



Bulletin

2018-2019

Announcements and Notices

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Bulletin Changes

The administration of National University of Health Sciences reserves the right, without prior notice, to make changes at any time to the material contained in this bulletin, whether in entrance and graduation requirements, curriculum, education fees, or any rules and regulations.

National University of Health Sciences is not responsible for printing errors.

Rules in this bulletin apply to all students attending the University. Previous catalogs, bulletins, and announcements are hereby rescinded.

Students are subject to the rules and regulations made by the University and are held to have knowledge of all University requirements published in this bulletin or otherwise brought to their attention.

Information contained in this bulletin is applicable as of August 31, 2018. For more specific information, inquiries may be addressed to the Registrar of National University of Health Sciences.

The University is not responsible for any changes in admission requirements, advanced standing privileges or any other rule listed in this bulletin due to mandates by state boards, governmental agencies and/or accrediting agencies.

Disclaimer: Although this bulletin intends to reflect current policies or rules of the Board of Trustees and administration of National University of Health Sciences referred to or incorporated herein, students are cautioned that changes or additions to such policies or rules may have become effective since the publication of this material. In the event of such a conflict, the current statements of policy contained in official minutes and manual of policies and procedures, bylaws, and guidelines shall prevail. Thus, the provisions of this bulletin are not to be regarded as an irrevocable contract between the Board of Trustees of National University of Health Sciences (or any of its schools) and the student. The University reserves the right to make changes as required in course offerings, curricula, academic policies, and other rules and regulations affecting students, these changes to be effective when determined by the appropriate authority within the University. These changes will govern current and formerly enrolled students. Registration of all students is accepted subject to these conditions.

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Table of Contents

The University

President’s Message	1
Mission Statement.....	2
Institutional Goals.....	2
Profiling the Practices of Complementary & Integrative Medicine	3
Seal, Logo, Motto and Colors.....	7
General Information	9
University Academic Policies, Regulations & Procedures.....	19
Student Life.....	34

College of Professional Studies

Programs of Study	51
Doctor of Chiropractic	51
Doctor of Naturopathic Medicine	51
Master of Science in Acupuncture.....	51
Master of Science in Oriental Medicine	51
Admission Information	52
College of Professional Studies Academic Policies, Regulations & Procedures.....	59
Departments of Instruction	66
Department of Basic Sciences	66
Department of Clinical Sciences	67
Department of Clinical Practice.....	67
Department of Research	68
Training and Assessment Center	69
Courses of the Chiropractic Curriculum.....	70
Chiropractic Course Descriptions	75
CCE Clinical Education Meta-competencies	91
Courses of the Naturopathic Curriculum.....	98
Naturopathic Course Descriptions.....	103
Required Competencies of the Naturopathic Medical Graduate.....	119
Courses of the Acupuncture Curriculum	124
Acupuncture Course Descriptions	131
Courses of the Oriental Medicine Curriculum	142
Oriental Medicine Course Descriptions	151
Elective Course Descriptions	164
Clinical Residency Programs	166

College of Allied Health Sciences and Distance Education

Certificate Programs	168
Academic Policies, Regulations & Procedures.....	173
Massage Therapy Program.....	177
Undergraduate Degree Programs.....	188
Bachelor of Science Degree in Biomedical Sciences	188
Admission Information	189
Academic Policies, Regulations & Procedures.....	193
Bachelor of Science Course Descriptions	196
Prerequisite Program	205
Prerequisite Program Course Descriptions	207
Associate of Applied Science in Massage Therapy	210

Graduate Degree Programs.....	211
Master of Science Degrees	211
Master of Science Degree in Advanced Clinical Practice.....	212
Master of Science Degree in Diagnostic Imaging	215

Lincoln College of Post-professional, Graduate & Continuing Education

Lincoln College.....	224
Programs Offered	225
Continuing Education	225
Post-professional Educational Programs.....	226
Licensure Information	229
Web Sites of Interest	231
Examining Boards	233

Personnel

University Personnel.....	237
Faculty	238
Post-professional Faculty.....	248
Adjunct and Visiting Faculty	252
Students with Instructional Duties	253
Standing Committees	255

Calendar and Maps

Calendars	260
Maps	274



National
University
Of Health Sciences



Bulletin
2018-2019

The
University

President's Message



National University of Health Sciences has become a model and example of how to integrate health care education. With a rich history dating back to 1906, we have been training practitioners to deliver health care to their communities for generations. At this institution you will be provided the tools necessary to make a difference. You will be provided the tools necessary to change lives. You will be provided the tools that will make you a necessary member of the service profession that is health care. You will have the opportunity to learn from a wide variety of academics and members of the health care profession. You will have the opportunity to challenge yourself and be challenged in the classroom. You will share these challenges from day one with classmates and share your triumphs during your last days of clinical training.

No matter which program of study you choose, the focus of National University is to train the student to become a critical thinker and to become a productive member of his or her chosen field. And often, our graduates also go on to become leaders in their professions. There are many possibilities and alternatives on the health care horizon, but what is most important is that each practitioner focus on what is best for the patient. So, no matter what view you take on health care, stay focused on the patient. I wish you every best opportunity and hope that you take advantage of the opportunities available you.

Best regards,

A handwritten signature in black ink that reads "Joe Stiefel". The signature is written in a cursive style with a large, looping "J" and "S".

Joe Stiefel, MS, EdD, DC
President
National University of Health Sciences

National University of Health Sciences

Mission Statement

Because:

- We value students as unique individuals seeking quality health sciences education through our service and support;
- We value being progressive, knowledgeable, adaptable, original, and academically sound in our academic programs;
- We value the substantive quality of our curricula through emphasis upon academic excellence;
- We value progress achieved by the development of new knowledge and its importance to chiropractic medicine and other complementary healing arts and sciences;
- We value quality training and practice in the clinical skills of all relevant programs with particular emphasis upon the physician/patient relationship within the first professional programs;
- We value complementary and alternative care for its emphasis upon holism and use of the least invasive therapeutic procedures necessary for optimizing human health;
- We value collegiality and cooperation among all members of the University community, the related professions, other health care systems, and the community;

Therefore:

The mission of National University of Health Sciences is to provide and promote the necessary leadership, cultural diversity, management, and resources for the advancement of education, new knowledge, outreach, and the ethical practice of the healing arts and sciences as taught within the programs of this University.

National University of Health Sciences

Institutional Goals

PILLARS

Students:

To provide quality education demonstrated by collaboration, innovation, evidence-informed practice, professionalism, a supportive environment, and a continued focus on student success, prior to and after graduation.

Employees:

To maintain and support a dynamic faculty and staff committed to the mission of the University – achieved through collaboration, development, and diversity.

University:

To ensure institutional stability, growth, and innovation through strategic planning and best practices, and to place institutional integrity at the forefront of all decisions and actions through transparency and honesty.

Community:

To remain a vital leader to all constituents through outreach, partnerships, engagement, and service.

Approved by the NUHS Board of Trustees, November 2015

Profiling the Practices of Complementary and Integrative Medicine

National University of Health Sciences and its related colleges hold that the practice of the alternative and complementary healing arts and sciences must embrace the whole person, with emphasis upon conservative health care that facilitates the inherent potential of the human organism to develop and maintain a state of self-regulation and to invoke self-healing processes with minimal therapeutic risk at reasonable cost.

We recognize a diversity of factors that impact upon human physiology, among which are biomechanical dysfunction, altered energy patterns, genetics, trauma, hygiene, microorganisms, nutritional status, exercise, motion, posture, environment, stress, emotion, and human relationships.

College of Professional Studies

Chiropractic

Purpose Statement of Chiropractic

The purposes of the Doctor of Chiropractic Program are to educate students in the basic and clinical sciences and related health subjects requisite for development of competent primary care chiropractic physicians, the development of new knowledge and other scholarship in the field of chiropractic, and the provision of health care and other services to patients in University clinics and the community.

Profile of Chiropractic

Chiropractic physicians must be competently trained to diagnose, including the use of specific spinal and biomechanical evaluation of the relationship of human structure and function, to care for the human being in health and disease, and to consult with, or refer to, other health care providers when clinically indicated.

National University of Health Sciences holds that the practice of the chiropractic physician embraces the whole person with emphasis upon conservative health care that facilitates the inherent potential of the human organism to develop and maintain a state of self-regulation and to invoke self-healing processes with minimal therapeutic risk at reasonable cost.

The practice of chiropractic embodies:

- recognition of a diversity of factors that impact upon human physiology, among which are biomechanical dysfunction, genetics, trauma, hygiene, microorganisms, nutritional status, exercise, motion, posture, environment, stress, emotion, and human relationships;
- primary care of patients based upon diagnostic evaluation including patient history, physical examination, clinical laboratory data, diagnostic imaging, and other special diagnostic measures, as well as those procedures that are unique to the chiropractic evaluation of human spinal and structural balance and integrity;
- the application of a diversity of spinal and other articular adjustments and manipulations for the treatment, correction, and prevention of neurologic, skeletal or soft tissue dysfunction, and for the production of beneficial neurologic and other physiologic effects as a central component of practice;
- use of other conservative means in the promotion of optimal health including, but not limited to, nutritional counseling, physiologic therapeutics, meridian therapy/acupuncture, trigger point therapy, exercise, life-style counseling, botanical medicine, homeopathic remedies, emotional support, and stress management.

The chiropractic physician is a primary care, first contact provider who practices within the legal scope of licensure, emphasizes the importance of the doctor-patient relationship, recognizes the need for other forms of therapy when

indicated, and interacts fully with other members of the health care delivery team, always in the best interest of the patient.

Naturopathic Medicine

Purpose Statement of Naturopathic Medicine

The purpose of the Doctor of Naturopathic Medicine Program at National University of Health Sciences is to create competent naturopathic physicians who are ethical, compassionate, and effective practitioners of the science and art of naturopathic medicine.

Program Outcomes of Naturopathic Medicine

1. The naturopathic graduate will possess a thorough knowledge and comprehension of the biomedical sciences as they currently relate to diagnosis, treatment, and the determinants of health, along with lifelong learning skills to stay abreast of new and emerging developments in biomedical knowledge.
2. The naturopathic graduate will be proficient in the assessment of patient health status, diagnosis, referral, and case management of patients informed by appraisal of current evidence and application of naturopathic principles.
3. The naturopathic graduate will be skilled in creating treatment plans that address the determinants of health, follow a therapeutic hierarchy/order, are informed by evidence, and are congruent with naturopathic principles.
4. The naturopathic graduate will be ethical, compassionate, and professional in interactions with patients.
5. The naturopathic graduate will be proficient in working within the contemporary health care milieu, including working within health systems and integrative settings, and will be able to gather essential information about and adhere to local, state and federal regulations.

Profile of Naturopathic Medicine

The practice of naturopathic medicine:

- embodies the recognition of those aspects of human health and disease detailed previously under the chapter heading, “Profiling the Practices of Alternative and Integrative Medicine”;
- is based on the following six principles: The Healing Power of Nature; Find the Cause; First Do No Harm; Doctor as Teacher; Treat the Whole Person; Prevention;
- is the primary care of patients based upon diagnostic evaluation including patient history, physical examination, clinical laboratory data, diagnostic imaging, and other special diagnostic measures as well as those procedures that are unique to the naturopathic evaluation of the human condition;
- promotes, as a central component of practice, the application of the principles of botanical medicine, homeopathy, proper nutrition, and hydrotherapy;
- includes the use of other means including but not limited to, physiologic therapeutics, meridian therapy/acupuncture, trigger point therapy, exercise, lifestyle counseling, emotional support, articular manipulation, and stress management.

The doctor of naturopathic medicine is a primary care, first contact physician who practices within the legal scope of licensure, emphasizes the importance of the doctor/patient relationship, recognizes the need for other forms of therapy when indicated, and interacts fully with other members of the health care delivery team, always in the best interest of the patient.

Acupuncture & Oriental Medicine

Purpose Statement of Acupuncture and Oriental Medicine

The purpose of the Master of Acupuncture and Oriental Medicine Program is to provide the highest quality comprehensive and professional education in the Five Branches of Traditional Oriental Medicine: Acupuncture, Chinese Herbal Medicine, Tui Na, Chinese Nutritional Therapeutics, and Tai Chi/Qi Gong. Through classroom instruction and extensive clinical experience — woven into the program from the start — we are dedicated to teaching the wisdom of classical acupuncture and oriental medicine as it continues to be informed by contemporary medical knowledge. The programs emphasize an integrative and holistic approach to health care, incorporating instruction in clinical western medicine so that our graduates may practice confidently in a wide range of clinical settings. We hold the core values of integrity and compassion in the practice of medicine in the greatest esteem, and seek to graduate students who wish to engage in it at the highest levels.

Profile of Acupuncture and Oriental Medicine

The practice of acupuncture and oriental medicine:

- embodies the recognition of those aspects of human health and disease detailed previously under the heading, “Profiling the Practices of Alternative and Complementary Medicine”;
- promotes the application of procedures including needling, moxibustion, acupressure, electroacupuncture, and other interventions for the purposes of balancing the meridians and affecting the circulation of chi as a primary component of therapeutic practice;
- accepts patients as portal of entry practitioners in those instances where this is statutorily permitted, and interacts with other members of the healing arts community in circumstances where such is required or is in the best interest of the patient;
- uses other means as statutorily permitted for the benefit of the patient.

College of Allied Health Sciences and Distance Education

The College of Allied Health Sciences and Distance Education provides certificate, undergraduate, and graduate programs to those seeking increased knowledge in the sciences. A certificate program is offered for those who wish to become certified as a massage therapist. Undergraduate programs are available to those who wish to complete a bachelor of science degree in biomedical science, or an associate of applied science in massage therapy. Graduate degrees in advanced clinical practice and diagnostic imaging are offered through in-class and distance education.

Certificate Programs

Profile of the Massage Therapist

The massage therapist:

- recognizes a diversity of factors that impact upon human physiology, among which are biomechanical dysfunction, genetics, trauma, hygiene, microorganisms, nutritional status, exercise, motion, posture, environment, stress, emotion, and human relationships;
- cares for clients based upon careful physical evaluation of human muscular, fascial and other connective tissues and the integument;
- applies various soft tissue massage techniques that are designed and intended to promote improved well-being by increasing circulation, joint flexibility, and a general sense of well-being;
- recognizes the massage therapist’s role as an allied health practitioner and takes responsibility for seeking advice and counsel from physicians when it is in the best interest of the client;
- takes responsibility for engaging in ethical client management and treatment, avoids performing diagnostic or therapeutic procedures that are outside the scope of instruction and knowledge, and seeks appropriate certification and licensure.

Undergraduate Programs

Bachelor's Degree Completion Program

The University offers a Bachelor of Biomedical Science Degree Program to prepare students for the first professional degree programs and other science-related occupations and professions. A component of the bachelor's program is the Prerequisite Program.

Prerequisite Program

This program includes science courses required to enter the first professional degree programs at the University. Courses such as general and organic chemistry, biology and physics are offered to help students meet specific professional entrance needs.

Associate of Applied Science in Massage Therapy

The Associate of Applied Science Degree (AAS) in Massage Therapy is available to students enrolled in the Massage Therapy Certificate Program who also meet the additional general education requirements. A student must have successfully completed, or plan to complete within the designated time period, a minimum of 33 credit hours of general education courses at a regionally accredited institution of higher education prior to entering the massage program.

Graduate Programs

Master of Science Degree – Advanced Clinical Practice

The purpose of the Master of Science (MS) Degree in Advanced Clinical Practice Program is to allow first professional health care providers to: enhance, broaden and refine their diagnostic skills in a wide variety of primary care conditions; understand and manage a greater array of clinical conditions utilizing a variety of advanced therapeutic skills in scientific writing for potential publication in peer-reviewed journals; pursue life-long learning to better serve patients and communities and engage in:

- professional leadership
- collective efforts to expand and protect scope of practice
- educational appointments, and
- PhD level programs.

Master of Science Degree – Diagnostic Imaging

The purpose of the Master of Science (MS) Degree in Advanced Diagnostic Imaging is to allow first professional health care providers to become proficient in the technical and diagnostic components of imaging.

Lincoln College of Postgraduate and Continuing Education

Lincoln College of Postgraduate and Continuing Education provides education to those who possess first professional degrees and other health care professionals who wish to remain current and/or specialize in various fields of practice. Several programs are offered for the purpose of continuing the lifelong learning that is emphasized by the University. NUHS/Lincoln College also offers programs intended to meet the requirements of various state statutes that require continuing education for professional license/registration renewal.

Seal, Logo, Motto, and Colors of National University of Health Sciences

by President Emeritus James F. Winterstein, DC

The seal of the National School of Chiropractic remained constant from the founding of the College in 1906 until 1920. Most prominently displayed was an American Bald Eagle facing to the left with wings spread, perched upon a sagittal section of the human vertebral column. These were superimposed upon a replica of the dome of the Capitol Building in Washington, D.C., suggesting an institutional objective to serve the entire nation; thus, the adjective “National” as part of the name. Under the eagle, were the words “Founded 1906.” The word “chiropractic” was superimposed across the ventral surface of the eagle’s wings and breast. While the College changed its geographic objective from that of serving the nation to that of serving the world, it did not alter its name.



In 1920, the name of the institution was changed from the National School of Chiropractic to The National College of Chiropractic. This change was reflected on the seal from that time until September 2000. Interestingly, although the official name of the institution was The National College of Chiropractic, the seal has never included the definite article “The.”

In 1963, the College relocated from Chicago to Lombard, Illinois, and again the seal was altered to include the words “Lombard, Illinois” at the lower center.



In 1987, the College undertook a study of the need for a College logo and concluded on the use of the lower case “ncc” with a particular artistic reverse slant. This logo was used in conjunction with the seal on letterheads and related materials.

In 1996, following more discussion and a broad-based request for opinions, the Board of Trustees, upon recommendation of the president, determined that the spine should be removed from the seal based upon the philosophic mandate that the mission of The National College of Chiropractic reaches far beyond the anatomical borders of the spinal column as might be suggested by the original seal. While spinal adjusting and concern for spinal integrity and especially the integrity of the nervous system remain at the center of chiropractic diagnostic and therapeutic efforts, this institution has always emphasized and continues to emphasize the integrative nature of the human mind, body and spirit, thus educating its graduates as holistic physicians who are not anatomically limited.



At that time, the bald eagle was changed from a perched position to a flying eagle to signify leadership and progress. In the eagle’s beak is a ribbon on which is inscribed the word “chiropractic.” The founding date was moved to the top center of the seal and the new logo “ncc” was incorporated beneath the Capitol steps.

Surrounding the center circle were three clearly defined rings that were in turn surrounded by a circular space that contained the words “National College of Chiropractic” around the top and the words “Esse Quam Videri” around the bottom. The outer margin of the seal consisted of an undulating ring.

In September 2000, following extensive planning and preparation, The National College of Chiropractic became National University of Health Sciences. Three Colleges were established as components of the University. These Colleges are the College of Professional Studies, Lincoln College of Postgraduate and Continuing Education, and the College of Allied Health Sciences and Distance Education.

As a result of these changes, the seal was changed to reflect the new name, with the words “National University of Health Sciences” replacing the former “National College of Chiropractic.” The small “ncc” was removed from the lower portion of the seal, but the word “chiropractic” remained on the ribbon in the mouth of the flying eagle as a tribute to the origins of this fine institution. A new rectangular logo also was created that incorporated the initials “NU” in a box to the left, a large “National” to the right with the smaller “University of Health Sciences” underneath.

After an extensive branding campaign in 2011, the University created a new brand message, a new tagline and a newly redesigned website, that emphasize the University’s key strengths of history, education, career, and philosophy. The new tag line – “Defining the Future of Integrated Health Care” – addresses both NUHS’ integrative program delivery and the University’s desire to create leaders in the increasingly integrated field of health care.

The revised logo, while similar to the old, now emphasizes “National University,” underscoring the University as a multi-purpose institution with a variety of program offerings.



The motto of the University is *Esse Quam Videri* that is literally translated, “to be rather than to seem to be.” This has been the motto of the institution since its founding in 1906.

The official University colors are maroon and goldenrod.



General Information

History

The University was founded by John Fitz Alan Howard, DC, in 1906 in Davenport, Iowa, as the National School of Chiropractic. It was moved to Chicago in 1908 for the purpose of providing a more scientifically rigorous academic culture in which to expand and develop the institution. The first home for the College in Chicago was at 1732 W. Congress St., across from the Presbyterian Hospital where it was chartered and incorporated under the laws of the state of Illinois.

In 1920, the student enrollment had increased to such an extent that larger quarters were required. A five-story stone and brick building was purchased at 20 N. Ashland Blvd. The name of the institution was then legally changed to The National College of Chiropractic. The Chicago General Health Service clinic was established in 1927 in connection with the College.

In 1942, National became a not-for-profit educational and research institution in accord with the corporate laws of Illinois and the requirements of the United States Department of the Treasury governing tax-exempt institutions. From 1936 to 1965, the professional training program at National College was four and one-half academic years. In 1965, the program was expanded to five academic years. In 1968, the two-year pre-professional requirement for admission became effective, a three-year pre-professional requirement was implemented in 1997, and a pre-professional baccalaureate requirement was instituted in 1999. Additional qualitative requirements for admission were adopted from time to time.

The Office of the Superintendent of Public Instruction of the State of Illinois granted official status to National as a degree-granting institution in 1966 for both the bachelor of science in human biology and the doctor of chiropractic degrees. Also in 1966, National was fully accredited by the Commission on Accreditation of the Council on Chiropractic Education of the American Chiropractic Association. The Doctor of Chiropractic Degree Program was approved by registration with the State Education Department of the State of New York in 1972. In 1974, the College was recognized as a Candidate for Accreditation by the North Central Association of Colleges and Secondary Schools and was accredited by North Central in 1981.

National has long been a leader in chiropractic education and has been at the forefront in: (1) introducing laboratory procedures into the teaching of the basic sciences; (2) originating the clinical approach to diagnosis; (3) incorporating broad scope therapeutic measures into chiropractic education and practice; (4) developing and researching various aspects of chiropractic practice through application of the scientific method; (5) initiating increased standards for pre-professional education; (6) researching and teaching acupuncture/meridian therapy to its professional students; (7) promoting the value of and various uses for soft tissue therapy; (8) teaching botanical medicine to its professional students; (9) initiating and using problem-based learning as a basis for its curriculum; and (10) pioneering efforts in seeking accreditation and/or approvals of the institution and its various programs by state, regional and federal accrediting bodies or agencies.

In 1963, The National College of Chiropractic moved to Lombard, Illinois, where on 20 acres, it developed facilities for the exclusive use of chiropractic educators. The campus has expanded to 35 acres, which includes five academic structures and four dormitories. Clinical facilities are also located in Aurora, Illinois, and St. Petersburg, Florida.

Since 1978, National has published the only refereed, internationally and MEDLINE indexed, chiropractic scientific journal, Journal of Manipulative and Physiological Therapeutics. It also publishes the Journal of Chiropractic Medicine, and the Journal of Chiropractic Humanities, both peer-reviewed indexed journals.

National University was also the first institution with a chiropractic program to develop and use a specialized training and assessment center and the first to install and use an MRI for patient and research purposes.

The chiropractic college started evolving into a university concept between 1993 and September 2000, when the institution was officially changed from a college to a university and was renamed National University of Health Sciences. The Massage Therapy Certification Program was introduced in 1999 as part of the University plan to expand its program offerings. In 2006, National was accredited by the Higher Learning Commission to offer the Doctor of Naturopathic Medicine Degree Program, the Master of Science Degree Program in Acupuncture, the Master of Science Degree Program in Oriental Medicine, the Master of Science in Diagnostic Imaging, and the Master of Science in Advanced Clinical Practice. The first students entered the new programs in Fall 2006.

In June 2008, National University entered into a partnership with the University Partnership Center of St. Petersburg (Florida) College (SPC) to utilize SPC classroom space and support services to begin offering the Doctor of Chiropractic Degree Program in St. Petersburg, Florida, in Fall 2009.

National University of Health Sciences operates teaching clinics and various other clinical setting opportunities for its interns at: the National University Whole Health Centers in Aurora and Lombard, Illinois; a Salvation Army clinic in Chicago, Illinois; the Caruth Health Center at St. Petersburg College and the Whole Health Center – Pinellas Park Florida; Scott Air Force Base, Illinois; Bay Pines VA Medical Center, St. Petersburg, Florida; Indianapolis VA Medical Center, Indianapolis, Indiana, and Laser Spine Institute, Tampa, Florida. Select interns participate in learning rotations at a Veteran's Administration Center in Danville, Illinois, and Ancillary Clinical Experiences.

Nature and Institutional Purposes

General

It is the vision and purpose of National University of Health Sciences that the various members of complementary and alternative medicine shall study together, work together, and develop a strong sense of collegiality and integrated function. To carry out this vision, it was decided in 1993, as part of the institution's long-range plan that it would begin to move toward expansion of its educational offerings. As part of this plan, the concept of a university was born and became a reality on September 1, 2000.

The University contains three Colleges, which administer their own programs:

- College of Professional Studies;
- College of Allied Health Sciences and Distance Education;
- Lincoln College of Postgraduate and Continuing Education.

Specific

1. National University of Health Sciences provides academic programs that help students acquire and develop the knowledge, skills, attitudes, and values that are necessary to be competent and ethical practitioners of the complementary and alternative medical healing arts.
2. The University subscribes to the Standards and Criteria of the Higher Learning Commission, the Council on Chiropractic Education, and other specialized, programmatic accrediting agencies, for the purpose of receiving accreditation by these agencies and to ensure a high quality of education at the University.
3. The University seeks to employ faculty who support the mission of the University, have diverse academic and professional experiences, are dedicated to teaching and scholarship, are sensitive to the needs of students, and are committed to professional development.

4. The University provides well-designed and maintained facilities, adequate fiscal resources, faculty development, and competent instruction, and promotes sound scholarship in an institutional culture of civility and ethical behavior. The University strives to provide a safe and effective educational and working environment that fosters active student learning, collegiality, collaboration, and innovation.
5. Pertinent clinical experiences and related activities are designed to prepare students to participate as health care providers in the civic, social, cultural, ethical, and political aspects of community life, and to assume leadership positions, when appropriate.
6. The University promotes the value of inquiry and encourages the advancement of knowledge through active research and the involvement of faculty and students in varying forms of scholarship.
7. The University seeks to provide service to, and develop meaningful relationships with, the community, the health professions, graduates of the University, and patients of the University clinics.
8. The University seeks to provide a collegial environment in which students can learn a specific health care discipline, develop a better understanding of other complementary healing arts and sciences, and become better prepared for interaction and practice in an integrated health care environment.

National University of Health Sciences does not discriminate on the basis of race, color, religion, sex, gender, sexual orientation including gender identity, age, national origin, citizenship status, genetic information, marital status, parental status, disability, status as a veteran, or any other status protected by state and/or federal law in admission, access to treatment, or employment in its programs and activities that receive or benefit from federal financial assistance, in accordance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, or the Age Discrimination Act of 1975, and the Americans With Disabilities Act of 1990.

National University of Health Sciences is currently approved as a degree-granting institution for the doctor of chiropractic and doctor of naturopathic medicine degrees, the master of science degrees in acupuncture and oriental medicine, the master of science in advanced clinical practice, master of science in diagnostic imaging and the baccalaureate of biomedical sciences under the Illinois statutes regulating degree-granting institutions. It is accredited for the same purposes and for issuing a certificate in massage therapy.

Governance

Control of National University of Health Sciences is vested in a 9-12 member Board of Trustees. The bylaws of the University provide that membership of the board shall include no fewer than three Illinois residents and no fewer than two public members who are not chiropractic physicians.

The Board of Trustees elects a president of the corporation who also holds the office of President of the University. The authority of the University is vested in the President, who is the chief executive officer. In such instances as the President deems proper, and subject to the President's reserved powers, the President may vest authority in the Vice President for Academic Services, Vice President for Administrative Services, Vice President for Business Services, the deans, assistant deans, directors, department chairs, the faculty, and the University Council, Faculty Senate, and various committees.

Within the NUHS learning community, the President draws upon the diverse academic and professional experiences of the faculty to promote a sense of shared governance using a policy-based "consultative decision-making" process. This model revolves around information sharing and discussion rather than joint decision-making. The American Association of University Professors (AAUP) describes this model in the association's Statement on Government of Colleges and Universities, wherein it concludes "the faculty has primary responsibility for such fundamental areas as curriculum, subject matter and methods of instruction, research, faculty status, and those aspects of student life that relate to the educational process, but where authority remains with the senior administrator and the Board of Trustees."

University Financial Information

The public may obtain a copy of information dealing with the financial condition of the University by contacting the Vice President for Business Services. The document will be mailed to an address provided by the requester

Accreditation

The University is accredited by the Higher Learning Commission (HLC). Please visit our website for further information at: www.nuhs.edu/about-us/our-profile/accreditation. HLC may be contacted at 230 S. LaSalle St., Suite 7-500, Chicago, IL 60604-1413; 800-621-7440, 312-263-0456.

The Doctor of Chiropractic Program of the College of Professional Studies on the main Illinois campus is accredited by the Commission on Accreditation of the Council on Chiropractic Education (CCE). In July 2011, the Doctor of Chiropractic Degree Program at National University of Health Sciences was awarded programmatic accreditation at both the Illinois campus and the Florida site by the Council on Chiropractic Education, 8049 North 85th Way, Scottsdale, AZ, 85258-4321; Phone, 480-443-8877; Website, www.cce-usa.org. Complaints regarding possible non-compliance with the standards of this body should be addressed to the CCE Commission on Accreditation at the address above.

The Doctor of Chiropractic Degree Program at the Florida site on the St. Petersburg College (SPC) campus has also been licensed by the Commission for Independent Education, Florida Department of Education. The Doctor of Chiropractic Medicine Degree Program is the only program licensed by the Commission for Independent Education for the Florida site. Additional information regarding this institution may be obtained by contacting the Commission at 325 W. Gaines St., Suite 1414, Tallahassee, FL 32399-0400; toll free 888-224-6684.

The University has been accredited by the Higher Learning Commission to offer the Doctor of Naturopathic Medicine Degree Program. NUHS' Doctor of Naturopathic Medicine Program is accredited by the Council on Naturopathic Medical Education (CNME), a professional accrediting agency for naturopathic medicine programs. For information, contact: CNME, PO Box 178, Great Barrington, MA 01230; 413-528-8877.

The University has been accredited by the Higher Learning Commission to offer the Master of Science Degree Program in Acupuncture and the Master of Science Degree Program in Oriental Medicine. The Master of Science Degree in Acupuncture and the Master of Science Degree in Oriental Medicine of the National University of Health Sciences are accredited under the Master's Degree standards by the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM), the recognized accrediting agency for programs preparing acupuncture and oriental medicine practitioners. ACAOM is located at 8941 Aztec Drive, Eden Prairie, Minnesota, 55347; phone, 952-212-2434; fax, 952-657-7068. NUHS graduates are eligible to sit for national board exams administered by the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM). Passing the appropriate board exams is a condition for obtaining state licensure in most states.

The University has been accredited by the Higher Learning Commission to offer the Bachelor of Biomedical Science Degree and the Associate of Applied Science Degree in Massage Therapy.

The Massage Therapy Certification Program is accredited by the Commission on Massage Therapy Accreditation (COMTA), 2101 Wilson Blvd., Suite 302, Arlington, VA 22201; Phone – 202-888-6790; Fax 202-888-6787; www.comta.org.

Approvals and Listings

- Department of Professional Regulation of the State of Illinois
- Florida Department of Education Commission for Independent Education
- Approval Agency for Veterans' Education, U.S. Code for veterans' benefits
- Illinois Student Assistance Commission
- All state board examiners in chiropractic
- All composite boards of medical examiners
- Canadian and various other foreign chiropractic boards of examiners
- U.S. Immigration and Naturalization Service for attendance by non-immigrant students
- U.S. Department of Education
- Academic Directory Listings
- The American Association of Collegiate Registrars and Admissions Officers
- American Library Association
- Directory of Illinois Schools
- The Federation of Illinois Independent Colleges and Universities
- HEP Higher Education Directory
- Illinois Association of Collegiate Registrars and Admissions Officers
- Medical Library Association
- National Association of College Admissions Counselors

Academic Records

National University of Health Sciences has become the trustee and curator of the records for the following healing arts institutions through a variety of relationships.

- American College of Naprapathy – June 1925
- American College of Mechano-Therapy, which became The Eclectic College of Chiropractic, which became The Peerless College of Chiropractic – January 1926
- Progressive College of Chiropractic, the corporate forerunner of the Lindlahr College of Natural Therapeutics – 1926
- University of Natural Healing Arts (originally Carver's Colorado Chiropractic University – June 1965
- Carver Chiropractic Institute, New York – September 1968
- Chiropractic Institute of New York – September 1968
- Cosmopolitan School of Chiropractic of New York – September 1968
- Eastern Chiropractic Institute – September 1968
- New York School of Chiropractic – September 1968
- Standard Institute of Chiropractic, New York – September 1968
- Detroit College of Chiropractic – December 1969
- O'Neil Ross Chiropractic College – August 1970
- International Chiropractic College – September 1971
- Lincoln Chiropractic College – September 1971
- Universal Chiropractic College – September 1971
- Kansas State Chiropractic College, Inc. – 1974
- Central States College of Physiatics – February 1975

Alumni Association

The National University of Health Sciences Alumni Association is an organization within the University that sponsors, encourages, and maintains professional advancement of National University of Health Sciences. The association is dedicated to serving the University by providing a program that enhances communication and support by alumni for the University. The alumni association provides student scholarships, supports student activities, homecoming activities, class reunions, area meetings, and campus development. For information, call 630-889-6701.

Locations and Facilities

National is located at 200 E. Roosevelt Road, Lombard, IL 60148-4583, a western suburb of Chicago. At this campus site, National University of Health Sciences has a modern plant equipped with up-to-date facilities for education in the basic sciences. The main building, Janse Memorial Hall, is a tri-level structure housing administrative and faculty offices, classrooms, laboratories, campus store, communications, registrar, alumni services, student services, and financial aid. Housing facilities for students are available on campus: Isaac P. Tieszen Hall (1963); W.H. and Evelyn Buchholz Hall (1969); Otto J. Turek Hall (1971); and Lincoln Hall (1973). The Earl G. Liss Auditorium and George Morris Ogden Student Center were completed in Fall 1977. A 56,000-square-foot patient care and research center, the Howard-Schulze Building, became operational in early 1981. The building comprises the National University Whole Health Center for outpatient care, the Interdisciplinary Research Laboratory, the Biological Resources Laboratory, and the Training and Assessment Center. The Learning Resource Center opened in September 1993. Through the years, National has purchased adjacent land, enlarging the main campus to about 38 acres.

National became part of the University Partnership Center (UPC) of St. Petersburg College (SPC) in 2009. This innovative campus-sharing program allows NUHS to offer its Doctor of Chiropractic Program on-site at St. Petersburg College. The NUHS – Florida physical plant is composed of four SPC locations. Phase One of the academic program is housed at the Caruth Health Education campus, 7200 66th St. N., Pinellas Park, FL 33781-4005. This campus sits on a 15.8-acre site with the main building consisting of 194,123 square feet. NUHS has access to lecture and laboratory space including two radiology suites, a cadaver laboratory, biochemistry/physiology laboratory, and a technique laboratory that is housed in a newly refurbished 48'x50' re-locatable classroom. NUHS operates a clinic in the main building providing health services for the faculty, staff, and students of NUHS, all UPC partners, and SPC. The majority of the faculty is located on site in a re-locatable classroom that has been converted to office space. Phase Two of the academic program is housed at the Health Education Center Annex, 6698 68th Ave., N., Pinellas Park, FL 33781-5015. The Annex is located two blocks south of the Caruth Health Education campus on a 3.6-acre site and houses faculty offices, evaluation and management laboratory, technique laboratory, training and assessment center, lecture hall, radiology laboratory/computer lab, and an interactive classroom. The University Partnership Center on the Seminole campus, 9200 113th St. N., Seminole, FL 33772-2800, houses two administrative offices. No instruction is given at the Seminole campus. The NUHS Whole Health Center – Pinellas Park, Florida, opened in Fall 2012, provides a new clinical internship option for students in the university's doctor of chiropractic program. NUHS students also have access to all facilities on the SPC campuses including the six libraries in the St. Petersburg College library system, two of which are located at the Caruth Health Education and Seminole campuses respectively.

