyen
Clinical Assistant Professor, Optometry
O.D., Nova Southeastern University, 2000

Scott A. Nichols
Clinical Assistant Professor, Pediatrics
B.A., Occidental College, 1995
M.D., University of Pennsylvania School of Medicine, 1999

Paul H. Niloff
Clinical Associate Professor, Surgery

B.A., University of Bishops, 1940
M.D., McGill University, 1943
M.S., McGill University, 1949

Iran Niroomand-Rad
Clinical Assistant Professor, Pediatrics
M.S., Michigan State University, 1982
D.O., Nova Southeastern University College of Osteopathic Medicine, 1989

Fred Norkin
Clinical Assistant Professor, Periodontology
D.D.S., Tufts University, 1997

Robert A. Norman
Clinical Associate Professor, Dermatology
D.O., Chicago College of Osteopathic Medicine, 1981
M.P.H., University of South Florida, 2001

Carlos H. Nousari
Clinical Associate Professor, Dermatology
M.D., Universidad Catolica De Cordoba, 1989

Martin Novey
Clinical Assistant, Optometry
B.S., Indiana University of Pennsylvania, 1991
O.D., Pennsylvania College of Optometry, 1994

Robert P. Novo
Clinical Assistant Professor, Pediatrics
B.A., Rugers University, 1975
M.D., CETEC University, 1980

Michael A. Nowak
Clinical Assistant Professor, Pathology
B.S., Xavier University, 1983
M.D., Wright State University, 1988

Jeffrey Nullman
Clinical Assistant Professor, Cariology and Restorative Dentistry
D.D.S., State University of New York at Buffalo, 1977

Charles L. Nutinsky
Clinical Associate Professor, Surgery
B.S., Delaware Valley College, 1973
D.O., University of Health Sciences College of Osteopathic Medicine, 1977

Timothy E. O'Connor
Clinical Instructor, Preventive Medicine
B.A., Wayne State University, 1974

Hector Octaviani
Clinical Assistant Professor, Pediatrics
B.S.N., University of Puerto Rico, 1978
M.D., University of Puerto Rico School of Medicine, 1982

Marshall D. Ohring
Clinical Assistant Professor, Pediatrics
M.D., Technion Institute of Technology School of Medicine, 1983

Juan C. Ojea
Clinical Instructor, Anesthesiology
B.S., University of South Florida, 1982
M.D., Universidad Tecnologica de Santiago, 1985

Nicholas Z. Okeson
Clinical Assistant Professor, Family Medicine
B.A., Bethany College, 1991
D.O., Kirksville College of Osteopathic Medicine, 1995

Nnachi L. Oko
Clinical Assistant Professor, Family Medicine
M.D., University of Health Sciences Antigua, 1987

Dennis J. O'Leary
Clinical Assistant Professor, Internal Medicine
B.A., Manhattan College, 1971
D.O., Philadelphia College of Osteopathic Medicine, 1977

Ovidio Olivencia
Physical Therapy
B.S., Univeresity of California—Davis, 1999
M.P.T., Nova Southeastern University, 2002

Kevin P. O'Neill
Clinical Instructor, Sports Medicine
B.S., University of Pittsburgh, 1976
M.S., University of Arizona, 1977

Martha O'Neill
Adjunct Faculty Member, Nursing
B.S.N., University of Michigan—Ann Arbor, 1972
M.S.N., University of Arizona, 1979

Peter H. Oostwouder
Clinical Assistant Professor, Family Medicine
B.A., Washington University, 1978
M.D., St. Louis University School of Medicine, 1982

Edgar G. Orellana
Clinical Assistant Professor, Pediatrics
M.D., University of San Carlos, Guatemala, 1979

Brett Osborn
Clinical Assistant Professor, Surgery
D.O., Chicago College of Osteopathic Medicine, 1996

Ana Ospina
Adjunct Faculty, Oral and Maxillofacial Surgery
D.D.S., University, Medellin, Colombia, 1997

Leon Ostroff
Clinical Assistant Professor, Periodontology
D.M.D., Tufts University School of Dental Medicine, 1973

Anthony N. Ottaviani
Clinical Professor, Pulmonary Medicine
Adjunct Associate Professor, Public Health
B.A., Gannon College, 1964
D.O., University of Health Sciences College of Osteopathic Medicine, 1968
M.P.H., Nova Southeastern University College of Allied Health, 1997

Melba Ovalle
Adjunct Faculty, Physician Assistant Studies
B.S., Pace University, 1978
M.D., Boston University, 1982

Melissa C. Overman
Clinical Instructor, Preventive Medicine
B.A., North Carolina Wesleyan College, 1997
M.A., East Carolina University, 1999
D.O., West Virginia School of Osteopathic Medicine, 2003
M.P.H., Nova Southeastern University, 2006

Orestes Pablos
Clinical Assistant Professor, Surgery
B.S., Instituto de Segundo Ensenanza, 1950
M.D., University of Havana Medical School, 1960

James Pace
Adjunct Faculty, Physician Assistant Studies
PA-C, University of Nebraska, 1976

Barbara Packer
Adjunct Professor, Audiology
B.A., Douglas College, Rutgers University, 1974
M.S., Teachers College, Columbia, 1976
Ed.D., Nova Southeastern University, 1995

Richard J. Paley
Clinical Assistant Professor, Family Medicine
M.D., University of Virginia School of Medicine, 1989

Tomia E. Palmer
Clinical Assistant Professor, Family Medicine
B.S., Xavier University, 1994
M.D., Medical College of Georgia, 1998

Siddharth J. Pandya
Clinical Assistant Professor, Radiology
B.S., Arizona State University, 1990
D.O., University of Health Sciences College of Osteopathic Medicine, 1995

Melvin E. Pann
Clinical Assistant Professor, Surgery
B.A., Hofstra University, 1969
M.D., New York University School of Medicine, 1973

Eric Pantaleon
Clinical Assistant Professor, Pediatrics
M.D., Universidad Nacional Pedro Henriquez Urena, 1986

Juan C. Paramo
Clinical Assistant Professor, Surgery
M.D., Pontificia Universidad Javeria, 1991

Thomas A. Parrino
Clinical Professor, Internal Medicine
B.S., John Carroll University, 1967
M.D., Georgetown University School of Medicine, 1971

Christopher F. Parry
Clinical Assistant Professor, Urology Surgery
B.S., Eastern Michigan University, 1976
D.O., Chicago College of Osteopathic Medicine, 1980

Rebecca M. Paschal
Clinical Assistant Professor, Family Medicine
B.A., University of Florida, 1992
ARNP, Johns Hopkins University School of Nursing, 2001

Rozalyn L. Paschal
Clinical Assistant Professor, Pediatrics
B.S., Howard University, 1970
M.D., University of Florida Medical School, 1974

Vinod B. Patel
Clinical Assistant Professor, Nephrology
M.D., University of Madras, 1968

Naresh H. Pathak
Clinical Assistant Professor, Internal Medicine
B.A., University of California, 1979
M.D., UTESA School of Medicine, 1985

Raja S. Pathapati
Clinical Assistant Professor, Internal Medicine
M.D., Andhra Medical College, 1991

Carlos A. Patino
Clinical Assistant Professor,Pediatrics
M.S., Universidad del Valle School of Medicine, 1989

Lucia Patino
Clinical Assistant, Optometry
O.D., Nova Southeastern University, 2002

Andres Patron
Clinical Assistant Professor, Internal Medicine
B.A., Seton Hall University, 1984
D.O., New York College of Osteopathic Medicine, 1988

Christopher D. Patterson
Clinical Assistant Professor, Family Medicine
B.S., University of South Florida, 1989
D.O., Southeastern University College of Osteopathic Medicine, 1993

Frank J. Pearl
Clinical Assistant Professor, Cardiology
B.A., University of Pennsylvania, 1969
M.D., Jefferson Medical College, 1974

Scott Pearl
Clinical Assistant Professor, Optometry
B.S., University of Delaware, 1980
B.S., University of Delaware, 1982
O.D., Pennsylvania College of Optometry, 1984

Brad Peltzer
Clinical Associate Professor, Optometry
O.D., University of Houston, 1991