University Clinics

At the conclusion of formal, didactic training, National's professional studies students (chiropractic and naturopathic) are required to serve an internship, which is a practical application of concepts and methods gained by the care and handling of patients. Their clinical experience is further enhanced through the diagnostic investigations of cases referred to the clinics by practicing physicians. Following their didactic training, students (chiropractic) may intern at an NUHS Whole Health Center (Lombard or Aurora) or the Salvation Army clinic (Illinois only). Naturopathic students train during their internship at an NUHS Whole Health Center (Lombard or Aurora) or the Salvation Army clinic (Illinois only). In addition to the required internship, a number of residencies are available to those interested in a specific avenue of chiropractic practice. Also available are special student rotations, Ancillary Clinical Experiences (ACE) and Clinical Based Internships (CBI) under the guidance of an adjunct faculty member of the University. In addition, NUHS maintains a Clinical Clerkship Program through which students (chiropractic and naturopathic) in the 9th and/or 10th trimesters of study may, if approved, participate in off-campus clerkships in specifically chosen health care clinics and/or hospitals.

Acupuncture and Oriental Medicine student internships begin in Trimester 4 on campus at the NUHS Whole Health Center – Lombard. AOM interns may, if approved, participate in off-campus internships at Stroger Hospital (Cook County) beginning in Trimester 5.

Massage therapy students provide client services in University health centers as part of their internship program.

NUHS Whole Health Center – Lombard

The National University of Health Sciences Whole Health Center – Lombard is situated on the east side of campus and provides a full range of patient and client services to Chicago’s west suburban population. The 48,240 square-foot center has over 40 treatment and examination rooms. Also housed within this facility is a massage therapy suite.

NUHS Whole Health Center – Aurora

The National University of Health Sciences Whole Health Center – Aurora, located in the far western suburbs of Chicago, is a 3,000-square-foot clinic that houses a small group practice providing patient care and intern practice.

NUHS Whole Health Center – Caruth Health Education Center

The National University of Health Sciences Whole Health Center – Caruth Health Education Center opened in Fall 2009 on the St. Petersburg College (SPC) campus in Pinellas Park, Florida, to offer health care services to SPC students, faculty and staff and their families. This full-service clinic is staffed by a National faculty clinician and provides internship experience for doctor of chiropractic students at the Florida site and select doctor of chiropractic students from the Illinois campus who are approved to complete their internship credits in Florida.

NUHS Whole Health Center – Pinellas Park

The National University of Health Sciences Whole Health Center – Pinellas Park, Florida, opened its doors in September 2012. The \$1.9 million facility offers comprehensive chiropractic care and integrative medical services to the Tampa Bay community. It also provides a dynamic new clinical internship option for students in the university’s doctor of chiropractic program. The 7,000-square-foot clinic contains 10 treatment rooms, a physical rehabilitation room, and a classroom.

Salvation Army Clinic

A Salvation Army clinic provides health care services to residents of the Salvation Army Rehabilitation Center (Des Plaines Avenue) in the city of Chicago.

Laboratories

Teaching Laboratories

Laboratory instruction serves as an important adjunct to the student’s learning environment. The facilities for this include the single purpose as well as multipurpose laboratories listed below.

Biochemistry, Neuroanatomy and Physiology Laboratory

The Standard Process Biochemistry, Neuroanatomy, and Physiology Laboratory on the Illinois campus and the biochemistry and neuroanatomy laboratory at the Florida site contain fume hoods, reagent tables and chemical resistant epoxy-topped tables that are equipped with drawers and cabinets for the storage of apparatus. The tables and fume hoods are provided with hot and cold water and electrical outlets. The drawers and cabinets contain standard equipment used in teaching biochemistry and are assigned to individual students. The laboratory also serves the neuroanatomy course where gross dissection and observation of the brain and brainstem are conducted.

Chiropractic and Massage Laboratories

There are six laboratories completely equipped for teaching chiropractic technique and massage therapy located at the Illinois campus. A dedicated fully equipped technique laboratory is located at the Florida site. Each laboratory is designed for teaching groups of approximately 25 students and is equipped with all necessary hygienic facilities.

Diagnosis, Physiological Therapeutics and Emergency Care Laboratories

Housed at both campuses are facilities for learning and practicing diagnostic skills. A separate laboratory is equipped with tables designed for microscopy and use with clinical instruments utilized in the processing and analysis of blood and urine specimens in the clinical laboratory diagnosis course. The physiological therapeutics laboratory provides space for teaching the utilization of various modalities. In addition, equipment and models for CPR, triage, bandaging, etc. are available for the needs of the emergency care and first aid procedures course. Dedicated laboratory space at the Florida site for the practicing diagnostic and therapeutic interventions is located in the Health Education Center Annex building.

Gross Anatomy Laboratory

The National University of Health Sciences' anatomy lab at the Illinois site contains 33 clamshell tables each with its own LED lighting unit, video cameras that broadcast to thirteen 42" monitors spaced around the room, and SMART Board technology. The lab also incorporates energy-efficient heating, ventilation, and air conditioning systems designed to provide a consistent flow of fresh air, limit temperature loss, and save energy. Hygienic features consist of stainless steel sinks operated by foot-pedal controls, and hospital-grade sheet vinyl that is heat-welded to the floor to create an impermeable membrane throughout the lab.

The gross anatomy laboratory at the Florida site contains a dissecting area with downdraft tables capable of accommodating nine cadavers. A high definition camera is located within the dissecting area allowing for group viewing during lecture periods.

Histology Laboratory

Within the Illinois and Florida histology labs, students are taught using interactive computer laboratory software with images and audiovisual aids.

Hydrotherapy Laboratory

A fully equipped hydrotherapy teaching laboratory on the Illinois campus gives naturopathic medicine students the opportunity to learn immersion, steam, constitutional, and other hydrotherapy techniques.

Physiology Laboratory

The Florida site laboratory contains student laboratory tables provided with drawers, trays, water, gas, forced air, and electrical outlets. Standard laboratory equipment and instruments are supplied for each student station. Computer stations provide advanced electronic technology for human subject data collection and to complement the wet labs.

Radiological Learning Laboratory

This laboratory in Room 117A in Janse Hall on the Illinois campus is used for individual and group study of an extensive teaching file. This laboratory is available for student use as well as for use by those doctors from the field who wish to improve their diagnostic skills. A similar lab at the Florida site is located in the Health Education Center Annex building.

Radiological Technology Laboratory

The radiological technology laboratory, located in the Whole Health Center – Lombard, houses two energized and one non-energized radiographic units. Non-energized units are available for student use after normal class hours. These units are used to demonstrate the practical aspects of radiography. Students learn to position classmates, calculate exposure factors, and simulate exposures in order to develop competency in radiographic positioning.

Radiation safety is stressed. Radiological technology laboratory space at the Florida site is located within the Caruth Health Education Center.

Training and Assessment Center

The Training and Assessment Center in Illinois is a multi-functional center that provides the resources for formal interpersonal skill training, clinical skill development, small group learning, and measurement of clinical competence. This 10-room facility is housed on the second floor of the Howard-Schulze Building. It functions independently of, but in concert with, the clinic and academic divisions of the University and provides an additional means to integrate the academic program with the clinical program. The University's comprehensive Standardized Patient Program is based here. A digital video recording studio is also housed in the center for clinical performance assessment and for faculty teaching productions. A similar lab at the Florida site is located within a diagnostic lab center at the Health Education Center Annex building.

Research Laboratories

Biological Resources Laboratory

The biological resources laboratory is located at the Illinois campus on the lower level of Howard-Schulze Building. The laboratory is equipped for dissection of cadaveric sections, necropsy of small rodents, auxiliary isolation, and testing of subcellular components, and for whole animal experiments.

Interdisciplinary Research Laboratory

The interdisciplinary research laboratory is located at the Illinois campus on the lower level of Howard-Schulze Building. This is a traditional wet laboratory equipped for cellular, biomechanical, physiological, and molecular experiments. In addition, the laboratory is equipped to conduct spinal morphometry. Equipment includes a flow cytometer, liquid scintillation and gamma counters, a luminometer, preparative and ultra centrifuges, conventional, dark field and fluorescence microscopes, balances, pH meters, an autoclave, a CO2 incubator, a laminar flow hood, and refrigerators and freezers.

WEBCO Laboratory

The Wellness, Endurance, Biomechanics, and Clinical Outcomes Laboratory (WEBCO) is located at the Illinois campus on the lower level of the Howard-Schulze Building. Many NUHS studies and clinical trials include a variety of outcomes that are collected in this lab. Examples of past outcome measures include treadmill tests, dynamic motion and strength analysis, Optical (infrared) motion analysis, load analysis of chiropractic adjustments, and motion simulation. The following equipment is currently available in this lab: treadmill, portable accelerometry cart with equipment to measure vibration data (e.g. joint crepitus and cavitation, and a mobile computer work station for data gathering.

Specialized Classrooms

Interactive Classrooms

National University utilizes three interactive classrooms on the Illinois campus that enable high quality video conferencing for courses shared between the Illinois campus and Florida site. The high-tech classrooms in Illinois and Florida include wall-mounted LED monitors and two projection screens, which can interact with iPad annotated application software. Instructors have multiple presentation options at their disposal including an ELMO visual presenter for document projection. The interactive classrooms also allow students on both campuses to benefit from special presentations by speakers from remote locations.

Computer Classroom

National University Room 117A in Janse Hall on the Illinois campus is a computer classroom to be utilized for faculty and staff development, computer software training and computer-oriented classes and labs. The room includes 15 dual-boot iMac computers, as well as state-of-the-art SMART board technology. The SMART board is especially

effective for radiology classes in which instructors can highlight pertinent areas of interest directly onto digital projections of X-rays, record each step of a lesson activity, and then save the lesson as a digital file that can be distributed to students for review at a later time.

Learning Resource Center

The Learning Resource Center (LRC) works to promote health information literacy and offers easy access to biomedical information in print and electronic formats. Its website portrays a collection of approximately 14,000 books, a wide variety of print journal subscriptions. It offers an array of links to scientific and biomedical electronic databases, websites and growing numbers of journals, many of which are full text. The library's collections reflect the University's emphasis on chiropractic medicine, naturopathic medicine, acupuncture and oriental medicine, nutrition, massage therapy, orthopedics, neurology, radiology, sports medicine, and alternative health care.

The LRC also has an Anatomage Table, a life-size 3-D interactive unit, which is one of today's most technologically advanced digital visualization systems for anatomy education. It is available for individual, clinical, and group study.

The Learning Resource Center's faculty and professional staff assist students by helping them to locate and use information effectively. They also serve health care practitioners requesting information from the specialized collections.

A computer center, located within the LRC, is equipped with 12 iMac and 12 PC computers. In addition to high-speed Internet access, there is also a wireless network for personal laptops. Natural and indirect lighting enhance the function of the spacious work areas.

The Learning Resource Center facility was built in 1993. It houses an inviting interior with comfortable furnishings designed for both relaxed conversation and serious group and individual study.

The LRC is a member of the Medical Library Association (MLA), Chiropractic Library Collaboration (CLC), Reaching Across Illinois Library System (RAILS), the National Network of Libraries of Medicine, the Consortium of Academic and Research Libraries of Illinois, and the Fox Valley Health Sciences Library Consortium.

A full-service Health Sciences Library is located at the Caruth Health Center at the NUHS Florida site. NUHS-Florida students also have complete access to the electronic reserves of the Learning Resource Center located at the Illinois campus. Additionally there is an Anatomage Table housed there for student utilization and learning.

University Academic Policies, Regulations & Procedures

The University Year

The University's academic year begins on September 1 and ends on August 31. Within these time parameters, the University operates on a trimester basis. The fall trimester begins approximately September 1; the spring trimester begins approximately January 1; the summer trimester begins approximately May 1. New classes for all programs (except Massage Therapy, which has a fall and spring start only) are admitted at the beginning of each trimester.

Changes

The University reserves the right to revise the requirements regarding admission and/or re-admission, to change the arrangement of courses, the requirements for graduation, degrees, tuition and fees, and other regulations affecting the student body. Such changes may affect both new and continuing students and will be effective at a time or times determined by the needs of the University or the students or both. The National University of Health Sciences Bulletin appears on the university website in a digital format (www.nuhs.edu/academics/bulletin/). Changes will be considered effective and become an integral part of the bulletin after notice of the change has been posted on the Bulletin website page under "Errata." Changes instituted during the current fiscal year will not appear in the official Bulletin document until the following fiscal year. Each student must assume personal responsibility for becoming informed of the content of all Bulletin changes published on the university website.

General

Each person whose registration has been completed is considered a student of National University of Health Sciences during the trimester for which the registration was completed, unless that connection becomes officially severed by approved withdrawal, suspension, or expulsion. No student registered at National University of Health Sciences will at the same time be registered in any other school, college, or other educational institution without the written consent of the appropriate dean.

The continuance of each student upon the rolls of the University and the conferring of any degrees are strictly subject to the authority of the University, which is free to cancel registration at any time on grounds that are deemed advisable.

Course Numbering

The institution follows an independent course numbering system to assign courses in accordance with program requirements. The system is designed to identify courses and differentiate the level of study. Courses are numbered sequentially and assigned a letter prefix depicting the program title.

Grading System

The grading system at National University of Health Sciences is designed to (1) provide academic incentive, (2) reward achievement of cognitive levels of learning and clinical skills competence, (3) encourage professionalism, and (4) assist in identifying students with academic problems.

Since different courses lend themselves to different evaluation procedures, individual course managers or their designee have the responsibility for explaining their method of evaluating academic achievement in each course or laboratory. At the end of each trimester, course managers provide the Registrar with a grade report indicating the level of the student's achievement in the course or laboratory. This final trimester grade is determined from the student's performance in a combination of the comprehensive final examination, midterms, laboratory examinations, quizzes, peer and self-evaluations, assignments, classroom and laboratory work, participation in and contribution to class and group discussions, attendance, decorum, and professionalism.

Regular Grades

A The grade of A indicates achievement of distinction. It is earned by those students who demonstrate exceptional interest in and mastery of the subject matter, who display initiative and creativity as well as superior insight in analyzing and synthesizing subject matter, and who manifest exceptional ability in integrating and applying this knowledge.

B The grade of B connotes evidence of intelligent fulfillment of course requirements. It is earned by those students who demonstrate marked ability to communicate and apply more than merely the basic elements of the course, whose initiative reveals unusual ability to generalize about course material, and who display a marked degree of independence.

C The grade of C indicates satisfactory grasp of course content. It is earned by those students who can apply and express basic concepts intelligibly, and who have shown no measurable deficiency in meeting requirements of the coursework.

D The grade of D indicates only passable achievement in coursework and indicates areas in basic course content where the student is deficient. It is earned by those students who have fulfilled no more than the minimum requirements of the course, thus making a failing grade unwarranted.

F The grade of F indicates deficiency in elements of the course to an extent that completely impairs the student's understanding of the course content.

In addition to the regular grades of A, B, C, D and F, the following irregular grades may be used.

Irregular Grades

AU The irregular grade of AU indicates that the auditing of a course or laboratory has been completed. No credits or clock hours are granted.

I The grade of I indicates satisfactory work, some part of which, however, is incomplete as of the date of the final examination. The student who does not complete the work may not take the final examination. The student may also be granted the grade of I if the make-up or a repeat final exam is missed. The student who does not complete the work or misses the make-up or repeat final exam due to verified death of an immediate family member, grave personal illness or injury, personal catastrophe, or non-reschedulable military service may be granted the grade of I by the course manager or laboratory faculty after consulting with the appropriate dean. The grade of I is not commonly issued for a single course or lab. This temporary grade of I must be removed from the student's record by completion of the incomplete portion(s) of the work prior to the make-up or repeat final exam of the following trimester to be allowed to sit for the make-up administration of the final exam. The student who misses the make-up or repeat exam fails the course (subject to the grade of I being continued by the course manager after consulting with the appropriate dean). Enrollment in a new course will not be continued if the student has not converted this irregular grade to a regular passing grade by the first calendar day of the second calendar week of the next trimester of attendance. The removal of the I must be accomplished within the maximum of one trimester. Otherwise, the I becomes an F automatically.

K The irregular grade of K signifies that the student has received National University credit for a course or laboratory by having presented evidence to the satisfaction of the appropriate dean of having satisfactorily completed a course equivalent in content and quality at another institution.

S/U Some courses at National University of Health Sciences have as their objective the development of a student's competency that does not lend itself to the refinements of quantification identified with the regular grades of A, B, C, D, and F. Thus, a student is judged by the instructor to be competent or incompetent. Competency is indicated by the award of the grade S. Incompetency is indicated by the grade U.

W The irregular grade of W signifies an authorized withdrawal from a course and will be counted in the attempted hours but is not calculated in the GPA.

WX The irregular grade of WX signifies an unauthorized withdrawal from a course by a student whose work is unsatisfactory and will be calculated into both the attempted hours and GPA.

Grade Point Average

A student's level of achievement is evaluated through a grade point average (GPA). This is an average of the student's grades that gives proportionate weight to individual courses on the basis of the credit hours (trimester credits) assigned to them. Course and laboratory credit values at National University range from .25 to 18 credit hours. The GPA is computed in the following manner:

1. A grade of A is valued at 4 grade points; B = 3; C = 2; D = 1; I = 0; and F = 0.
2. The number of grade points for the grade of each course is multiplied by the respective trimester course or laboratory credit hours to arrive at a number of quality points.
3. The quality points are calculated for each course. The quality points for each course are summed.
4. This sum is divided by the sum total of the trimester credit hours attempted. The resulting quotient is the GPA of the student for that trimester.

The cumulative grade point average (CGPA) indicates the level of achievement in all courses attempted as of the last trimester in which the student received grades.

The GPA is the basis for identifying those students to be placed on the Dean's List and the Honor Roll. The CGPA is a basis for identifying those students to be awarded degrees with distinction.

Courses that are graded on a satisfactory/unsatisfactory basis, although they have trimester credit value, are not included in the calculation of either the GPA or the CGPA. The GPA and CGPA calculation involving repeated courses uses the grade received last. The initial and repeat grades for a repeated course are not averaged.

Attendance (in Person)

Students are permitted 10% absenteeism in each class after which they will be issued a grade of F for that course. Students are admonished to maintain a record of attendance for themselves, although the record of the faculty member will be the official record. These absences are to be used for emergencies, not to just be used and then plead for mercy when an emergency takes absences over the 10% limit. Faculty members will notify each student if the attendance record indicates that the student is in jeopardy. The instructor of record for said class, in consultation with the appropriate dean, may make excused absences on a case-by-case basis. Exceptions to the 10% rule cannot exceed the equivalent of 20% of course work in a given class during a trimester. Excused absences must be submitted prior to the day of the class, however, where extenuating circumstances prohibit prior notice, the request must be made without delay. The instructor of record may require that excused absence requests be made in writing, with documentation supporting the request.

Attendance (Online)

Students are expected to attend all online course sessions through class participation. The method of participation (such as discussion board posts or submission of assignments) is defined by each faculty member, and these requirements can be found in each course syllabus. Online class posts are date- and time-stamped upon receipt on the university servers, which operate on Central Time. Each course syllabus will define due dates. Typically, the online course week starts on Wednesday at midnight. For absence due to illness or personal emergency, the student is expected to contact the faculty as soon as possible.

Excused Absence

An excused absence is official permission given by the instructor of record to the student to make up class work missed as a result of extenuating circumstances beyond the student's control. The student is to inform the faculty member of these circumstances in a timely manner.

Students who have a planned extenuating circumstance beyond their control, such as major organized religious holidays of the student's belief, are to inform the faculty member at the beginning of the trimester and just prior to the absence.

If the student does not complete the required make-up work assigned by the instructor, the excused absence will not give exception to the 10% rule of attendance.

Disputes regarding the student attendance record will be referred to the appropriate dean.

Tardiness

Students are expected to be on time and prepared for class. A student will be marked as tardy (T) or left early (Y) if they are not in attendance at the start of the class or leave prior to the class ending up to a maximum of 15 minutes. A tardy (T) or left early (Y) designation does not count as an absence. Students who enter class after the 15-minute mark or leave prior to the regularly scheduled class time will be counted as absent, which does count towards the 10% rule. The instructor keeps the official class time. Students who have a legitimate excuse for being late greater than 15 minutes may appeal to the instructor for an excused absence.

Institutional emergency closing due to weather or unforeseen circumstances in which the campus is closed are excused absences.

Clinic Internship policy is contained in the Intern Manual.

Auditing

Audit is a registration status allowing students to attend a course without receiving credit or clock hours. Audited courses do not count toward full-time status or satisfactory progress and do not qualify as a prerequisite. Students currently registered in courses for credit in a program at National University of Health Sciences may enroll to audit a course in any of the University's colleges, if space is available.

Students may select this option to gain more knowledge and understanding of content as well as greater insight into the practical aspects of the field. Auditors must adhere to the Student Code of Conduct and attend classes as specified by the attendance policy. Assignments and exams are not required. Auditors have the right to participate in class discussions.

Students must seek approval and register through the office of the appropriate dean after having met all requirements such as prerequisites. Thus, an audit will be documented on the student transcripts with a grade of AU (audit completed) or WA (attendance requirement not met). No credits or clock hours are granted. The registration status of the course (repeat or audit) cannot be changed after the add-drop date. The tuition and fees for auditing a course are the same as when taking it for credit. The tuition and fees do not apply if the student has successfully completed the exam or received advanced standing transfer credit for the course. A student may audit a course up to three times.

Dean's List and Honor Roll

At the end of each trimester, recognition of the Dean's List of Students for Distinguished Academic Achievement is awarded to those full-time students who have achieved a GPA of at least 3.5 on a 4.0 scale for the trimester with no grade lower than a S/C. Recognition on the Honor Roll of Students for Exemplary Academic Achievement is awarded to those full-time students who have achieved a GPA of at least 3.0 (on a 4.0 scale) for the trimester with no grade lower than a C.

Program Specific Academic Policies

Each college has separate academic policies and procedures that will be applied to their students as warranted. Students are responsible for individual program academic policies and procedures.

Student Costs

2018–2019 Tuition Rates

Tuition rates are in effect for the fall, spring, and summer trimesters. New tuition rates are established each year beginning with the Fall Trimester; tuition and fees are subject to change annually. Refer to each program for tuition, course, lab, and other costs associated with that program. Postgraduate course and seminar fees are posted under each program. Refer to Admission fees within applicable individual programs.

University Fees – Charged to all students in all programs as applicable.

Add/drop fee	\$25.00
Commencement ceremony fee	\$85.00
Emergency loan fee	\$30.00
Finance charges per month	1.5%
Payment plan per trimester.....	\$20.00
Late payment fee.....	\$15.00
Late registration fee	\$75.00
Replacement ID card fee	\$5.00
Returned check fee.....	\$25.00
Transcript fee.....	\$7.00
Parking fee per year (See Campus Parking section in Student Life)	\$12.00

Program Fees – Vary by program as listed below.

College of Professional Studies – DC, ND, AC, OM

Tuition: new, repeat, audit, elective (DC, ND) - per credit hour	\$498.00
Tuition: new, repeat, audit, elective (AC, OM) - per credit hour	\$448.00
Special student: new, repeat, elective – per credit hour	\$490.00
Diagnostic Kit Fee (Tri 1 DC, ND)	\$1,150.00
Diagnostic Kit Fee (Tri 1 AC, OM)	\$590.00
Tuition deposit, not refundable	\$150.00
Laboratory fee for each course audited	\$125.00
Application fee, not refundable	\$55.00
Reservation fee, not refundable	\$75.00
Student activity fee per credit hour	\$1.50
Technology fee – per trimester	\$121.00
EM6304 (DC) laboratory fee	\$315.00
EM6304N (ND) laboratory fee	\$315.00
EC6303 (DC) laboratory fee	\$45.00
RA6409 (DC) laboratory fee	\$125.00
AN5102 (DC, ND) laboratory fee	\$105.00
FR6307 (DC, ND) laboratory fee	\$110.00
MM6220 (DC only) laboratory fee	\$220.00
Challenge exam fee	\$100.00
Exam retake fee	\$100.00
Malpractice insurance fee	\$96.00
Degree verification fee	\$7.00

Postgraduate transcript fee	\$15.00
Certificate fee (each)	\$15.00
Application fee for readmission after one calendar year of non-attendance	\$25.00
Managed care verification fee	\$7.00

Postgraduate course and seminar fees are posted for each program.

College of Allied Health Sciences and Distance Education

Massage Therapy Program

Tuition: new, repeat, elective (MT) - per clock hour.....	\$20.16
Tuition: non-certificate student - per clock hour.....	\$20.16
Application fee, not refundable.....	\$55.00
Technology fee per trimester	\$48.00
MT226 lab fee.....	\$50.00
Supervised massage make-up	Faculty hourly rate
Exam retake fee	\$100.00
Certificate verification fee	\$7.00
Certificate fee (one included in tuition)	\$15.00

* A massage table will be needed for laboratory practice and clinical practicum that begins in the first trimester. Expect to pay \$400 to \$600 for the table. Books and supplies (including massage cream) will cost approximately \$400 for the program.

Bachelor of Science Program including Prerequisite Program

Tuition: new, repeat, elective (BS) - per credit hour	\$379.00
Technology fee per trimester	\$67.00
Application fee, not refundable	\$55.00
Student activity fee per credit hour	\$1.50
CHEM115 lab fee	\$50.00
CHEM205 lab fee	\$50.00
PHYS115 lab fee	\$50.00
Lab fee for audited course	\$115.00
Degree verification fee	\$7.00

Master of Science in Advanced Clinical Practice

Tuition: new, repeat, elective - per credit hour	\$498.00
Tuition deposit, not refundable	\$150.00
Application fee, not refundable	\$55.00
Reservation fee, not refundable	\$75.00
Technology fee per trimester	\$48.00
Exam retake fee	\$100.00
Application fee for readmission (after one calendar year of non-attendance)	\$25.00
Managed care verification fee	\$7.00

University Payment Policy

- All tuition and fees are due and payable as indicated on the fee schedule furnished each term. The student must make arrangements for payment of tuition and fees in full prior to the first day of class through one of the Payment Options below.
- Payment Options include: cash, personal check, money order, cashier's check, traveler's checks, Visa, Mastercard, Discover, American Express, sign-up for the Payment Plan below, or financial assistance through the Financial Aid Office.

- Payment Plan: Pay one-fourth of the tuition prior to the first day of class and one-fourth each of the next three months due on the first day of the month.
- Finance charges are assessed on past due student account balances at 1.5% per month. Students are responsible for payment of all tuition and fees. Failure to make timely payments will result in finance charges to their accounts. In the event of non-payment, students will be responsible for all collection costs.
- Breakage charges in courses where special equipment is used: Payment must be made for breakage or loss before grade in course can be issued.
- Diploma, state board credentials, transcripts, etc. are not issued unless all fees and any other obligations to the University are paid or met in full.

Refund Policy

1. Refunds for tuition paid to the University may be made only in the case of formal voluntary approved withdrawal of the student for a course(s). Fees are not refundable. To be eligible for a refund, the student must fill out an official withdrawal form from the Registrar, obtain appropriate departmental signatures, and submit the completed withdrawal form to the Registrar. Refund eligibility is contingent on the official approved withdrawal being submitted in accordance within the time frames as stated below.

Prior to Week 1	100% tuition refund
Week 1	100% tuition refund
Week 2	75% tuition refund
Week 3	50% tuition refund
Week 4	25% tuition refund
Week 5-15	0% tuition refund
2. Refund eligibility for Prerequisite Program students is contingent on the official approved withdrawal being submitted in accordance within the time frames as stated below for each mini-semester.

Prior to Week 1 or 9	100% tuition refund
Week 1 or Week 9	100% tuition refund
Week 2 or Week 10	50% tuition refund
Week 3 or Week 11	0% tuition refund
3. Refunds resulting from dropping a course(s) will be returned to the borrower's Direct Loan or GradPLUS lender (unless tuition was paid from private, non-federal sources) to reduce educational debt, and not to the student. Adjustments to federal or state grant programs may be necessary depending on when the course is dropped. Refunds due to non-Title IV borrowers will be made within 30 days of the date that the institution determines that the student has withdrawn.
4. A 100% refund is granted for course(s) in which advanced standing is received prior to the end of the first eight weeks of the first trimester of attendance. Since all advanced standing credit is to be determined within the first trimester of attendance, no special refund consideration is available in subsequent trimesters of attendance.
5. Elective refund policy: Elective course payments are non-refundable unless the course is cancelled due to insufficient enrollment.
6. Complete withdrawal from the University may result in a pro-rated housing refund. See the Housing License Agreement for more information.

7. For students called to active military duty, tuition and fee charges will be fully refunded for courses not yet completed at the time the student is called to active duty. Any financial aid funds that a student is determined not eligible to retain after the Return of Title IV Fund calculation shall be the debt of the student.
8. All first time, first trimester College of Professional Studies students registered in first trimester courses (as listed in the current Bulletin) may receive a 100% refund in Weeks One and Two and a 75% refund in Weeks Three and Four for up to one-half of the enrolled credits.

Return of Title IV Funds Policy/Withdrawal from NUHS

The Higher Education Amendments of 1998 (HEA98) changed the method of returning Title IV federal financial aid when a student totally withdraws from the University. The policy governs all federal grant and loan programs (Pell Grant, SEOG, Direct Loans, Perkins loans and PLUS), but does not include the Federal Work Study program.

This regulation assumes that a student “earns” federal financial aid in proportion to the number of days in the term completed. The University must calculate, according to a specific formula, the portion of financial assistance that the student earned and is therefore entitled to retain, until the time that the student totally withdrew. If a student receives (or the University receives on the student’s behalf) more assistance than the student earns, the unearned funds must be returned. Students who have not completed the verification process are ineligible to receive any financial aid.

The portion of the federal grants and loans that the student is entitled to receive is calculated on a percentage basis. For example, if a student completes 30% of the trimester, the student earns 30% of the approved federal aid that was originally scheduled for the term. This means that 70% of the student’s scheduled or disbursed aid remains unearned and must be returned. However, a student who withdraws after the 60% point in a trimester is considered to have earned 100% of the aid awarded for that trimester, and funds will not be returned to any federal Title IV financial aid programs.

This federal policy does not affect the student’s charges. The University’s withdrawal policy will be used to determine the reduction, if any, in the student’s tuition and fee or room and board charges. The student is responsible for paying any outstanding charges to the University.

The student’s official withdrawal date will be determined by the University as:

1. the date the student began the University’s withdrawal process (the date the student gave official notification of intent to withdraw);
2. the midpoint of the trimester if the student withdraws without notifying the University; or
3. the student’s last date of attendance at an academically-related activity as documented by the University.

If it is determined that a portion of the financial aid received on the student’s behalf is unearned, the University shares with the student the responsibility of returning those funds. Any grant funds that the student is required to return to the federal programs are considered an overpayment. The student must either repay the amount in full or make satisfactory payment arrangements with the Department of Education to repay the amount. If the student fails to repay or make payment arrangements to repay an overpayment, the student will lose eligibility to receive future federal financial aid at any institution.

Financial Aid Post-Withdrawal Disbursement Policy

The student may be entitled to a post-withdrawal disbursement of federal financial aid if the return of funds calculation indicates that the student earned more aid than the amount that was disbursed prior to withdrawal. Post-withdrawal disbursements will be credited first toward unpaid institutional charges. Any portion of a post-withdrawal disbursement that exceeds unpaid institutional charges will be offered as a disbursement to the student. Students must accept this disbursement within 14 days of the offer. If a response is not received, or if the offer is declined, these excess funds will be returned to the appropriate Title IV program.

NUHS will return its share of unearned Title IV grant funds no later than 45 days after determination of withdrawal and Title IV loan funds no later than 30 days after determination of the withdrawal date.

Financial Aid Unofficial Withdrawal Policy

Unofficial withdrawal occurs when a student registers for a class and never attends, or a student stops attending courses without completing and submitting the withdrawal form. Confirmation of the last date of attendance in an academic activity will be obtained and for those receiving federal aid, NUHS will adjust aid in the same manner as an official withdrawal.

Financial Aid Repeated Coursework Policy

Current Department of Education regulations impact students who repeat courses. Repeated courses may impact financial aid eligibility and Federal Title IV financial aid awards. In order for a repeated course to count toward the student's enrollment status for financial aid purposes, the student may only repeat a previously passed course once (a total of two attempts). If the student enrolls in a previously repeated course for a third time, this course will not count towards their enrollment for financial aid purposes. A student may receive aid when repeating a course for the first time.

- A student may receive aid when repeating a course that was previously failed or withdrawn from regardless of the number of times the course was attempted and failed. However, students should be aware that university policy regarding repeated coursework may limit their ability to retake courses.
- A student may receive aid to repeat a previously passed course one additional time. If a student fails the second attempt, no more financial aid will be given to repeat the course a third time. If the second attempt is a withdrawal, then it is allowed for a third attempt.
- Once a student has completed any course twice with a grade, they are no longer eligible to receive aid for that course. If a student retakes a course that is not aid-eligible, the credit hours will be excluded from the financial aid enrollment for that trimester. When counting credits to determine aid eligibility for that trimester, repeated classes will be excluded from the financial aid eligible credit count.
- Note: All repeated courses affect Financial Aid Satisfactory Academic Progress (SAP) calculations. Regardless of whether the student received financial aid or not, all repeated coursework must be counted as attempted credits in SAP calculations.

Financial Aid

National University of Health Sciences maintains a Financial Aid Office to assist students in the financing of their education. Students must plan their financing very carefully. The federal role in paying for higher education exists only when there is a gap between educational costs and the ability of students to pay. Students should be aware that the principal responsibility is theirs.

The primary sources of financial aid available at National University of Health Sciences are federal loans and grants, followed by institutional grants and scholarships. Work study positions and fellowships also are available to qualified students. The official FY2013 three-year Cohort Default Rate reported in September 2016 for NUHS is 1.8%.

How to Apply

The Financial Aid Office will email financial aid information to all applicants when notified of the student's admission to the University. New students are accepted every trimester and should submit the appropriate FAFSA at least eight weeks prior to the start of the intended term of enrollment. Continuing students must submit next year's FAFSA no later than June 1. Complete information about program costs are available online at www.nuhs.edu under 'Admissions' and the 'Finance' tab for each program.

Required Forms

All students seeking financial aid must have the following forms filed with the University's Financial Aid Office:

1. The "Free Application for Federal Student Aid" (FAFSA) that is processed by the Department of Education is required. This document is used to determine how much financial assistance the student will need during the academic period for which assistance is being requested. Complete the FAFSA form online at www.fafsa.gov.
2. If selected for verification by the federal processor or the Financial Aid Office, the student (and spouse and parent(s) if applicable) must submit an IRS tax return transcript(s) for the appropriate year and any other requested documents.