Eduardo I. Pena
Clinical Assistant Professor, Psychiatry
B.A., State University of New York, 1985
B.A., State University of New York, 1989

Manuel A. Penalver
Clinical Professor, Obstetrics and Gynecology

B.S., University of Miami, 1973
M.D., University of Miami School of Medicine, 1977

Matthew G. Penson
Clinical Assistant Professor, Pediatrics
B.A., University of Virginia, 1994
M.D., University of Florida College of Medicine, 1998

Laura J. Peralta
Clinical Assistant Professor, Family Medicine
B.S.N., Texas Christian University, 1979
D.O., Southeastern University College of Osteopathic Medicine, 1988

Hugo N. Perez
Clinical Assistant Professor, Pediatrics
M.D., Universidad Central del Este Dominican Republic, 1980

Joseph R. Perez
Clinical Assistant Professor, Internal Medicine
B.S., Florida International University, 1996
D.O., Nova Southeastern University College of Osteopathic Medicine, 2001

Manuel Perez-Espinosa
Clinical Associate Professor, Family Medicine
B.S., Institute de Segunda Ensenanza de Vedado, 1950
M.D., University of Havana School of Medicine, 1960

Manuel Perez-Menendez
Clinical Assistant Professor, Radiology
M.D., Universidad de Salamanca, 1972

David E. Perloff
Clinical Assistant Professor, Internal Medicine
B.G.S., University of Miami, 1987
M.D., University of Miami School of Medicine, 1991

Stewart I. Perlow
Adjunct Faculty, Cariology and Restorative Dentistry
D.M.D., Tufts University, 1968

Joshua A. Perper
Clinical Professor, Surgery
Adjunct Professor, Public Health
M.D., Medical School of Hebrew University, 1960
M.S., John Hopkins University School of Hygiene & Public Health, 1969

Dana E. Perrin
Clinical Assistant Professor, Family Medicine
B.S., Colorado State University, 1974
M.A., University of California, 1976
M.D., University of South Florida College of Medicine, 2002

Silvia Peters
Adjunct Faculty, Health Science
B.S., University of Findlay, 2000
M.S., University of Nebraska Medical Center, 2001
D.H.Sc., Nova Southeastern University, 2004

Richard K. Peterson
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1987
M.D., University of Florida, 1992

Raymond A. Petrus II
Clinical Assistant Professor, Family Medicine
B.S., University of South Florida, 1989
D.O., Southeastern University College of Osteopathic Medicine, 1993

Samuel A. Pettina
Clinical Assistant Professor, Family Medicine
B.A., St. Vincent College, 1967
D.O., Chicago College of Osteopathic Medicine, 1972

Yves E. Pierre-Louis
Clinical Assistant Professor, Family Medicine
M.D., Haiti State University Medical School, 1980

Anthony B. Pietroniro
Clinical Assistant Professor, Pediatrics
B.S., Barry University, 1985
M.D., Tulane University School of Medicine, 1989

Antoinette C. Pignataro
Clinical Assistant Professor, Internal Medicine
B.A., Manhattanville College, 1979
M.D., San Juan Bautista School of Medicine, 1983

Alan B. Pillersdorf
Clinical Assistant Professor, Surgery
B.S., State University of New York, 1973
M.D., Georgetown University School of Medicine, 1980

Mathias Piskur
Clinical Assistant Professor, Cardiology
B.A., Queens College, 1964
M.D., University of Bologna, 1970

David V. Pizzimenti
Clinical Assistant Professor, Internal Medicine
B.S., University of Florida, 1997
D.O., Nova Southeastern University, 2002

Parker Plante
Clinical Assistant, Optometry
B.S., Southern California College of Optometry, 1984
O.D., Southern California College of Optometry, 1986

Melvin Platt
Adjunct Professor, Prosthodontics
D.D.S., University of Detroit, 1955

Marc S. Plotkin
Clinical Assistant Professor, Family Medicine
B.S., University of Michigan, 1990
M.D., Baylor College of Medicine, 1996

Joel S. Policzer
Clinical Assistant Professor, Hematology/Oncology
B.S., Syracuse University, 1970
M.S., University of Brussels, 1974
M.D., College of Medicine and Dentistry of New Jersey, 1976

Wayne M. Pollak
Clinical Assistant Professor, Cardiology
M.D., University of Florida, 1962
B.A., University of Michigan, 1992

Heidi A. Pomm
Clinical Associate Professor, Family Medicine
B.A., Florida International University, 1990
M.A., California School of Professional Psychology, 1994
Ph.D., California School of Professional Psychology, 1996

Benjamin Porras
Adjunct Faculty, Endodontics
D.D.S., New York University, 1982

Regina Portcarrero
Clinical Assistant, Optometry
O.D., Nova Southeastern University College of Optometry, 2002

Nicholas S. Potochny
Clinical Assistant Professor, Physical Medicine and Rehabilitation
B.S., Pennsylvania State University, 1992
D.O., University of New England College of Osteopathic Medicine, 1996

Donna R. Potts
Clinical Assistant Professor, Family Medicine
A.A., University of South Florida, 1980
B.S., Florida State University, 1982
M.D., University of South Florida College of Medicine, 1992

Evangelos G. Poulos
Clinical Assistant Professor, Surgery
B.S., University of Miami, 1976
M.D., University of Miami School of Medicine, 1976

Robert Powell
Adjunct Faculty, Endodontics
D.D.S., Medical College of Virginia, 1976

Luis Pozniak
Clinical Assistant Professor, Rural Medicine
M.D., Central University of Venezuela School of Medicine, 1990

Heidi D. Pratt
Clinical Assistant Professor, Family Medicine
B.S., Nova Southeastern University, 1998
D.O., Nova Southeastern University College of Osteopathic Medicine, 2002

Eroston A. Price
Clinical Assistant Professor, Surgery
B.S., Mount Saint Mary's College, 1982
M.D., University of Pittsburgh School of Medicine, 1988

Melvin M. Propis
Clinical Assistant Professor, Surgery
B.A., Syracuse University, 1964
M.D., Hadassah Medical School, 1972

Abby A.R. Pudpud
Clinical Assistant Professor, Pediatrics
B.A., Wake Forest University, 1985
D.O., University of Medicine and Dentistry of New Jersey, 1991

Ivan Puente
Clinical Assistant Professor, Surgery
B.S., University of Michigan, 1983
M.D., University of California, 1987

Isidro Pujol
Clinical Assistant Professor, Internal Medicine
B.S., University of Miami, 1988
D.O., Nova Southeastern University College of Osteopathic Medicine, 1994

Subhash R. Puranik
Clinical Assistant Professor, Surgery
M.D., B.J. Medical College, 1963

Gerald Pyser
Clinical Assistant Professor, Pediatric Dentistry
D.D.S., Temple University, 1971

Jose R. Quero
Clinical Assistant Professor, Internal Medicine
B.S., Loyola University, 1979
M.D., Rush Medical College, 1984

Georges Quesnel
Clinical Assistant Professor, Obstetrics and Gynecology
M.D., Universite de Montreal, 1965

Hugo F. Quevedo
Adjunct Faculty, Physician Assistant Studies
B.S., Universidad de Chile, 1981
M.A., San Jose State University, 1992
P.A., Miami Dade Community College, 2001

Francis L. Quito
Clinical Assistant Professor, Internal Medicine
D.V.M., University of Philippines, 1980
Ph.D., University of Minnesota, 1991
D.O., Nova Southeastern University College of Osteopathic Medicine, 1998

Zafar I. Qureshi
Clinical Assistant Professor, Pediatrics
M.D., Sindh Medical College, 1989

Louis Radnothy
Clinical Assistant Professor, Family Medicine
B.S., Geneva College, 1953
D.O., University of Osteopathic Medicine and Health Sciences, 1957

Frederick Rahe
Adjunct Assistant Professor, Audiology
B.A., University of Florida, 1975
M.A., University of Florida, 1976
Au.D., Nova Southeastern University, 2000

Amy D. Raines
Clinical Assistant Professor, Family Medicine
B.A., University of Texas at Austin, 1998
D.O., University of North Texas College of Osteopathic Medicine, 2002

Kenneth A. Ramey
Clinical Assistant Professor, Osteopathic Principles and Practice
D.O., Chicago College of Osteopathic Medicine, 1994