To avoid late charges from the Financial Services Office, students should adhere to applicable deadlines when submitting requested financial aid forms to the Financial Aid Office.

Award Offer

First-time students applying for financial aid will be sent an award offer via U.S. postal mail. Included will be the amount and source of awarded funds, along with additional required steps to receive the aid offered.

Continuing students will be informed when aid for the award period is entered and viewable at mynu.nuhs.edu. The Financial Services Office sends estimated billing statements to all students 3 weeks prior to the start of the upcoming term.

Loans

Federal Direct Loan (DL) Program

Direct Loans are processed directly through the U.S. Department of Education. National University of Health Sciences will apply a student's Direct Loan toward the student's tuition and other University charges and provide any remaining excess funds to the student to assist with living expenses.

Federal Direct Subsidized Loan

The Direct Subsidized Loan is a need-based loan where the federal government pays the interest (other than time that may exceed the Usage Period) that accrues for undergraduate students attending school on at least a half-time basis and during the grace period. The loan has a variable fixed rate based on the rate announced each July 1.

Federal Direct Unsubsidized Loan

The Direct Unsubsidized Loan is not based on financial need. The loan has a variable fixed interest rate based on the rate announced each July 1. Interest accrues while in school and throughout repayment. Repayment is required beginning 6 months after ceasing half-time enrollment at which time the accrued interest is capitalized. The repayment period varies from 10 to 25 years and the borrower works with the servicer to arrange a suitable repayment plan.

Federal GradPlus Loan

The GradPlus Loan is a credit-based non-need loan for graduate students where the student is responsible for all interest that accrues from the date of disbursement. The loan has a variable fixed interest rate based on the rate announced each July 1. Interest accrues while in school and throughout repayment. The maximum amount cannot exceed the approved cost of education (including all other aid) for the loan period. Repayment begins immediately following degree completion or less than half-time enrollment.

Federal Perkins Loan Program

The Federal Perkins Loan is a low interest loan awarded to students with higher financial need based on available funding. The interest rate for the Perkins Loan is fixed at 5%. Interest does not accrue and repayment is not required while the borrower is enrolled in school on at least a half-time basis. Interest will begin to accrue 9 months after the borrower graduates or ceases to be enrolled at least half-time.

Federal Parent PLUS Loan

Parents of a dependent undergraduate student may apply for low-interest loans to help pay for college expenses. The student must be enrolled at least half-time and is encouraged (but not required) to submit the FAFSA to determine eligibility for Subsidized Loan eligibility first. However, parents may apply for the Direct PLUS loan without the student completing the FAFSA. Parents may borrow up to the cost of education (less other financial aid) for the year. Parents will generally be required to pass a credit check, or obtain another eligible person to endorse the loan, in order to receive the loan. The loan has a variable fixed interest rate as announced each July 1 with interest accruing from the date of the first disbursement until the loan is paid in full.

Private Student Loans

Students enrolled at least half-time in a degree-seeking program may be eligible to borrow up to the total cost of attendance less other aid. The loan is not based on financial need; rather, eligibility is based on subtracting other financial aid assistance from the student's approved cost of attendance. Eligibility is also based on the student borrower and/or co-borrower's credit history and ability to repay the loan. Information about private loans is available at www.nuhs.edu; enter 'Alternative Loan' in the search bar.

Institutional Scholarships and Grants

President's Excellence Award

Any student entering the DC, ND, MSOM, and MSAc program at National University for the first time who has earned a cumulative undergraduate grade point average of 3.50 or greater (on a 4.0 scale) will receive a \$6,000 scholarship. Scholarship recipients must enroll in at least 15 credit hours in each trimester and have a CGPA of 2.0 or greater to receive the remainder in the second or subsequent trimester. Recipients who violate the Code of Conduct forfeit any remaining disbursement. The President's Excellence Award is a one-time scholarship paid in two equal installments — \$3,000 in each of the first two trimesters of professional studies.

President's Achievement Award

Any student entering the DC, ND, MSOM, and MSAc program at National University for the first time who has earned a cumulative undergraduate grade point average of 3.25 to 3.49 (on a 4.0 scale) will receive a \$4,000 scholarship. Scholarship recipients must enroll in at least 15 credit hours each trimester and have a CGPA of 2.0 or greater to receive the remainder in the second or subsequent trimester. Recipients who violate the Code of Conduct forfeit any remaining disbursement. The President's Achievement Award is a one-time scholarship paid in two equal installments — \$2,000 in each of the first two trimesters of professional studies.

Dean's Award

Any student entering the DC, ND, MSOM, and MSAc program at National University for the first time who has earned a cumulative undergraduate grade point average of 3.0 to 3.24 (on a 4.0 scale) will receive a \$2,000 scholarship. The Dean's Award is paid in two equal installments--\$1,000 in each of the first two trimesters of professional studies. Scholarship recipients must enroll in at least 15 credit hours each trimester and have a CGPA of 2.0 or greater to receive the remainder in the second or subsequent trimester. Recipients who violate the Code of Conduct forfeit any remaining disbursement. The Dean's Award is a single award, payable one time only to each recipient.

Phi Theta Kappa Scholarship

The Phi Theta Kappa Scholarship is awarded to community college students who are members of the Phi Theta Kappa International Honor Society and who have earned a cumulative transfer grade point average of 3.50 on a 4.00 scale and completed a minimum of 33 credit hours. The \$2,000 scholarship will be awarded in two disbursements of \$1,000 each, one in each of the student's first two trimesters. Recipients must be enrolled in 12 or more credits in each trimester to receive this scholarship. To qualify for the award, students must provide an official college transcript indicating PTK membership, a copy of their PTK membership certificate or membership card, or a statement written by current or previous PTK chapter advisor or president on chapter letterhead that includes their date of induction and states they are a member in good standing. PTK members who have already earned a BA or BS degree are still eligible.

Presidential Bright Stars Scholarship

NUHS offers an institutional scholarship to Florida residents who would otherwise qualify for the Bright Stars Graduate Study scholarship by attendance at the Florida site. This scholarship is equal to the amount the student would have otherwise received as either a Florida Academic Scholar (FAS) or Florida Medallion Scholar recipient during the first trimester of enrollment.

To be eligible for this scholarship, students must meet current Florida Department of Education criteria, which includes: (1) the student must graduate with a baccalaureate degree earned in the 2010-11 academic year or thereafter, in seven or fewer semesters; (2) must have remaining eligibility for Florida Grant funding; and (3) must submit a FAFSA. Complete information is found by calling 1-888-827-2004 or through their website at www.floridastudentfinancialaid.org. Eligible students must be registered for 15 or more credits at NUHS.

Illinois Minority Student Scholarship

The purpose of the Illinois Minority Student Scholarship is to make the professional degree programs (DC, ND, MSOM, and MSAc) at National University of Health Sciences more accessible to Illinois residents who are minorities (identified by the Illinois Health Services Education Act as Black/Non-Hispanic, American Indian/Alaskan Native, and Hispanic), by offering a scholarship award of \$1,000 per trimester during their enrollment at NUHS. In order for a student to continue to receive the award, the student must maintain satisfactory academic progress, maintain a CGPA of at least 2.0, and be enrolled for 15 hours or more. Eligibility is determined at the time of matriculation into a professional program.

International Student Scholarship

The International Student Scholarship provides financial assistance to international students (including Canadian students) who desire to study in the DC, ND, MSOM, and MSAc program at National University of Health Sciences. Any international student who is not a citizen of the United States of America is eligible for the International Student Scholarship. The award is \$1,000 per trimester beginning with the third trimester and lasting through the standard end of the student's program. Eligible recipients of this award must enroll in at least 15 credits per trimester, and have a cumulative grade point average of no less than 2.50. Other restrictions may apply, and the student is ineligible if he or she is also receiving U.S. Federal Title IV financial aid.

Prerequisite Tuition Waiver

Undergraduate students who apply for a professional program at NUHS and who take required coursework at NUHS for acceptance, will be granted a 50% tuition waiver on those courses specifically required for admission. This waiver will be applied after confirmation by the Office of Admissions of both required coursework and application to a professional program is received in Financial Aid.

Campus Visit Day and Student For A Day Grant

Individuals who signed up and attended either a Campus Visit Day or Student For A Day event (at either Illinois or Florida) will receive a one-time grant that is applied to their first-semester of enrollment. Graduate students will receive \$500, and BS and MT students will receive \$250.

Endowed Institutional Scholarships

National University is proud to offer 26 endowed scholarships funded by alumni, friends, and supporters of NUHS. The scholarships have different criteria and may be awarded based on an evaluation of a student's financial need, academic achievement, character, extracurricular participation, or special area of interest. Scholarship amounts range from \$1,000 to \$2,500. Enrolled students will be informed when the scholarship applications are available. Further information is available from the Financial Aid Office and online at www.nuhs.edu by entering 'Institutional Scholarship' in the search bar.

Alumni Legacy Benefit

Spouses or children of NUHS graduates, who have been active members of the National University of Health Sciences Alumni Association for a minimum period of the five consecutive years immediately preceding the date of matriculation of spouse/child, shall receive a 50% discount on remaining tuition due, after other NUHS gift aid has been credited to the student's account, for the first term of study in any program within the College of Professional Studies or the College of Allied Health Sciences and Distance Education. Contact the Admissions Office for further information and for verification of eligibility.

Multi-Family Benefit

Students attending NUHS who are from the same family household and concurrently enrolled are each entitled to a discount. Each student will receive a discount of their tuition based on 15% of the lower tuition charge as long as all family members are in good academic standing and are attending classes as full-time students in a degree-seeking program. An application must be completed by each family member when both meet the stated criteria in the same trimester; it is not retroactive to prior trimesters. Applications are available from the Financial Aid Office.

Federal Work Study

A limited number of on-campus federally subsidized jobs are available to eligible students. University work study positions are awarded to students who have financial need and whose skills can be matched with job requirements. Priority is given to those students who have worked in a University work study position and wish to be reinstated in the same department. Preference is also given to students who apply early. Jobs for students ineligible to receive federal financial aid are limited.

Federal Work Study Fellowships

Teaching, research, and service fellowships are available to qualified students who are eligible for federal work study. Fellowships are awarded through individual departments and require a specified amount of time from the student for assisting in instruction, research, or University service. Requests for information regarding fellowships should be made directly to the appropriate academic dean.

Veterans Affairs Educational Benefits

National University is approved to offer assistance to students using Veterans Administration benefits for educational purposes. Any students interested in determining for which benefits they may be eligible must speak

with the Registrar. All veterans must provide a copy of their DD214 and complete VA form 22-1995, or 22-1990 if they have attended college previously.

Yellow Ribbon Program

National University participates in the Yellow Ribbon Program. The Yellow Ribbon Program ensures that students receiving benefits at the 100% rate under the Post 9/11 GI Bill (Chapter 33) will receive full tuition and fees paid while pursuing their education at NUHS.

Satisfactory Academic Progress (SAP)

The Higher Education Act (HEA) requires that a student maintain satisfactory progress in their program of study to be eligible to receive Title IV funds. Under the HEA and current federal regulations, a school is required to periodically evaluate if the student is successfully meeting both qualitative and quantitative academic standards specified by the school.

A student’s academic performance is monitored following each trimester to determine if they are meeting minimum standards. If the student does not meet certain standards the student will lose eligibility for federal financial aid. One of these standards is the {qualitative) cumulative grade point average (CGPA), which measures for a minimum academic performance. The second standard is the pace of progression (quantitative), the measurement a school uses to make certain a student is on track to complete their degree in a reasonable amount of time.

Pace – Coursework Completion

The student must successfully complete all required coursework and the clinic internship program in no longer than twice the standard program length for graduate programs, and one-and-one-half times the standard program length for undergraduate programs.

Program	Minimum Completion Time*	Maximum Completion Time
DC and ND*	10 trimesters (3 years, 1 tri)	24 trimesters (8 years)
Acupuncture*	7 trimesters (2 years, 1 tri)	18 trimesters (6 years)
Oriental Medicine*	9 trimesters (3 years)	24 trimesters (8 years)
Postprofessional Masters*	6 trimesters	9 trimesters
Bachelor of Science**	4 trimesters (1 year)	6 trimesters
Massage Therapy **	705 clock hours (1 year)	1057.5 clock hours (1 year, 2 tris)

*The student must successfully complete 50% of all hours attempted each trimester.

**The student must successfully complete 67% of all hours attempted each trimester.

Successful completion is indicated by grades of A, B, C, D, and S.

1. Hours attempted include grades of A, B, C, D, F, S, U, I, W, or WX.
2. Hours attempted include repeated courses.
3. Withdrawals will be included as attempted, except those dropped within allowable add/drop period.
4. Any transferred hours for credit will be included in attempted hours.

Students will be measured for course work completion at the end of the each trimester.

GPA – Academic Standing

A student must maintain a minimum CGPA (cumulative grade point average) of 2.0 out of a 4.0 scale for each trimester of enrollment.

1. Incompletes are not to be calculated in the GPA.
2. The grade from the repeated course will be included in the GPA.

Financial Aid Warning – SAP

A student who fails to meet either the 50% coursework completion in graduate programs or 67% coursework completion in undergraduate programs, or a 2.0 CGPA at the end of a trimester will be placed on Financial Aid Warning.

1. A Financial Aid Warning letter will be sent indicating that the student is eligible to receive one more trimester of aid only.
2. Included will be a statement that if SAP is not met in the subsequent trimester, no further federal aid will be allowed until SAP is again achieved – except through appeal.

Financial Aid Probation – SAP

A student who fails to meet either the 50% coursework completion in graduate programs or 67% coursework completion in undergraduate programs, or 2.0 CGPA for the second consecutive trimester will be placed on Financial Aid Probation.

1. A Financial Aid Probation letter will be sent indicating that the student is no longer eligible for federal aid in the subsequent trimester.
2. The student may submit an appeal for continuation of federal aid.
3. The letter will include the instructions to appeal and the SAP Appeal Form.

Appeals

Students, who feel there are extenuating circumstances to their situation, may appeal for reconsideration to have federal financial aid re-established through submission of the SAP Appeal Form and supporting documentation.

An appeal may be submitted for any of the following reasons:

1. the death of a relative,
2. an injury or illness of the student, or
3. other special circumstances.

In addition, the appeal must include:

1. an explanation of the reason(s) the student failed to maintain SAP,
2. a statement of the student's personal plan of action, and
3. what has changed in the student's situation to enable the student to demonstrate SAP at either:
 - a. the end of the next trimester, or
 - b. at the end of a specified academic plan designed by the academic department.

Students whose appeal is approved are placed on Financial Aid Probation. Students whose federal aid has been reinstated under the terms of an academic plan will be considered to be making satisfactory progress as long as they continue to fulfill the requirements of the academic plan.

Students who do not make SAP will lose federal Title IV aid eligibility until SAP is again achieved.

Appeals are reviewed by the Financial Aid Satisfactory Academic Progress Committee, whose decision is final.

Student Life

Student Council

The Student Council meets each week to discuss matters concerning upcoming University events and other topics of interest to the entire student body. Attending Student Council meetings enables students to keep informed and to have a representative voice within several important University forums. Student Council officers serve as voting members of various presidential standing committees. These committees are empowered to provide important recommendations to the executive administration on a regular basis.

The Student Council receives its operating funds from the student activity fee assessed against the account of every student who enrolls at NUHS. These funds support some of the activities of the Student Council, numerous campus-based clubs, and several other social, professional, and athletic events.

All University students are welcome to attend Student Council meetings and events. For more information relative to the time and location of meetings and Student Council activities, contact the Student Council or the Office of Student Services.

Student Clubs

The University encourages students to join or form organizations and to assume responsibility for their effective operation. Student groups seeking official recognition and approval must be guided by a purpose that is compatible, supportive, and clearly related to the mission and goals of National University of Health Sciences.

The following organizations represent some of the NUHS student groups that have been registered with the Office of Student Services.

Depending on the social, athletic, and professional interests of particular groups of students, additional organizations and clubs may be formed with the approval of the Dean of Students. In addition to group activities, many of our student organizations promote special events, lectures, and activities for the entire NUHS community.

- AOM Student Association (AOMSA)
- Applied Kinesiology
- Basketball
- Black Naturopathic Student Association (BNSA)
- ChiroGames
- Fellowship of Christian University Students (FOCUS)
- Functional Neurology
- Homeopathy
- Lambda Chi Sorority
- Latin Medical Club
- Mixed Martial Arts
- Motion Palpaton
- Naturopathic Sports Medicine
- Nu Delta Sigma Fraternity
- NUHS Student Veterans of America (SVA)
- Ohio Club
- Pride Medical Alliance
- Public Health
- Running/Walking
- Sigma Phi Kappa Fraternity
- Soccer
- Sports Rehab
- Sports Medicine
- Student American Black Chiropractic Association (SABCA)
- Student American Chiropractic Association (SACA)
- Wisconsin Club

Recreational and Athletic Activities

The student organizations of the University support and organize wide-ranging recreational and intramural athletic programs on a year-round basis at both campus sites. Facilities exist to provide convenient participation in these activities and to complement the intent of the University to mold and challenge the minds and bodies of future physicians. In addition to the on-campus gymnasium, outdoor basketball and volleyball courts, and fitness center, students residing in Illinois may participate in Lombard Park District programs and utilize Park District facilities,

including the outdoor pool in Lombard Common Park. NUHS students have access to the recreational facilities on two sites at St. Petersburg College: the Seminole campus recreation center with outdoor pool, weight room, and intramural athletic fields; and the Gibbs campus workout facility.

Campus Housing

The University offers convenient student housing on the suburban Lombard, Illinois, campus. Tieszen Hall is composed of efficiency, studio, and one-bedroom apartments. Buchholz Hall offers studio and one-bedroom apartments, and Turek and Lincoln halls offer a limited selection of studios and one- and two-bedroom facilities. First-time matriculants will be notified of the availability of housing four or five weeks prior to the opening of the new trimester. No housing applications will be acted upon prior to this time.

Food Service

The Illinois campus offers vending machines as well as an array of beverages, snacks, and fresh food items in the Campus Store. The St. Petersburg College campus offers vending machines and a cafeteria for student convenience.

Textbooks and Supplies

MBS Direct is National's online resource for textbooks, references, and other supplies. Students access the bookstore via the MyNU Student Portal.

Living Expenses and Employment

The cost of living in the Chicago and Tampa Bay areas are comparable to any large metropolis. Part-time employment opportunities are plentiful. Students interested in obtaining part-time employment should arrive at the University before the opening of any trimester. Student employment schedules should not interfere with class attendance nor encroach upon study time.

Student ID Card

Each student must possess a current, validated student ID card for the utilization of the University facilities. ID card distribution is managed by the Office of Student Services. Students attending the NUHS Florida site will be issued an additional ID from the St. Petersburg College University Partnership Center. Effective January 2019 all students will be issued new student ID's annually.

Student Health Service

All students whose programs result in a license are given required physical examinations at the National University Whole Health Center, with the cost of such examination included as part of the first trimester student fees. Health care provided to the student, student's spouse and children is coordinated through the NUHS Whole Health Centers. All new students are encouraged to schedule their new student physical at their earliest convenience during their first trimester of attendance. NUHS Florida students will be seen at the NUHS Whole Health Center clinic in the Caruth Health Education Center.

Student Health Insurance

The Affordable Care Act requires nearly everyone to purchase health insurance or be subject to penalties. NUHS students may purchase health insurance through the Affordable Care Act marketplace exchanges. The law allows young adults under the age of 26 to stay on their parent's insurance. For coverage options, please visit: <https://www.healthcare.gov/choose-a-plan/>

At the NUHS Whole Health Center, health care is available at both the Florida and Illinois sites for all students, as well as their immediate families, at little or no cost. Upper trimester interns render care under the supervision and license of attending physicians.

Peer Tutoring

Peer tutoring is a free service offered to any student who is currently enrolled in the University. Based on requests, tutoring is available for a variety of courses. Given tutor availability, this type of academic assistance is provided by students who have already demonstrated proficiency within specific subjects. These students are assigned to tutor other students who have requested assistance with a subject, topic, or concept within a course.

Peer tutoring is intended to supplement, not replace, class attendance and personal study time. Tutors may help clarify points from lectures, labs, group discussions, or assigned readings. Tutors act as facilitators for student learning; they will not write papers, do homework, complete other assignments for students or charge students for tutoring services. Peer Tutors are paid by the university via federal work study funds. Based on the availability of tutors, one-on-one or small group tutoring will be offered in an environment conducive to learning. Restrictions regarding tutoring, tutoring locations, dates, and times may apply based on the number of tutors available with the proficiency to help within a particular subject.

The tutoring programs are coordinated through the Office of Student Services.

In Illinois, contact Student Services via email at studentservices@nuhs.edu, or by phone at 630-889-6542.

In Florida, contact Debra Bechtel via email at dbechtel@nuhs.edu, or by phone at 727-394-6217.

Keep in mind that the first place to turn for academic assistance is the faculty member responsible for instruction in the course. Full-time faculty members have regular office hours usually posted outside their offices and on their syllabi. Students should arrange appointments to see their faculty members during these office hours. Part-time faculty are usually available before or after class or by appointment.

Counseling Center Resources

The curriculum at NUHS is rigorous regardless of the program or credit-hour load. Depression, helplessness, anxiety, homesickness, marital conflicts, and many other personal issues are common student dilemmas. The Office of Student Services is available to offer basic help with some of these problems but, very often, more intensive professional counseling succeeds at regaining daily functionality and longer lasting developmental change through insights guided by a trained professional.

The University is able to provide referrals for clinical counseling services for NUHS students from an independent counselor not affiliated with the University's other clinical services. The provider will accept most insurance coverage programs. Sessions are strictly confidential; records are not shared with NUHS personnel. To secure a local referral in Illinois or Florida, stop by the Office of Student Services where personnel are on duty to answer your questions and provide the assistance you need, or email studentservices@nuhs.edu.

Substance Abuse & Addiction Recovery Support Groups

Links to a variety of self-help support groups for people trying to recover from alcoholism and drug addiction are listed in the next paragraph. These groups are not formally affiliated with nor specifically endorsed by NUHS. Each, however, has been shown to be helpful for certain types of people seeking recovery help. As noted, some of these groups have online meetings available. If you are a student from a state other than Illinois or Florida, contact Student Services for help.

Illinois Resources

Alcoholics Anonymous

- www.chicagoaa.org
- www.chicagoaa.org/meetings
- <http://aa-intergroup.org>

SMART Recovery

- www.smartrecovery.org
- www.smartrecovery.org/meetings_db/view

Marijuana Anonymous

- www.ma-online.org/chat.php

Al-Anon

- www.niafg.org
- www.niafg.org/AdvFind.asp
- www.ola-is.org

Cocaine Anonymous

- www.illinoisca.org/
- www.illinoisca.org/meetings.asp
- www.ca-online.org/

Adult Children of Alcoholics

- adulthoodchildren.org
- www.allone.com/12/aca/
- adulthoodchildren.org/ipb

Narcotics Anonymous

- www.chicagona.org/
- www.chicagona.org/meeting_directory.html

Florida Resources

Alcoholics Anonymous

- www.aapinellas.org
- www.aapinellas.org/meetings/meetings_index.htm

SMART Recovery

- www.smartrecovery.org
- www.smartrecovery.org/meetings_db/view

Marijuana Anonymous

- www.ma-online.org/chat.php

Al-Anon

- www.al-anon.alateen.org
- www.al-anon.org/local-meetings
- www.al-anon.org/electronic-meetings

Cocaine Anonymous

- www.fla-ca.org/
- www.ca.org/phones.html
- www.usrecovery.info/CA/Florida.htm

Adult Children of Alcoholics

- adulthoodchildren.org
- www.allone.com/12/aca/
- adulthoodchildren.org/ipb

Narcotics Anonymous

- bascna.org/
- bascna.org/meetings/

Resources for Veteran Students and their Families

For veterans, their friends and families, the return home is often just the first step in a longer re-adjustment process.

This site (<http://www.mentalhealth.va.gov/college/students.asp>) provides resources on a wide range of issues to help vets following deployment — topics such as transitioning to life at home, uncovering signs of emotional problems and dealing with war trauma.

For more information, contact Student Services at 630-889-6542, or email studentservices@nuhs.edu.

Inclement Weather Closing – Illinois

When weather conditions warrant it, the University and its public clinics will either close or implement a modified schedule instead of closing. When that happens, the University will send a notification using Omnilert, our emergency alert system. This system allows notification by text, email, and voicemail, and posts a message to the NUHS website homepage. Students' names are added at orientation and they receive an email that must be responded to in order to enable the system. If for some reason a student does not receive an email or needs to be added to the system, they should contact the Registrar.

Inclement Weather Closing – Florida

Students enrolled in the NUHS Florida program on the St. Petersburg College (SPC) campus will be required to observe the governance required by SPC in the event of inclement weather for this location in addition to observing weather alerts produced by NUHS Illinois administrators using Omnilert. During severe weather conditions in Lombard, Illinois, website administrators shall post updates for e-programming to aid with re-establishing class times and make-up sessions. Students enrolled in this program will be required to enroll in the mass notification program developed by SPC administrators to receive weather/school closing alerts in the Florida region. Any e-programming

adjustments made due to weather conditions in Florida or Illinois shall be posted on the NUHS website by website administrators to keep the campus community informed.

Campus Parking

All vehicles on the Illinois campus, whether faculty, staff, or student vehicles, must be registered for security purposes and properly display a current vehicle tag. Registration forms are available in the Financial Services Office in Janse Hall, between the hours of 8:30 a.m. and 5:00 p.m., Monday through Friday. Applicants should be prepared to provide their name and telephone number as well as the make, model, color, year, and license plate number of the vehicle(s). Inaccurate or incomplete applications cannot be processed. Vehicle tags expire August 31 each year. All vehicles must be completely reregistered for the following 12-month period.

Campus Parking Regulations – Florida

NUHS Florida students should refer to the St. Petersburg College Student Handbook for current parking regulations.

Registration Fees – Illinois

Student parking fees are charged through the student’s account and are payable at the Cashier’s window.

Yearly Registration (Sept. 1-Aug. 31)	\$12.00
8th Tri student at Yearly Registration	\$8.00
9th Tri student at Yearly Registration	\$4.00
10th Tri student at Yearly Registration.....	No Charge
(Registration/Tag Required)	
New Student (Jan. 1-Aug. 31)	\$8.00
New Student (May 1-Aug. 31)	\$4.00
Additional Tag*	\$4.00
Replacement for Lost/Damaged Tag	\$4.00

*Required for campus resident with more than one registered vehicle

*Commuting student may use one tag between registered vehicles

Vehicle Rules and Regulations – Illinois

1. Registration tags must be hung from the rearview mirror of the vehicle facing out.
2. The person to whom the vehicle is registered and/or tag is issued is responsible for all vehicle violations.
3. Motorcycles must be registered.
4. Motorcycles are not permitted to park in bicycle racks.
5. Two motorcycles may park in one spot only if approved by Security.
6. Vehicle and/or license plate changes must be communicated to the Parking Coordinator immediately. There is no charge for updating information.
7. Student vehicle tags are issued based on the residency type of the registrant: On-Campus or Off-Campus. If the registrant’s residency type changes, the current tag must be brought to the Parking Coordinator and exchanged. There is no charge for the change.
8. No overnight or extended parking is permitted for guests, oversized vehicles, vans, buses, etc., unless it has been approved by Security or the Parking Coordinator. A temporary tag will be issued.
9. If a vehicle becomes inoperable, notify Security or the Parking Coordinator. A temporary tag will be issued.
10. A replacement tag must be purchased for all lost or damaged tags.
11. Police and/or service vehicles may stop, stand, or park irrespective of the parking regulations while performing necessary official business.

Designated Parking Areas – Illinois

1. Handicapped: Vehicle must display state issued handicapped placard
2. Patient: Clinic patients only
3. Visitor & Admissions: No current faculty, staff, or students
4. Faculty/Staff: Numbered spaces are assigned parking for Full-time Faculty and
 1. Staff only
5. Apartment Area: Apartment residents and their guests only

Fines – Illinois

The following fines have been established for parking violations:

Parking in Handicapped or Patient Designated Areas	\$250
No appeal available for above violation	
Parking on Sidewalk / Grass	\$100
Obstructing Traffic/Failure to Observe Posted Traffic Signs	\$50
No tag / Improperly Displayed Tag / Expired Tag	\$25
Parking in Faculty/Staff (numbered) Areas	\$25
Parking in Visitor/Admissions Designated Areas	\$25
Parking in Loading/Unloading Zone	\$25

Fines may be paid at the Cashier's window, located on the 2nd floor of Janse Hall, between the hours of 8:30 a.m. and 4:30 p.m., Monday through Friday.

Appeal Process – Illinois

Anyone who receives a vehicle violation notice has the right to an appeal for all violations except: Parking in Handicapped or Patient Designated Areas. A completed appeal form must be submitted to the Parking Coordinator within 3 business days of the violation date. Forms can be found on the wall across from the Cashier's window.

Visitor Parking – Illinois

Parking for campus visitors is available in the designated area west of Janse Hall, Building D. Visitors should obtain a Visitor Pass from the Admissions Office. Passes are available at no charge. If a visitor is issued a citation, all fines will be waived upon notification to the Parking Coordinator.

Responsibility of the University

National University of Health Sciences assumes no responsibility, nor is it liable for any damage done to vehicles when parked on the University campus.

Student Code of Conduct

A University is an academic community. Like any other community, it relies upon "core" values that reflect the collective beliefs, governing principles, and boundaries of deportment that are expected of its individual members. These are the virtues and obligations usually referred to as the "rules of conduct" that any society must stress if it is to function and remain viable. The most basic expression of these core values includes "the abstract virtue of justice, some form of obligation to mutual aid, and, mutual abstention from injury, and, in some form and in some degree, the virtue of honesty." In addition to these common values, at NUHS we also believe that civilized conduct and an atmosphere conducive to intellectual and personal development are vital if learning is to flourish. This NUHS Student Code of Conduct has been formulated to promote and fortify optimal learning conditions that advance the University's Mission Statement, protect individual student liberties, and safeguard the interests of all members of the NUHS academic community.

A fundamental obligation each member must accept and support, holds that students, staff, faculty, and administrators share collective responsibility to maintain the "rules of conduct" within our community and to discipline those who violate its standards, policies, and/or procedures. This responsibility, however, is premised

upon an assumption that community order cannot be maintained by threat of punishment alone. Instead, we believe the soundest way to ensure the requisite conditions exist for learning and personal development is for every individual at NUHS to assertively claim their personal stake in the collective ownership of the welfare of our University, and likewise, for every inhabitant within it.

As a condition of enrollment in NUHS, all students are automatically enjoined to share this responsibility to abide by the standards, rules, and/or policies set forth in the NUHS Student Code of Conduct, the NUHS Clinic Intern Manual, the NUHS Bulletin, and other official University publications. Student organizations are similarly obligated to follow these standards, rules, and/or policies.

Certain programs within the University have additional standards of conduct that are enforced during the clinical phase of training. These standards are designed to promote specific behaviors, to achieve a required clinical competency or to demonstrate evidence of a higher degree of responsibility, moral reasoning, personal accountability or ethical deportment expected of the students enrolled in programs that include intern training within a NUHS clinic. These specific standards may not be expressly included in the NUHS Student Code of Conduct because they are only a required standard of the students enrolled within certain programs. These specific standards of conduct are described in detail within the NUHS Clinic Intern Manual. However, the NUHS Student Code of Conduct should be broadly construed as the primary document governing the conduct, competencies, and additional clinic standards of all University students.

Student Records Policy (FERPA)

Directory Information Notice

The Family Educational Rights and Privacy Act (FERPA), a federal law, requires that National University of Health Sciences, with certain exceptions, obtain written consent from students prior to the disclosure of personally identifiable information from their education records. However, the University may disclose appropriately designated “directory information” without written consent, unless students have advised the University to the contrary in accordance with University procedures. The primary purpose of directory information is to allow the University to include this type of information from students’ education records in certain University publications. Examples include: student contact directory, student recognition lists (eg, dean’s list, club membership, service/volunteer achievements), graduation programs, alumni directory, and Homecoming reunion programs.

Directory information, which is information that is generally not considered harmful or an invasion of privacy if released, can also be disclosed to outside organizations without prior written consent. Outside organizations include, but are not limited to, companies that manufacture class rings or publish yearbooks.

Students who do not want the University to disclose directory information from their education records without prior written consent must notify the Registrar in writing at the start of each trimester. NUHS has designated the following information as directory information: student’s name, address, telephone listing, e-mail address, ID photo, as well as any degrees, certificates, honors, and awards received, date and place of birth, dates of attendance at NUHS, highest trimester completed, and the most recent educational agency or institution attended.

Notification of Rights Under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights include:

1. The right to inspect and review education records within 45 days of the day the University receives a request for access. Students should submit to the Registrar, written requests that identify the record(s) they wish to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the records may be inspected.

2. The right to request the University to amend a record that students believe is inaccurate. Students should clearly identify the part of the record they want changed, and specify why it is inaccurate. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of their right to a hearing regarding the request for amendment.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as an attorney, auditor or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or complaint committee, or assisting another school official in performing their tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

NOTE: Upon request, the University discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the University to comply with the requirements of FERPA. The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-4605.

Student Complaint Procedures

Complaint Processes

The U.S. Department of Education Regulation 34 CFR § 668.43(b) requires institutions of higher education authorized under Title IV of the Higher Education Act to make available to enrolled or prospective students upon request, documents describing the institution's accreditation and its state, federal, or tribal approval or licensing. The institution must also provide its students or prospective students with contact information for filing complaints with its accreditor and with its state approval or licensing entity.

Internal Complaint Processes

Students must first exhaust all internal complaint processes before beginning most external complaint processes. NUHS expects that any student complaint will be filed in accordance with the procedures currently in place at the institution before seeking a resolution from a state or federal agency or any of the University's accreditation bodies. In the absence of or unfamiliarity with a procedure, the complaint should be filed with the Student Services Office in Janse Hall on the Illinois campus or in the Caruth Health Education Center Annex in Florida.

Note: No student will be subjected to any form of retaliation as a result of an earnest, good faith filing of a complaint. See NUHS Non-Retaliation Policy: http://www.nuhs.edu/extras/policies/Non-Retaliation_Policy.pdf

Filing an Internal Academic or Non-Academic Complaint

In order to ensure an effective response, initial complaints should be prepared in a typed or written format. Complainants should describe the issue in their own words, and include their full name and contact information. Complainants should also include dates and any college officials that were involved or have been contacted. Any supporting documentation, such as emails or other correspondence should be included in order to help others understand the nature, context, actions, or events that lead to the complaint. Finally, the complainant should state what, if any, remedy is sought.

NUHS is committed to resolving complaints at the earliest and most informal level, conducting internal investigations in a timely and effective manner, adhering to the procedures as outlined, and providing prompt corrective action if discrimination is believed to have occurred. The date upon which a written complaint is received shall be referred to as the date of complaint. NUHS will make every reasonable attempt to resolve all complaints within 60 days.

In order to file an internal academic or non-academic complaint, contact the following:

- Complaints regarding the Financial Aid Program: Director of Financial Aid, 630-889-6517.
- Complaints regarding College of Professional Studies Programs/Illinois: Dean of the College of Professional Studies-Illinois, 630-889-6461.
- Complaints regarding College of Professional Studies Programs/Florida: Dean of the College of Professional Studies-Florida, 727-394-6058,
- Complaints regarding College of Allied Health Sciences and Distance Education: Dean of the College of Allied Health Sciences and Distance Education, 630-889-6545.
- Complaints regarding Lincoln College of Postgraduate and Continuing Education Programs: Dean of Lincoln College, 630-889-6620.
- Complaints regarding non-academic university issues (discipline, discrimination, sexual misconduct, harassment, disabilities, privacy, misuse of computing resources, mental health concerns, student safety and security, etc.): Dean of Students, 630-889-6546 or email studentservices@nuhs.edu or via the online complaint form: <https://www.nuhs.edu/student-services/support-services/complaints/student-complaint-form/>

Filing a Complaint with a Program's Accrediting Agency

In order to file a complaint with a program's accrediting agency, contact the following:

- Doctor of Chiropractic Program (Illinois and Florida): The Council on Chiropractic Education (CCE) complaint process is located on the CCE website at www.cce-usa.org under the keywords "CCE Policy 64."
- Doctor of Chiropractic Program (Florida only): The Commission for Independent Education, Florida Department of Education, has also licensed NUHS' DC program in Florida. To file a complaint with this body, contact the Commission at 325 W. Gaines Street, Suite 1414, Tallahassee, FL 32399, 888-2243-6684.
- Naturopathic Medicine Program: The ND program has been accredited by the Council on Naturopathic Medical Education (CNME). To file a complaint with this body, contact CNME, 342 Main Street, P.O. Box 178, Great Barrington, MA 01230, 413-528-8877.
- Acupuncture and Oriental Medicine Program: The complaint process for the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM) is located on the ACAOM website at www.acaom.org/students/.
- Master of Science in Advanced Clinical Practice, Master of Science in Diagnostic Imaging, Bachelor of Science in Biomedical Science, and Associate in Applied Science in Massage Therapy programs: The complaint process instructions for the Higher Learning Commission (HLC) can be found at: <http://www.hlcommission.org/Student-Resources/complaints.html> Massage Therapy Certification Program: Accredited by the Commission on Massage Therapy Accreditation (COMTA), the complaint procedure is located on the COMTA website at www.comta.org under the keywords "Complaint Procedure."

Filing a State Licensing Complaint

In order to file a state licensing complaint for programs at both the Illinois campus and Florida site, contact the following:

- Illinois State Board of Education, 1 N. Old State Capitol Plaza, Suite 333, Springfield, IL 62701-1377; 217-782-2551; www.ibhe.org.

Disability Support Services

The Americans with Disabilities Act (ADA) allows for more people and more types of disabilities to be included under the law. However, the law also formalized the proof required (documentation) to be eligible to receive accommodations, support services, or academic adjustments. At the university level, a student cannot be accommodated for a disability until they have obtained proper documentation, submitted the documentation to the Dean of Students in the Student Services Office, and obtained a letter from the Dean of Students that describes the accommodations the student will be granted due to a documented disability. It is a student's responsibility to provide a copy of the Dean's letter to the instructor of any course that will require the accommodation(s) authorized by the Dean.

Students who need to be accommodated for any national certification exam or state licensing board requirement will be required to submit the same detailed documentation that is required by NUHS. Also, disability law generally requires documentation that is no older than three years.

Obtaining Disability Accommodations

- Students with disabilities who wish to receive accommodations or services must formally request services, including accommodations from the Dean of Students, and submit the appropriate documentation for their disability. Documentation submitted must be current (i.e., 3 years or less), comprehensive, and complete, in order to avoid any unnecessary delays in granting the accommodations. The proper disability form may be downloaded from the NUHS Student Services webpage or is available as a hard copy from the Student Services Office.
- Requests for services or accommodation should be made early (prior to the start of the trimester or very early in the trimester) to allow time to review requests and documentation and make proper arrangements. Accommodation arrangements may be compromised or denied if a request is not made in a timely manner.
- Accommodations are determined on a case-by-case basis taking into account the learning needs of the student, the requirements of the learning task, the course standards and essential requirements, and the educational environment.
- The Dean will issue a letter describing accommodations the University will provide. Students are responsible for giving a copy of the Dean's letter to their instructor and for scheduling any accommodated exams in the Testing Center with Student Services.
- The University reserves the right to deny services or accommodations in the event that documentation does not comply with its published guidelines for service eligibility, e.g., the student does not meet the criteria of ADA or Section 504, or documentation is out-of-date or incomplete. Students will be given the opportunity to supplement the initial documentation with more information from an appropriately licensed or credentialed authority.
- The University is not required to provide an accommodation that compromises the essential requirements of a course or program, imposes an undue financial burden based upon the University's overall institutional resources, or poses a threat to the health or safety of the student or to others.

Accident/Incident Reporting

Students should report all accidents, incidents, building hazards, or criminal activity to the Campus Security Office, the Dean of Students or to personnel in the Student Services Office.

Sexual Assault Resources and Support Services

Title IX (Sexual Discrimination)

National University of Health Sciences (NUHS) is committed to providing equal access to educational and employment opportunities regardless of race, color, religion, national origin, physical or mental disability, pregnancy, age, sex, sexual orientation, gender identity status, or ancestry. As required by Title IX and its implementing regulations, 34 C.F.R. Part 106, NUHS does not discriminate on the basis of sex in its educational programs and activities. In addition, the University is committed to providing a work and student environment that is free of sexual harassment, and will not tolerate sexual harassment activity by any University employee, University student, or third party. We will act promptly and impartially to address claims of sexual misconduct and discrimination and remedy the effects of discrimination.

NUHS Statement on the Violence Against Women Act (VAWA)

NUHS prohibits the offenses of domestic violence, dating violence, sexual assault, and stalking, as defined by federal law, applicable local law, and University policy, and reaffirms its commitment to maintain a campus environment emphasizing the dignity and worth of all members of the University community.

NUHS Title IX Officials and Contact Information

If you or someone you know has been the victim of sexual misconduct by a member of the University community, you are encouraged to report such misconduct to the Title IX Coordinator via the Sexual Misconduct (Title IX) Complaint Form at www.nuhs.edu/titleixform, or by phone at 630-889-6607.

The University has also assigned three Deputy Title IX Coordinators to receive sexual misconduct complaints and conduct investigations under the supervision of the Title IX Coordinator. They are:

- Director of Human Resources: Phone: 630-889-6878
- Dean of Students: Phone: 630-889-6546
- Florida Site Coordinator: Phone: 727-394-6217

A Confidential Advisor is a designated individual who has been trained to advise and serve as a confidential resource for a person of the NUHS community who has experienced sexual misconduct. Contact the Confidential Advisor at 630-889-6548.

For more information about complaint management for victims see the NUHS Title IX and Sex Discrimination Policy: https://www.nuhs.edu/extras/policies/Title_IX_and_Sex_Discrimination_Policy.pdf

Further information about Title IX and sex discrimination in education is available from:
Office of Civil Rights, 400 Maryland Ave., SW, Washington, DC 20202-1100
Customer Service Hotline: 800-421-3481; Fax: 202-453-6012; TDD: 877-521-2172
Email: OCR@ed.gov; or on the web, at <https://www2.ed.gov/about/offices/list/ocr/index.html>

NUHS strictly prohibits retaliation against any individual who brings a good faith complaint under this policy or participates in any portion of a Title IX investigation. Retaliatory conduct violates not only the University's Non-Retaliation Policy and Title IX, but may also violate state and federal law.

Resources for Victims of Sexual Misconduct

The University urges anyone who has been sexually assaulted to seek support as soon as possible to minimize and treat physical harm, assist with processing the unique and complex emotional aftermath, and help preserve and understand options for pressing charges. Even for someone who does not wish to report the event to the police or pursue disciplinary action, seeking medical attention as soon as possible is important. At any point that an individual is ready to come forward, the University is prepared to help her or him.

POLICE

- Illinois or Florida (Emergency): 911
- Lombard, Illinois: 630-620-5955
- Pinellas Park, Florida: 727-541-0758
- Pinellas County Sheriff's Office, Florida: 727-582-6200

CAMPUS SECURITY

- NUHS-Illinois Security: 630-927-9957
- NUHS-Illinois Security Office: 630-889-6683
- NUHS-Florida, Security from on-campus phone: Ext. 2560
- NUHS-Florida, Security from an outside phone: 727-791-2560

RAPE CRISIS/SEXUAL ASSAULT

- National Sexual Assault Hotline: 1-800-656-HOPE; <http://www.rainn.org>
- Sexually Transmitted Disease National Hotline: 800-227-8922
- AIDS National Hotline: 800-223-4636
- Illinois: Coalition Against Sexual Assault: 217-753-4117
- Rape Victim Advocates: 312-443-9603
- Florida: Suncoast Center 24-hour Rape Crisis Hotline: 727-530-7273, www.suncoastcenter.org
Suncoast Center Abuse Hotline: 800-962-2873
Florida Council Against Sexual Violence: www.fcasv.org/information/victims

SEXUAL ABUSE OUTREACH & ADVOCACY

- Illinois: Domestic Violence Family Shelter/Counseling: 630-469-5650
Child Abuse Hotline: 1-800-25A-BUSE
Victim Service Unit: 630-407-8008
- Florida: Abuse Outreach & Advocacy Shelters
CASA (Community Action Stops Abuse), 24-hour hotline: 727-895-4912
Suncoast Center Abuse Hotline: 800-962-2873
Florida Domestic Violence Hotline: 800-500-1119
Florida Department of Children And Families Abuse Hotline: 800-962-2873
Haven of RCS, 24-hour hotline: 727-442-4128
Abuse Hotlines: Statewide Abuse Hotline: 800-500-1119
Pinellas County Clerk: 727-464-4933

STALKING RESOURCES

- National Stalking Resource Center: 202-467-8700; www.ncvc.org
- Illinois Stalking Laws:
<http://www.victimsofcrime.org/our-programs/stalking-resource-center/stalking-laws/criminal-stalking-laws-by-state/illinois>
- Florida Stalking Laws:
<http://www.victimsofcrime.org/our-programs/stalking-resource-center/stalking-laws/criminal-stalking-laws-by-state/florida>

COUNSELING/MENTAL HEALTH SERVICES

- National Alliance on Mental Health: 800-950-6264; www.nami.org
- Illinois: Mental Hospital of DuPage/Crisis Center: 630-627-1700
NAMI of DuPage County: 630-752-0066
Health and Human Services Helpline: 800-545-2200
YWCA – Sexually assaulted women & children: 630-790-6600
- Florida:
Suncoast Center: 727-388-1220
University of South Florida Psychological Services Center, Public Resources:
<http://psc.usf.edu/PublicResources.aspx>

VICTIMS RIGHTS & RESOURCES

- Directory of Crime Victim Services: <http://ovc.ncjrs.gov/findvictimservices>
- Not Alone: <https://www.notalone.gov/resources>
- National Domestic Violence Helpline: 800-799-7233; <http://www.thehotline.com>

Campus Security

National University strives to ensure a safe and welcoming environment for all students, faculty, staff, and visitors. This is accomplished through the visibility of security personnel, preventive patrols, 24-hour accessibility, conflict resolution, and crime prevention and awareness programs.

The Illinois campus employs security officers to patrol the campus grounds and parking lots on a 24-hour basis. These officers can assist with special needs such as gaining entry to a locked room, apartment or building, and help starting a car with a dead battery. Campus security will also honor requests for an escort to or from a building or vehicle at any time of the day or night.

In Florida, each of the St. Petersburg College campuses has security officers to help provide a safe environment. Security officers patrol the campus grounds and parking lots during the hours that the campuses are open to students and staff. College-wide security also provides a full range of services including crime prevention, traffic/parking enforcement, safety and security inspections, safety escorts, and crowd control for special events.

Combined Report: Annual Campus Security and Fire Safety Reports

NUHS is committed to assisting all members of the University community in elevating their awareness and responsibility for their own safety and security. The **NUHS Combined Report: Annual Campus Security and Fire Safety Reports** (also known as the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act (20 U.S.C. § 1092(f)) is available on the University website, under the “Reports” tab at: www.nuhs.edu/student-services/campus-life/campus-security/

A hard copy of the Annual Combined Report is also available upon request from the Student Services Office at both the Illinois or Florida site.

The Annual Combined Report contains information regarding campus security and personal safety including topics such as: crime prevention, fire safety, University security officers’ enforcement authority, crime reporting policies, disciplinary procedures, and other matters of importance related to security and safety on campus such as the next steps to take after receiving emergency notification (campus voice-mail, emails, text messaging, digital signage, etc.) of a potential threat or emergency on campus. The report also contains information about crime statistics for the three previous calendar years concerning reported crimes that occurred on campus, in certain off-campus buildings or property owned or controlled by NUHS, and on public property within, or immediately adjacent to and accessible from the campus.

The Campus Sex Crimes Prevention Act is a federal law requiring notice as to where lists of registered sex offenders may be accessed. The Illinois Sex Offender Registry can be accessed at <https://www.isp.state.il.us/sor/>

The Florida Registry can be accessed at: <http://offender.fdle.state.fl.us/offender/homepage.do>

Summaries of the crime statistics for the Illinois and Florida sites have been extracted from the **NUHS Combined Report: Annual Campus Security and Fire Safety Reports** and are printed on the following pages.

NUHS CRIME STATISTICS - Lombard, IL Site – Main Campus				
<u>January 1 2014 – December 31, 2016</u>	2014	2015	2016	
<u>Criminal Offenses</u>	---	---	---	
Criminal Homicide	---	---	---	
Murder/ Non-negligent manslaughter	0	0	0	
Negligent manslaughter	0	0	0	
Sex Offenses	---	---	---	
Rape	0	0	0	
Fondling	0	0	0	
Incest	0	0	0	
Statutory Rape	0	0	0	
Robbery	0	0	0	
Aggravated Assault	0	0	0	
Burglary	0	3	1	
Motor Vehicle Theft	0	0	0	
Arson	0	0	0	
<u>Hate Crimes</u>	---	---	---	
Larceny – Theft	0	0	0	
Simple Assault	0	0	0	
Intimidation	0	0	2	
Destruction/damage/vandalism of property	0	0	0	
<u>VAWA Offenses</u>	---	---	---	
Domestic Violence	0	1	0	
Dating Violence	0	0	1	
Stalking	0	1	0	
Total Incidents	0	5	4	
Liquor Law: Referral/Arrest	0/0	0/0	0/0	
Drug Violations: Referral/Arrest	0/0	0/0	0/0	
Weapons Possessions: Referral/Arrest	0/0	0/0	0/0	
Total Arrests	0	0	0	

NUHS CRIME STATISTICS - Health Education Center, FL Site

<u>January 1 2014 – December 31, 2016</u>	2014	2015	2016
<u>Criminal Offenses</u>	---	---	---
Criminal Homicide	---	---	---
Murder/ Non-negligent manslaughter	0	0	0
Negligent manslaughter	0	0	0
Sex Offenses	---	---	---
Rape	0	0	0
Fondling	0	0	0
Incest	0	0	0
Statutory Rape	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	0	0
Motor Vehicle Theft	1	0	0
Arson	0	0	0
<u>Hate Crimes</u>	---	---	---
Larceny – Theft	0	0	0
Simple Assault	0	0	0
Intimidation	0	0	0
Destruction/damage/vandalism of property	0	0	1
<u>VAWA Offenses</u>	---	---	---
Domestic Violence	0	0	0
Dating Violence	0	0	0
Stalking	0	0	0
Total Incidents	1	0	1
Liquor Law: Referral/Arrest	0/0	0/0	0/0
Drug Violations: Referral/Arrest	0/0	0/0	0/0
Weapons Possessions: Referral/Arrest	0/0	0/0	0/0
Total Arrests	0	0	0

Fire Safety

Per federal law, NUHS is required to annually disclose statistical data on all fires that occur in on-campus student housing facilities. Listed below are the non-emergency numbers to call to report fires that have already been extinguished in on-campus student housing. These are fires of which you are unsure whether the NUHS Housing Office may already be aware. If you find evidence of such a fire or if you hear about such a fire, please contact one of the following:

NUHS Security Office: 630-927-9957

NUHS Housing Office: 630-889-6661

NUHS Director of Facilities: 630-889-6638

Summary of NUHS 2016 Fire Safety Statistics

The data presented in the following table summarizes that no fires were reported in on-campus housing facilities for the 2016 calendar year. Fire statistics from off-campus housing are not included in this report. This data is cited in the **NUHS Combined Report: Annual Campus Security and Fire Safety Reports** under the “Reports” tab at www.nuhs.edu/student-services/campus-life/campus-security/

Residence Hall	Number of Fires	Causes	Injuries	Fatalities	Value Prop. Damage
Lincoln Hall	0	N/A	N/A	N/A	N/A
Turek Hall	0	N/A	N/A	N/A	N/A
Tieszen Hall	0	N/A	N/A	N/A	N/A
Buchholz Hall	0	N/A	N/A	N/A	N/A



Bulletin

2018-2019

College of Professional Studies

- Doctor of Chiropractic
- Doctor of Naturopathic Medicine
- Master of Science in Acupuncture
- Master of Science in Oriental Medicine

Programs of Study

All first professional programs are offered at the National University Illinois site. Only the Doctor of Chiropractic Program is offered at the Florida site.

Doctor of Chiropractic

Assistant Dean – Christopher Arick, MS, DC – Illinois; Dean – Daniel Strauss, DC – Florida

As a school of healing, chiropractic medicine may be defined as the diagnosis and treatment of human ailments. Chiropractic medicine emphasizes the ability of the body to self-regulate and self-heal. Any interference with the basic physiological components of optimal health may result in disease.

While manipulation is the centerpiece of chiropractic medicine, a number of therapies may be utilized including physical and manual therapy, functional medicine, nutritional and lifestyle counseling, and acupuncture. Chiropractic medicine does not profess to be the only method of healing. Conditions that are beyond the scope of chiropractic are referred to the appropriate health care professional for treatment.

Doctor of Naturopathic Medicine

Assistant Dean – Fraser Smith, MA, ND

Naturopathic medicine is a distinct method of primary health care — an art, science, philosophy, and practice of diagnosis, treatment, and prevention of illness. Naturopathic physicians seek to restore and maintain optimum health in their patients by emphasizing nature's inherent self-healing process, (what Hippocrates referred to as the *vis medicatrix naturae*). This is accomplished through education about lifestyle — determining factors of health — and the rational use of natural therapeutics such as clinical nutrition, botanical medicine, physical medicine, manipulation, acupuncture, homeopathy, and hydrotherapy.

Master of Science in Acupuncture

Assistant Dean – Zhanxiang Wang, MD (China), PhD, LAc

The Master of Science in Acupuncture is a 121-credit, seven-trimester program. Students will be immersed in the same comprehensive training as in the oriental medicine program, with the exception of the study of Chinese herbal medicine. This program is ideal for health care professionals — chiropractors, nurses, physician, physical therapists, and others — who wish to study oriental medicine comprehensively but who are not necessarily interested in becoming herbalists at this point. Master of science in acupuncture graduates may have the option of returning to NUHS to complete the Chinese herbal medicine training at a later date should they choose to do so.

Master of Science in Oriental Medicine

Assistant Dean – Zhanxiang Wang, MD (China), PhD (China), LAc

This nine-trimester program culminating in the Master of Science in Oriental Medicine provides comprehensive training in the five branches of oriental medicine. It provides a solid foundation in classical Chinese medical theory and practice, incorporating Eight Principle and Five Element theory as well as modern oriental medical theories and techniques from China, Japan, Korea, France, etc.

The 167.5 credit program covers the history, theory, and philosophy of oriental medicine as well as rigorous training in diagnosis, treatment planning, and the highest standards in the practice of acupuncture and Chinese herbal medicine.

Students will also graduate with a solid foundation in the basic sciences of western medicine, having developed the skills necessary for integrative and collaborative practice within hospitals and health care settings of their choosing. This comprehensive curriculum combined with extensive and sustained clinical training throughout the nine trimesters ensures program success.

Admission Information

General Guidelines

National University of Health Sciences admits new classes each fall (September), spring (January, and summer (May). Class sizes are limited and prospective students are urged to call the Admissions Office for official application deadlines. All applicants are encouraged to apply at least one year in advance.

Applicants can apply to National University while completing the necessary prerequisite courses at their own institution. All prerequisite courses will need to be completed prior to the first day of classes. National University offers its own accelerated Prerequisite Program, which includes the required science courses.

Selection of Candidates

The Committee on Admissions approves applicants for matriculation. In addition to meeting National's University's admission standards, the Committee on Admissions will admit only those candidates who in the judgment of the University are of good character, possess the physical, behavioral, emotional, and cognitive criteria regarded as essential requirements needed to participate and complete the entire spectrum of study, training, and experiences within the educational program they are seeking to be admitted by the University, and who show promise of becoming a credit to the related profession and the University. Telephone or personal interviews may be required. For foreign applicants and others living a considerable distance from the University, University representatives in the area in which the applicant resides may be designated for such interviews.

National University of Health Sciences has set its entrance requirements beyond the minimum standards and criteria established by federal and professional accrediting agencies. A National University applicant should be academically disciplined and personally motivated to undertake the challenges of a curriculum that is patient-focused, and evidence-based in its clinical orientation. National University's College of Professional Studies seeks active, life-long learners prepared to diagnose, treat, and manage the full range of human conditions as broad-based primary care physicians and other practitioners.

Application Procedure

All students are strongly encouraged to apply one year in advance. Application for admissions must include:

1. A properly completed Application for Admission. Applications for admission should be completed online or mailed to the Admissions Office.
2. An application fee of \$55. The fee is not refundable.
3. Transcript of college record(s) to be sent directly to the NUHS Admissions Office by all colleges and universities attended. Failure to submit all transcripts for all credits earned from all colleges and universities may render a student ineligible for admission.
4. Two character reference forms, one preferably from an appropriately degreed health professional for the intended program, and one preferably from a current instructor or preprofessional advisor, submitted directly to the Admissions Office by the persons providing the reference. (Reference forms from relatives will not be accepted.)
5. Character reference forms are furnished by the Admissions Office.
6. Written essays are required for DC, ND, and AOM applicants.

Admission Decisions

Applicants for admission are not fully approved by the Committee on Admissions until it receives documentation of completion of all requirements for admission. However, an early decision conditional approval may be granted to students who have not yet completed one or more of the required components of their admissions file. Conditionally approved students will be held to the following regulations and timelines:

1. Accepted students will be notified upon entry to the program that the matriculation file must be completed by the end of the 30th day of the term. Students whose application files are not complete by the end of the sixth week of the term will not be allowed to remain enrolled in the University.
2. If applicable, financial aid awards shall not be certified or released to students until the matriculation file is complete.
3. Students who demonstrated continuing attempts to complete the application file in a timely manner, but are not able to do so through no fault of their own, may be granted an extended period of time to complete the file. The granting of the extended period of time must be approved by the Director of Admissions.
4. Students who do not complete the matriculation file by the end of the term will be required to start over from the beginning of the first trimester.
5. University policy on tuition and refunds will be adhered to for such students.
6. The University will attempt to help students with the completion of the matriculation file; however, it is the responsibility of students to do so.

Notification of Acceptance

Those applicants accepted by the University will be notified promptly. Upon receipt of notice of acceptance, applicants shall remit a matriculation fee of \$225. This includes a \$150 tuition deposit (applicable toward the first trimester tuition) and a \$75 reservation fee. Generally, the deposit is due within 20 days from the date posted on the applicant's official letter of acceptance to the program. However, if the application is received close to the application deadline date(s), the deposit may be due before the 20-day time period. The matriculation deposit is required to reserve a seat in the desired class and is paid with the understanding that it will not be refunded if the applicant fails to report for registration to the University.

Special Requirements

Immunization

Pursuant to Illinois law, students enrolled in all Illinois pre-secondary institutions, who were born on or after January 1, 1957, must provide proof of immunity to "vaccine-preventable diseases." All applicants, whether enrolled in Illinois or Florida, are required to submit all required forms and appropriate documentation to the Student Services Office at or before orientation. Students with any questions or concerns should contact Student Services. Students who fail to submit the required documentation will not be allowed to continue their enrollment at the University.

Fingerprinting

Pursuant to Illinois law, students enrolling in all Illinois medical schools, "must submit to a fingerprint-based criminal history records check for violent felony convictions and any adjudication of the matriculant as a sex offender conducted by the Department of State Police." The fingerprinting process will be conducted as part of the University's orientation of new professional program students on both the Florida and Illinois campuses.

Degree and GPA Requirements

Students in the first professional programs must have earned a baccalaureate degree from an accredited college or university. DC and ND applicants will be required to have a baccalaureate degree and a minimum cumulative GPA of 3.00 (on a 4.0 scale). Those between a 2.75 and 2.99 may be admitted under an Alternative Admissions Track Plan (AATP). Students in the MSAc program must have 60 semester credits and students in the MSOM program must have 90 semester credits and minimum cumulative GPA of 2.50 (on a 4.0 scale). No prerequisite courses are required for the programs.

Specific Course Requirements: DC, ND, MSAc and MSOM Programs

Students are expected to have completed 24 hours of general education credits and 24 hours of life and physical science credits for a total of 48 semester hours of credit (or the quarter hour credit equivalents) before entering the chiropractic or naturopathic programs.

General education credits should include coursework in the following areas:

- English Language Skills 6 semester hours
- Psychology..... 3 semester hours
- Social Sciences / Humanities 15 semester hours

Life and physical science coursework should include both lecture and laboratory components in each of the following areas:

- Biology, Physics, General Chemistry, and Organic Chemistry.

All courses must be taken at an accredited institution and must be transferable at the baccalaureate level. All 48 credit hours for prerequisite courses must be completed with a “C” grade (2.0 on a 4.0 scale) or higher. A grade of “C-” is not satisfactory unless it is equivalent to a 2.0 on a 4.0 scale. Specific prerequisite classes may be waived due to a student’s academic performance or life experience.

Beneficial Courses

Taking the following courses may help you to prepare for academic success in the first professional programs at NUHS. These courses are not required and taking or not taking them will not affect admissions decisions in any way. The beneficial courses are biochemistry, anatomy and physiology (human or comparative anatomy), and cell biology.

Dual Enrollment

Students may dual enroll in two first professional programs or a first professional and certificate program. Students are not eligible to begin dual enrollment until the third trimester of study in their initial or primary program of entry. Students must have a 2.50 GPA in their primary program, complete the dual enrollment form, and obtain all required signatures in order to be granted dual enrollment status.

Credit by Proficiency Examination

A portion of an applicant’s pre-professional education may be acquired through institutional proficiency exams or coursework such as the College Level Examination Program (CLEP), Advanced Placement Program (AP), International Baccalaureate (IB), Defense Action for Non-Traditional Educational Support (DANTES), American College Testing Program (ACT), Program Evaluation Procedure (PEP), New York Board of Regents College Examinations, or through challenge courses.

Equivalence will only be acceptable if the applicant has had certification of the credits by an institution that is accredited at the college level by an accrediting organization that is listed as nationally recognized by the Secretary of Education of the U.S. Department of Education.

Technical Standards for Admission

All applicants accepted to National University of Health Sciences' College of Professional Studies must be able to meet the University's technical standards of the College and/or the program in which they enroll. Technical standards are those physical, behavioral, emotional, and cognitive criteria that an applicant must already possess as personality traits, life skills, or acquired abilities before enrolling in the program. These qualities are regarded as essential requirements needed to participate and complete the entire spectrum of study, training, and experiences within the educational program they are seeking to be admitted by the University. These standards are applied in addition to, and separate from, academic standards of qualification.

Applicants must review the technical standards that apply to the educational program in which they intend to enroll and sign a form certifying they have read, understand, and are able to meet the standards (with or without reasonable accommodations) of that program. This information is provided to help every student be more aware of the types of performance and expectations associated with different educational programs that the University offers. The use of technical standards is derived from Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. These laws provide a framework for individuals with documented disabilities to request reasonable accommodations to fulfill their educational objectives. Reasonable accommodations are defined as any change or modification in the way things are usually done that enables an individual with a disability to participate as fully as possible in an educational program. An effective accommodation for a disability can ensure that an otherwise qualified student with a disability is able to perform and be assessed on their ability rather than by their disability.

Candidates with documented disabilities who wish to request accommodations under the Americans with Disabilities Act must follow the University's procedure for requesting an accommodation. This procedure, in summary, requires submitting a written request for accommodations and supporting documentation of a life-limiting disability to the Dean of Students. The Dean will review the request and determine whether a reasonable accommodation can be made.

National University of Health Sciences does not discriminate against qualified individuals with disabilities in recruitment or admission to its programs, services, or activities. Any information disclosed by an applicant regarding disabilities will not adversely affect admissions decisions nor eligibility to remain enrolled.

The University reserves the right to reject requests for accommodations that would fundamentally alter the nature of a University educational program, lower the academic standards, cause an undue hardship on the University, or endanger the health or safety of a student with a disability, other students, clinic patients, or any other member of the University community.

Students must have abilities and skills of five varieties:

Sensory/Observation

A student must be able to observe demonstrations and experiments in the basic sciences including, but not limited to, demonstrations on human cadavers, animals, microbiologic cultures, and microscopic studies of microorganisms and tissues in normal and pathologic states. A student must be able to observe a patient accurately at a distance and close at hand. Observation necessitates the functional use of the senses of vision and somatic sensation. It is enhanced by the functional use of the sense of smell. Therefore, a student must have sufficient sense of vision, hearing and touch to perform the customary techniques in a physical examination such as auscultation (listening with a stethoscope), percussion (tapping of the chest or abdomen to elicit a sound indicating the relative density of the body part), palpation (feeling various body parts such as the breast or abdomen with the ability to discern the size, shape, and consistency of masses), and visual observation sufficient to note changes in skin and eye color, as well as to use such instruments as an otoscope (magnifying device for examining the ear) and ophthalmoscope (magnifying device for examining the eye).

Communication

A student must be able to speak, to hear, and to observe patients in order to elicit information, describe changes in mood, activity and posture, and perceive nonverbal communications. A student must be able to communicate effectively and sensitively with patients. Communication includes not only speech, but also reading and writing. The student must be able to communicate effectively and efficiently in oral and written form. In summary, a student must have verbal and written communication skills sufficient to conduct patient interviews and record clinical histories, read all forms of diagnostic imaging, and make assessments and plans known to patients and other members of the health care team.

Motor/Strength/Coordination

A student must have sufficient motor function to elicit information from patients by palpation, auscultation and percussion, perform basic laboratory tests (urinalysis, CBC, etc.), carry out diagnostic procedures (digital rectal, otoscopic, etc.), and read EKGs and X-rays. A student must also be able to coordinate both gross and fine muscular movements, equilibrium, and provide general manual therapy care and emergency treatment to patients. Examples of minimal emergency treatment required of primary health care providers include the ability to perform quickly and effectively such emergency procedures as CPR, the application of pressure to stop bleeding, the opening of obstructed airways, and venipuncture (inserting a needle into a vein). Examples of manipulative therapy care involve the requisite strength and dexterity to be able to perform basic procedures such as static and dynamic palpation of joints, movement of diagnostic and therapeutic equipment, and sufficient motor function to coordinate and balance the hands and body while manually delivering the high velocity, low amplitude thrusting action associated with the controlled manipulative therapy that complementary and alternative medicine (CAM) practitioners frequently apply to the spine or extremities of a patient.

Conceptual, Integrative, and Quantitative Abilities

These abilities include measurement, calculations, reasoning, analysis, and synthesis. Additionally, a student must be able to comprehend three-dimensional relationships and to understand the spatial relationships of structures. Problem solving in group and individual settings requires all of these intellectual abilities. Testing and evaluation of these abilities in the College of Professional Studies employs periodic examinations as an essential component of the curriculum. Successful completion of these examinations is required of all candidates as a condition for continued progress through the curriculum. Examples of these tests include essay, oral and/or multiple choice tests, typewritten papers, oral presentations, and lab practicals designed to assess a variety of cognitive and non-cognitive skills in a simulated or supervised clinical setting.

Behavioral and Social Attributes

A student must possess the emotional health required for full utilization of his or her 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 relationships with patients. A student must be able to function effectively under stress. A student must also be able to adapt to change, display poise and flexibility in the face of uncertainties and stressful situations, and to independently demonstrate empathy, integrity, compassion, motivation, and commitment commensurate with the habits and mannerisms of professional training to become a professional health care provider.

International Students

National University of Health Sciences is authorized under federal law to enroll non-immigrant alien students. Because of difficulties inherent to overseas communications, international students should expect the application procedure to require at least several months. It is strongly recommended that international students apply to the University at least one year in advance. International students seeking admission to the University must provide the following documentation:

1. A properly completed Application for Admission including a non-refundable \$55 fee.

2. Transcript(s) of college records (or equivalents acceptable to National University) mailed directly to National University from the college(s) attended or evaluation agency. For all international students needing foreign transcript evaluation, educational records must be evaluated by an evaluation agency approved by the University, such as World Education Services Inc., P.O. Box 745, Old Chelsea Station, New York, NY 10113-0745.
3. Students for whom English is not their primary language must submit proof of proficiency in the English language. For all first professional program applicants (DC, ND, MSOM, MSAc) taking the TOEFL exam, a minimum total score of 80 is required. Additionally, a minimum score of 26 on the Speaking section and 22 on the Listening section is required. The University's institution code is 1567. Students who successfully complete coursework in English Composition at a regionally accredited U.S. school may be eligible for a waiver of the TOEFL exam.
4. Evidence that adequate provisions have been made to meet financial needs during the first academic year of study. The United States Department of Immigration does not permit international students to be employed during their first nine months of attendance by anyone other than the National University, which has limited employment opportunities for its students.

Transfer Students and Advanced Standing

National University of Health Sciences will award advanced standing credits from institutions fully accredited by specialty professional health care accrediting commissions such as the Commission on Accreditation of the Council on Chiropractic Education, the Council on Naturopathic Medical Education, or credits from another accredited professional college(s), in those instances where the credits are germane and equivalent to the credits of the curriculum of NUHS. Because there is not total universality between various chiropractic, naturopathic, and professional colleges with regard to curricula, transfer students should expect to lose some credit given at institutions attended previously. The following regulations apply to transfer students:

1. Transfer students must follow the application procedure for new students, must meet the current entrance requirements for admission to the University, and must be approved by the Committee on Admissions.
2. The applicant must remit official transcripts to National University from another professional college(s) prior to submission of their file to the Committee on Admissions.
3. Students may be granted advanced standing for coursework taken at another professional college. Students must initiate this process through the Admissions Office. Advanced standing will be determined by the appropriate dean.
4. Courses considered for advanced standing must be equivalent in content and quality to those of National University, and must be satisfactorily completed with C grades or higher 2.0 (on a 4.0 scale).
5. Students must be competent in the courses for which advanced standing is sought. This may require passing course competency examinations.
6. Students wishing to be granted additional advanced standing after matriculation to National University must submit this request within one calendar year of matriculation.
7. Not more than the equivalent of two academic years of credit may be granted to applicants who have taken professional work in a medical or osteopathic college, and then only when the colleges from which credit is offered are accredited by the accrediting agencies of the respective professions.

8. Students who have interrupted their professional studies for a period in excess of five calendar years shall be allowed no credit on re-enrollment and no credit in transfer for chiropractic and other professional studies courses taken previously. Such students must reapply for admission and must meet all current admission requirements.
9. For the acupuncture and oriental medicine programs, transfer students granted advanced standing must complete a minimum of 30 credits within no less than one calendar year (or 1.5 academic year) of resident study in order to graduate from National University of Health Sciences.

Non-Degree Students

National University makes a limited number of courses available to individuals who wish to take classes as non-degree seeking students. Students taking coursework in this capacity do not go through the normal admission process and are not admitted to a degree program. Interested individuals should contact the Admissions Office for guidance and course availability. Course enrollment is handled through the Registrar. The Registrar, in consultation with the appropriate dean, will determine if a student can enroll in any specific course as a non-degree seeking student. To obtain credit for courses, non-degree students must complete the entire trimester and successfully pass all required examinations. Tuition is paid by the non-degree student by the per credit hour fee.