Francisco Ramirez, Jr.
Clinical Assistant Professor, Radiology
A.A., University of Santo Tomas, 1952
M.D., University of Santo Tomas, 1958

Nina C. Ramirez
Clinical Assistant Professor, Pediatrics
B.A., Fordham University, 1953
M.D., Cornell University, 1978

Otto M. Ramos
Clinical Associate Professor, Pediatrics
M.D., University of Santiago, 1977

M. Vic Rampertaap
Adjunct Faculty, Prosthodontics
D.D.S., Howard University, 1986

Eileen M. Ramsaran
Clinical Instructor, Internal Medicine
M.D., St. George's University School of Medicine, 1991

Elaine M. Rancatore
Clinical Assistant Professor, Family Medicine
B.A., Boston University, 1980
M.S., Fairleigh Dickinson University, 1982
M.D., New York University, 1984

Theyar Rangarajan
Clinical Assistant Professor, Prosthodontics
M.B.A., New York University, 1981
D.D.S., New York University, 1989

Robert F. Raspa
Clinical Assistant Professor, Family Medicine
B.S., Fairmont State College, 1978
M.D., West Virginia University, 1982

Ranga Rathakrishnan
Clinical Assistant Professor, Internal Medicine
B.A., University of Oklahoma, 1988
M.D., University of Oklahoma College of Medicine, 2000

Kenneth R. Ratzan
Clinical Professor, Internal Medicine
M.D., Harvard Medical School, 1965

Michael A. Ravitsky
Clinical Assistant Professor, Cardiology
B.S., Delaware Valley College, 1969
D.O., Kansas City College of Osteopathic Medicine, 1973

Hussain E. Rawji
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Florida Agricultural & Mechanical University, 1986
M.D., University of Florida, 1990

Robert E. Rayder
Clinical Associate Professor, Pediatrics
B.S., University of Akron, 1971
M.D., University Autonoma of Guadalajara, 1975

Melvyn H. Rech
Clinical Professor, Orthopedic Surgery
A.B., Temple University, 1960
D.O., Kirksville College of Osteopathic Medicine, 1965
Fellow, American College of Osteopathic Surgeons
Fellow, American Osteopathic Academy of Orthopedics

Dianne Rechtine
Clinical Assistant Professor, Family Medicine
M.D., West Virginia University School of Medicine, 1965

Christine E. Reeve
Adjunct Assistant Professor, Health Science
B.S., Duke University, 1988
M.A., State University of New York, 1990
Ph.D., State University of New York, 1996
Board Certified Behavior Analyst

Leonid Remenson
Clinical Assistant Professor, Psychiatry
M.D., Tomsk Medical Institute, 1984

Herbert Remnick
Professor, Diagnostic Sciences
D.D.S., Columbia University, 1947

Mark L. Remz
Clinical Assistant Professor, Family Medicine
B.A., State University of New York, 1980
D.O., New York College of Osteopathic Medicine, 1985

Warren Reuther
Clinical Assistant Professor, Internal Medicine
B.A., Loyola University, 1988
B.S., Tulane University, 1990
M.D., Louisiana State University School of Medicine, 1994

Luis C. Rey-Martinez
Clinical Assistant Professor, Pathology
M.D., Universidad del Norte, 1988

Jeffrey A. Rich
Clinical Assistant Professor, Orthopedic Surgery
B.S., University of Florida, 1988
D.O., Southeastern University College of Osteopathic Medicine, 1992

Willie F. Richardson, Jr.
Clinical Assistant Professor, Dermatology
B.S., Pembroke State University, 1996
M.D., East Carolina University, 2000

Hal Richman
Clinical Assistant Professor, Oral and Maxillofacial Surgery
D.M.D., University of Michigan, 1973
CT—Oral and Maxillofacial Surgery, University of Miami/Jackson Memorial Hospital

Paul T. Richman
Clinical Assistant Professor, Oral and Maxillofacial Surgery
D.D.S., University of Michigan School of Dentistry, 1958
M.S., University of Illinois, 1961

Francisco J. Rincon
Clinical Assistant Professor, Family Medicine
M.D., Universidad Santiago de Compostela, 1970

Lois Ritter
Adjunct Faculty, Health Science
B.S., College of Notre Dame, 1991
M.S., San Francisco State University, 1993
Ed.D., University of San Francisco, 2002

Maria A. Rivera
Clinical Assistant Professor, Obstetrics and Gynecology
B.S.N., Adelphi University, 1974
CNM, State University of New York Downstate Medical Center, 1980

David L. Roach
Adjunct Assistant Professor, Public Health
B.A., Emory University, 1969

Elysa Roberts
Adjunct Professor, Occupational Therapy
B.A., Syracuse University, 1990
M.S., Florida International University, 1994
Ph.D., Nova Southeastern University, 2001

Joel Roberts
Clinical Assistant Professor, Family Medicine
B.S., Washington College, 1980
D.O., Kirksville College of Osteopathic Medicine, 1984

Paul J. Roberts III
Clinical Assistant Professor, Psychiatry
B.S., University of Central Florida, 1981
D.O., Southeastern University College of Osteopathic Medicine, 1985

Edgar B. Rodas
Clinical Instructor, Surgery
M.D., Universidad de Cuenca-Facultad de Medicina, 1995

Raul A. Rodas
Clinical Assistant Professor, Surgery
B.S., University of Oregon, 1978
D.O., Michigan State University, 1983

Julie Rodman
Clinical Assistant Professor, Optometry
O.D., New England College of Optometry, 1998

Armando V. Rodriguez
Clinical Assistant Professor, Internal Medicine
B.S., Miami Dade Community College, 1980
M.D., Technological Institute of Santo Domingo, 1985

Dora Rodriguez
Adjunct Faculty, Community Dentistry
D.M.D., Nova Southeastern University, 2005

Juan Carlos Rodriguez
Clinical Assistant Professor, Pulmonary Medicine
M.D., Rosario University, 1997

Martha M. Rodriguez
Clinical Instructor, Internal Medicine
B.S., Seton Hall University, 1983
M.D., Universidad Central del Este, 1987

Ofer Rodriguez
Clinical Instructor, Surgery
D.O., New York College of Osteopathic Medicine, 1996

Richard Rodriquez
Clinical Assistant Professor, Surgery
B.S., University of Miami, 1984
M.P.H., University of Miami, 1986
D.O., Philadelphia College of Osteopathic Medicine, 1990

Hector M. Rodriguez-Cortes
Clinical Assistant Professor, Pediatrics
M.D., University of Puerto Rico School of Medicine, 1991

Julio H. Rodriguez-Novo
Clinical Assistant Professor, Pediatrics
B.H.S., Florida International University, 1976
M.D., Universidad Autonoma de Guadalajara, 1978

Paul O. Rohart
Clinical Assistant Professor, Family Medicine
B.S., University of New Hampshire, 1981
M.D., State University of New York, 1986

Douglas Rolfe
Visiting Lecturer, Cariology, and Restorative Dentistry
D.D.S., Ohio State University, 1985

Eloy Roman
Clinical Assistant Professor, Internal Medicine
M.D., Central University of the East School of Medicine, 1999

Paul L. Rondino
Clinical Assistant Professor, Cardiology
M.S., University of Miami, 1986
M.D., University of Miami, 1989

Shari Rone-Adams
Adjunct Professor, Physical Therapy
B.S./P.T., University of Miami, 1985
M.S., Nova University, 1988
D.B.A., Nova Southeastern University, 2002

Patricia L. Rooney
Clinical Assistant Professor, Surgery
B.S., Hillsdale College, 1977
D.O., University of Health Sciences College of Osteopathic Medicine, 1982

Joel B. Rose
Clinical Assistant Professor, Family Medicine
D.O., West Virginia School of Osteopathic Medicine, 1983

Norman Rose
Clinical Professor, Surgery
B.S., Marietta College, 1959
D.O., Des Moines College of Osteopathic Medicine & Surgery, 1963

Richard Rosen
Clinical Assistant Professor, Family Medicine
D.O., Philadelphia College of Osteopathic Medicine, 1975

David Rosenberg
Clinical Assistant Professor, Pediatrics
B.S., Florida International University, 1976
M.D., American University of the Caribbean, 1984