College of Professional Studies

Academic Policies, Regulations & Procedures

Academic and Clinical Competencies

In the College of Professional Studies, students will be expected to meet a minimum performance standard in the following competencies:

- 1. Medical Knowledge**
Before graduation, the competent student must be able to demonstrate knowledge about established and evolving biomedical, clinical, and cognitive sciences and the application of this knowledge to patient care.
- 2. Interpersonal and Communication Skills**
Before graduation, the competent student must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, patients' families, and professional associates.
- 3. Patient Care**
Before graduation, the competent student must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.
- 4. Professionalism**
Before graduation, the competent student must be able to demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
- 5. Practice-based Learning and Improvement**
Before graduation, the competent student must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices.
- 6. Systems-based Practice**
Before graduation, the competent student must be able to demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value.

Student Course Load

A full-time student at National University of Health Sciences is one who: (1) enrolls in no less than two of the three trimesters that the University offers during its fiscal year (September 1 through the succeeding August 31); and (2) during each trimester of attendance, enrolls in no less than 10 credit hours of coursework.

Full-time DC and ND students also have the option of taking a reduced course load through the Flexible Track Option. This allows students to take fewer credits per trimester, lengthening Phase I and II of the program from four to five or six trimesters depending on the track selected. Illinois and Florida DC students have separate Flexible Track curriculums.

AOM students have the option of a part-time course load.

Academic Advising

In an effort to foster academic success, all students are assigned a faculty advisor to assist them in course load selection and decisions related to their program of study. The faculty advisor acts as a liaison to the other academic and general student support through the Student Services Office. Students admitted under the Alternative Admissions Track Plan (AATP) will require closer performance tracking, which may generate increased contact with academic advising and an individual plan to modify course schedules.

Trimester Credit

The University operates on a trimester schedule. A trimester has a duration of not less than 15 weeks. The trimester hour is the unit of credit. A trimester hour of credit is defined as one didactic period or two laboratory periods of learning each week during the trimester. The class period is 50 minutes in duration. In addition, each credit hour in class includes two hours of study or homework outside of the class. The program is made up of lecture, scheduled group facilitation, and self-directed didactic learning hours that are given credit on a one-to-one basis (one didactic learning hour equals one credit). Laboratory hours are given credit on a two-to-one basis (two laboratory learning hours equals one credit). Clinic hours are given credit on a two-to-one basis (two clinic hours equal one credit). A student may receive 0.5 credits during a trimester in which there are an odd number of laboratory hours per week. The formal hours of the program are generally scheduled Monday through Friday from 8 a.m. to 5 p.m. except for clinic duty, or an occasional intensive learning experience.

The didactic course hours of the AOM program are generally scheduled Monday through Friday from 5 p.m. to 10:30 p.m. However, some of the courses will be offered during the weekend as well. The clinical training of the AOM program will be scheduled Monday through Friday from 8 a.m. to 5 p.m. and Saturday from 8 a.m. to 12 noon.

Academic Standing

Students must maintain a minimum cumulative grade point average (CGPA) of 2.0 on a 4.0 scale and pass Clinic Internship.

Students are evaluated by their academic advisor at the end of each trimester to determine if they are making satisfactory progress. Students not making satisfactory progress may be placed on Academic Deficiency, Academic Warning, or Academic Probation. The third Academic Probation results in suspension from the program.

Course Withdrawal Policy

The first week of the trimester is considered the add/drop week. Students may add or drop courses during this period with an advisor's signature. Courses that are dropped during this period will not appear on the transcript as an attempted course.

Starting in the second week, and continuing through the twelfth week of the trimester, a student may still withdraw from courses. These courses will be listed on the transcript as attempted with a grade of W, and these course hours will add to the attempted hours for that trimester, as well as to the cumulative attempted hours. The GPA will not be affected by withdrawals during this period, as GPA is calculated by dividing grade hours by quality points. This will, however, negatively impact academic progress, which is measured as earned hours divided by attempted hours. Advisors may therefore assess both academic progress, as well as academic performance.

Students are allowed to withdraw from any course with approval of their advisor. Students may withdraw or repeat a course two additional times from the first attempt for a total of three attempts. Students may appeal to the appropriate academic dean to have the course withdrawal deadline extended in cases of documented medical/family emergency.

Repeated Course

Students must repeat any required courses in which a grade of F, W, or WF is received. Students will only be allowed to repeat courses in which they received a D or below. In the case of a D or F, the most recent grade received will replace the grade received for the previous attempt and be calculated into the Cumulative GPA. The initial grade is flagged with an RPT indicating that the course has been repeated. All original and repeated courses will be counted as attempted credits in satisfactory academic progress calculations. Students may withdraw or repeat a course two additional times from the first attempt for a total of three attempts. Failure to pass a course after three attempts shall result in expulsion.

Make-up Final Examination Policy

Missed final examinations may be made up if an excused absence has been granted by the appropriate dean. The make-up examination will be scheduled by the faculty member within two weeks of the missed final examination but never later than the first day of class of the following trimester. If examinees are not present at the scheduled make-up exam time, they will receive the grade of F for the course or lab unless the grade of I is reissued. Enrollment in any new courses will not be continued if students have not converted the grade of I to a regular passing grade by the first calendar day of the second calendar week of the next trimester of attendance. The removal of the I must be accomplished within the maximum of one calendar year. Otherwise, the I becomes an F automatically.

Final Comprehensive Examinations

Final examinations are an integral part of the course evaluation and are scheduled at the end of the course. Each examination is scheduled at a specific time. Students who present themselves to the exam site late (greater than 15 minutes or after the first student leaves the exam site, whichever comes first) may be required to follow the make-up exam policy. Final examinations may not be given at times other than the regularly scheduled periods or the make-up periods.

Passing the final comprehensive examination is required to pass a course. Laboratory final examinations are given during their last regularly scheduled time.

The nature of each course and laboratory requires various means of evaluation. Course managers and laboratory instructors have the responsibility for developing appropriate evaluation criteria. Course managers must explain them to their students at the beginning of the trimester and must stipulate them in the course syllabi filed with the appropriate dean.

No student will be permitted to sit for a final examination who has not completed all the work, including tests, practical examinations, class assignments, attendance, etc., required by the course manager and laboratory instructor prior to the final examination.

To receive the grade of I, a student who has not completed all the required work prior to the time of the final examination must seek the permission of the course manager who must consult with the appropriate dean.

Unexcused (no grade of I granted) absence from or failure of the second administration of the final examination will be noted as a grade of F for the course or laboratory.

The format of the final comprehensive examinations will be determined by the course manager and specified in the syllabus.

Clinical Competency Assessment

Both MSAC and MSOM students are required to take the Internship Foundational Examination by the end of Trimester 3 in order to start their internship. Each program requires the Senior Intern Advanced Examination at the end of Trimester 5 for MSAC and Trimester 7 for MSOM. Students of both programs must successfully complete the Comprehensive Graduation Examination by the end of the final trimester of their program.

Co-Curricular Learning (CCL)

National University of Health Sciences graduates are called to take their place as health professionals and leaders in their communities. While at National, all students are required to participate in community service activities that support both the University and the public, providing excellent training for future leadership roles. Co-curricular Learning (CCL) is a program that all degree-seeking students are required to complete for graduation.

By participating in CCL, students are ascribing to the National University of Health Sciences mission by demonstrating their abilities in leadership and management, cultural diversity and ethics, and advancement of education.

CCL incorporates learning experiences that complement, in some way, what students are learning in their programs. Students will engage in service programs, projects and volunteer opportunities that serve NUHS and its surrounding communities. Students are asked to submit short written assignments reflecting on their own learning experiences therein. A master list of opportunities will be maintained by the Office of Student Services. All first professional students (College of Professional Studies) must complete the last 3 assignments while in clinic. Clinic service opportunities will be posted by the Dean of Clinics.

<u>Program Requirements</u>	<u>Required Assignments</u>
Chiropractic/Naturopathic	10
Oriental Medicine	9
Acupuncture	7

Academic Difficulty

There are three categories of academic difficulty: Academic Deficiency, Academic Warning, and Academic Probation.

Academic Deficiency

Academic Deficiency occurs whenever a grade of F or U is received in one or more courses, regardless of the trimester or cumulative grade point average. Courses with a grade of F or U must normally be repeated in the following trimester.

Academic Warning

Academic Warning occurs whenever the trimester grade point average is less than 2.00. A single academic warning does not typically trigger remedial actions. Repeated academic warnings may cause remedial actions in the form of load reduction and/or repeating courses with a grade of D.

Academic Probation

Academic Probation occurs whenever the cumulative grade point average is less than 2.00. Students on Academic Probation are no longer in good academic standing and are subject to remedial actions intended to improve academic performance. The probationary period is one trimester in length. During the probationary period, students shall not be allowed to participate in off-campus extracurricular activities or receive excused absences to attend activities supported by the University. Students within the College of Professional Studies may receive only two academic probations, cumulatively. A third probation causes academic separation from the program.

Remedial actions are typically prescribed for students as a result of being placed into one of these categories. Such actions are administered through the office of the Dean, in consultation with designated academic advisors. Academic sanctions in the form of suspension or expulsion from the program may also result from an accumulation of academic warnings and probations. Such decisions are made by the Dean, and may be appealed to the Committee on Academic Standards, Grades, and Records through the Dean's office.

Probation with Extenuating Circumstances

Probation with extenuating circumstances is a status that informs students that their academic record is sufficiently poor to warrant permanent separation from the program. However, due to extenuating circumstances brought forward via written appeal by the student to the Committee on Academic Standards, Grades and Records through the office of the appropriate dean, they will be allowed to continue at the discretion of the appropriate dean or the committee.

Academic Separation

There are two designations for academic separation from the program: academic suspension and academic expulsion. Academic separation requires the Committee on Academic Standards, Grades, and Records to submit a recommendation to the Dean, who will make the final decision. The recommendation may be to continue in the program following a prescribed plan for remediation or expulsion. Expulsion is permanent separation from the program.

A student who receives a third academic probation (cumulative) is placed on academic separation. Should the recommendation be to continue in the program following a prescribed plan for remediation, this shall occur after a mandatory suspension from the program for one to three trimesters.

When the decision is to allow a student who has been separated from the program to continue, that student becomes eligible for reinstatement by agreeing to a remediation plan within the current program. Alternatively, or in addition, students may be required to complete further academic development in the form of higher education courses of learning while they are on suspension from the program. The Dean, in consultation with the Committee on Academic Standards, Grades, and Records shall approve the remediation plan, and shall also define and approve any further academic development in the form of higher education courses of learning. Once reinstated, these students shall normally be allowed one trimester in which to restore good academic standing. Failure to restore good academic standing by raising the cumulative grade point average to 2.00 or greater at the completion of the remediation trimester will normally result in expulsion from the program. In addition to the above, the accumulation of multiple academic warnings in combination with academic probations can provide cause for an academic review through the Committee on Academic Standards, Grades, and Records that may lead to a recommendation for academic separation from the program. Such a review would be initiated by the Dean.

Expulsion

Expulsion of a student represents permanent separation from the program. There is no opportunity for re-enrollment or re-instatement in that program. Those wishing to consider enrollment in another program at NUHS may do so by contacting the appropriate academic dean in writing. Expulsion may represent permanent separation from the institution where deemed appropriate by the dean. Appeals to any expulsion reside with the Vice President for Academic Services.

A student who has been expelled from a professional program of another institution or the institution itself, if it is a single purpose institution, may be considered for admission to an equivalent program or a different program offered by NUHS. In both instances, the student must meet all admission requirements for entry plus be approved for entry by the appropriate academic dean in writing. Appeals to any decision made by the dean reside with the Vice President for Academic Services.

Remedial Actions

To provide students in academic difficulty with an opportunity to restore good academic standing, the following remedial actions may be prescribed: limit the course load to a restricted number of credits; and/or repeat courses with a grade of D, in addition to those with a grade of F or U. Remedial actions may also include registration in repeat courses only with no new subjects, mandatory counseling with individuals on or off campus, and mandatory tutorial in specified subjects

Re-enrollment and Re-instatement

A student interested in re-enrolling in a program from which they previously withdrew, or wishing to be re-instated after suspension must submit a completed re-enrollment/re-instatement form to the Registrar. The appropriate dean, in consultation with the proper committee, will determine a student's eligibility to rejoin the institution and will consider the following guidelines.

Returning After Suspension

If a student has been suspended from the University, a student may petition the appropriate dean for re-instatement. This process will be dependent upon the student meeting the dean's written terms for re-instatement.

Returning After Withdrawal

Students who left the University in good academic standing and now wish to re-enroll within a year (three trimesters) of their withdrawal date may be allowed to resume academic studies where they finished at the discretion of the appropriate assistant dean. However, if a student leaves in poor academic standing, the resumption of academic studies will be at the discretion of the appropriate assistant dean. The appropriate assistant dean may consult with other relevant personnel regarding this request. In either case, the student may be required to follow a remedial academic plan approved by the appropriate assistant dean.

A student who left the University in good academic standing and now wishes to re-enroll more than a year (four or more trimesters) after their withdrawal date will be assessed by the appropriate dean in conjunction with the Admissions Office, which will process the potential reinstatement. The student may apply for advanced standing to receive credit for prior coursework. The awarding of advanced standing is made at the discretion of the appropriate dean. If the student left in poor academic standing, they may possibly receive no credit for prior coursework and have to start over.

In all circumstances, a student must complete the first professional doctoral program within eight (8) calendar years from the date of their first matriculation in coursework applicable to the doctoral degree they are pursuing.

Dean's List and Honor Roll

At the end of each trimester, recognition of the Dean's List of Students for Distinguished Academic Achievement is awarded to those full-time students who have achieved a GPA of at least 3.5 on a 4.0 scale for the trimester with no grade lower than a S/C. Recognition on the Honor Roll of Students for Exemplary Academic Achievement is awarded to those full-time students who have achieved a GPA of at least 3.0 (on a 4.0 scale) for the trimester with no grade lower than a C.

Graduation Honors

At National University of Health Sciences, degrees granted with distinction, Latin honors (cum laude, magna cum laude and summa cum laude), are based primarily on the student's cumulative grade point average. To be eligible to receive a degree with distinction, a student must have earned 90% of the credits required for graduation in courses taken at National University. Degrees with distinction are conferred upon students in all degree programs other than the AAS. Certificate programs do not qualify.

A degree summa cum laude is conferred upon the student who has attained a cumulative grade point average of 3.7-4.0.

A degree magna cum laude is conferred upon the student who has attained a cumulative grade point average of 3.6-3.69.

A degree cum laude is conferred upon the student who has attained a cumulative grade point average of 3.5-3.59.

Valedictorian/Salutatorian

The valedictorian and salutatorian are respectively the first and second highest ranking scholars in the graduating class of each program. The students must have earned at least 90% of their core curriculum credits at National University of Health Sciences. The rankings are determined by the cumulative grade point average of the core courses.

If there is a tie, elective courses will be used to calculate the cumulative GPA. In the event there is a tie for the valedictorian position, there will be no salutatorian. In the event there is a tie for the salutatorian position, there may be more than one. In the DC program, only those students who participate in commencement three trimesters after beginning their clinic internship may be named as valedictorian or salutatorian.

Graduation Requirements

The doctor of chiropractic, the doctor of naturopathic medicine, the master of science in acupuncture, and the master of science in oriental medicine degrees are conferred on individuals who:

1. Meet all stipulated academic requirements for the degree and have been a resident student at National University of Health Sciences for at least the last two academic years of study;
2. Have successfully completed all the required courses, laboratories, and clinic internships in the degree curriculum within the eight-calendar-year limit for the chiropractic, naturopathic, and oriental medicine programs and within six calendar years for the acupuncture program;
3. Are in good academic standing and are clinically competent;
4. Are recommended for graduation by the faculty of the University;
5. Are free of all indebtedness and other obligations to the University;
6. Have attained the age of 21;
7. Have successfully completed all required Co-Curricular Learning assignments
8. Have submitted a completed and signed Petition for Degree Completion Form;
9. Have participated in the commencement ceremony. (Graduates of the NUHS Florida program are required to attend commencement on the main campus in Illinois.)
10. DC program only: has completed a minimum of the last 25% of the NUHS required program credit hours.

Graduation Rate for the Chiropractic Degree

National University of Health Sciences is pleased to provide the following information regarding our institution's graduation/completion rates. The information is provided in compliance with the Higher Education Act of 1965, as amended. National University maintains an overall graduation average of 80.87% since the Fall 2006 cohort enrolled. The Academic Year 2012-13 cohort, the most recent to complete the 150% of normal time, recorded an 80.61% graduation rate.

While reviewing this information, please bear in mind:

- The graduation/completion rate is based on attendance that equates to 150% of our longest program. This period is used to account for our Flexible Track Option that allow students to complete their degree requirements at a slower pace.
- We have elected not to report our transfer-out rate because our University's mission does not include providing substantial preparation for students to enroll in other institutions.
- The graduation/completion rate does not include students who left the school to serve in the armed forces, on official church missions, or in the foreign service of the federal government. Students who died or were totally and permanently disabled are also excluded.

Questions related to this report should be directed to the Registrar at 630-889-6549.

Placement Rate for Chiropractic Graduates

Ninety percent (90%) of National University graduates, from 2014 through 2017, were licensed, or license eligible, within six months of graduation.

Departments of Instruction

The faculty of National University of Health Sciences has developed an innovative and active process of learning with problem-based learning methodologies and competencies being placed at its core.

Courses are identified by course number, title, and designations that indicate hours devoted to lecture/group/self-directed and laboratory formats and its respective credit value. Specific prerequisites also are listed.

The course content for the student who is seeking to earn the professional degree comprises five major components: basic sciences, clinical sciences, research, nutrition and biochemical therapeutics, and internship. The basic science content includes the disciplines of (1) anatomy, (2) pathology, microbiology and public health, and (3) physiology and biochemistry. The clinical science content includes the areas of (1) diagnosis, (2) diagnostic imaging and laboratory methods, and (3) therapeutics.

Although the teaching of basic sciences, based upon clinical patient cases, and the clinical sciences, steeped in the mechanisms of basic science, is integrated throughout the curriculum, there is a difference in emphasis. Basic science content is emphasized during the early trimesters and clinical science content is emphasized during the latter part of the curriculum at National University of Health Sciences.

The research component of the instructional content of the professional degree includes the critical review of the clinical literature, scholarly independent study, journal clubs, etc.

The internship component is required of all students seeking the first professional degree.

Students will be assessed on their clinical competence throughout the program. The integrated assessments will be done in the Training and Assessment Center (TAC). The assessments are made on sum total content and performance requirements of the courses to that point in time.

Department of Basic Sciences

Illinois: Professor Robert Appleyard — Chair; Florida: Assistant Professor Sridharan Manavalan — Chair

Learning the normal structure and function of the human body is the first step towards becoming a competent physician. At NUHS, students learn and study the basic sciences to develop an applied understanding of how the presentation of normal health is dependent upon structure and function at all levels of organization, from biomolecules to the genome, from cells to tissues, and from individual organs to organ systems. Such learning is accomplished through the disciplines of biochemistry, histology, anatomy, and physiology. Of equal importance is learning that normal health is also a reflection of balanced and coordinated signaling and communication between biomolecules and organelles within cells, between cells within tissues and organs, and between tissues and organs throughout the body. Pathways and mechanisms of signaling and communication are learned through the context of homeostatic regulation via the nervous and endocrine systems, as well as through the emerging concepts of epigenetics at the genomic level, and neuroendocrinology at the intercellular and systems levels.

The application of basic science to human health and medicine must also consider the biological structure and function of the immune system and its role in defending against pathogens, as well as learning, through the disciplines of microbiology, virology and mycology, the biology of the major classes of pathogens that threaten human health. Mastery of the basic sciences culminates with the discipline of pathology, which integrates and applies the individual science disciplines towards understanding mechanisms that underlie the symptomatic and

diagnostic presentations of disease, as well as explaining the basis of disease in terms of abnormal structure and function within the body.

Department of Clinical Sciences

Illinois: Professor Kristina Conner — Chair; Florida: Instructor Steven Freeman - Chair

The clinical sciences are taught by the faculty of the disciplines of (1) chiropractic practice, (2) diagnosis, (3) diagnostic imaging, (4) naturopathic medicine, (5) acupuncture and oriental medicine, and (6) nutrition and biochemical therapeutics. The clinical sciences augment the training and knowledge gained through basic science content and bring them into clinical perspective.

Through content objectives in the discipline of diagnosis emphasizing physical, laboratory and special procedures, students are prepared to examine patients and understand the problems of diseases that present in practice. Through the study of biomechanics and the discipline of diagnostic imaging, students add to their special knowledge, which is particularly related to the physician's discipline. Content in chiropractic, nutrition, botanicals, homeopathy, naturopathic medicine, oriental medicine, and physiological therapeutics trains students not only in the mechanics of treatment but also in the rationale of natural therapy. As a primary care physician/practitioner, the doctor of chiropractic, the doctor of naturopathic medicine, the practitioner of acupuncture and the practitioner of oriental medicine serve as portals of entry for patients into the health care system. The doctor of chiropractic and the doctor of naturopathic medicine must be trained to diagnose diseases and maladies that necessitate health care that may be outside the scope of practice of the doctor of chiropractic and the doctor of naturopathic medicine. The clinical sciences, therefore, present material in both diagnosis and therapeutic management beyond that which is strictly germane to the practice of chiropractic and naturopathic medicine, but which is essential for interaction with other health care professionals.

The clinical science objectives also emphasize practical training. Through the radiological learning laboratory, the use of the heart-sound simulator, practical experience in electrocardiography, the physical and laboratory examination of students in diagnosis laboratory sessions, laboratory experience in the use of various physiotherapy modalities, and above all, practice in the technique laboratories, the student learns by doing as well as by lecture. To augment practical training in the laboratories and the Training and Assessment Center, the Learning Resource Center has additional resources for students to see and hear actual or simulated presentations of patient complaints. The examination and treatment of patients begins with the clinic internship, which occupies much of the student's time thereafter. Starting with observation, students expand their clinical knowledge and skills by treating patients, with increasing responsibility throughout the course of their education.

Department of Clinical Practice

Illinois: Professor Theodore Johnson Jr., Dean of Clinics; Professor Manuel Duarte, Chair; Florida Chair — Vacant

Internship must be taken as one unit. Successful completion without interruption of the internship represents the culmination of the clinical phase of the program. The AOM program can be taken as a shift unit individually.

The final internship program of patient management is essential preparation for private practice and includes the recruitment of patients. Application of the techniques, instrumentation, and procedures studied previously in the program forms the nucleus of the internship. Interns participate in case management under the supervision and instruction of the attending faculty physicians. Students must be available to cover the assigned clinic shift at the specified NUHS Whole Health Center and/or other assigned clinic facility, as hours vary at each location, in order to serve the needs of patients and the community.

During their internship, students, under the supervision of a licensed health care provider, provide health care to patients as their main duty. The internship also provides students other clinical opportunities, such as clerkships and rotations at other clinical sites outside of their primary clinical assignment.

A clinical competency exam must be passed to enter the acupuncture and oriental medicine internships. In addition to patient care, interns participate in clinic business operations, in-service seminars on a variety of topics, community service, quality assurance, and advanced diagnostic procedures.

At all times, the intern must demonstrate professionalism in patient and colleague interactions as well as evidence of clinical efficiency and competence. While learning to apply didactic and laboratory knowledge gained in the earlier trimesters, it is important to strive for efficiency and quality in patient care. This is particularly relevant in today's atmosphere of increasing competitiveness for the ambulatory-care patient. National University of Health Sciences provides its students (interns) with the opportunity to meet all of the quantitative (as well as qualitative) requirements set forth in the National University Clinic Intern Manual. These requirements meet the Educational Standards for Chiropractic Colleges, published by the Council on Chiropractic Education, and the educational standards for naturopathic medicine colleges, published by the Council on Naturopathic Medicine Education, and the educational standards for acupuncture and oriental medicine colleges published by the Accreditation Commission for Acupuncture and Oriental Medicine. The opportunity for students to serve in more than a single clinic provides a variety of cases to a greater degree than might be expected in private practice. Interns are required, as part of their education in patient recruitment, service and leadership to accumulate Co-Curricular Learning experiences.

The National University of Health Sciences Clinical Clerkship Program is designed to offer first professional students the opportunity to gain valuable clinical experience in the private practice setting under the supervision and guidance of experienced, ethical, and successful physicians. The Clinical Clerkship Program functions within the parameters established by the Council on Chiropractic Education (CCE), the Council on Naturopathic Medical Education, and the state licensing board for the respective state in which the supervising doctor is located. The programs allow eligible interns to spend part or all of their clinical training in this off-campus educational experience. The supervising doctors participating in the programs are considered as adjunct faculty of National University of Health Sciences.

The National University of Health Sciences Clinical Clerkship Program consists of two separate and distinct programs, the Ancillary Clinical Experience (ACE) and the Community Based Internship (CBI). The Ancillary Clinical Experience is utilized by students who have completed the clinical requirements for graduation within the campus-based National University clinic system and are to continue the clinical learning process in an established off-campus chiropractic office until the time of graduation. The Community Based Internship is utilized by students who are to be considered for a program in which they can satisfy the clinical requirements for graduation in the office of a field doctor rather than within the campus clinics.

Department of Research

Professor Gregory D. Cramer — Dean

As professional health care practitioners, it is critical that chiropractic and naturopathic physicians, acupuncture and oriental medicine practitioners, massage therapists, and other complementary and alternative medicine (CAM) providers continually strive to improve the application of their art. Research findings provide the knowledge base essential to sound clinical judgment in both diagnosis and treatment.

The faculty and staff of the Department of Research conduct research of their own and also provide support for research conducted by faculty outside of the Research Department. Through a wide variety of research activities, the research programs at NUHS provide students, faculty, and health care providers with objective data that may be used to improve the quality of patient care. The faculty of the department provides expertise in analysis of the clinical literature and research fundamentals embedded in many aspects of the curriculum. In addition, several required and elective courses are also taught by faculty of the department.

The department coordinates the use of facilities and resources and supports a variety of fundamental and clinical studies. Special attention is directed to studies of pathophysiological changes that are believed to occur as a result of abnormal function and the effects (including mechanisms of action) of CAM therapies on such abnormal function

and related changes. Research on specific neuromusculoskeletal and non-neuromusculoskeletal conditions thought to respond to CAM therapies, and research on other topics related to primary care is also conducted. Current areas of investigation include clinical and fundamental research related to mechanisms of action of treatments used by CAM practitioners (including studies that use advanced diagnostic imaging, electrophysiologic and biomechanical testing, and other methods), clinical studies of treatment for specific conditions, research exploring neurovisceral and neurosomatic relationships, and anatomic research.

Training and Assessment Center

Nicholas Chancellor, MS, DC — Dean for Institutional Effectiveness

A Training and Assessment Center (TAC) is housed on the second floor of the Howard-Schulze Building on the Illinois campus. It functions independently of, but in concert with, the clinic and academic divisions of the University and provides an additional means to integrate the academic program with the clinical program.

The TAC is a multi-functional center that provides the resources for formal interpersonal and communication skills training, clinical skills development, small group learning, measurement of clinical competence, and individualized environments for students with special testing needs. Students demonstrating diagnostic and therapeutic management procedures as well as clinical reasoning and justification for these procedures are assessed for clinical performance in cognitive, affective, and psychomotor areas of learning.

This 10-room facility is fully equipped for viewing, monitoring, and recording each individual room from a centralized audio-visual control center. A fully equipped digital video recording studio is also housed in the center for clinical performance assessment and for faculty teaching productions as well as for the broadcast of performances and assessments throughout the University and off campus. In addition, the center houses individual computers for pre- and post-session interactions and for delivery of computerized learning programs such as heart sounds simulations.

The University's Comprehensive Standardized Patient (SP) Program is based here. Standardized patients are trained performers and observers with simulated symptoms and complaints. The SPs allow students to interact with them as "real" patients in order to develop students' clinical and communication skills. SPs allow students to practice and learn from them without the responsibility of working with a real patient. This is a very valuable tool for the interim step of a student transitioning from the basic sciences into clinical care.

Courses of the Chiropractic Curriculum

The following course descriptions and credits are effective for students beginning the DC program in the Fall 2018 term or later.

Phase I: Term One		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
AN5101	Spine & Extremities Anatomy	75	0	0	75	5.00
AN5102	Spine & Extremities Anatomy Lab	0	105	0	105	3.50
AN5107	Histology & Embryology I	30	15	0	45	2.50
BC5104	Human Biochemistry	60	30	0	90	5.00
MM5120	Introduction to Palpation Skills and Landmark Identification	0	30	0	30	1.00
FH5106	Fundamentals of Natural Medicine & Historical Perspectives	30	0	0	30	2.00
PH5103	Cellular Physiology & Hematology	45	30	0	75	4.00
Total		240	210	0	450	23.00

Phase I: Term Two

AN5201	Head & Neck Anatomy	45	0	0	45	3.00
AN5202	Head & Neck Anatomy Lab	0	60	0	60	2.00
AN5203	Neuroanatomy	75	15	0	90	5.50
BU5209	Introduction to Business Principles	15	0	0	15	1.00
EM5207	Evaluation & Management of the Chest & Thoracic Spine	30	30	0	60	3.00
MI5205	Fundamentals of Public Health	45	0	0	45	3.00
MM5220	Manipulation of the Thoracic Spine	0	30	0	30	1.00
PA5204	Fundamentals of Pathology	45	0	0	45	3.00
PH5208	Neurophysiology	45	15	0	60	3.50
RA5206	Normal Radiographic Anatomy & Variants	15	15	0	30	1.50
Total		315	165	0	480	26.50

Phase I: Term Three		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
AN5304	Thorax, Abdomen & Pelvic Anatomy	30	0	0	30	2.00
AN5305	Thorax, Abdomen & Pelvic Anatomy Lab	0	60	0	60	2.00
AN5307	Histology & Embryology II	30	15	0	45	2.50
BC5308	Nutritional Biochemistry I	30	0	0	30	2.00
EM5309	Evaluation & Management of the Abdomen, Pelvis & Lumbar Spine	30	30	0	60	3.00
FH5310	Whole Health Concepts & Philosophical Perspectives	15	0	0	15	1.00
MI5303	Medical Microbiology I	68	0	0	68	4.50
MM5320	Manipulation of the Lumbo-Sacral Spine, T/L Junction & Pelvis	0	30	0	30	1.00
PA5302	Systems Pathology I	60	0	0	60	4.00
PH5306	Neuroendocrinology, GI & Reproductive Physiology	60	0	0	60	4.00
Totals		323	135	0	458	26.00

Phase I: Term Four

BC5409	Nutritional Biochemistry II	15	0	0	15	1.00
EM5408	Evaluation & Management of the Head, Neck & Cervical Spine	30	30	0	60	3.00
EP5401	Evidence-Based Practice: Critical Appraisal of the Biomedical Literature	15	0	0	15	1.00
MI5403	Medical Microbiology II	75	0	0	75	5.00
MM5420	Manipulation of the Cervical Spine, CT Junction & First Rib	0	30	0	30	1.00
NN5406	Science of Diet & Nutrition	45	0	0	45	3.00
PA5402	Systems Pathology II	90	0	0	90	6.00
PH5405	Cardiovascular, Respiratory & Renal Physiology	60	30	0	90	5.00
RA5407	Radiation Physics & Technology	15	0	0	15	1.00
Totals		345	90	0	435	26.00

Phase II: Term One		Lecture Clock	Lab Clock	Clinic Clock	Total Clock	Total Credits
EM6103	Evaluation & Management of the GI/GU & Reproductive Systems	60	0	0	60	4.00
EM6104	Evaluation & Management of the Cardiovascular & Respiratory Systems	45	0	0	45	3.00
EM6105	Evaluation & Management of the EENT	45	0	0	45	3.00
EM6106	Evaluation & Management of the Neurological System	45	0	0	45	3.00
EM6112	Evaluation & Management of the Musculoskeletal System I	30	0	0	30	2.00
EM6120	Evaluation & Management of the Extremities	30	60	0	90	4.00
MM6110	Soft Tissue Management	0	15	0	15	0.50
NN6107	Pharmacology I	45	0	0	45	3.00
NN6108	Botanical Medicine I	45	0	0	45	3.00
RA6109	Fundamentals of Imaging: Arthritides & Trauma	30	15	0	45	2.50
Totals		375	90	0	465	28.00

Phase II: Term Two

BU6201	Principles of Marketing & Communication	30	0	0	30	2.00
EM6202	Physical Diagnosis	45	45	0	90	4.50
EM6203	Clinical Laboratory Diagnosis	45	0	0	45	3.00
EM6207	Pediatrics, Geriatrics & Female Health Issues	45	0	0	45	3.00
EM6210	The Clinical Encounter	15	15	0	30	1.50
EM6212	Evaluation & Management of the Musculoskeletal System II	30	0	0	30	2.00
EM6213	Phlebotomy & Specimen Collection	0	15	0	15	0.50
FR6204	Functional Rehabilitation I: Introduction to Therapeutic Exercise & Spinal Rehabilitation	30	30	0	60	3.00
MM6208	Orthopedic Musculoskeletal Imaging	15	0	0	15	1.00
MM6220	Advanced Manual Therapy Techniques I	0	45	0	45	1.50
MM6221	Diversified Technique	15	0	0	15	1.00
NN6206	Pharmacology II	45	0	0	45	3.00
RA6205	Fundamentals of Imaging: Skeletal Dysplasia, Tumors, Endocrine, & Hematopoietic Disorders	30	15	0	45	2.50
Totals		345	165	0	510	28.50

Phase II: Term Three		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
BU6306	Business Planning	30	0	0	30	2.00
EC6303	Ambulatory Trauma Care	15	15	0	30	1.50
EM6304	Advanced Diagnosis & Problem Solving	0	60	0	60	2.00
EM6305	Psychopathology & Health Psychology	45	0	0	45	3.00
EP6310	Evidence-Based Practice: Applied EBP	15	0	0	15	1.00
FR6307	Physiological Therapeutics: Modalities	60	15	0	75	4.50
FR6309	Functional Rehabilitation II: Extremity Rehabilitation	30	30	0	60	3.00
MM6320	End Range Loading & Flexion/Distracton Technique	0	30	0	30	1.00
NN6301	Clinical Nutrition	60	0	0	60	4.00
NN6308	Botanical Medicine II	60	0	0	60	4.00
RA6302	Fundamentals of Imaging: Chest & Abdomen	30	15	0	45	2.50
Totals		345	165	0	510	28.50

Phase II: Term Four

BU6404	Ethical Management of the Chiropractic Practice	45	0	0	45	3.00
BU6407	Risk Management & Legal Issues	15	0	0	15	1.00
EM6403	Clinical Natural Medicine	30	0	0	30	2.00
EM6405	Doctor-Patient Relationship	30	0	0	30	2.00
EM6406	Dermatology	15	15	0	30	1.50
EP6410	Evidence-Based Practice: Journal Club	8	0	0	8	0.50
FR6412	Sports Medicine	30	0	0	30	2.00
IC7000	Clinic Internship I	0	0	330	330	11.00
MM6420	Advanced Manual Therapy Techniques II	0	15	0	15	0.50
MM6421	Comparative Techniques & Listing Systems	15	0	0	15	1.00
RA6408	Report Writing & Advanced Imaging	0	30	0	30	1.00
RA6409	Radiographic Positioning & Radiology Management	15	30	0	45	2.00
Totals		203	90	330	623	27.50

Phase III: Term One		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
IC7100	Clinic Internship II	0	0	525	525	17.00
Total		0	0	525	525	17.00
Phase III: Term Two						
IC7200	Clinic Internship III	0	0	525	525	17.00
Total		0	0	525	525	17.00
Grand Total		2490	1110	1380	4980	248.00

Note: this document reflects the current courses and credit hours in the Doctor of Chiropractic Medicine curriculum. However, the University reserves the right to make changes as required and may have modified the curriculum since the publication of this material. The most up-to-date information can be found on the University's website at www.nuhs.edu.