Morton Rosenbluth
Clinical Assistant Professor, Periodontics
D.D.S., New York University, 1946
CT—Peridontics, New York University, 1957

Robert S. Rosenstein
Clinical Assistant Professor, Cardiology
M.D., University of Louisville Medical School, 1978

Ian Ross
Adjunct Faculty, Physical Therapy
B.S., Montclair State, 1983
M.S., Montclair State, 1985
M.S., P.T., Hahnemann University, 1988
Ed.D., Nova Southeastern University, 2001

Saul Ross
Visiting Lecturer, Community Dentistry
Ed.D., University of Toronto, 1986

Stephen L. Roth
Clinical Assistant Professor, Cardiology
B.A., New York University Heights College, 1970
M.D., University of Pennsylvania School of Medicine, 1976

Victoria Rothman
Adjunct Assistant Professor, Orthodontics
D.M.D., Boston University, 2002
CT—Orthodontics, Nova Southeastern University, 2005

Sharon Rothwell
Adjunct Faculty Member, Nursing
B.S.N., University of South Florida, 1993
M.S.N., University of Miami, 1995

Taras Roud
Adjunct Faculty, Endodontics
D.M.D., Nova Southeastern University, 2000

Mazyar Rouhani
Clinical Instructor, Family Medicine
B.S., University of Florida, 1993
M.D., University of Miami School of Medicine, 1999

Howard D. Routman
Clinical Assistant Professor, Orthopedic Surgery
B.A., University of Florida, 1991
D.O., Nova Southeastern University College of Osteopathic Medicine, 1995

Patricia A. Rowe-King
Clinical Assistant Professor, Pediatrics
B.A., Boston University, 1984
M.D., University of Miami School of Medicine, 1988

Daryl Roy
Adjunct Faculty, Prosthodontics
D.M.D., Boston University, 1986

Simon Rozen
Clinical Associate Professor, Hematology/Oncology
B.S., Instituto de Segunda Ensenanza, 1946
M.D., University of Havana School of Medicine, 1953

Richard Rozencwaig
Clinical Assistant Professor, Orthopedic Surgery
B.S., University of Miami, 1988
M.D., University of Miami School of Medicine, 1992

Paul L. Rozynes
Clinical Assistant Professor, Internal Medicine
B.S., University of Florida, 1971
M.D., University of Miami School of Medicine, 1975

Mark A. Rubenstein
Clinical Associate Professor, Family Medicine
B.S., Tulane University School of Engineering, 1985
M.D., State University of New York Health Science Center, 1989

Darin M. Rubin
Clinical Assistant Professor, Family Medicine
B.A., State University of New York, 1988
D.O., New York College of Osteopathic Medicine, 1992

Viviana Rubin
Clinical Assistant Professor, Pediatric Dentistry
D.D.S., University of Buenos Aires, 1990

Adam J. Rubinstein
Clinical Assistant Professor, Surgery
B.S., Brooklyn College, 1992
M.D., St. Louis University of Medicine, 1996

Kerith S. Rudnicki
Clinical Assistant Professor, Pediatrics
B.A., Brandeis University, 1990
M.D., Mount Sinai School of Medicine, 1994

Carla Ruiz
Adjunct Clinical Instructor, Pediatric Dentistry
D.D.S., Central University of Venezuela, 1999

Caswell J. Rumball
Clinical Assistant Professor, Family Medicine
B.S., University of Toronto, 1976
M.D., University of Toronto, 1980

Barbara H. Rumberger
Clinical Assistant Professor, Pediatrics and Rural Medicine
B.S., Dickinson College, 1968
M.D., Medical College of Pennsylvania, 1972

Eric S. Runyon
Clinical Assistant Professor, Obstetrics and Gynecology
D.O., Southeastern University College of Osteopathic Medicine, 1977
B.S., University of South Florida, 1993

Joel L. Rush
Clinical Associate Professor, Orthopedic Surgery
B.A./B.S., Washington University, 1977
D.O., Southeastern University College of Osteopathic Medicine, 1985

Laura M. Rutizer
Clinical Instructor, Pediatrics
B.A., Salisbury State University, 1982
B.S., Florida Atlantic University, 1995
M.S., Florida Gulf Coast University, 2003

Joshua Rycus
Clinical Assistant Professor, Family Medicine
B.S., Michigan State University, 1996
D.O., Michigan State University College of Osteopathic Medicine, 2001

Maria Rynning
Adjunct Faculty Member, Nursing
B.S.N., Florida Atlantic University College of Nursing, 2001
M.S.N., Florida Atlantic University College of Nursing, 2004

Susan Saba
Adjunct Faculty Member, Nursing
B.S.N., Nova Southeastern University, 2004
M.S.N., Nova Southeastern University, 2006

Saria Carter Saccocio
Clinical Assistant Professor, Family Medicine
B.S., Florida Atlantic University, 1996

M.D., University of Florida, 2001

Carl H. Sadowsky
Clinical Associate Professor, Neurology
B.S., State University of New York at Stony Brook, 1967
M.D., Cornell University, 1971

Gennaro Sagliocca
Clinical Assistant Professor, Nephrology
B.S., Rensselaer Polytechnic Institute, 1976
M.D., University of Padova School of Medicine, 1985

Bhagirathy Sahasranaman
Clinical Assistant Professor, Psychiatry
M.D., VSS Medical College, 1981

Hadley Saitowitz
Clinical Associate Professor, Optometry
O.D., Technikon Witwatersrand School of Optometry, 1986
O.D., New England College of Optometry, 1991

Flora C. Sakornsin
Clinical Assistant Professor, Pediatrics
M.D., Far Eastern University, 1961

Mustafa A. Saleh
Adjunct Assistant Professor, Public Health
D.V.M., Cairo Veterinary Medical School, 1973
M.H.S.A., Nova Southeastern University, 1994
M.P.H., Nova Southeastern University, 1999

Emery M. Salom
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., University of Miami, 1993
M.D., University of Miami School of Medicine, 1997

David B. Saltzman
Clinical Assistant Professor, Pulmonary Medicine
B.A., Temple University, 1967
D.O., Philadelphia College of Osteopathic Medicine, 1972

Snehprabha V. Samant
Clinical Instructor, Internal Medicine
M.D., Bombay University, 1971

Harvey B. Samowitz
Clinical Assistant Professor, Urology
B.S., Duke University, 1980
M.D., University of Connecticut School of Medicine, 1984

Ramon Sanchez
Adjunct Assistant Professor, Prosthodontics
D.D.S., University of Iowa College of Dentistry, 1967

Diana M. Sanchez-Steiner
Clinical Assistant Professor, Psychiatry
M.D., Colegio Mayor del Rosario University, 1994

Angeleke Saridakis
Clinical Assistant Professor, Surgery
B.A., Cornell University College of Arts and Sciences, 1984
M.D., University of Miami School of Medicine, 1988
M.P.H., Harvard School of Public Health, 2001

James Satovsky
Clinical Assistant Professor, Endodontics
D.D.S., University of Michigan School of Dentistry, 1971
M.S., University of Michigan, 1974

Sandra Savinelli
Adjunct Faculty, Health Science
B.S., Kean College, 1984
M.A., Marywood College, 1990
SLP.D., Nova Southeastern University, 2001

Eugene J. Sayfie
Clinical Associate Professor, Cardiology
B.A., West Virginia University, 1956
M.D., Washington University School of Medicine, 1960

Paul N. Schacknow
Clinical Associate Professor, Ophthalmology
B.S., Brooklyn College, 1970
Ph.D., City University of New York, 1976
M.D., University of Miami School of Medicine, 1983

Kenneth A. Scheppke
Clinical Assistant Professor, Family Medicine
B.S., State University of New York, 1988
M.D., State University of New York, 1992

Brent M. Schillinger
Clinical Assistant Professor, Dermatology
B.A., State University of New York, 1975
M.D., State University of New York, 1979

Drew Schnitt
Clinical Assistant Professor, Oral Surgery
M.D., Eastern Virginia Medical School, 1995

Kathleen Schrank
Clinical Professor, Family Medicine
B.S., University of Wisconsin, 1972
M.D., University of Miami School of Medicine, 1979

Michael Schulman
Clinical Assistant Professor, Internal Medicine
B.A., State University of New York—Binghamton, 1983
D.O., University Health Sciences College of Osteopathic Medicine, 1988

Aaron Schwartz
Clinical Assistant Professor, Pulmonary Medicine
B.S., University of Miami, 1980
D.O., Philadelphia College of Osteopathic Medicine, 1984

Gary B. Schwartz
Clinical Assistant Professor, Orthopedic Surgery
B.S., Fairleigh Dickinson University, 1976
M.D., New York Medical College, 1980

Leslie H. Schwartz
Clinical Associate Professor, Psychiatry
A.B., Columbia University, 1967
M.D., University of Pennsylvania, 1971

Michael A. Schwartz
Clinical Assistant Professor, Internal Medicine
B.A., Franklin and Marshall College, 1982
M.D., University of Medicine and Dentistry of New York, 1986

Hartley A. Schwartzberg
Clinical Professor, Dermatology
B.A., University of Rochester, 1963
D.O., University of Osteopathic Medicine and Health Sciences, 1967

Roger K. Schwartzberg
Clinical Assistant Professor, Internal Medicine
B.A., Syracuse University, 1970
D.O., Michigan State University College of Osteopathic Medicine, 1973

James J. Sciote
Clinical Associate Professor, Preventive Medicine
B.S., Geneva College, 1982
D.D.S., University of North Carolina, 1986
M.S., University of Michigan, 1989
Ph.D., University of Michigan, 1992

Steven R. Scott
Clinical Instructor, Family Medicine
B.A., University of Florida, 1995
M.B.A., Wake Forest University School of Management, 2000
M.D., Wake Forest University School of Medicine, 2000

Robert H. Sculthorpe
Clinical Professor, Anesthesiology
B.S., University of Nebraska, 1970
D.O., Philadelphia College of Osteopathic Medicine, 1974

Mona Sedrak
Adjunct Faculty, Health Science

B.S., University of Texas South Western Medical Center at Dallas, 1990
M.S., AT Stills University, 2000
Ph.D., Walden University, 2003

Tamir Segal
Clinical Assistant Professor, Periodontology
D.M.D., Boston University, 1996

David Seitlin
Adjunct Faculty, Community Dentistry
D.D.S., Loyola University, 1947

Andrew A. Seltzer
Clinical Assistant Professor, Orthopedic Surgery
B.S., Michigan State University, 1979
D.O., University of Osteopathic and Health Sciences, 1983

James E. Seltzer
Clinical Assistant Professor, Obstetrics and Gynecology
B.A., Lake Forest College, 1971
D.O., Chicago College of Osteopathic Medicine, 1978

Paul D. Seltzer
Clinical Assistant Professor, Orthopedic Surgery
B.S., Eastern Michigan University, 1976
D.O., Philadelphia College of Osteopathic Medicine, 1980

Robert Selz
Adjunct Faculty, Prosthodontics
D.D.S., New York University College of Dentistry, 1963
M.S., New York University Graduate School of Arts and Sciences, 1966
CT—Prosthodontics, New York University College of Dentistry, 1966
Diplomate, American Board of Prosthodontics, 1970

Zsuzsanna V. Seybold
Clinical Instructor, Preventive Medicine
M.D., University of Medical Sciences, 1980

Mark S. Shachner
Clinical Assistant Professor, Surgery
M.D., Yale University School of Medicine, 1985

Robert I. Shaffer
Clinical Assistant Professor, Internal Medicine
M.D., Albany Medical College, 1992

Susan M. Shamaskin
Clinical Assistant Professor, Pediatrics
B.S., State University of New York—Binghamton, 1982
D.O., New York College of Osteopathic Medicine, 1988

Elizabeth A. Shandor
Clinical Assistant Professor, Internal Medicine
B.S., Delaware Valley College, 1991
D.O., Philadelphia College of Osteopathic Medicine, 1995

Martin Shansky
Clinical Assistant Professor, Internal Medicine
B.S. (Pharm.), Philadelphia College of Pharmacy and Sciences, 1969
M.D., Temple University School of Medicine, 1974

Craig S. Shapiro
Clinical Assistant Professor, Otorhinolaryngology
B.S., University of Florida, 1985
D.O., Southeastern University College of Osteopathic Medicine, 1989

David H. Shapiro
Clinical Professor, Surgery
A.B., Williams College, 1961
M.D., Tufts University School of Medicine, 1965

Marc S. Shapiro
Clinical Assistant Professor, Internal Medicine
B.S., University of Miami, 1981
D.O., Philadelphia College of Osteopathic Medicine, 1985

Leslie G. Shawn
Clinical Assistant Professor, Family Medicine
B.S., University of Michigan, 1969
D.O., Des Moines College of Osteopathic Medicine & Surgery, 1969

James S. Shecter
Clinical Assistant Professor, Family Medicine
B.S., Emory University, 1981
M.D., Temple University School of Medicine, 1991

Martin J. Sherman
Clinical Assistant Professor, Pediatrics
A.B., Hamilton College, 1970
M.D., Tufts University School of Medicine, 1974

Richard L. Sherman
Clinical Assistant Professor, Pediatric Dentistry
D.D.S., Medical College of Virginia School of Dentistry, 1973

P. Lee Shettle
Clinical Assistant Professor, Ophthalmology
B.S., Northeast Missouri State University, 1984
D.O., Kirksville College of Osteopathic Medicine, 1988

Philip Leroy Shettle
Clinical Assistant Professor, Ophthalmology
B.S., Stetson University, 1962
D.O., Kirksville College of Osteopathic Medicine, 1964

Kedar Shetye
Clinical Assistant Professor, Nephrology
M.D., Seth G.S. Medical College, 1994

Kevin B. Shrock
Clinical Assistant Professor, Orthopedic Surgery
B.S., Yale University, 1982
M.D., Stanford University School of Medicine, 1987

Alexander Shteiman
Clinical Instructor, Internal Medicine
M.D., Kaunas Medical Institute, 1984

Todd Shuba
Clinical Assistant Professor, Optometry
O.D., Pennsylvania College of Optometry, 1995

Robert A. Shultz
Clinical Assistant Professor, Gastroenterology
B.A., St. Louis University, 1977
D.O., Kirksville College of Osteopathic Medicine, 1983

Joseph Shuman
Clinical Assistant Professor, Internal Medicine
M.D., University of Salamanca School of Medicine, 1967

Christopher Siano
Clinical Assistant Professor, Pediatrics
B.S., Nova Southeastern University, 1999
D.O., Nova Southeastern University College of Osteopathic Medicine, 2003
M.P.H., Nova Southeastern University, 2007

Geoffrey M. Siegel
Clinical Assistant Professor, Dermatology
B.S., University of Miami, 1968
D.O., Des Moines University College of Osteopathic Medicine, 1972

Deneen Signator-Newman
Clinical Instructor, Physician Assistant Studies
B.S., Northern Illinois University, 1986
P.A., Cook County Hospital Physician Assistant Program, 1993

Fernando Silva
Clinical Assistant Professor, Optometry
O.D., Pennsylvania College of Optometry, 1988

William M. Silverman
Clinical Associate Professor, Family Medicine
B.S., Muhlenberg College, 1972
D.O., Philadelphia College of Osteopathic Medicine, 1977

Albert Simon
Adjunct Faculty, Health Science
B.S., Alderson-Broaddus College, Physician Assistant, 1979
M.Ed., Saint Francis University, 1985
D.H.Sc., Nova Southeastern University, 2004

Robin G. Simon
Clinical Assistant Professor, Orthopedic Surgery
D.O., University of Osteopathic Medicine and Health Sciences, 1990

Randy Sims
Adjunct Faculty, Health Science
Ph.D., Florida Atlantic University, 1993

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
D.D.S., Emory University School of Dentistry, 1978

Jerry Singer
Clinical Assistant Professor, Urology
M.D., New York University School of Medicine, 1980

Melissa S. Singer
Clinical Assistant Professor, Pediatrics
B.A., Cornell University College of Arts and Sciences, 1991
M.D., University of Miami School of Medicine, 1996
M.P.H., George Washington Medical Center School of Public Health and Health Sciences, 2002