AN5203 **Neuroanatomy** **Credits 5.5**

The purpose of this course is to study the structures of the brain, spinal cord, and autonomic nervous system (ANS), and their functions. The structures of the brain, spinal cord, and ANS, and their functions will be introduced to students through the following methods: lectures, group activities, self-directed learning, readings, and laboratory participation. The functions of these structures will be emphasized and their relevancy to clinical practice will be demonstrated through the use of patient paper cases and problems.

Prerequisite: AN5107

Corequisites: AN5201, AN5202, PH5208

AN5304 **Thorax, Abdomen & Pelvic Anatomy** **Credits 2.0**

Students will study, in lecture and group formats, the normal structure and function of the organ systems associated with the thorax, abdomen, and pelvis. Specifically, this course will cover the gross anatomy of the respiratory, cardiovascular, gastrointestinal, reproductive, and urinary systems. Laboratory exercises will help guide students toward understanding the anatomical concepts associated with these systems. In addition, students will interrelate their anatomical knowledge with the Histology and Embryology II course.

Prerequisites: AN5201, AN5202, AN5203

Corequisites: AN5305, AN5307

AN5305 **Thorax, Abdomen & Pelvic Anatomy Lab** **Credits 2.0**

Students will study, in laboratory format, the normal structure and function of the organ systems associated with the thorax, abdomen, and pelvis. Specifically, this course will cover the gross anatomy of the respiratory, cardiovascular, gastrointestinal, reproductive, and urinary systems. Laboratory exercises will help guide students toward understanding the anatomical concepts associated with these systems. In addition, students will interrelate their anatomical knowledge with the Histology and Embryology II course.

Corequisites: AN5304, AN5307

AN5307 **Histology & Embryology II** **Credits 2.5**

In coordination with the corequisite gross anatomy course, students will learn the developmental anatomy and histology of the main systems of the chest, abdomen, and pelvis in this course.

Prerequisite: AN5107

Corequisites: AN5304, AN5305

BC5104 **Human Biochemistry** **Credits 5.0**

The structure and functions of proteins, carbohydrates, lipids, and their reactions in metabolic pathways are investigated.

Prerequisite / Corequisite: None

BC5308 **Nutritional Biochemistry I** **Credits 2.0**

Water soluble and fat soluble vitamins and vitamin-like nutrients (choline, lipoic acid, L-carnitine, ubiquinone, and flavonoids) will be studied with an emphasis on their absorption, transport, excretion and biochemical involvement within human metabolic pathways involving normal physiology and pathophysiology.

Prerequisites: BC5104

BC5409 **Nutritional Biochemistry II** **Credits 1.0**

Minerals, fatty acids and fiber will be studied with an emphasis on their absorption, transport, excretion and biochemical involvement within human metabolic pathways involving normal physiology and pathophysiology. Biochemical interactions regarding nutrigenomics will also be discussed.

Prerequisites: BC5308

BU5209 Introduction to Business Principles Credits 1.0

The purpose of this course, the first part of the comprehensive course in the Ethical Practice Management Program, is to introduce certain practical issues that students will encounter in the future to help prepare them for the rigors and realities of their chiropractic practices.

Prerequisite: None

BU6201 Principles of Marketing & Communication Credits 2.0

The main emphasis of BU6201 addresses several areas of practice that are essential for the health care practitioner to know, understand, and utilize. Concentration is on the following topics: ethically and effectively marketing and promoting a health care practice; developing effective written, verbal, and electronic communication skills; addressing Risk Management issues including boundaries; and discussion of protective strategies.

Prerequisite: Completion of Phase I

BU6306 Business Planning Credits 2.0

This course focuses on preparing students to create a functional business plan for their future practices. Experts from the business field discuss the necessary elements and give direction to students to assist in the development of their business plans.

Prerequisite: BU6201

BU6404 Ethical Management of the Chiropractic Practice Credits 3.0

This course is a continuation of the Ethical Practice Management Program. This course comprehensively examines and discusses many different practice topics and situations that the new doctor will shortly encounter. Also, each student will submit their business plan to a local banker who will evaluate it. The banker will then interview the student to give feedback and possibly suggest revisions to make the plan more useful to the student in their future practice. A business plan that is considered acceptable to the banker is a requisite to begin the Clinical Internship.

Prerequisite: BU6306

BU6407 Risk Management & Legal Issues Credits 1.0

The purpose of this course is to study the rights, privileges, duties, and obligations of the chiropractic physician in the general practice of chiropractic. Emphasis is placed on understanding liabilities, malpractice and risk management, giving testimony, report writing, and documentation. Common aspects of business law are also discussed as related to leases, licenses, and advertising. Also discussed is mandatory reporting as it pertains to child/elder abuse as well as the reporting requirement for infectious disease. Throughout the course, specific ethical issues are discussed as they relate to topics.

Prerequisite: Completion of Phase I

EC6303 Ambulatory Trauma Care Credits 1.5

This course places emphasis on the practical application of emergency care procedures that can be employed in a primary care clinic setting if required. This course provides instruction in open and closed wound management techniques that encompass sterile procedures, the application methods of roller bandages, and suturing techniques. To receive a passing grade in this course, students must show current CPR certification from the American Heart Association, BLS for Health Care Providers.

Prerequisite: Completion of Phase I

EM5207 Evaluation & Management of the Chest & Thoracic Spine Credits 3.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage the chest and thoracic spine. Students will learn methods for obtaining a history specific to the chest and thoracic spine, as well as examination skills for these areas. Skills covered in the course will include, but are not limited to, taking vitals, inspection, joint and soft tissue palpation, auscultation, percussion, range of motion, orthopedic evaluation, and basic neurological examinations. The clinical presentation of normal anatomy, biomechanics, and physiology will be emphasized, along with an introduction to the evaluation and management of uncomplicated common conditions. This course will integrate basic concepts in (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of

health, and (iv) lifestyle counseling involving the chest and thoracic spine. Teaching methods will include lectures, demonstrations, and skills laboratories that focus on skills development and clinical reasoning.

This is the student's first Evaluation and Management course. It will lay the foundation for other Evaluation and Management courses by teaching concepts related to (i) the patient interview, examination and management process; (ii) joint and soft tissue evaluation; and (iii) the doctor-patient relationship.

Prerequisites: AN5101, AN5102, FH5106

Corequisite: MM5220

EM5309 Evaluation & Management of the Abdomen, Pelvis, and Lumbar Spine Credits 3.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage the abdomen, pelvis, and lumbar spine. Students will learn methods for obtaining a history specific to the abdomen, pelvis, and lumbar spine, as well as examination skills for these areas. Skills covered in the course will include, but are not limited to, inspection, joint and soft tissue palpation, auscultation, percussion, range of motion, orthopedic evaluation, and basic neurological examinations. This course will teach treatments applicable to the abdomen, pelvis, and lumbar spine such as joint and soft tissue manipulation. The clinical presentation of normal anatomy, biomechanics, and physiology will be emphasized, along with an introduction to the evaluation and management of uncomplicated common conditions. This course will integrate basic concepts in (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of health, and (iv) lifestyle counseling involving the abdomen, pelvis and lumbar spine. Teaching methods will include lectures, demonstrations, skills laboratories, and problem-based large group discussions that focus on skills development and clinical reasoning.

Prerequisite: EM5207

EM5408 Evaluation & Management of the Head, Neck & Cervical Spine Credits 3.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage select conditions of the head, neck, and cervical spine. The clinical presentation of normal anatomy, biomechanics, and physiology will be emphasized, along with an introduction to the concepts of (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of health, and (iv) lifestyle counseling as it relates to the evaluation and management of uncomplicated conditions affecting the head, neck, and cervical spine. Students will reinforce their skills of the standard historical methods learned in EM5207 as well as learn the examination methods required to gather pertinent patient information regarding the head, neck and cervical spine in a professional and reliable manner. The course is structured to include instruction via two distinct methods: classroom lectures as well as clinical skills practicums. The clinical skills practicum portion of the course is distinctively further divided into an evaluation as well as management portion. Overall the teaching methods of the course will include lectures, demonstrations, skills laboratories, simulated patient encounters, small group work, and problem-based large group discussion that focus on clinical/motor skills development.

Prerequisites: AN5201, AN5202, EM5309

Corequisite: MM5420

EM6103 Evaluation & Management of the GI/GU & Reproductive Systems Credits 4.0

This course focuses on the clinical manifestations of disorders of the gastrointestinal, genitourinary and female reproductive systems. The emphasis is on the etiology, presentation, diagnostic identification, management, and prevention of system conditions. Learning is driven by class lectures, case-based learning, and self-directed small group assignments. Diagnostic evaluation includes appropriate laboratory testing, special testing, and imaging. Management of system disorders includes the study of clinical aspects of nutritional therapy to include diet modification, botanical medicine, manipulation, and physiological therapeutics.

Prerequisite: Completion of Phase I

EM6104 Evaluation & Management of the Cardiovascular & Respiratory Systems Credits 3.0

This course focuses on the differential diagnosis and management of common disorders of the cardiopulmonary system. Students are expected to develop skills in history collection, physical examination, laboratory evaluation, critical thinking, and differential evaluation. In addition to history taking and the physical exam, diagnosis of these conditions will include evaluation of electrocardiograms and various laboratory tests. Students are introduced to the various modalities that are available for the treatment of these disorders. Case presentations include, but are not limited to, disorders such as myocardial infarction, congestive heart failure, chronic obstructive pulmonary disease, peripheral vascular disease, pneumoconiosis, and pneumonia. Management of these conditions will encompass the study of the clinical aspects of nutritional science including diet therapy and botanical medicine, manipulation, physiological therapeutics, and rehabilitation.

Prerequisite: Completion of Phase I

EM6105 Evaluation & Management of the EENT Credits 3.0

This course focuses on the clinical manifestations of disorders of the eyes, ears, nose, and throat. The emphasis is upon the etiology, presentation, diagnostic identification, management, and prevention of these disorders. Diagnostic procedures include laboratory testing, special testing, and appropriate imaging. Management of these conditions will encompass the study of the clinical aspects of nutritional science including diet therapy and botanical medicine, manipulation, physiological therapeutics, and rehabilitation. There is a portion of the course that will address complaints of dizziness and vertigo. The emphasis is upon the etiology, presentation, diagnostic identification, pathophysiology, and on the conservative management of these complaints. Learning will be driven by the class lectures, case-based presentations, and self-directed small group assignments.

Prerequisite: Completion of Phase I

EM6106 Evaluation & Management of the Neurological System Credits 3.0

This course presents a study of the procedures of the neurological history and examination, clinical correlation of neurological findings with other clinical data, an introduction to functional neurology, and the application of manipulation, massage, exercise, and other sensory input in the management of patients with neurological disorders. Methods of instruction include lecture, patient video presentations and clinical cases presented in a large group. Small group and self-directed learning activities outside of class include specific readings about neurological diseases/disorders and written assignments based on the readings.

Prerequisite: Completion of Phase I

EM6112 Evaluation & Management of the Musculoskeletal System I Credits 2.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage disorders of the musculoskeletal system. The clinical presentation of common musculoskeletal conditions will be emphasized, along with an introduction to the management of uncomplicated common conditions. This course will integrate basic concepts in (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of health, and (iv) lifestyle counseling involving the musculoskeletal system. Teaching methods will include lectures, and problem-based large group discussions that focus on skills development and clinical reasoning.

Prerequisites: AN5201, AN5202, EM5309

EM6120 Evaluation & Management of the Extremities Credits 4.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage the upper and lower extremities. Students will learn methods for obtaining a history specific to the extremities, as well as examination skills for this area. Skills covered in the course will include, but are not limited to, inspection, joint and soft tissue palpation, range of motion, orthopedic evaluation, and basic neurological examinations. This course will teach treatments applicable to the extremities, such as joint and soft tissue manipulation. The clinical presentation of normal anatomy, biomechanics, and physiology will be emphasized, along with an introduction to the evaluation and management of uncomplicated common conditions. This course will integrate basic concepts in (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of health, and (iv) lifestyle counseling involving the extremities.

EM6213 **Phlebotomy and Special Collections Lab** **Credits 0.5**

The primary objective of this course is for students to learn the skill of phlebotomy, and to introduce students to the collection and handling of laboratory specimens including throat culture, quick strep test, urinalysis, and capillary glucose testing.

Prerequisites: EM6212

EM6304 **Advanced Diagnosis & Problem Solving** **Credits 2.0**

The primary objective of this course is to give students an opportunity to master the diagnostic skills, and the associated psychomotor skills used in a broad-based conservative care (primary health care) setting. The laboratory portion of this course will use simulated patients to help students synthesize and refine their history taking, examination, and diagnostic skills. Emphasis will be placed on the doctor-patient relationship, including appropriate ethical boundaries and effective communication skills. Students will also practice record keeping skills, including the preparation of SOAP notes. This course will require students to perform male and female sensitive exams (breast and pelvic) on standardized patients.

Prerequisites: Completion of Phase I, EM6202

EM6305 **Psychopathology & Health Psychology** **Credits 3.0**

This course includes:

(i) review and discussion of the major topics in health psychology including examination of the relationships of psychopathology, lifestyle and personal relationships to physical health. Topics include risk factors and treatments for physical disorders such as cardiovascular disease, cancer and chronic pain as well as the exploration of the co-morbidity of physical and psychological disorders.

(ii) an examination of diagnoses across the basic categories of psychopathology (depression, anxiety, somatoform, substance use disorders, sleep disorders, eating disorders, sexual dysfunction, cognitive disorders, and psychosis) with emphasis on etiology, screening, diagnosis, and management in a primary care setting. Students are asked to review current theories and their implication for practice.

There are three hours of lecture presentation per week on the topics of psychopathology and health psychology. Self-directed learning is organized around additional material available through the course website and may include cases, articles, on-line presentations, etc.

Prerequisite: Completion of Phase I

EM6403 **Clinical Natural Medicine** **Credits 2.0**

The primary objective of this course is to give students an opportunity to synthesize and apply the basic and clinical science knowledge they have encountered through a broad-based conservative care (primary health care) framework. Students will apply a comprehensive skill set, including mechano-biology, manual therapies, nutritional aspects of care, functional rehabilitation, and exercise prescription, and the application of physiological, biochemical, and pharmacological therapeutic modalities, through case reviews and application of current research and findings.

Students will be presented with a variety of case studies and will derive appropriate diagnoses and treatment plans. Students will then justify their treatment plans and protocols in terms of basic and clinical science concepts as well as emerging research in an oral presentation. Patient management within the whole health oriented paradigm will be emphasized as well as the use of emerging theories and research in clinical practice. This course will be presented through a combination of lecture and online sessions. Group work will be emphasized in this course.

Prerequisites: Completion of Phase I, EM6304, FR6309, FR6307, MM6220, NN6206, NN6301, NN6308

Corequisite: IC7000

EM6405 **Doctor-Patient Relationship** **Credits 2.0**

This course focuses on the practical issues of patient management in practice. Students are asked to explore the literature to broaden their understanding of the issues in the field and then reflect on and actively develop strategies for their relationships with patients and other health care providers. Lecture and discussion topics include: structures in doctor-patient interaction; models of the doctor-patient interaction; doctor-patient boundaries; the impact of the

doctor-patient relationship on health care outcomes; the impact of the doctor-patient relationship on patient satisfaction; culturally-responsive health care; the sociological context of patient suffering; co-creation of the patient's story in a therapeutic relationship; death, dying and palliative health care; management of the abused patient; and the doctor's responsibilities to the community and society. Class time is used to explore doctor-patient relationship issues through lectures, cases, guest presentations, structured interpersonal exercises, article reviews, and discussion.

Prerequisite: EM6210

EM6406 **Dermatology** **Credits 1.5**

This course is designed to help students gain necessary knowledge and build skill in observation and clinical reasoning for the diagnosis and management of common diseases of the skin encountered in a broad-based conservative care (primary health care) setting.

Prerequisite: EM6202

EP5401 **Evidence-Based Practice: Critical Appraisal of the Biomedical Literature** **Credits 1.0**

The focus of this course is research literacy, appraisal of clinical research studies, and the application of the best research evidence to patient care and clinical practice. Students will sharpen their skills recognizing and developing both the research hypothesis and patient-centered clinical questions as well as searching the highest quality and most significant clinical and basic science literature and databases, including complementary and alternative medicine (CAM) specific databases. Students will learn to appraise and analyze the research studies and evaluate the evidence before deciding to apply the best evidence to patient and health care issues. Students will learn to effectively communicate literature reviews, analyses and conclusions in written, oral, and electronic formats to patients, peers, and professionals. Students will develop the skills for effective and efficient information management, research literacy, and evidence-based practice (EBP) habits to accelerate learning and expand basic and clinical science knowledge.

Prerequisite: MI5205

EP6310 **Evidence-Based Practice: Applied Evidence-Based Practice** **Credits 1.0**

Building on skills learned, this course emphasizes the professional application of evidence-based practice (EBP). Applied EBP is emphasized, including questioning, researching, analyzing, and communicating clinically relevant information. Focusing on clinically relevant topics such as headache, neck, thoracic, and low back pain, as well as non-musculoskeletal problems such as asthma, hypertension, etc., students will form appropriate clinical questions and search the research and clinical literature, including complementary and alternative medicine (CAM) databases using limits, MeSH terms, etc. Students will develop and demonstrate the skills to analyze and evaluate the literature, and determine the clinical value and relevance of the evidence. The course will also focus on communication: the presentation of the evidence, analysis, evaluation, and conclusion in written, oral and electronic formats to peers, professionals and patients. Students will develop clinical reasoning, critical thinking, creativity, resourcefulness, and coping skills, using an evidence-based practice approach to professional development and continuing education. CAM professionals will present applied EBP content as guest lecturers at various times during the term.

Prerequisite: Completion of Phase I

Corequisite: EM6304 (or prior successful completion)

EP6410 **Evidence-Based Practice: Journal Club** **Credits 0.5**

This class is an interactive course designed to sharpen the student's Advanced Topics in Spinal Care Advanced Topics in Spinal Care research literacy and evidence-based practice (EBP) skills. Applied EBP is emphasized, including questioning, researching, analyzing, and communicating clinically relevant information. The overall objective of this course is to create sound EBP habits in students preparing to become physicians. Students will research, develop, and present a journal of clinically relevant, important, and applicable research literature to a small group of peers and practicing clinical mentors and professionals, using key evidence-based practice skills (asking, accessing, appraising, applying, and assessing) along with the concepts of critical appraisal of the literature. Emphasis is placed on how the research and clinical literature impacts clinical decisions.

Prerequisite: Completion of Phase II

IC7000**Clinic Internship I****Credits 11.0**

Clinic Internship I, although designated as a laboratory in a curricular sense, marks the advent of the student's practical application of the basic and clinical sciences in a clinical setting. Students will receive close supervision, guidance and instruction in the delivery of health care by licensed clinical personnel, as well as mentoring by senior interns. Students participating in clinical experiences are expected to exhibit clinical competence and professionalism (including knowledge of and strict adherence to confidentiality and privacy policies). Clinic Internship I operations will closely mirror the experiences of Clinic Internship II and III, including but not limited to clinic forms, diagnostic evaluations and therapeutic procedures. In each clinical experience (I, II, III), responsibilities are granted to interns based upon the clinician's assessment that patient care competencies have been mastered. Clinical competencies relating to skills of historical interviewing, medical record documentation, physical examination (general, regional and specialty), laboratory testing (selection, performance and interpretation), evidence-based therapeutics, differential diagnoses development, ethics, professionalism, and interpersonal communication will be assessed (Competencies I-VII).

Prerequisites: Completion of Phase I, EC6303, RA6302, FR6307

Corequisites or Completion: EM6403, RA6408, RA6409

IC7100**Clinic Internship II****Credits 17.0**

Students will further develop skills needed for successful management of patients and their conditions. Students will participate in off-campus rotations to expand their experience and knowledge base. All students will be evaluated for skill development, manipulative technique and case management. Students will participate in Quality Assurance activities to ensure that the patient chart is in compliance with the University's Quality Assurance program. In-service training will be given in personnel issues for the practice, OSHA compliance issues for the private practice office, provisional credentialing of the chiropractic intern, and Medicare issues for the private practice.

Prerequisites: Completion of Phase II, IC7000, American Heart Association BLS for Health Care Professionals with AED CPR certification.

IC7200**Clinic Internship III****Credits 17.0**

Students will further develop skills needed for successful management of patients and their conditions. Off-campus rotations to expand the experience and knowledge base of the student are available for those that qualify. All students will be evaluated for skill development, manipulative technique and case management. Students will participate in Quality Assurance activities to ensure that the patient chart is in compliance with the University's Quality Assurance program.

Prerequisites: IC7100, American Heart Association BLS for Health Care Professionals with AED CPR certification.

Corequisite: Case Defense

**** A listing of the Council on Chiropractic Education (CCE) Clinical Education Meta-Competencies is located at the end of the course descriptions.***

MI5205**Fundamentals of Public Health****Credits 3.0**

The focus of this course is to introduce students to the concepts of public health, health promotion, and disease prevention. Individual, environmental and socio-demographic factors affecting the population's health will be discussed, along with organization of the public health system, health surveys, health policies, and health screening. Research literacy will also be a major focus in this course including searching quality databases, developing effective search strategies, recognizing various study designs, and determining the best evidence that supports various public health and health care topics.

Prerequisite: None

MI5303**Medical Microbiology I****Credits 4.5**

Considered in this course are the infections affecting the nervous system, upper respiratory system, blood and lymphatic system, skeletal system, and integumentary system. The discussion would include microbiologic characteristics, epidemiology, clinical aspects, treatment, and prevention of various pathogens where appropriate public health aspects of these infections would be elaborated upon. In addition, basic and clinical immunology

including immunologic disorders will be discussed in detail. All the content will be discussed in lecture, group, and case-based format.

Prerequisite: MI5205

MI5403 Medical Microbiology II Credits 5.0

Considered in this course are the infections affecting the respiratory, gastrointestinal, reproductive, and urinary systems. The discussion will include microbiologic characteristics, epidemiology, clinical aspects, treatment, and prevention of various pathogens. Where appropriate, public health aspects of these infections will be elaborated upon. All the content will be discussed in lecture, group, and case-based format.

Prerequisite: MI5303

MM5120 Introduction to Palpation Skills & Landmark Identification Credits 1.0

The focus of this laboratory course is to introduce the skills of palpation and identification of osseous and soft tissue structures. We will introduce the concepts of static and motion palpation as well as palpation for trigger points, tender points, spasm, and other pathology. This course provides some basic clinical perspective to build upon the fundamentals introduced in the first trimester anatomy lab.

Prerequisite: None

MM5220 Manipulation of the Thoracic Spine Credits 1.0

This course teaches manipulation of the thoracic spine as an introduction to management of uncomplicated, common thoracic conditions. Teaching methods will include demonstrations, skills laboratories, and problem-based large group discussions that focus on skills development and clinical reasoning. This is the student's first manipulation course. It will lay the foundation for other manipulation courses by teaching concepts related to (i) the patient management process; (ii) spinal manipulation; and (iii) the doctor-patient relationship.

Corequisite: EM5207

MM5320 Manipulation of the Pelvis, Lumbar Spine, T/L Junction Credits 1.0

The primary objective of this course is for students to learn the essential concepts and skills necessary to palpate and manipulate the pelvis and lumbar spine, and the thoracolumbar junction. The clinical presentation of normal anatomy biomechanics will be highly emphasized. Teaching methods will include prelab discussions, demonstrations, and skills laboratories. This course is part of a series or stream of technique courses wherein techniques are sequentially added and skills and competencies are further developed.

Prerequisite: MM5220

MM5420 Manipulation of the Cervical Spine and Cervico-Thoracic Junction Credits 1.0

This course will teach manipulation of the cervical spine as an introduction towards management of uncomplicated, common cervical conditions. Teaching methods will include demonstrations, skills laboratories, and problem-based large group discussions that focus on skills development and clinical reasoning. As the third manipulation course, it assists in building on previous concepts related to (i) the patient management process; (ii) spinal manipulation; and (iii) the doctor-patient relationship.

Prerequisites: AN5101, AN5102, FH5106, MM5220, MM5320

MM6110 Soft Tissue Management Credits 0.5

This laboratory course introduces soft tissue therapies and builds upon brief introductions from previous E&M classes. Techniques for enhancing soft tissue function and reducing pathology are presented.

Prerequisite: Completion of Phase I

MM6208 Orthopedic Musculoskeletal Imaging Credits 1.0

This course will consider the practical application of imaging the orthopedic patient. The course will concentrate on the most common advanced imaging modalities currently used in private practice, relating them to various orthopedic conditions encountered in private practice. The course will review the epidemiology, pathophysiology, natural history, and treatment of various orthopedic conditions, and place a strong emphasis on the imaging

required to evaluate these conditions, assess severity and monitor treatment or provide appropriate referral, when required.

Prerequisites: Completion of Phase I, EM6112, EM6120

MM6220 **Advanced Manual Therapy Techniques I** **Credits 1.5**

This laboratory course presents assessment and treatment procedures for the hip, pelvis, lumbar, and lower thoracic spine regions. The assessment includes orthopedic testing and static and dynamic assessment of joint function. Treatment options for the findings noted during the examination are discussed. Treatment procedures emphasize joint manipulation with management considerations. Integrative methods to treat the spine that include blocking, instrument assisted adjusting, and drop table procedures are incorporated in the course.

Prerequisites: Completion of Phase I, EM6120

MM6221 **Diversified Technique** **Credits 1.0**

This course emphasizes enhancement of fundamental skills, analysis, and technique selection necessary for the chiropractic physician to apply Diversified Technique in the clinical setting in an effective and precise manner. Lecture/lab sessions will be used to demonstrate and individually instruct the students in the proper application of the common as well as less frequently employed diversified techniques that are utilized in special or unique situations. Rationale for adaptations that can be made will be stressed and explained.

MM6320 **End Range Loading & Flexion Distraction Technique** **Credits 1.0**

This laboratory course presents the utilization of the end range loading (MDT) and flexion/distraction manipulative procedures in the management of common clinical presentations.

Prerequisite: MM6220

MM6420 **Advanced Manual Therapy Techniques II** **Credits 0.5**

This laboratory course is a condition-based course on the manual therapy management of the conditions in the cervical, thoracic, lumbar spine, and upper and lower extremities. Additional conditions encountered in chiropractic practice such as colic, restless leg syndrome, TMJ syndrome, otitis media, and essential hypertension will also be included.

Prerequisite: MM6220

MM6421 **Comparative Techniques & Listing Systems** **Credits 1.0**

This course will explore the various listing systems for a functional articular lesion in the application of manual therapies. It will also allow students to communicate with other doctors that utilize listing systems. Scientific and philosophical principles will be employed to illustrate the validity of the various listing systems. Discussions of the rationale of continued use of listing systems will also be discussed.

Prerequisite: Completion of Phase I

NN5406 **Science of Diet & Nutrition** **Credits 3.0**

This course provides a basic understanding of the fundamentals of human nutrition and stresses the essentials of the basis for good nutritional status. It serves as the basic nutrition course that follows the basic science presentation of the macronutrients and the micronutrients presented in the Nutritional Biochemistry course (BC5308). Topics presented in this course include a review of the macronutrients and micronutrients with emphasis on the health properties of each as well as the severe deficiency states for both micronutrients and macronutrients. Digestion, absorption and transport of the nutrients, and consequences of malabsorption care are covered. Energy production, energy balance and weight management are also described. Food habits in the United States and nutrition across the life cycle are discussed in the course. Male and female health, sports and exercise nutrition, enteral and parenteral nutrition procedures as well as an introduction to the science of food preparation and handling are included. An introduction to nutritional status assessment using food frequency questionnaires and diet history is given.

Prerequisite: BC5308

NN6107 **Pharmacology I** **Credits 3.0**

This course provides a basic understanding of the use of drugs in western medicine for the treatment of disease. Topics covered in this course will be descriptions of drug names and classification, general principles of drug action and metabolism that will cover the area of pharmacokinetics and pharmacodynamics. Factors influencing drug action and a discussion of drug safety are addressed. A large part of this course will be a description of the drug actions on body systems including all the major organ systems and the disorders and diseases in each of the systems. Included will be a description of the mechanism of action, major untoward effects, and contraindications for each drug and drug category. Interactions with other drugs and botanicals as well as a description of the nutrients that are depleted by each of the drugs will be covered. Drug actions on infection and immune system regulation as well as chemical dependency and substance abuse will be described. A discussion of poisons and their antidotes is included.

Prerequisite: Completion of Phase I

NN6108 **Botanical Medicine I** **Credits 3.0**

This course presents the fundamentals of herbal science and pharmacognosy. Topics included are herbal terminology, principles of herbal pharmacology and treatment, as well as mechanisms for optimizing safety. Dosage forms and preparations and standardization are covered in detail. Extraction and purification of the active ingredients are explained in the course. Herbal approaches to maintenance of health and treatment of disease as well as the strengthening of organ systems are presented for all the major organ systems of the body and many of the primary care diseases found in each of those organ systems. A major focus in the second half of this course is a description of the Materia Medica for 30 of the common botanical medicines used in western medicine. Active ingredient, part of the plant used, major therapeutic use, untoward effects, contraindications and interactions with drugs, and other botanical medicines are covered in detail.

Prerequisite: Completion of Phase I

NN6206 **Pharmacology II** **Credits 3.0**

The Pharmacology II course will encompass a discussion of first and second level drugs for the common disorders of each organ system and the art of prescribing these medications. The course addresses the development of medical protocols for the patient by the physician using current pharmaceutical agents for the prevention and treatment of disease. Included in the course are discussions of treatment duration as well as dosages and side effects of common drugs. Differences in individual reactions according to CYP450 typology and idiopathic reactions to drugs are stressed. The administration of the drugs including the effects of enteral and parenteral administration as well as depot and subcutaneous routes will be discussed. Drug-drug, drug-herb, and drug-nutrient, as well as drug-food interactions and nutrient depletion by drugs will be addressed. Students will be given the opportunity to develop an appropriate course of treatment for the drugs most often prescribed in the United States. Students will be given case studies and will be expected to develop appropriate protocols and specific medications for patients across the life cycle. Students will be given a description of the scope of license regarding medications of legend and over-the-counter drugs.

Prerequisite: NN6107

NN6301 **Clinical Nutrition** **Credits 4.0**

This course offers a nutritional approach to the prevention and treatment of disease, with an emphasis on maintenance of health and homeostasis and specific disease conditions and their prevention. Nutritional assessment methods are covered in detail and the methods for obtaining a physical exam of nutrition health and means to assess nutritional status are covered. A description of the approach to nutrition counseling and the nutrition counseling session are described. Topics covered are food frequency questionnaires (FFQ), health history and physical exam forms, and food diary and intake forms. The diseases of the major organ systems in the body are covered with the musculoskeletal, joint health, gastrointestinal, and cardiovascular systems covered in depth. Metabolic diseases such as diabetes and thyroid diseases are also described. Liver detoxification, adrenal stress syndrome, and a functional medicine approach to the liver, adrenal, thyroid, and gastrointestinal tract are described. Other diseases covered are central nervous system disease and infectious and dermatological conditions. A discussion of immune up-regulation, glandular products, chelation therapy, and glyconutrients is held. The use of all nutritional therapies, botanical medicines, and other functional medicine approaches to maintenance of health and prevention and treatment of disease are described.

Prerequisite: Completion of Phase I

NN6308 **Botanical Medicine II** **Credits 4.0**

This advanced course will engage the subject of therapeutic herbalism in great detail. The strategies for addressing dysfunction in the organ systems will be outlined. Specific aspects of botanicals will be studied including: constituents, pharmacognosy, specific indications, contraindications, toxicity, and dosing parameters. In the traditional manner, the herbs will be studied according to therapeutic category (nervines, hepatics, anodynes, etc.). Close attention will be paid to the potential for herb-herb and herb-drug interaction. Students will practice compounding and dispensing as part of their clinical rotations, but this course will provide the theoretical information to enable them to do so.

Prerequisite: NN6108

PA5204 **Fundamentals of Pathology** **Credits 3.0**

This course provides an introduction to the basic changes in the morphology of the cells, tissues, and organs in diseased states. Extensive use of visual aids with the latest computer technology helps students to differentiate abnormal from normal, and to correlate the clinical aspects of the alterations. Included also is discussion on general characteristics, classification and differential diagnosis of cysts, benign and malignant tumors, and other neoplastic entities. All content will be discussed in lecture and group activity/discussion format.

Prerequisites: AN5107, PH5103

PA5302 **Systems Pathology I** **Credits 4.0**

Considered in this course are the pathologies peculiar to and characteristic of the various systems of the body. The systems examined are the nervous system, myopathy, neuropathy, bone and joint pathology, immunopathology, hematopathology, and dermatopathology. Each condition is studied from the standpoint of general characteristics, gross and microscopic appearance, and clinical course.

Prerequisite: PA5204

Corequisites: AN5304, AN5305, AN5307

PA5402 **Systems Pathology II** **Credits 6.0**

Considered in this course are the pathologies peculiar to and characteristic of various systems of the body. The systems examined are respiratory, cardiovascular, reproductive and mammary, gastrointestinal (inclusive of liver, gall bladder and pancreas), urinary, and endocrine.

Corequisite: PH5405

Prerequisite: PA5302

PH5103 **Cellular Physiology & Hematology** **Credits 4.0**

In this course, students will review, in a problem-based setting, the basic science concepts related to the physiology of cellular membranes and organelles, along with the integrated functioning of the blood as a tissue. The physiology lab exercises will consist of problem sets and case studies, designed to integrate and apply material and concepts introduced through the accompanying lectures each week.

Corequisite: AN5107

PH5208 **Neurophysiology** **Credits 3.5**

The purpose of this course is to study the neurophysiology of the nervous system. The complex signals created and utilized by the nervous system to control most bodily functions will be studied in depth to gain a better understanding of how the human nervous system functions. Areas of study will include: synaptic transmission; autonomic control; sensory systems including the special senses of vision, hearing, touch, balance (vestibular function), taste and smell; signal integration in the CNS; control of the motor system (including skeletal muscle physiology); and higher cortical functions such as speech, sleep and associational areas of the brain.

Prerequisite: PH5103

Corequisites: AN5201, AN5202, AN5203

CCE CLINICAL EDUCATION META-COMPETENCIES

The CCE Meta-Competencies listed below are defined by the Council on Chiropractic Education and are chiropractic-specific. The six NUHS Academic and Clinical Competencies (see College of Professional Studies Academic Policies, Regulations and Procedures) were adopted by the University to meet the inter-professional needs of the multiple programs in the College of Professional Studies, and also satisfy the requirements laid out in the CCE Meta-Competencies.

A graduate of a CCE-accredited Doctor of Chiropractic Program (DCP) is competent in the areas of:

META-COMPETENCY 1 – ASSESSMENT & DIAGNOSIS

Assessment and diagnosis require developed clinical reasoning skills. Clinical reasoning consists of data gathering and interpretation, hypothesis generation and testing, and critical evaluation of diagnostic strategies. This dynamic process includes the collection and assessment of data through history, physical examination, imaging, laboratory tests, and case-related clinical services.