Richard Singer
Adjunct Professor, Orthodontics
D.M.D., Washington University
M.S., Orthodontics, St. Louis University

Satya P. Singh
Clinical Assistant Professor, Gastroenterology
M.B.B.S., All India Institute of Medical Sciences, 1978

Thomas A. Sipprell
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Bethany College, 1971
D.O., Kirksville College of Osteopathic Medicine, 1976

Emon Skaff
Adjunct Faculty, Community Dentistry
D.M.D., University of Pittsburgh, 2002

Arthur Skidmore
Adjunct Professor, Endodontics
D.D.S., West Virginia University, 1966

Stanley E. Skopit
Clinical Associate Professor, Dermatology
B.S., University of Miami, 1967
M.S., Drake University, 1972
D.O., University of Health Sciences College of Osteopathic Medicine, 1977

Joel Slingbaum
Clinical Assistant Professor, Endodontics
D.M.D., Tufts University, 1998
CT—Endodontics, Nova Southeastern University, 2000

Kirk Smick
Clinical Assistant Professor, Optometry
B.S., Pacific University, 1966
O.D., Pacific University, 1967

James W. Smith
Clinical Assistant Professor, Family Medicine
B.S., Florida Southern College, 1977
D.O., Chicago College of Osteopathic Medicine, 1983

Leslie L. Smith
Clinical Assistant Professor, Family Medicine
B.A., University of Tennessee, 1993
D.O., Nova Southeastern University College of Osteopathic Medicine, 1997

Sheila J. Smith
Clinical Assistant Professor, Family Medicine
D.O., Oklahoma State University College of Osteopathic Medicine, 1977

Suzanne G. Smith
Clinical Assistant Professor, Family Medicine
B.S., University of Florida, 1975
D.O., Southeastern University College of Osteopathic Medicine, 1987

Elaine M. Smith-Marchant
Clinical Assistant Professor, Dermatology
B.S., Howard University, 1989
M.D., Howard University College of Osteopathic Medicine, 1993

Edward N. Smolar
Clinical Assistant Professor, Internal Medicine
B.S., Union College, 1964
M.D., Albert Einstein School of Medicine, 1968
M.B.A., Nova University, 1985

Jason C. Sniffen
Clinical Assistant Professor, Internal Medicine
B.S., Florida A&M University, 1991
D.O., Southeastern University College of Osteopathic Medicine, 1996

Jeffrey P. Snow
Clinical Assistant Professor, Surgery
B.S., Massachusetts Institute of Technology, 1978
M.D., Johns Hopkins School of Medicine, 1982

Marcia L. Snowball
Clinical Assistant Professor, Obstetrics and Gynecology and Rural Medicine
B.S., John Brown University, 1979
M.D., The Ohio State University College of Medicine, 1982

Kathleen P. Soe
Clinical Instructor, Dermatology
B.A., University of South Florida, 1992
D.O., Nova Southeastern University College of Osteopathic Medicine, 1999

Terrence L. Soldo
Clinical Assistant Professor, Family Medicine
B.S., University of Nebraska School of Medicine, 1977
D.O., Kirksville College of Osteopathic Medicine, 1990

Andrea H. Sommers
Clinical Assistant Professor, Family Medicine
B.A., University of South Florida, 1978
D.O., Nova Southeastern University College of Osteopathic Medicine, 1986

Richard Sorkin
Clinical Assistant Professor, Optometry
O.D., Nova Southeastern University College of Optometry, 1997

John M. Sortino
Clinical Assistant Professor, Internal Medicine
M.D., University of Rome, 1983

Joel S. Spalter
Clinical Associate Professor, Infectious Disease
B.S., Massachusetts Institute of Technology, 1962
M.D., New York University Medical Center, 1966

David Spiezman
Clinical Assistant Professor, Internal Medicine
B.A., Tulane University, 1983
D.O., New York College of Osteopathic Medicine, 1990

Theodore Splaver
Adjunct Faculty, OMFS

D.M.D., University of Pittsburgh, 1966

Kevin Spohr
Clinical Assistant Professor, Family Medicine
D.O., Kirksville College of Osteopathic Medicine, 1995

Timothy E. Spruill
Clinical Associate Professor, Psychiatry
B.A., Andrews University, 1973
M.A., George Mason University, 1977
Ed.D., Western Michigan University, 1992

Latha Srinath
Clinical Assistant Professor, Internal Medicine
B.S., National College, 1978
M.D., Bangalore Medical College, 1984

Brad Stach
Adjunct Professor, Audiology
B.A., New Mexico State University, 1977
M.A., Vanderbilt University, 1979
Ph.D., Baylor College of Medicine, 1986

William H. Stager
Clinical Associate Professor, Family Medicine
B.A., Livingston College, 1983
D.O., Southeastern University College of Osteopathic Medicine, 1989

Zarina Staller
Adjunct Professor, Prosthodontics
D.M.D., Nova Southeastern University College of Dental Medicine, 2000

Robert Stanton
Adjunct Faculty, Cariology and Restorative Dentistry
D.M.D., Tufts University, 2001

Margaret J. Starr
Clinical Assistant Professor, Family Medicine
M.S., Stanford University, 1970
D.O., Michigan State University College of Osteopathic Medicine, 1979

Alvin Stein
Clinical Assistant Professor, Orthopedic Surgery
B.A., New York University, 1957
M.D., Chicago Medical School, 1961

Ira M. Stein
Clinical Assistant Professor, Otolaryngology
B.A., University of Pennsylvania, 1979
M.D., University of Health Sciences Medical School, 1985

Joel D. Stein
Clinical Associate Professor, Family Medicine
B.A., Washington and Jefferson College, 1978
D.O., Kirksville College of Osteopathic Medicine, 1983

Kimberly R. Stein
Clinical Assistant Professor, Family Medicine
B.S., Pennsylvania State University, 1985
D.O., Southeastern University College of Osteopathic Medicine, 1989

Joshua Z. Steiner
Clinical Assistant Professor, Family Medicine
B.A., Yeshiva University, 1992
D.O., Nova Southeastern University College of Osteopathic Medicine, 2000

Jeff P. Steinhoff
Clinical Assistant Professor
B.S., Pennsylvania State University, 1994
M.D., University of Medicine and Dentistry of New Jersey, 1998

Eric Stelnicki
Clinical Assistant Professor, Pediatric Dentistry
M.D., University of Florida, 1991

Lawrence Stempel
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Tulane University, 1984

D.O., New York College of Osteopathic Medicine, 1988

Stewart Stempel
Clinical Assistant Professor, Prosthodontics
D.D.S., New York University College of Dentistry, 1960

Fran E. Sterling
Clinical Assistant Professor, Pediatrics
B.S., Ohio State University, 1975
D.O., Ohio State University, 1981

David J. Stern
Clinical Assistant Professor, Internal Medicine
B.A., LaSalle College, 1975
D.O., Philadelphia College of Osteopathic Medicine, 1979

Diane Stern
Clinical Professor, Diagnostic Sciences
D.M.D., Columbia University College of Optometry, 1961

Schmuel Stern
Adjunct Faculty, Periodontology
D.D.S., New York University, 2000
D.M.D., Nova Southeastern University, 2004

Jeffrey Stevens
Clinical Assistant Professor, Oral and Maxillofacial Surgery
D.M.D., Tufts University, 1967

Stanley Stewart
Clinical Assistant Professor, Oral and Maxillofacial Surgery
D.M.D., University of Pittsburgh, 1973

Amos Stoll
Clinical Assistant Professor, Neurology
M.D., University of Oklahoma College of Medicine, 1974

Kevin E. Stone
Clinical Assistant Professor, Internal Medicine
B.A., Boston University, 1976
M.D., Universidad Mundial Dominicana, 1984

Reed Stone
Clinical Assistant Professor, Neurology
M.D., Universidad Central del Este, 1981

Barbara T. Strahl
Adjunct Assistant Professor, Health Science
M.S., Nova Southeastern University, 1995
Ph.D., Nova Southeastern University, 2005

Neil H. Strauss
Clinical Instructor, Geriatrics
B.S., Dickinson College, 1997
D.P.M., Barry University of Graduate Medical Science, 2003