CURRICULAR OBJECTIVE:

The program prepares students to:

- A. Compile a case-appropriate history that evaluates the patient's health status, including a history of any present illness, systems review, and review of past, family and psychosocial histories for the purpose of constructing a differential diagnosis and directing clinical decision-making.
- B. Determine the need for and availability of external health records.
- C. Perform case-appropriate examinations that include evaluations of body regions and organ systems, including the spine and any subluxation/segmental dysfunction that assist the clinician in developing the diagnosis/es.
- D. Perform and utilize diagnostic studies and consultations when appropriate, inclusive of imaging, clinical laboratory, and specialized testing procedures, to obtain objective clinical data.
- E. Formulate a diagnosis/es supported by information gathered from the history, examination, and diagnostic studies.

OUTCOMES:

Students will be able to:

- 1) Develop a list of differential diagnosis/es and corresponding exams from a case-appropriate health history and review of external health records.
- 2) Identify significant findings that may indicate the need for follow-up through additional examination, application of diagnostic and/or confirmatory tests and tools, and any consultations.
- 3) Generate a problem list with diagnosis/es.

META-COMPETENCY 2 – MANAGEMENT PLAN

Management involves the development, implementation and monitoring of a patient care plan for positively impacting a patient’s health and well-being, including specific healthcare goals and prognoses. It may include case follow-up, referral, and/or collaborative care.

CURRICULAR OBJECTIVE:

The program prepares students to:

- A. Develop a management plan appropriate to the diagnosis/es, the patient’s health status, obstacles to improvement, specific goals, and prognoses, while incorporating patient values and expectations of care.
- B. Determine the need for chiropractic adjustment/manipulation or other forms of passive care.
- C. Determine the need for active care.
- D. Determine the need for changes in patient behavior and activities of daily living.
- E. Determine the need for emergency care, referral, and/or collaborative care.
- F. Provide information to patients of risks, benefits, natural history, and alternatives to care regarding the proposed management plan.
- G. Obtain informed consent.
- H. Monitor patient progress and alter management plans accordingly.
- I. Recognize the point of a patient’s maximum improvement and release the patient from care, or determine rationales for any ongoing care.

OUTCOMES:

Students will be able to:

- 1) Develop an evidence-informed management plan appropriate to the diagnosis, including obstacles to improvement, measurable healthcare goals, prognoses, and target endpoint of care in consideration of bio-psychosocial factors, natural history, and alternatives to care.
- 2) Refer for emergency care and/or collaborative care as appropriate.
- 3) Present a management plan that includes obtaining informed consent.
- 4) Deliver appropriate chiropractic adjustments/manipulations, and/or other forms of passive care as identified in the management plan.
- 5) Implement appropriate active care as identified in the management plan.
- 6) Make recommendations for changes in lifestyle behaviors, activities of daily living, and/or dietary and nutritional habits as appropriate.
- 7) Implement changes to the management plan as new clinical information becomes available.
- 8) Identify maximum improvement and document the endpoint of care or determine rationales for continuing care.

META-COMPETENCY 3 – HEALTH PROMOTION & DISEASE PREVENTION

Health promotion and disease prevention requires an understanding and application of epidemiological principles regarding the nature and identification of health issues in diverse populations and recognition of the impact of biological, chemical, behavioral, structural, psychosocial and environmental factors on general health.

CURRICULAR OBJECTIVE:

The program prepares students to:

- A. Identify appropriate hygiene in a clinical environment.
- B. Explain health risk factors, leading health indicators and public health issues to patients.
- C. Identify public health issues in diverse populations.
- D. Understand their reporting responsibility regarding public health risks and issues.

OUTCOMES:

Students will be able to:

- 1) Manage health risks and public health issues, including reporting, as required.
- 2) Recommend or provide resources (educational, community-based, etc.) and instruction regarding public health issues.
- 3) Address appropriate hygiene practices in the clinical environment.
- 4) Communicate health improvement strategies with other health professionals.

META-COMPETENCY 4 – COMMUNICATION AND RECORD KEEPING

Effective communication includes oral, written and nonverbal skills with appropriate sensitivity, clarity and control for a wide range of healthcare related activities, to include patient care, professional communication, health education, record keeping and reporting.

CURRICULAR OBJECTIVE:

The program prepares students to:

- A. Communicate effectively, accurately, and appropriately, in writing and interpersonally with diverse audiences.
- B. Acknowledge the need for, and apply cultural sensitivity in, communications with patients and others.
- C. Create and maintain accurate, appropriate, and legible records.
- D. Comply with regulatory standards and responsibilities for patient and business records.

OUTCOMES:

The student will be able to:

- 1) Document health risks and management options considering the patient's health care needs and goals.
- 2) Consider the patient's ethnicity, cultural beliefs, and socio-economic status when communicating.
- 3) Generate accurate, concise, appropriate, and legible patient records, narrative reports, and correspondence.
- 4) Safeguard and keep confidential the patient's protected health and financial information.
- 5) Generate patient records that are in compliance with state and federal laws and regulations and applicable/accepted industry standards.

META-COMPETENCY 5 – PROFESSIONAL ETHICS & JURISPRUDENCE

Professionals are expected to comply with the law and exhibit ethical behavior.

CURRICULAR OBJECTIVE:

The program prepares students to:

- A. Apply knowledge of ethical principles and boundaries.
- B. Apply knowledge of applicable health care laws and regulations.
- C. Apply knowledge of expected professional conduct.

OUTCOMES:

The student will be able to:

- 1) Maintain appropriate physical, communication (verbal and non-verbal), and emotional boundaries with patients.
- 2) Maintain professional conduct with patients, peers, staff, and faculty.
- 3) Comply with the ethical and legal dimensions of clinical practice.

META-COMPETENCY 6 – INFORMATION & TECHNOLOGY LITERACY

Information literacy is a set of abilities, including the use of technology, to locate, evaluate, and integrate research and other types of evidence to manage patient care.

CURRICULAR OBJECTIVE:

The program prepares students to:

- A. Locate, critically appraise, and use relevant scientific literature and other evidence.

OUTCOMES:

Students will be able to:

- 1) Use relevant scientific literature and other evidence to inform patient care.

META-COMPETENCY 7 – CHIROPRACTIC ADJUSTMENT/MANIPULATION

Doctors of chiropractic employ the adjustment/manipulation to address joint and neurophysiologic dysfunction. The adjustment/manipulation is a precise procedure requiring the discrimination and identification of dysfunction, interpretation and application of clinical knowledge, and the use of cognitive and psychomotor skills.

CURRICULAR OBJECTIVE:

The program prepares students to:

- A. Assess normal and abnormal structural, neurological, and functional articular relationships.
- B. Evaluate the clinical indications and rationale for selecting a particular chiropractic adjustment/manipulation.
- C. Determine, based on clinical indications and risk factors, the appropriateness of delivering chiropractic adjustment/manipulation.
- D. Demonstrate the knowledge, mechanical principles, and psychomotor skills necessary to safely perform chiropractic adjustment/manipulation.
- E. Assess the patient outcome(s) of the chiropractic adjustment/manipulation.

OUTCOMES:

Students will be able to:

- 1) Identify subluxations/segmental dysfunction of the spine and/or other articulations.
- 2) Analyze and interpret findings indicating the need for chiropractic adjustment/manipulation.
- 3) Identify indications, contraindications, and risk factors for the chiropractic adjustment/manipulation; and, explain the anticipated benefits, potential complications, and effects to patients.
- 4) Apply chiropractic adjustment/manipulation to patients while ensuring patient safety.
- 5) Identify the effects following the chiropractic adjustment/manipulation.

META-COMPETENCY 8 – INTER-PROFESSIONAL EDUCATION

Students have the knowledge, skills, and values necessary to function as part of an inter-professional team to provide patient-centered collaborative care. Inter-professional teamwork may be demonstrated in didactic, clinical, or simulated learning environments.

CURRICULAR OBJECTIVE:

The program prepares students to:

- A. Work with other health professionals to maintain a climate of mutual respect and shared values, placing the interests of patients at the center of inter-professional health care delivery.
- B. Use the knowledge of one's own role and other professions' roles to effectively interact with team members.
- C. Understand different models of inter-professional care, organizational and administrative structures, and the decision-making processes that accompany them.
- D. Understand the principles of team dynamics to perform effectively on an inter-professional team influencing patient-centered care that is safe, timely, efficient, effective, and equitable.
- E. Organize and communicate with patients, families, and healthcare team members to ensure common understanding of information, treatment and care decisions.

OUTCOMES:

Students will be able to:

- 1) Explain their own roles and responsibilities and those of other care providers and how the team works together to provide care.
- 2) Use appropriate team building and collaborative strategies with other members of the healthcare team to support a team approach to patient centered care.

CCE Accreditation Standards – Principles, Processes & Requirements for Accreditation January 2018

Courses of the Naturopathic Curriculum

The following course descriptions and credits are effective for students beginning the ND program in the Fall 2018 term or later.

	Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
Phase I: Term One					
AN5101N Spine & Extremities Anatomy	75	0	0	75	5.00
AN5102N Spine & Extremities Anatomy Lab	0	105	0	105	3.50
AN5107N Histology & Embryology I	30	15	0	45	2.50
BC5104N Human Biochemistry	60	30	0	90	5.00
FH5106N Fundamentals of Natural Medicine & Historical Perspectives	30	0	0	30	2.00
MM5120 Introduction to Palpation Skills and Landmark Identification	0	30	0	30	1.00
NT5110N Foundations of Naturopathic Medicine I	30	0	0	30	2.00
PH5103N Cellular Physiology & Hematology	45	30	0	75	4.00
Total	270	210	0	480	25.00

Phase I: Term Two

AN5201 Head & Neck Anatomy	45	0	0	45	3.00
AN5202 Head & Neck Anatomy Lab	0	60	0	60	2.00
AN5203N Neuroanatomy	75	15	0	90	5.50
EM5207N Evaluation & Management of the Chest & Thoracic Spine	30	30	0	60	3.00
MM5220N Manipulation of the Thoracic Spine	0	30	0	30	1.00
MI5205N Fundamentals of Public Health	45	0	0	45	3.00
NN5212N Homeopathy I	15	0	0	15	1.00
NT5210N Foundations of Naturopathic Medicine II	15	0	0	15	1.00
NT5211N Basic Science Applications: Determinants of Health	22.5	0	0	22.5	1.50
PA5204N Fundamentals of Pathology	45	0	0	45	3.00
PH5208N Neurophysiology	45	15	0	60	3.50
RA5206N Normal Radiographic Anatomy & Variants	15	15	0	30	1.50
Total	352.5	165	0	517.5	29.00

Phase I: Term Three		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
AN5304N	Thorax, Abdomen & Pelvic Anatomy	30	0	0	30	2.00
AN5305N	Thorax, Abdomen & Pelvic Anatomy Lab	0	60	0	60	2.00
AN5307N	Histology & Embryology II	30	15	0	45	2.50
BC5308N	Nutritional Biochemistry I	30	0	0	30	2.00
EM5309N	Evaluation & Management of the Abdomen, Pelvis & Lumbar Spine	30	30	0	60	3.00
MM5320N	Manipulation of the Lumbo-Sacral Spine, the T/L Junction and the Pelvis	0	30	0	30	1.00
MI5303N	Medical Microbiology I	60	0	0	60	4.50
NP5312N	Introduction to Naturopathic Counseling	22.5	0	0	22.5	1.50
PA5302N	Systems Pathology I	60	0	0	60	4.00
PH5306N	Neuroendocrinology, GI & Reproductive Physiology	60	0	0	60	4.00
Totals		323	135	0	458	26.50

Phase I: Term Four

BC5409N	Nutritional Biochemistry II	15	0	0	15	1.00
EM5408N	Evaluation & Management of the Head, Neck & Cervical Spine	30	30	0	60	3.00
MM5420N	Manipulation of the Cervical Spine, the CT Junction and the First Rib	0	30	0	30	1.00
MI5403N	Medical Microbiology II	75	0	0	75	5.00
NN5406N	Science of Diet and Nutrition	45	0	0	45	3.00
PA5402N	Systems Pathology II	90	0	0	90	6.00
PH5405N	Cardiovascular, Respiratory & Renal Physiology	60	30	0	90	5.00
RE5401N	Evidence-Based Practice: Critical Appraisal of the Biomedical Literature	15	0	0	15	1.00
Total		330	90	0	420	25.00

Phase II: Term One		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
EM6103N	Evaluation & Management of the GI/GU & Reproductive Systems	60	0	0	60	4.00
EM6104N	Evaluation & Management of the Cardiovascular & Respiratory Systems	45	0	0	45	3.00
EM6106N	Evaluation & Management of the Neurological System	45	0	0	45	3.00
EM6120N	Evaluation & Management of the Extremities	30	60	0	90	4.00
NN6107N	Pharmacology I	45	0	0	45	3.00
NN6108N	Botanical Medicine I	45	0	0	45	3.00
NN6112N	Homeopathy II	60	0	0	60	4.00
NP6109N	Introduction to Naturopathic Primary Care	45	15	0	60	3.50
NT6110N	Advanced Naturopathic Clinical Theory	15	0	0	15	1.00
NT6111N	Introduction to Traditional World Medicines	30.0	0	0	30.0	2.00
Totals		420	75	0	495	30.50

Phase II: Term Two

BU6201N	Principles of Marketing and Communication	30	0	0	30	2.00
EM6202 N	Physical & Laboratory Diagnosis	45	45	0	90	4.50
EM6203N	Clinical Laboratory Diagnosis	45	0	0	45	3.00
EM6213N	Phlebotomy and Specimen Collection Lab	0	15	0	15	0.50
HY5409N	Hydrotherapy & Traditional Naturopathy	15	30	0	45	2.00
MM6240N	Physical Medicine in Systemic Dysfunction	0	30	0	30	1.00
ND6317N	Clinic Observation	0	0	60	60	2.00
NN6206N	Pharmacology II	45	0	0	45	3.00
NN6212N	Homeopathy III	60	0	0	60	4.00
NT6210N	Applied Naturopathic Clinical Theory	30	0	0	30	2.00
RA6207N	Imaging Diagnosis	30	0	0	30	2.00
Totals		300	120	60	480	26.00

Phase II: Term Three		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
BU6306N	Business Planning	30	0	0	30	2.00
EM6304N	Advanced Diagnosis & Problem Solving	0	60	0	60	2.00
EM6305N	Psychopathology & Health Psychology	45	0	0	45	3.00
FR6307N	Physiological Therapeutics: Modalities	60	15	0	75	4.50
ND6315N	Hydrotherapy Clinical Rotation	0	0	30	30	1.00
NN6301N	Clinical Nutrition	60	0	0	60	4.00
NN6308N	Botanical Medicine II	60	0	0	60	4.00
NN6312N	Homeopathy IV	60	0	0	60	4.00
NX6215N	Clinical Endocrinology	30	0	0	30	2.00
NX6216N	Functional Laboratory & Point of Care Testing	0	15	0	15	0.50
Totals		345	90	30	465	27.00

Phase II: Term Four						
EM6405	Doctor-Patient Relationship	30	0	0	30	2.00
EM6406N	Dermatology	15	15	0	30	1.50
ND6410N	Internship I	0	0	270	270	9.00
NN6401N	Pharmacotherapeutics (Online)	7.5	0	0	7.5	0.50
NN6402N	Intravenous therapeutics	15	0	0	15	1.00
NN6412N	Botanical Medicine III: Advanced Naturopathic Botanical Prescribing	30	0	0	30	2.00
NN6416N	Advanced Nutrition: Functional Medicine	30	0	0	30	2.00
NP6415N	Advanced Topics in Women's Health	15	0	0	15	1.00
NP6417N	Internal Medicine / Emergency Medicine	67.5	0	0	67.5	4.50
NP6418N	Naturopathic Management of Special Populations	15	0	0	15	1.00
Totals		225	15	270	510	24.50

Phase III: Term One		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
NB6413N	ND Practice Management: Jurisprudence	30	0	0	30	2.00
ND7111N	Internship II – A	0	0	285	285	9.50
ND7112N	Internship II – B	0	0	195	195	6.50
NN7109N	Botanical Medicine IV: Advanced Materia Medica	15	0	0	15	1.00
NP6419N	Environmental Medicine / Toxicology / Detoxification	15	0	0	15	1.00
NP7419N	Pediatrics	30	0	0	30	2.00
ST7107N	Minor Surgery	15	15	0	30	1.50
Totals		105	15	480	600	23.50
Phase III: Term Two						
ND7211N	Internship III - A	0	0	255	255	8.50
ND7212N	Internship III - B	0	0	165	165	5.50
Totals		0	0	420	420	14.00
Grand Total		2662.5	930	1260	4852.5	251.00

Note: This document reflects the current courses and credit hours in the Doctor of Naturopathic Medicine curriculum. However, the University reserves the right to make changes as required and may have modified the curriculum since the publication of this material. The most up-to-date information can be found in the Bulletin on the University's website at www.nuhs.edu.

Courses Needed for NPLEX Acupuncture Add-on Exam

Students in the naturopathic medicine program who plan to sit for the NPLEX (Naturopathic Physicians Licensing Examination) may take coursework at NUHS in order to qualify for the optional NPLEX acupuncture exam. NPLEX itself is required for licensure but the acupuncture component is an add-on only required by some jurisdictions. Students are strongly advised to check www.nabne.org regarding jurisdictions that require the acupuncture add-on, as well as check with the jurisdictional licensing bodies themselves.

Students who may want to take the NPLEX acupuncture add-on must consult with the Assistant Dean, Naturopathic Medicine.

AN5203N **Neuroanatomy** **Credits 5.5**

The purpose of this course is to study the structures of the brain, spinal cord and autonomic nervous system (ANS) and their functions. The structures of the brain, spinal cord and ANS, and their functions, will be introduced to students through the following methods: lectures, group activities, self-directed learning, readings, and laboratory participation. The functions of these structures will be emphasized and their relevancy to clinical practice will be demonstrated through the use of patient paper cases and problems.

Prerequisite: AN5107N

Corequisites: AN5201N, PH5208N

AN5304N **Thorax, Abdomen & Pelvic Anatomy** **Credits 2.0**

Students will study, in lecture and group formats, the normal structure and function of the organ systems associated with the thorax, abdomen, and pelvis. Specifically, this course will cover the gross anatomy of the respiratory, cardiovascular, gastrointestinal, reproductive, and urinary systems. Laboratory exercises will help guide students toward understanding the anatomical concepts associated with these systems. In addition, students will interrelate their anatomical knowledge with the Histology and Embryology II course.

Prerequisites: AN5201N, AN5202N, AN5203N

Corequisites: AN5305N, AN5307N

AN5305N **Thorax, Abdomen & Pelvic Anatomy Lab** **Credits 2.0**

Students will study, in laboratory format, the normal structure and function of the organ systems associated with the thorax, abdomen and pelvis. Specifically, this course will cover the gross anatomy of the respiratory, cardiovascular, gastrointestinal, reproductive, and urinary systems. Laboratory exercises will help guide students toward understanding the anatomical concepts associated with these systems. In addition, students will interrelate their anatomical knowledge with the Histology and Embryology II course.

Corequisites: AN5304N, AN5307N

AN5307N **Histology & Embryology II** **Credits 2.5**

In coordination with the corequisite gross anatomy course, students will learn the developmental anatomy and histology of the main systems of the chest, abdomen, and pelvis in this course.

Prerequisite: AN5107N

Corequisites: AN5304N, AN5305N

BC5104N **Human Biochemistry** **Credits 5.0**

The structure and functions of proteins, carbohydrates, lipids, and their reactions in metabolic pathways are investigated.

Prerequisite / Corequisite: None

BC5308N **Nutritional Biochemistry I** **Credits 2.0**

Vitamins and minerals will be studied with an emphasis on their digestion, absorption, transport, and biochemical involvement within human metabolic pathways and physiology.

Prerequisites: BC5104N

BC5409N **Nutritional Biochemistry II** **Credits 1.0**

This course will cover the digestion, absorption, transport, and biochemical involvement within human pathways and physiology of fatty acids, fiber, carnitine, ubiquinone, lipoic acid, flavonoids, prebiotics, and probiotics. Biochemical interactions in regard to the microbiome and nutrigenomics will also be discussed.

Prerequisites: BC5308N

BU6201N Principles of Marketing & Communication Credits 2.0

The main emphasis of BU6201N addresses several areas of practice that are essential for the health care practitioner to know, understand, and utilize. Concentration is on the following topics: ethically and effectively marketing and promoting a health care practice; developing effective written, verbal, and electronic communication skills; addressing Risk Management issues including boundaries; and discussion of protective strategies.

Prerequisite: Completion of Phase I

BU6306N Business Planning Credits 2.0

This course focuses on preparing students to create a functional business plan for their future practices. Experts from the business field discuss the necessary elements and give direction to students to assist in the development of their business plans.

Prerequisite: BU6201N

EM5207N Evaluation & Management of the Chest & Thoracic Spine Credits 3.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage the chest and thoracic spine. Students will learn methods for obtaining a history specific to the chest and thoracic spine, as well as examination skills for these areas. Skills covered in the course will include, but are not limited to, taking vitals, inspection, joint and soft tissue palpation, auscultation, percussion, range of motion, orthopedic evaluation, and basic neurological examinations. The clinical presentation of normal anatomy biomechanics and physiology will be emphasized, along with an introduction to the evaluation and management of uncomplicated common conditions. This course will integrate basic concepts in (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of health, and (iv) lifestyle counseling involving the chest and thoracic spine. Teaching methods will include lectures, demonstrations, and skills laboratories that focus on skills development and clinical reasoning.

This is the student's first Evaluation and Management course. It will lay the foundation for other Evaluation and Management courses by teaching concepts related to (i) the patient interview, examination and management process; (ii) joint and soft tissue evaluation; and (iii) the doctor-patient relationship.

Prerequisites: AN5101N, AN5102N, FH5106N

Corequisite: MM5220N

EM5309N Evaluation & Management of the Abdomen, Pelvis, & Lumbar Spine Credits 3.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage the abdomen, pelvis, and lumbar spine. Students will learn methods for obtaining a history specific to the abdomen, pelvis, and lumbar spine, as well as examination skills for these areas. Skills covered in the course will include, but are not limited to, inspection, joint and soft tissue palpation, auscultation, percussion, range of motion, orthopedic evaluation, and basic neurological examinations. This course will teach treatments applicable to the abdomen, pelvis, and lumbar spine such as joint and soft tissue manipulation. The clinical presentation of normal anatomy, biomechanics, and physiology will be emphasized, along with an introduction to the evaluation and management of uncomplicated common conditions. This course will integrate basic concepts in (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of health, and (iv) lifestyle counseling involving the abdomen, pelvis, and lumbar spine. Teaching methods will include lectures, demonstrations, skills laboratories, and problem-based large group discussions that focus on skills development and clinical reasoning.

Prerequisite: EM5207N

EM5408N Evaluation & Management of the Head, Neck, & Cervical Spine Credits 3.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage select conditions of the head, neck, and cervical spine. The clinical presentation of normal anatomy, biomechanics, and physiology will be emphasized, along with an introduction to the concepts of (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of health, and (iv) lifestyle counseling as it relates to the evaluation and management of uncomplicated conditions affecting the head, neck, and cervical spine. Students will reinforce their skills of the

standard historical methods learned in EM5207N as well as learn the examination methods required to gather pertinent patient information regarding the head, neck, and cervical spine in a professional and reliable manner. The course is structured to include instruction via two distinct methods: classroom lectures as well as clinical skills practicums. The clinical skills practicum portion of the course is distinctively further divided into an evaluation as well as management portion. Overall the teaching methods of the course will include lectures, demonstrations, skills laboratories, simulated patient encounters, small group work, and problem-based large group discussion that focuses on clinical/motor skills development.

Prerequisites: AN5201N, AN5202N, EM5309N

Corequisite: MM5420N

EM6103N Evaluation & Management of the GI/GU & Reproductive Systems Credits 4.0

This course focuses on the clinical manifestations of disorders of the gastrointestinal, genitourinary, and female reproductive systems. The emphasis is on the etiology, presentation, diagnostic identification, management, and prevention of system conditions. Learning is driven by class lectures, case-based learning, and self-directed small group assignments. Diagnostic evaluation includes appropriate laboratory testing, special testing, and imaging. Management of system disorders includes the study of clinical aspects of nutritional therapy to include diet modification, botanical medicine, manipulation, and physical therapeutics.

Prerequisite: Completion of Phase I

EM6104N Evaluation & Management of the Cardiovascular & Respiratory Systems Credits 3.0

This course focuses on the differential diagnosis and management of common disorders of the cardiopulmonary system. Students are expected to develop skills in history collection, physical examination, laboratory evaluation, critical thinking, and differential evaluation. In addition to history taking and the physical exam, diagnosis of these conditions will include evaluation of electrocardiograms and various laboratory tests. Students are introduced to the various modalities that are available for the treatment of these disorders. Case presentations include, but are not limited to, disorders such as myocardial infarction, congestive heart failure, chronic obstructive pulmonary disease, peripheral vascular disease, pneumoconiosis, and pneumonia. Management of these conditions will encompass the study of the clinical aspects of nutritional science including diet therapy and botanical medicine, manipulation, physiologic therapeutics, and rehabilitation.

Prerequisite: Completion of Phase I

EM6106N Evaluation & Management of the Neurological System Credits 3.0

This course presents a study of the procedures of the neurological history and examination, clinical correlation of neurological findings with other clinical data, an introduction to functional neurology, and the application of manipulation, massage, exercise, and other sensory input in the management of patients with neurological disorders. Methods of instruction include lecture, patient video presentations, and clinical cases presented in a large group. Small group and self-directed learning activities outside of class include specific readings about neurological diseases/disorders and written assignments based on the readings.

Prerequisite: Completion of Phase I

EM6120N Evaluation & Management of the Extremities Credits 4.0

The primary objective of this course is for students to learn the basic concepts and skills necessary for a broad-based conservative care (primary health care) physician to evaluate and manage the upper and lower extremities. Students will learn methods for obtaining a history specific to the extremities, as well as examination skills for this area. Skills covered in the course will include, but are not limited to, inspection, joint and soft tissue palpation, range of motion, orthopedic evaluation, and basic neurological examinations. This course will teach treatments applicable to the extremities, such as joint and soft tissue manipulation. The clinical presentation of normal anatomy, biomechanics, and physiology will be emphasized, along with an introduction to the evaluation and management of uncomplicated common conditions. This course will integrate basic concepts in (i) preventive medicine, (ii) biochemical and nutritional foundations of health, (iii) determinants of health, and (iv) lifestyle counseling involving the extremities. Teaching methods will include lectures, demonstrations, skills laboratories, and problem-based large group discussions that focus on skills development and clinical reasoning.

Prerequisite: Completion of Phase I

EM6202N **Physical Diagnosis** **Credits 4.5**

The primary objective of this course is for students to reinforce history taking and physical diagnostic skills taught in prior Evaluation and Management courses. These physical skills are reinforced in this course with an emphasis placed on interpretation of findings on a wide range of conditions. The context of this course will be a broad-based conservative care (primary health care) setting. The course's laboratory activities will require students to perform a comprehensive (head-to-toe) physical examination, individual regional exams, and a region-based musculoskeletal exam using skills introduced prior. Lectures will emphasize correlation of physical finding and interpretation.

Prerequisites: Completion of Phase I, EM6103N, EM6104N, EM6105N, EM6106N, EM6120N

EM6203N **Clinical Laboratory Diagnosis** **Credits 3.0**

The primary objective of this course is for students to learn laboratory diagnostic skills. This course will include comprehensive instruction about the laboratory testing process, including indications, the collection and preparation of samples, the interpretation and evaluation of laboratory test results, and associated record keeping techniques. The context of this course will be a broad-based conservative care (primary health care) setting. The course will include commonly run profiles of hematology, chemistries, urinalysis, fecal and sputum studies.

Prerequisites: EM6103N, EM6104N, EM6105N, EM6106N, NP6109N

EM6213N **Phlebotomy and Special Collections Lab** **Credits 0.5**

The primary objective of this course is for students to learn the skill of phlebotomy, and to introduce students to the collection and handling of laboratory specimens including throat culture, quick strep test, urinalysis, and capillary glucose testing.

Prerequisites: EM6212N

EM6304N **Advanced Diagnosis and Problem Solving** **Credits 2.0**

The primary objective of this course is to give students an opportunity to master the diagnostic skills, and the associated psychomotor skills used in a broad-based conservative care (primary health care) setting. The laboratory portion of this course will use simulated patients to help students synthesize and refine their history taking, examination, and diagnostic skills. Emphasis will be placed on the doctor-patient relationship, including appropriate ethical boundaries and effective communication skills. Students will also practice record keeping skills, including the preparation of SOAP notes. This laboratory will require students to perform male and female sensitive exams on standardized patients.

Prerequisites: Phase I, EM6202N

EM6305N **Psychopathology & Health Psychology** **Credits 3.0**

This course includes:

(i) review and discussion of the major topics in health psychology including examination of the relationships of psychopathology, lifestyle and personal relationships to physical health. Topics include risk factors and treatments for physical disorders such as cardiovascular disease, cancer and chronic pain as well as the exploration of the co-morbidity of physical and psychological disorders.

(ii) an examination of diagnoses across the basic categories of psychopathology (depression, anxiety, somatoform, substance use disorders, sleep disorders, eating disorders, sexual dysfunction, cognitive disorders, and psychosis) with emphasis on etiology, screening, diagnosis, and management in a primary care setting. Students are asked to review current theories and their implication for practice.

There are three hours of lecture presentation per week on the topics of psychopathology and health psychology. Self-directed learning is organized around additional material available through the course website and may include cases, articles, on-line presentations, etc.

Prerequisites: Completion of Phase I, EM5207N, EM5309N, EM5408N, EM6103N, EM6104N, EM6120N, NP6109N

EM6405N **Doctor-Patient Relationship** **Credits 2.0**

This course focuses on the practical issues of patient management in practice. Students are asked to explore the literature to broaden their understanding of the issues in the field and then reflect on and actively develop strategies for their relationships with patients and other health care providers. Lecture and discussion topics include: structures in doctor-patient interaction; models of the doctor-patient interaction; doctor-patient boundaries; the impact of the doctor-patient relationship on health care outcomes; the impact of the doctor-patient relationship on patient satisfaction; culturally-responsive health care; the sociological context of patient suffering; co-creation of the patient's story in a therapeutic relationship; death, dying and palliative health care; management of the abused patient; and the doctor's responsibilities to the community and society. Class time is used to explore doctor-patient relationship issues through lectures, cases, guest presentations, structured interpersonal exercises, article reviews, and discussion.

Prerequisite: EM6310 or EM6310N I, EM5207N, EM5309N, EM5408N, EM6103N, EM6104N, EM6120N, NP6109N

EM6406N **Dermatology** **Credits 1.5**

This course is designed to help students gain necessary knowledge and build skill in observation and clinical reasoning for the diagnosis and management of common diseases of the skin encountered in a broad-based conservative care (primary health care) setting.

Prerequisite: EM6202N

FH5106N **Fundamentals of Natural Medicine & Historical Perspectives** **Credits 3.0**

Students are introduced to the historical perspective of the common principles and origins on which natural medicine concepts were founded and developed with emphasis on chiropractic and naturopathic medicine. The concepts of the science of manual therapy and its effect on tissue physiology, neurological processes, and psychophysiological aspects are introduced. The whole health concept of patient care will be introduced in this course. This course will also introduce concepts of personal and collective duties of professionalism, ethics, and self-reflection that must be developed by future physicians.

Prerequisite: None

FR6307N **Physiological Therapeutics: Modalities** **Credits 4.5**

This course introduces therapeutic modalities and their practical application in the clinical setting. Therapies include actinotherapy, thermotherapy, hydrotherapy, cryotherapy, mechanotherapy, and various electrostimulation modalities.

Prerequisite: Completion of Phase I

HY5409N **Hydrotherapy & Traditional Naturopathy** **Credits 2.0**

Hydrotherapy was the cornerstone therapy of the "nature cure" movement and of the pioneers of naturopathic medicine. Its effective use in both acute and chronic conditions belied a deep and comprehensive understanding of disease and the healing process. This course presents students with theory and skills of hydrotherapy. Practice in the constitutional method of hydrotherapy will be done until students are comfortable and confident enough to use the treatment in clinic.

The use of a simple agent such as water and temperature will serve to demonstrate that healing can be supported and encouraged by safe, natural, and gentle treatments that are nonetheless powerful.

Prerequisite: None

MI5205N **Fundamentals of Public Health** **Credits 3.0**

The focus of this course is to introduce students to the concepts of public health, health promotion, and disease prevention. Individual, environmental, and socio-demographic factors affecting the population's health will be discussed, along with organization of the public health system, health surveys, health policies, and health screening. Research literacy will also be a major focus in this course including searching quality databases, developing effective search strategies, recognizing various study designs, and determining the best evidence that supports various public health and health care topics.

Prerequisite: None

MI5303N **Medical Microbiology I** **Credits 4.5**

Considered in this course are the infections affecting the nervous system, upper respiratory system, blood and lymphatic system, skeletal system, and integumentary system. The discussion would include microbiologic characteristics, epidemiology, clinical aspects, treatment, and prevention of various pathogens where appropriate public health aspects of these infections would be elaborated upon. In addition, basic and clinical immunology including immunologic disorders will be discussed in detail. All the content will be discussed in lecture, group, and case-based format.

Prerequisite: MI5205N

MI5403N **Medical Microbiology II** **Credits 5.0**

Considered in this course are the infections affecting the respiratory, gastrointestinal, reproductive, and urinary systems. The discussion will include microbiologic characteristics, epidemiology, clinical aspects, treatment, and prevention of various pathogens. Where appropriate, public health aspects of these infections will be elaborated upon. All the content will be discussed in lecture, group, and case-based format.

Prerequisite: MI5303N

MM5120N **Introduction to Palpation Skills & Landmark Identification** **Credits 1.0**

The focus of this laboratory course is to introduce the skills of palpation and identification of osseous and soft tissue structures. We will introduce the concepts of static and motion palpation as well as palpation for trigger points, tender points, spasm, and other pathology. This course provides some basic clinical perspective to build upon the fundamentals introduced in the first trimester anatomy lab.

Prerequisite: None

MM5220N **Manipulation of the Thoracic Spine** **Credits 1.0**

This course teaches manipulation of the thoracic spine as an introduction to management of uncomplicated, common thoracic conditions. Teaching methods will include demonstrations, skills laboratories, and problem-based large group discussions that focus on skills development and clinical reasoning. This is the student's first manipulation course. It will lay the foundation for other manipulation courses by teaching concepts related to (i) the patient management process; (ii) spinal manipulation; and (iii) the doctor-patient relationship.

Corequisite: EM5207N

MM5320N **Manipulation of the Pelvis, Lumbar Spine, & T/L Junction** **Credits 1.0**

The primary objective of this course is for students to learn the essential concepts and skills necessary to palpate and manipulate the pelvis and lumbar spine, and the thoracolumbar junction. The clinical presentation of normal anatomy, biomechanics, and physiology will be highly emphasized. Teaching methods will include prelab discussions, demonstrations, and skills laboratories. This course is part of a series or stream of technique courses wherein techniques are sequentially added and skills and competencies are further developed.