Stuart B. Strikowsky
Clinical Associate Professor, Family Medicine
B.A., Pennsylvania State University, 1973
D.O., College of Osteopathic Medicine and Surgery, 1977

Lawrence A. Strong
Clinical Assistant Professor, Dermatology
B.A., Washington and Jefferson College, 1990
D.O., Philadelphia College of Osteopathic Medicine, 1994

Amy Stumpf
Adjunct Faculty, Physician Assistant Studies
B.A., University of Delaware, 1997
B.S., Nova Southeastern University, 2002
M.P.H., Nova Southeastern University, 2002

J. Richard Susi
Clinical Assistant Professor, Ophthalmology
B.A., Case Western Reserve University, 1977
D.O., Philadelphia College of Osteopathic Medicine, 1981

Pamela M. Sutton
Clinical Assistant Professor, Family Medicine

B.A., Pomona College, 1969
M.D., University of California at San Francisco Medical School, 1973

Jon Suzuki
Visiting Lecturer, Periodontology,
D.D.S., Loyola University of Chicago, 1978

Marc A. Swerdloff
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

Arlene L. Taylor
Clinical Assistant Professor, Family Medicine
B.S., University of Miami, 1993
D.O., Nova Southeastern University College of Osteopathic Medicine, 2002

James H. Taylor
Clinical Associate Professor, Family Medicine
B.S., Dickinson College, 1972
D.O., Philadelphia College of Osteopathic Medicine, 1977

George R. Termotto
Clinical Instructor, Pediatrics
B.S., University of Miami, 1968
M.D., University of Zaragoza, 1975

Ann Marie Tharpe
Adjunct Professor, Audiology
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

James S. Thayer
Clinical Instructor, Internal Medicine
B.A., California State University, 1972
M.D., Creighton University College of Medicine, 1976

Sheila A. Thomas-McLeod
Clinical Assistant Professor, Pediatrics
B.S., The Ohio State University College of Pharmacy, 1992
M.D., The Ohio State University College of Medicine, 1996

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

Elias Tobon
Adjunct Faculty, Prosthodontics
D.M.D., Tufts University, 1992

H. Murray Todd
Clinical Professor, Neurology
B.A., University of Toledo, 1962
M.D., University of Miami School of Medicine, 1966

Kathleen L. Todd
Clinical Assistant Professor, Family Medicine
D.O., Michigan State University College of Osteopathic Medicine, 1995

Ronald B. Tolchin
Clinical Associate Professor, Physical Medicine and Rehab.
B.S., Villanova University, 1983
D.O., Southeastern University College of Osteopathic Medicine, 1989

Peter A. Tomasello, Jr.
Clinical Assistant Professor, Orthopedic Surgery
B.A., University of South Florida, 1986
D.O., Southeastern University College of Osteopathic Medicine, 1991

Dennis Tommasone
Clinical Associate Professor, Community Dentistry
D.D.S., Case Western Reserve University, 1968

Calvin Torneck
Visiting Professor, Endodontics
D.D.S., University of Toronto, 1958

Julio D. Torres
Clinical Assistant Professor, Otolaryngology
M.D., University of Puerto Rico School of Medicine, 1978

Melissa Tovin
Adjunct Professor, Physical Therapy
B.S.P.T., New York University, 1988
M.S., Columbia University, 1993
Ph.D., Georgia State University, 1999

Robert J. Trenschel
Clinical Associate Professor, Preventive Medicine
Adjunct Assistant Professor, Public Health
B.A., Florida Atlantic University, 1984
D.O., Southeastern University College of Osteopathic Medicine, 1989

Santiago H. Triana
Clinical Assistant Professor, Surgery
M.D., Universidad Nacional de Colombia, 1959

Nancy M. Troast
Clinical Assistant Professor, Internal Medicine
B.A., Washington and Jefferson College, 1979
D.O., Philadelphia College of Osteopathic Medicine, 1983

Marie C. Tromans
Clinical Assistant Professor, Internal Medicine
M.D., State University Medicine and Pharmacy School, 1989

Dennis P. Trupkin
Clinical Assistant Professor, Pediatric Dentistry
D.D.S., Medical College of Virginia School of Dentistry, 1970

Claudia D. Tuda
Clinical Assistant Professor, Infectious Disease
M.D., University of Buenos Aires, 1986

Gerald T. Turgeon
Clinical Assistant Professor, Neurology
B.S., University of Dakota, 1973
D.O., Kirksville College of Osteopathic Medicine, 1979

Michael J. Turley
Clinical Instructor, Physician Assistant Studies
P.A., Bayley Seton Hospital Physician Assistant Program, 1973

Lisa Unger
Adjunct Faculty Member, Nursing
B.S.N., Lewis University, 1982
M.S.N., Lewis University, 1988
Ed.D., Nova Southeastern University, 2001

Amit Upadhiaya
Clinical Assistant Professor, Internal Medicine
M.D., J.J.M. Medical College, 1989
D.O., New York College of Osteopathic Medicine, 2001

Rafael Urbino
Adjunct Faculty, Community Dentistry

D.M.D., University of Florida, 2004

Norman Urich
Clinical Assistant Professor, Family Medicine
B.S., Duquesne University, 1970
D.O., Kirskville College of Osteopathic Medicine, 1974

Eugene Usberghi, Jr.
Clinical Assistant Professor, Family Medicine
B.S., University of Akron, 1968
D.O., College of Osteopathic Medicine and Surgery, 1976

Dushyant J. Utamsingh
Clinical Assistant Professor, Internal Medicine
M.D., Seth G.S. Medical College, 1984

Mark A. Vacker
Clinical Assistant Professor, Family Medicine
B.A., State University of New York, 1973
M.D., New York Medical School, 1979

Yolanda M. Valdes
Clinical Assistant Professor, Pediatrics
B.S., University of Miami, 1989
M.D., University of Miami School of Medicine, 1993

Jacqueline B. Valdes-Rafuls
Clinical Assistant Professor, Pediatrics
M.D., Universidad Central del Este, 1986

Gabriel A. Valle
Clinical Assistant Professor, Nephrology
B.S., University of Heredia, 1972
M.D., University of Heredia, 1980

Andrea E. Varga
Clinical Assistant Professor, Internal Medicine
M.D., Semmelweis University of Medicine, 1997

Paul Vazquez
Clinical Associate Professor, Urology
B.S., University of Miami, 1976
D.O., Kirksville College of Osteopathic Medicine, 1981

Manuel Vega
Clinical Assistant Professor, Pediatrics
B.S., University of Miami, 1978
M.D., Universidad Central del Este, 1982

German Vergara
Clinical Assistant Professor, Nephrology
M.D., Universidad de Sevilla, 1977

Ramon G. Vidal
Clinical Assistant Professor, Family Medicine
M.D., Universidad Central del Este, 1986

Tomas Villanueva
Clinical Assistant Professor, Internal Medicine
B.A., St. Thomas University, 1986
D.O., Southeastern University College of Osteopathic Medicine, 1991

Virkas M. Virkud
Clinical Assistant Professor, Cardiology
M.D., King Edward Memorial School, 1976

Craig D. Vogel
Clinical Assistant Professor, Cardiology
B.S., New York Institute of Technology, 1986
D.O., New York College of Osteopathic Medicine, 1989

James K. Vogler
Clinical Assistant Professor, Obstetrics and Gynecology
B.S., Western Michigan University, 1966
D.O., Chicago College of Osteopathic Medicine, 1975

Roberto L. Von Sohsten
Clinical Assistant Professor, Cardiology
M.D., Federal University Medical School, 1990

Stuart M. Waldman
Clinical Assistant Professor, Oncology
B.S., George Washington University, 1978

M.D., The George Washington University School of Medicine, 1982

Bailus Walker, Jr.
Adjunct Professor, Public Health
M.P.H., University of Michigan, 1959
Ph.D., University of Minnesota, 1975

Linda L. Walker
Clinical Assistant Professor, Family Medicine
B.S., Yale University, 1981
M.D., University of Vermont College of Medicine, 1985

Gerald Wallach
Adjunct Faculty, Cariology and Restorative Dentistry
D.D.S., New York University, 1961

Douglas A. Walsh
Clinical Assistant Professor, Family Medicine
B.S., University of Houston, 1965
D.O., University of Health Sciences College of Osteopathic Medicine, 1970

Ronald L. Walsh
Clinical Associate Professor, Cardiology
B.S., Alma College, 1974
D.O., Chicago College of Osteopathic Medicine, 1977

Jacqueline R. Walter
Adjunct Faculty, Occupational Therapy
B.S., Keuka College, 1997

Cheng Wang
Adjunct Assistant Professor, Public Health
B.S., University of Science and Technology of China, 1985
M.S., Academic Institute of Sciences of China, 1987
M.S., University of California—Santa Barbara, 1994

Monica Warhaftig
Clinical Assistant Professor
B.A., University of Miami, 1989
D.O., Des Moines College of Osteopathic Medicine, 1997

Sheldon T. Warman
Clinical Associate Professor, Internal Medicine
B.A., New York University, 1973
M.D., Chicago Medical School, 1976

Simon J. Warren
Clinical Assistant Professor
M.A., Jesus College, 1986
M.D., Guys and St. Thomas Medical School, 1993

Jack Waterman
Clinical Assistant Professor, Nephrology
D.O., Philadelphia College of Osteopathic Medicine, 1981

Gary J. Wayne
Clinical Assistant Professor, Oral and Maxillofacial Surgery
D.M.D., Fairleigh Dickinson University College of Dental Medicine, 1989

Malvin Weinberger
Clinical Associate Professor, Surgery
A.B., University of Pennsylvania, 1958
M.D., Temple University, 1962

Michael S. Weinblatt
Clinical Assistant Professor, Internal Medicine
B.S., State University of New York—Binghamton, 1978
M.D., State University of New York Upstate Medical Center, 1982

Neil J. Weinreb
Clinical Associate Professor, Hematology/Oncology
M.D., State University of New York, 1966

Brian K. Weinstein
Clinical Assistant Professor, Surgery
M.D., State University of New York Health Science, 1993

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 Assistant Professor, Pulmonary Medicine
B.S., Brandeis University, 1988
M.D., Albert Einstein College of Medicine, 1992

Michael C. Weiss
Clinical Assistant Professor, Orthopedic Surgery
B.S., University of Florida, 1981
D.O., Southeastern University College of Osteopathic Medicine, 1986

Paul Werner
Adjunct Faculty, Pediatric Dentistry
D.D.S., Georgetown University, 1975
CT—Pedodontics, Eastman Dental Center, 1979

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 F. 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

Grady E. Williams III
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
Clinical Assistant, Optometry
O.D., Nova Southeastern University, 1998

Richard K. Williams
Clinical Assistant Professor, Internal Medicine
B.A., Brown University, 1973
M.D., University of Chicago, 1977

Jerry Williamson
Clinical Assistant Professor, Pediatrics
M.D., The Medical College of Pennsylvania, 1975

Joseph G. Willmitch
Clinical Instructor, Physician Assistant Studies
B.S., Youngstown State University, 1976

Charles D. Wingfield
Clinical Associate Professor, Internal Medicine
B.S., Gettysburg College, 1959
D.O., Philadelphia College of Osteopathic Medicine, 1963

Paul K. Winner
Clinical Professor, Neurology
B.S., Manhattan College, 1977
D.O., New York College of Osteopathic Medicine, 1981

Stanley W. Wisnioski III
Clinical Instructor, Family Medicine
B.S., Palm Beach Atlantic University, 1996
D.O., Pikeville College of Osteopathic Medicine, 2002

Ava C. Wolf-Rosenberg
Clinical Assistant Professor, Family Medicine
B.A., State University of New York, 1984
D.O., New York College of Osteopathic Medicine, 1988

Jackson Wong
Clinical Assistant Professor, Pediatrics
B.A., Cornell University College of Arts and Surgery, 1981
M.D., New York University School of Medicine, 1985

Stephen R. Wood
Clinical Assistant Professor, Orthopedic Surgery
B.S., University of South Dakota, 1974
D.O., Kirksville College of Osteopathic Medicine, 1980

William D. Wood
Clinical Assistant Professor, Pediatrics
B.S., Clemson University, 1990
M.D., Medical University of South Carolina, 1994

Gerald R. Woodard
Clinical Assistant Professor, Family Medicine
B.A., University of Missouri, 1978
D.O., Kirksville College of Osteopathic Medicine, 1983

Thomas Woods
Adjunct Faculty, Health Science
B.S., Saint Francis College, 1987
M.A., Saint Francis College, 1992
D.H.Sc., Nova Southeastern University, 2003

Arlene Wright
Adjunct Faculty Member, Nursing
B.S., University of St. Francis, 1994
M.S.N.,/FNP, University of Tampa, 2000

Marilyn Wright
Adjunct Faculty, Health Science
B.A., University of California, 1974
B.S., Loma Linda University, 1976
M.P.H., Loma Linda University, 1991
D.P.H, Loma Linda University, 2001

Mark J. Yacht
Clinical Assistant Professor, Preventive Medicine
M.P.H., Tulane School of Public Health and Tropical Medicine, 1971
M.D., University of the East Ramon Magsay Memorial Medical Center, 1978

Bose Yalamanchi
Clinical Assistant Professor, Surgery
M.D., Gulbargo Medical College, 1970

Zhang Ying
Clinical Adjunct Professor, Optometry
Tianjin Medical University, 1994

Louis R. Yogel
Clinical Assistant Professor, Urology
B.A., Temple University, 1975
M.D., Autonomous University of Guadalajara, 1979

Erol A. Yoldas
Clinical Assistant Professor, Orthopedic Surgery, Sports Medicine
B.S., Duke University School of Engineering, 1990
M.D., Yale University School of Medicine, 1994

David B. Youel
Clinical Assistant Professor, Internal Medicine
B.A., University of Minnesota, 1958
M.D., University of Minnesota, 1963

Aristides Zacharoudis
Clinical Assistant Professor, Cardiology
B.S., St. John's University, 1982

M.D., Autonomous University
of Guadalajara, 1986

Elise J. Zahn
Clinical Assistant Professor,
Family Medicine
B.S., University of Florida, 1989
D.O., Nova Southeastern University
College of Osteopathic Medicine, 1996

Maria B. Criselda Zaldivar
Clinical Assistant Professor,
Nephrology
B.S., University of the Philippines College
of Science, 1992
M.D., University of the Philippines, 1997

Brian A. Zalis
Clinical Associate
Professor, Family Medicine
M.D., University of Florida
School of Medicine, 1976

Michael J. Zappa
Clinical Assistant Professor,
Family Medicine
B.S., City University of New York, 1985
M.D., State University of New York, 1987

Bernard J. Zaragoza
Clinical Assistant Professor, Surgery
B.A., University of Miami, 1986
M.D., Harvard Medical School, 1990

Joseph J. Zarlengo
Clinical Assistant Professor,
Family Medicine
B.S., University of Scranton, 1994
D.O., University of Health Sciences
College of Osteopathic Medicine, 1999

Elsa M. Zayas
Clinical Assistant Professor, Psychiatry
B.S., University of Miami, 1983
B.A., University of Miami, 1983
M.D., Universidad de Zaragoza, 1989

Richard Zeber
Clinical Assistant, Optometry
O.D., Ohio State University, 1998

Robert Zelikow
Assistant Professor, Endodontics
D.D.S., University of Illinois
College of Dentistry, 1954
Fellow, American College
of Stomatologic Surgeons

Paul Zidel
Clinical Assistant Professor, Surgery
M.D., University of Medicine and
Dentistry of New Jersey, 1980

Susan L. Zito
Clinical Assistant Professor
B.A., Temple University, 1989
M.P.H., University of South Florida
College of Public Health, 1998
D.O., Des Moines University Osteopathic
Medical Center, 2002

Alex R. Zopo
Clinical Assistant Professor, Internal
Medicine
M.D., Escuela de Medicina, 1990

Jose A. Zuniga
Clinical Assistant Professor, Neurology
B.S., Peruvian University
Cayetano Heredia, 1965
M.D., Peruvian University
Cayetano Heredia, 1971

College of Osteopathic Medicine

College of Pharmacy

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Health Professions Division

3200 South University Drive
Fort Lauderdale, Florida 33328-2018
(954) 262-1101 • 800-356-0026, ext. 1101
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