Prerequisite: MM5220N

MM5420N **Manipulation of the Cervical Spine & Cervico-Thoracic Junction** **Credits 1.0**

This course will teach manipulation of the cervical spine as an introduction towards management of uncomplicated, common cervical conditions. Teaching methods will include demonstrations, skills laboratories, and problem-based large group discussions that focus on skills development and clinical reasoning. As the third manipulation course, it

assists in building on previous concepts related to (i) the patient management process; (ii) spinal manipulation; and (iii) the doctor-patient relationship.

Prerequisites: AN5101N, AN5102N, FH5106N, MM5220N, MM5320N

MM6240N **Physical Medicine in Systemic Dysfunction** **Credits 1.0**

Manual medicine is a versatile and powerful modality in the naturopathic therapeutic order. In this course, students will develop skills in using a variety of physical medicine approaches to address systemic dysfunction. The course will follow a conditions/organ systems organization. The techniques included in this course improve function and structure through a variety of soft tissue, myofascial, somatosensory and neurorehabilitative pathways. Students will conclude this course with the ability to integrate these techniques into their treatment plans and some awareness of areas for further study and practice.

Prerequisite: EM6120N

NB6413N **ND Practice Management / Jurisprudence** **Credits 2.0**

This course reviews skills in opening, closing, or selling a practice. Finding an appropriate niche for services is discussed and particular emphasis is on unlicensed state practice — legal and appropriate communications that respect state law. A solid review of accounting practices, tax obligations, and accounting software complement the practice management skills. Students will leave this course able to bring a business plan to a bank, and to effectively employ a loan or their own start-up resources. An appreciation of how to use business professionals, such as accountants, lawyers, marketing consultants, etc. is a recurring theme. The basics of medical jurisprudence are examined. Examples from various and diverse jurisdictions are discussed.

Prerequisite: BU6306N

ND6315N **Hydrotherapy Clinical Rotation** **Credits 1.0**

This rotation in the naturopathic medicine program is designed to give the student an opportunity to demonstrate basic skills in hydrotherapy in a clinical setting. Students will perform hydrotherapy treatments as assigned by the attending clinician. Although students on this rotation are not acting as interns, they will perform a basic intake (including vital signs), make chart entries, attend to patient needs, and suggest treatment options/modifications. Patient treatments are at the discretion and under the close supervision of the attending clinician. Interns from Phase III of the ND program may be paired with the student or other NUHS interns, as deemed appropriate.

Prerequisites: EM6202N, HY5409N

ND6317N **Clinic Observation** **Credits 2.0**

Students will participate in clinic activities for three hours per week. Students in ND6317N will take on a more active role. During their shift, they will be paired with a senior intern (Phase III, Term One or Two) or faculty practitioner. Students will assist in the physical examination and research for the case. The clinic faculty and interns will expect students to come prepared to discuss cases in conference and to provide input into diagnosis and treatment. The thinking of the Phase II, Term Three student must have evidence of training in applied naturopathic clinical theory, as well as overall competence in diagnosis and therapeutics appropriate for their standing in the naturopathic program. This rotation is also an opportunity for students to strengthen their skills of charting, for which they will be responsible whenever they perform any treatment, interview, or examination of a patient. Evaluation will be by clinical faculty and interns.

Prerequisite: EM6202N

**** Students must be available to cover the assigned clinic shift at the specified NUHS Whole Health Center and/or other assigned clinic facility, as hours vary at each location, in order to serve the needs of patients and the community.***

ND6410N **Clinical Internship I** **Credits 9.0**

This comprises the first of three block assignments during which students will assume increasing responsibility for the treatment of patients within a naturopathic medical team. Although ultimate responsibility for the case will rest with the supervising doctor, interns will be given sufficient opportunity to exercise the skills and competencies that they have acquired in their training to date. The goal of this first internship block is to make the transition to being

responsible for the case, and assemble all of the relevant clinical skills. There is more intense supervision than students in ND7110N and ND7210N and interns will often be paired with a more experienced peer. Students will be evaluated in a number of ways, and will show competence in treating a variety of clinical conditions and patient populations, including both NUHS students and the patients from the general community. In all cases, interns will demonstrate an understanding of naturopathic principles as well as clinical skill.

Prerequisites: Completion of Phase I, FR6307N, ND6317N

Corequisites: NP6415N, NP6417N, NP6418N, NP6419N

ND7111N **Clinical Internship II – A** **Credits 9.5**

In this clinical rotation, students will assume responsibility for the treatment of patients within a naturopathic medical team. Although ultimate responsibility for the case will rest with the supervising doctor, the interns will be given sufficient opportunity to exercise all the skills and competencies that they have acquired in their training to date. They will sometimes be paired with a peer. Students will be evaluated in a number of ways, and will show competence in treating a variety of different clinical conditions and patient populations, including both NUHS students and the patients from the general community. In all cases, interns will demonstrate an understanding of naturopathic principles as well as clinical skills. The observational evaluation of intern performance will emphasize the Medical Interview, Physical Examination, and Organization/Efficiency at an advanced level appropriate for a student who is midway through the internships of the program.

Prerequisite: Completion of Phase II

ND7112N **Clinical Internship II – B** **Credits 6.5**

In this clinical rotation, students will assume responsibility for the treatment of patients within a naturopathic medical team. Although ultimate responsibility for the case will rest with the supervising doctor, the interns will be given sufficient opportunity to exercise all the skills and competencies that they have acquired in their training to date. They will sometimes be paired with a peer. Students will be evaluated in a number of ways, and will show competence in treating a variety of different clinical conditions and patient populations, including both NUHS students and the patients from the general community. In all cases, interns will demonstrate an understanding of naturopathic principles as well as clinical skills. The observational evaluation of intern performance will emphasize Counseling and Naturopathic Therapeutics at an advanced level appropriate for a student who is midway through the internships of the program.

Prerequisite: Completion of Phase II

ND7211N **Clinical Internship III – A** **Credits 8.5**

In this clinical rotation, students will assume increasing responsibility for the treatment of patients within a naturopathic medical team. Although ultimate responsibility for the case will rest with the supervising doctor, the interns will be given sufficient opportunity to exercise all the skills and competencies that they have acquired in their training to date. Increased self-sufficiency in the management of patient care, combined with evidence of awareness of indications for consultation and referral are the hallmarks of this third block assignment. Interns may be sometimes paired with a peer. Students will be evaluated in a number of ways, and will show competence in treating a variety of different clinical conditions and patient populations. In all cases, interns will demonstrate an understanding of naturopathic principles as well as clinical skills. The observational evaluation of intern performance will emphasize the Medical Interview, Physical Examination, and Organization/Efficiency at an advanced level appropriate for a student who is soon to be an entry-level practitioner.

Prerequisite: Completion of ND7111N and ND7112N

ND7212N **Clinical Internship III – B** **Credits 5.5**

In this clinical rotation, students will assume increasing responsibility for the treatment of patients within a naturopathic medical team. Although ultimate responsibility for the case will rest with the supervising doctor, the interns will be given sufficient opportunity to exercise all the skills and competencies that they have acquired in their training to date. Increased self-sufficiency in the management of patient care, combined with evidence of awareness of indications for consultation and referral are the hallmarks of this third block assignment. Interns may be sometimes paired with a peer. Students will be evaluated in a number of ways, and will show competence in treating a variety of different clinical conditions and patient populations. In all cases, interns will demonstrate an

understanding of naturopathic principles as well as clinical skills. The observational evaluation of intern performance will emphasize Counseling and Naturopathic Therapeutics, at an advanced level appropriate for a student who is soon to be an entry-level practitioner.

Prerequisite: Completion of ND7111N and ND7112N

*** A listing of the required clinical competencies for naturopathic medicine students is located at the end of the course descriptions.**

NN5212N Homeopathy I Credits 1.0

This course introduces students to the principles of homeopathy. Basic terminology and concepts, such as the purpose of the repertory, the study of materia medica, case taking, and the preparation of homeopathic medicines are discussed. Students will learn examples of basic prescribing for acute conditions. This skill is presented at a beginner's level and in preparation for more in-depth methodology to follow in Homeopathy II-IV courses.

Prerequisite: None

NN5406N Science of Diet and Nutrition Credits 3.0

This course provides a basic understanding of the fundamentals of human nutrition and stresses the essentials of the basis for good nutritional status. It serves as the basic nutrition course that follows the basic science presentation of the macronutrients and the micronutrients presented in Nutritional Biochemistry (BC5308N). Topics presented in this course include a review of the macronutrients and micronutrients with emphasis on the health properties of each as well as the severe deficiency states for both micronutrients and macronutrients. Digestion, absorption and transport of the nutrients, and consequences of malabsorption care are covered. Energy production, energy balance and weight management are also described. Food habits in the United States and nutrition across the life cycle are discussed in the course. Male and female health, sports and exercise nutrition, enteral and parenteral nutrition procedures, as well as an introduction to the science of food preparation and handling are included. An introduction to nutritional status assessment using food frequency questionnaires and diet history is given.

Prerequisite: BC5308N

NN6107N Pharmacology I Credits 3.0

This course provides a basic understanding of the use of drugs in western medicine for the treatment of disease. Topics covered in this course will be descriptions of drug names and classification, general principles of drug action and metabolism that will cover the area of pharmacokinetics and pharmacodynamics. Factors influencing drug action and a discussion of drug safety are addressed. A large part of this course will be a description of the drug actions on body systems including all the major organ systems and the disorders and diseases in each of the systems. Included will be a description of the mechanism of action, major untoward effects and contraindications for each drug and drug category. Interactions with other drugs and botanicals as well as a description of the nutrients that are depleted by each of the drugs will be covered. Drug actions on infection and immune system regulation as well as chemical dependency and substance abuse will be described. A discussion of poisons and their antidotes is included.

Prerequisite: Completion of Phase I

NN6108N Botanical Medicine I Credits 3.0

This course presents the fundamentals of herbal science and pharmacognosy. Topics included are herbal terminology, principles of herbal pharmacology and treatment, as well as mechanisms for optimizing safety. Dosage forms and preparations and standardization are covered in detail. Extraction and purification of the active ingredients are explained in the course. Herbal approaches to maintenance of health and treatment of disease as well as the strengthening of organ systems are presented for all the major organ systems of the body and many of the primary care diseases found in each of those organ systems. A major focus in the second half of this course is a description of the materia medica for 30 of the common botanical medicines used in western medicine. Active ingredient, part of the plant used, major therapeutic use, untoward effects, contraindications and interactions with drugs, and other botanical medicines are covered in detail.

Prerequisite: Completion of Phase I

NN6112N **Homeopathy II** **Credits 4.0**

A thorough study of the Organon is made, as preparation for effective practice. Topics include the principles of health and disease, medicine action, case taking, suppression, complex cases, alternating diseases, and provings.

Prerequisite: Completion of Phase I

NN6206N **Pharmacology II** **Credits 3.0**

The Pharmacology II course will encompass a discussion of first and second level drugs for the common disorders of each organ system and the art of prescribing these medications. The course addresses the development of medical protocols for the patient by the physician using current pharmaceutical agents for the prevention and treatment of disease. Included in the course are discussions of treatment duration as well as dosages and side effects of common drugs. Differences in individual reactions according to CYP450 typology and idiopathic reactions to drugs are stressed. The administration of the drugs including the effects of enteral and parenteral administration as well as depot and subcutaneous routes will be discussed. Drug-drug, drug-herb, and drug-nutrient as well as drug-food interactions and nutrient depletion by drugs will be addressed. Students will be given the opportunity to develop an appropriate course of treatment for the drugs most often prescribed in the United States. Students will be given case studies and will be expected to develop appropriate protocols and specific medications for patients across the life cycle. Students will be given a description of the scope of license regarding medications of legend and over-the-counter drugs.

Prerequisite: NN6107N

NN6212N **Homeopathy III** **Credits 4.0**

Building on the basic concepts introduced to this point, the course centers on the actual skills of taking a case, analyzing symptoms, using the Repertory, and selecting a remedy. Materia medica is taught by examining provings. Students will study carefully the range of symptoms in the proving, and the physiological actions, as well as the wide variety of mental symptomatology found in many provings.

Prerequisite: NN6112N

NN6301N **Clinical Nutrition** **Credits 4.0**

This course offers a nutritional approach to the prevention and treatment of disease, with an emphasis on maintenance of health and homeostasis and specific disease conditions and their prevention. Nutritional assessment methods are covered in detail and the methods for obtaining a physical exam of nutrition health and means to assess nutritional status are covered. A description of the approach to nutrition counseling and the nutrition counseling session are described. Topics covered are food frequency questionnaires (FFQ), health history and physical exam forms, and food diary and intake forms. The diseases of the major organ systems in the body are covered with the musculoskeletal, joint health, gastrointestinal, and cardiovascular systems covered in depth. Metabolic diseases such as diabetes and thyroid diseases are also described. Liver detoxification, adrenal stress syndrome, and a functional medicine approach to the liver, adrenal, thyroid, and gastrointestinal tract are described. Other diseases covered are central nervous system disease and infectious and dermatological conditions. A discussion of immune up-regulation, glandular products, chelation therapy, and glyconutrients is held. The use of all nutritional therapies, botanical medicines, and other functional medicine approaches to maintenance of health and prevention and treatment of disease are described.

Prerequisite: Completion of Phase I

NN6308N **Botanical Medicine II** **Credits 4.0**

This advanced course will engage the subject of therapeutic herbalism in great detail. The strategies for addressing dysfunction in the organ systems will be outlined. Specific aspects of botanicals will be studied including: constituents, pharmacognosy, specific indications, contraindications, toxicity, and dosing parameters. In the traditional manner, the herbs will be studied according to therapeutic category (nervines, hepatics, anodynes, etc.). Close attention will be paid to the potential for herb-herb and herb-drug interaction. Students will practice compounding and dispensing as part of their clinical rotations, and this course will provide the theoretical information to enable them to do so.

Prerequisite: NN6108N

NN6312N **Homeopathy IV** **Credits 4.0**

Materia medica study is continued in depth. Follow-up prescriptions and case analysis over sequential visits is emphasized. Medicine potency, repetition, time between prescriptions, and potency alternation are examined. Students are taught how to distinguish between suppression, an aggravation, and a positive response. Group exercises continue the use of cases for analysis, as well as presentations on materia medica. Challenging or unique cases are presented and discussed in class. This serves to reinforce previously presented concepts such as the principles of case taking, case analysis, remedy selection, and proper follow-up. Comparative materia medica is discussed during presentations about case analysis and remedy section. The value of acute prescribing and the role of adjunct therapies are explored.

Prerequisite: NN6212N

NN6401N (Online) **Pharmacotherapeutics** **Credits 0.5**

This course presents up-to-date current pharmacological care of patients who present with primary care disorders and conditions. Students will be presented with a series of clinical cases and will be asked to formulate a plan of action that includes their first choice of prescription medication and its dose. Building on knowledge from previous pharmacology courses, students will be given resources about the mechanism of action, side effects, major use, contraindications, and appropriate dose of drugs for major conditions. Students will be assessed on their ability to choose an effective medication at the effective and safe dose.

Prerequisite: NN6206N

NN6402N **Intravenous Therapeutics** **Credits 1.0**

This lecture-based course will introduce students to the fundamental principles and procedures of naturopathic intravenous therapeutics. This includes the common indications for this therapy as well as the appropriate procedures including safety considerations. Commonly used agents and their known pharmacodynamics are discussed as well as some ancillary parenteral procedures such as intramuscular injections.

Prerequisite: NN6301N

NN6412N **Botanical Medicine III:
Advanced Naturopathic Botanical Prescribing** **Credits 2.0**

The focus of this course is the creation of special botanical treatment prescriptions that are individually formulated for a patient case. Additional materia medica will be discussed in this course, building onto those emphasized in NN6308N. Sources, indications, contraindications, and pharmacology of medical herbs are described. Herbal medicines from the Eclectic Material Medica, including those with a narrow therapeutic window, are discussed, including precise dosing regimens as well as traditional combinations of botanicals for various organ systems or conditions.

Prerequisite: NN6308N

NN6416N **Advanced Nutrition: Functional Medicine** **Credits 2.0**

This course explores the field of functional medicine. Biochemical individuality, interconnections in physiological and biochemical systems of the body, and the maximization of organ reserve are key concepts. The testing and protocols for addressing fundamental issues such as inflammation, detoxification, H Pylori, leaky gut (permeability increases), mitochondrial dysfunction, food allergy, environmental allergy, and chemical sensitivity are reviewed. In addition, the course outlines specific protocols for long-term nutritional management of chronic illness. Discussion of the merits of these approaches versus other therapeutic interventions and the applications to prevention are encouraged.

Prerequisite: NN6301N

NN7109N **Botanical Medicine IV: Advanced Materia Medica** **Credits 1.0**

This final course in the botanical medicine series focuses on acquiring knowledge of additional botanicals, not previously covered, that are important for a naturopathic practice. The class will also review those herbs that are within the scope of naturopathic medicine but must be used with extra caution. Class time will be allocated to reviewing herbs that are very frequently used in naturopathic medicine and therefore both important to patient

care and likely to appear on licensing examinations. Students will be expected to demonstrate knowledge of herb-drug interactions and how to skillfully research queries about the potential risk associated with an herbal medicine treatment using reliable databases and other resources.

Prerequisite: NN6412N

NP5312N Introduction to Naturopathic Counseling Credits 1.5

Effective counseling skills are essential to the practice of naturopathic medicine. In this course, students will review the techniques of counseling and engage in the practice of those techniques. Self-awareness, listening, understanding, and exploring sensitive topics are discussed and to some extent practiced with peers. Students learn techniques of stress management and apply them to their own life.

Prerequisite: None

NP6109N Introduction to Naturopathic Primary Care Credits 3.5

Current naturopathic practice includes the role of a primary care physician. In naturopathic medicine, primary care is based on the naturopathic principles and guided through the use of the therapeutic order. This class serves as the introduction to naturopathic medicine in practice, with the focus on acute conditions. Students will learn how to manage common acute conditions safely, how to determine cases for referral, and how to treat these conditions using naturopathic therapies.

Prerequisite: Completion of Phase I

NP6415N Advanced Topics in Women's Health Credits 1.0

Taking the perspective that the whole person and the determinants of health need to be considered in the treatment of female health issues, students will review approaches to common issues (dysmenorrhea, endometriosis, infertility, breast cancer, ovarian cancer, uterine cancer, amenorrhea, infertility, and menopause), a rational approach to these issues that includes counseling about common medical options, prevention, and naturopathic therapeutics.

Corequisite: ND6410N

NP6417N Internal Medicine / Emergency Medicine Credits 4.5

This course is an in-depth study of the treatment and management of disease of the organ systems. Although naturopathic medicine promotes prevention, the practicing naturopathic physician must be prepared to address any of the common issues seen in a general practice. Students entering this Trimester Eight course will already be trained in diagnosis and therapeutic modalities. This course is a review of treatment and management strategies. Some new treatment information will be added to strengthen the student's knowledge of botanical, nutritional, and homeopathic medicine, and other therapies. The course will occur throughout the week, and treatment of disease of the organ systems (cardiopulmonary, gastroenterological, hepatobiliary, renal/urologic, hematological, and gynecologic) will be followed in depth. The last lecture of the week will be on emergency medicine topics, relating to the internal medicine issues taught to date. The overall approach builds on the clinical theory and principles studied throughout the ND program.

Prerequisite: Entry into Phase II, Term Four

NP6418N Naturopathic Management of Special Populations Credits 1.0

Naturopathic physicians are responsible for providing consistent and thorough outpatient care to people of all ages and life situations. This course focuses on the practice strategies and issues encountered in treating prenatal and geriatric patients, issues arising from veteran's health care, care of underserved populations, global medicine issues, and LGBT specific health care issues. A review of screening and health maintenance strategies for the adult patient is included. Additional treatment information in the areas of dermatology, neurology, hematology, and EENT are included.

Prerequisite: EM6304

NP6419N Environmental Medicine/Toxicology/Detoxification Credits 1.0

This course examines the clinical manifestations of exposure to environmental toxins. Sources and the route of exposure of synthetic and naturally occurring toxins are discussed. Emphasis is placed on the clinical strategies that are useful to detect and alleviate overburdened detoxification pathways. The activation of the body's greater defensive system, including inflammation and sensitization (both allergic and non-allergic) is examined in light of how patients might present in clinic and what historical and environmental factors are likely present in the history. Acquiring a high level of confidence in recommending protocols that support detoxification pathways through various naturopathic therapies is considered a key element in this course.

Prerequisite: NP6417N

NP7419N Pediatrics Credits 2.0

Naturopathic physicians are responsible for providing consistent and thorough outpatient care to pediatric patients. A review of screening and health maintenance strategies for the pediatric patient is the focus of this course. Assessment and treatment of both presenting office complaints and strategies for long-term prevention and wellness are stressed. Contemporary issues such as Autism Spectrum Disorders, obesity, and psychosocial issues such as bullying and abuse are discussed. Additional treatment information in the areas of dermatology, neurology, hematology, and EENT are included.

Prerequisite: NP6417N

NT5110N Foundations of Naturopathic Medicine I Credits 2.0

This course forms the basis of the clinical theory stream of courses in the ND program, which serves as a framework for practice. The course begins with an overview and the vision and ultimate goals of the ND program. The naturopathic principles are discussed at length. Major concepts such as health, holism, and vitalism are analyzed by the class. Ecology and environmental health as a basis for individual health and the broader implications of the Gaia theory are explored. Spirituality and its importance to life and healing and the need for the physicians to be whole themselves form the concluding portion of the course.

Prerequisite: None

NT5210N Foundations of Naturopathic Medicine II Credits 1.0

This course examines the historical and cultural roots of naturopathic medicine. The history of western medicine and the roots of naturopathic medicine in the context of 19th century nature cure are examined. The role and experience of women in medicine is discussed. A portion of the course will explore the evolution and relevance to naturopathic medicine of various world medical systems (East Asian, South Asian, African, etc.). As a prelude to future clinical theory courses and the development of therapeutic skills, the course will conclude with some discussion of clinical theory, such as the therapeutic order.

Prerequisite: None

NT5211N Basic Science Applications: Determinants of Health Credits 1.5

Addressing the determinants of health comprises the foundational step in naturopathic therapeutics. The knowledge of the human being and their internal and external environment that is gained by studying the basic sciences gives the practitioner insight into how to address the determinants of health. This course reviews the most common categories of the determinants and the basic science topics that relate to them such as: proper hydration and its relation to kidney function, perspiration, pituitary function, beneficial effects of adequate sunlight and the nature of vitamin D metabolism; and known risks of UV light, etc. The theme of the course is that basic science knowledge assists us in making a diagnosis, and in engineering the proper conditions for healing and prevention of disease.

Prerequisite: NT5110N

NT6110N Advanced Naturopathic Clinical Theory Credits 1.0

The therapeutic order is discussed in more detail. Students will by this time have a basic knowledge of the various naturopathic therapies. Their employment within different orders of intervention will be discussed as a part of a dynamic approach to patient care. A unified theory of healing is presented, with emphasis on the clinical indications of improvement or deterioration of a patient's condition.

Prerequisite: Completion of Phase I

NT6210N Applied Naturopathic Clinical Theory Credits 2.0

This is a participatory course. Students work in small groups, applying their knowledge of clinical theory to actual cases. Competency in analysis of the causes of disease, the obstacles to healing, and the sequence and timing of various interventions are expected of students. Weekly group reports and individually prepared comprehensive reports will be the basis of students' grades. The amounts and dosing of prescribed substances are less emphasized in this course, whereas the understanding of the application of naturopathic principles and theory is paramount. The competencies reached in this course serve as the foundation for the study of internal medicine and care throughout the life cycle in Phase II, Term Four, which is based on a consistent and coherent approach.

Prerequisite: NT6110N

NX6215N Clinical Endocrinology Credits 2.0

This course builds on previously attained knowledge in diagnosis and laboratory medicine, focusing on disorders of the endocrine system. Students will learn how to approach commonly encountered endocrine conditions in naturopathic medicine, such as hypothyroidism and diabetes mellitus. All aspects of endocrine management are covered, from presentation and assessment of symptoms, to diagnostic testing and treatment. The use of more experimental tests and therapies and the evidence behind them are approached in a critical sense. Both conventional and naturopathic therapies are reviewed. Students will practice creating treatment protocols following the naturopathic therapeutic order using clinical cases.

Prerequisites: EM6203N, NN6108N

NX6216N Functional Laboratory and Point of Care Testing Credits 0.5

This course builds on previously attained knowledge in laboratory medicine. The emphasis is on: a) functional lab testing including comprehensive digestive analysis; b) allergy testing; c) heavy metal and detoxification testing; d) cardiac biomarker testing; e) point of care testing (urine, hemoglobin A1C, etc.); and f) specimen collection and transport for analysis at a hospital laboratory (and other CLIA certified labs). Universal precautions are stressed throughout the lab experience. The delivery of this course will be a combination of pre-lab and hands-on activities with point of care testing.

Prerequisite: Completion of Phase I

ON5311N Oriental Medicine (ND) Credits 1.5

This is an introduction to traditional world medicines. This includes Traditional Asian Medicine, Ayurvedic medicine, and aboriginal/folk medicine of the Americas, Europe, and Africa. Review of the historical background and development will provide framework for understanding the current practice of each system. Students will be able to recognize the key concepts in theory, assessment and treatment for each major system. Students will be able to compare these concepts with those of naturopathic medicine and Western biomedicine.

Prerequisite: None

PA5204N Fundamentals of Pathology Credits 3.0

This course provides an introduction to the basic changes in the morphology of the cells, tissues, and organs in diseased states. Extensive use of visual aids with the latest computer technology helps students to differentiate abnormal from normal, and to correlate the clinical aspects of the alterations. Included also is discussion on general characteristics, classification, and differential diagnosis of cysts, benign and malignant tumors, and other neoplastic entities. All content will be discussed in lecture and group activity/discussion format.

Prerequisites: AN5107N, PH5103N

PA5302N Systems Pathology I Credits 4.0

Considered in this course are the pathologies peculiar to and characteristic of the various systems of the body. The systems examined are the nervous system, myopathy, neuropathy, bone and joint pathology, immunopathology, hematopathology, and dermatopathology. Each condition is studied from the standpoint of general characteristics, gross and microscopic appearance, and clinical course.

Prerequisite: PA5204N

Corequisites: AN5304N, AN5305N, AN5307N

PA5402N **Systems Pathology II** **Credits 6.0**
Considered in this course are the pathologies peculiar to and characteristic of various systems of the body. The systems examined are respiratory, cardiovascular, reproductive and mammary, gastrointestinal (inclusive of liver, gall bladder and pancreas), urinary, and endocrine.
Corequisite: PH5405N
Prerequisite: PA5302N

PH5103 **Cellular Physiology & Hematology** **Credits 4.0**
In this course, students will review, in a problem-based setting, the basic science concepts related to the physiology of cellular membranes and organelles, along with the integrated functioning of the blood as a tissue. The physiology lab exercises will consist of problem sets and case studies, designed to integrate and apply material and concepts introduced through the accompanying lectures each week.
Corequisite: AN5107

PH5208N **Neurophysiology** **Credits 3.5**
The purpose of this course is to study the neurophysiology of the nervous system. The complex signals created and utilized by the nervous system to control most bodily functions will be studied in depth to gain a better understanding of how the human nervous system functions. Areas of study will include: synaptic transmission; autonomic control; sensory systems including the special senses of vision, hearing, touch, balance (vestibular function), taste and smell; signal integration in the CNS; control of the motor system (including skeletal muscle physiology); and higher cortical functions such as speech, sleep, and associational areas of the brain.
Prerequisite: PH5103N
Corequisites: AN5201N, AN5202N, AN5203N

PH5306N **Neuroendocrinology, GI & Reproductive Physiology** **Credits 4.0**
This course will address neuroendocrine mechanisms that operate to maintain homeostatic control over various systems and states within the body. The primary focus will be upon the normal mechanisms and reflexes that operate to maintain a healthy state. Specific topics will include regulation of the reproductive, gastrointestinal, and thermoregulatory systems. Neuroendocrine feedback pathways that regulate metabolic and mineral homeostasis will also be discussed. Course instruction will be through lecture and group discussion of selected problems and cases.
Prerequisite: PH5208N

PH5405N **Cardiovascular, Respiratory & Renal Physiology** **Credits 5.0**
This course will present the normal physiologic function of the respiratory system (breathing, ventilation, and gas exchange), circulatory system (blood pressure, cardiac output, pressure and flow homeostasis, and cardiac electrophysiology), and the kidney (conservation and excretion, and volume homeostasis). Content will be presented through lecture, laboratory, and supplemental problem exercises. Structure-function relationships and mechanisms of regulation will be emphasized. Laboratory based measurements on human subjects will be used along with computer simulations to demonstrate and illustrate core concepts. Supplemental problem exercises will provide students the opportunity to demonstrate and test their understanding and capability to apply core concepts toward explanative assessment of how each of these systems function.
Prerequisites: AN5304N, AN5305N, PH5306N

RA5206N **Normal Radiographic Anatomy & Variants** **Credits 1.5**

Naturopathic physicians must have a thorough understanding of the normal radiographic anatomy of the skeletal system if they are to detect abnormal pathology in these regions. This course provides background information as a basis for courses in musculoskeletal imaging diagnosis, essentially designed to help students differentiate a normal structure from pathology. The study of normal variants and anomalies of the skeletal system and skeletal measurement procedures are presented to give students an overall understanding of variations of normal, which both mimic pathology and often present with unique clinical challenges.

Prerequisites: AN5101 or AN5101N AND AN5102 or AN5102N

RA6207N **Imaging Diagnosis** **Credits 2.0**

The basic principles of the major modalities of diagnostic imaging are discussed. Students will learn normal findings on X-ray films and also will become familiar with the type of abnormal findings yielded by the most common tests. This course is designed for the naturopathic student planning to be in general practice that will request and receive radiographic and other diagnostic imaging reports. Interpretation of these reports and knowing when to request them are the major learning outcomes.

Prerequisite: RA5206N

RE5401N **Evidence-Based Practice: Critical Appraisal of the Biomedical Literature** **Credits 1.0**

The focus of this course is research literacy, appraisal of clinical research studies, and the application of the best research evidence to patient care and clinical practice. Students will sharpen their skills recognizing and developing both the research hypothesis and patient-centered clinical questions as well as searching the highest quality and most significant clinical and basic science literature and databases, including complementary and alternative medicine (CAM) specific databases. Students will learn to appraise and analyze the research studies and evaluate the evidence before deciding to apply the best evidence to patient and health care issues. Students will learn to effectively communicate literature reviews, analyses, and conclusions in written, oral, and electronic formats to patients, peers, and professionals. Students will develop the skills for effective and efficient information management, research literacy, and evidence-based practice (EBP) habits to accelerate learning and expand basic and clinical science knowledge.

Prerequisite: MI5205N

ST7107N **Minor Surgery** **Credits 1.5**

This course outlines the basic principles and procedures of minor surgery. Procedures involving cutaneous or subcutaneous surgery or procedures to obtain a diagnostic specimen, that can be done in-office, are the main focus of the course. Clean field, sterile instrumentation, and wound cleanliness are stressed throughout. Basic in-office medical procedures such as biopsy, wound debridement, treatment of benign skin lesions, and suturing are discussed. Laboratory components include practice of suturing technique and use of specialized equipment and instrumentation. Appropriate wound dressings and topical agents, such as antiseptics and anesthetics, are reviewed. Special topics include: dermatologic medicine, procedures to address patient safety during minor surgery, and how to respond to adverse reactions.

Prerequisite: NP6417N

Required Competencies of the Naturopathic Medical Graduate

The competencies that guide the Doctor of Naturopathic Medicine Program are the NUHS College of Professional Studies Six Core Competencies (*see [College of Professional Studies Academic Policies, Regulations and Procedures](#)*). The Association of Accredited Naturopathic Medical Colleges (AANMC) is a voluntary organization of accredited ND programs/institutions, which also produces an ND-specific set of competencies. The voluntary, non-binding AANMC Required Competencies of the Naturopathic Medical Graduate is included here as a reference for students and for the ongoing development of the curriculum.

The Seven Areas of Competence for the Naturopathic Medical Graduate:

- Medical Assessment and Diagnosis
- Patient Management
- Communication and Collaboration

- Professionalism
- Career Development and Practice Management
- System-Based Practice
- Practice-Based Learning, Research, and Scholarship

Medical Assessment and Diagnosis

Naturopathic medical graduates conduct a complete and accurate history, physical exam, and objective assessment to arrive at a diagnosis. They demonstrate the knowledge, skills, abilities, and attitudes expected of a naturopathic physician within the context of a patient-centered model.

The naturopathic medical graduate:

Elicits a complete and accurate medical and biopsychosocial history

- Establishes a therapeutic doctor-patient relationship
- Demonstrates active listening when taking a history and performing a physical exam
- Assesses the determinants of health, as defined by the World Health Organization
- Documents the medical record consistent with legal, institutional, and ethical requirements

Performs a complete and accurate health examination, including pathological and functional assessment

- Selects assessments and performs diagnostic procedures based on a risk benefit analysis
- Performs appropriate system-specific or hypothesis-driven examination based on patient presentation
- Performs health screenings for disease prevention and early diagnosis
- Orders and/or performs appropriate diagnostic tests and imaging studies
- Conducts rapid assessment in emergency situations
- Performs assessments mindful of personal biases including, but not limited to, age, sex, race, ethnicity, disability, religion, social status, gender identity, and sexual orientation

Formulates an accurate medical diagnosis

- Interprets results for laboratory tests, physical examination, imaging studies, and other diagnostic tests
- Integrates the medical history, physical examination, and diagnostic testing with naturopathic principles in formulating a diagnosis
- Applies critical thinking and clinical reasoning to the synthesis of a medical diagnosis
- Identifies emergency and life-threatening situations and diagnoses
- Communicates assessment findings and diagnosis with the patient as appropriate

Patient Management

Naturopathic medical graduates provide personalized, compassionate, ethical, holistic patient care. Determination of interventions are informed by considering the risk of harm, efficacy, level of evidence, and patient values and priorities as individually appropriate in promoting patient health and prevention of disease.

The naturopathic medical graduate:

Establishes therapeutic relationships with patients

- Builds and maintains rapport in patient interactions
- Displays empathy in patient interactions
- Respects doctor/patient roles and responsibilities
- Actively collaborates with patients in shared decision-making

Develops an individualized treatment plan based on diagnosis and consistent with naturopathic principles

- Incorporates cultural and psychosocial issues
- Uses best practices and best available evidence
- Focuses on safe, natural medical care

- Emphasizes health promotion and illness prevention
- Considers the safety, efficacy, contraindications, actions, and interactions of therapies
- Fosters patient adherence through consideration of the patient's circumstances, resources, and ability to implement the plan
- Addresses physical, spiritual, mental, and emotional aspects of the patient

Recommends and/or administers therapies used in the individualized care of patients, including but not limited to *:

- Botanical medicine
- Counseling (e.g., lifestyle counseling, health psychology, mind-body medicine)
- Homeopathic medicine
- Medical office therapeutic procedures (e.g. injections and infusions, minor surgery)
- Clinical Nutrition (e.g., dietary counseling and nutraceuticals)
- Pharmaceuticals
- Physical medicine (e.g., manipulation, electrotherapies, and hydrotherapy)

*Therapeutic modalities outlined in this document are those consistent with offerings at all CNME recognized institutions. Additional therapeutic modalities may be taught within individual academic programs.

Facilitates informed patient decisions by presenting evidence-informed therapeutic and wellness options including risks, benefits, and alternatives to therapies

- Engages patients in establishing a long-term focus for their personal health management with an emphasis on prevention and wellness
- Provides counseling and support for patients, their families, and significant others related to chronic illness, acute illness, and end of life issues
- Recommends plan for follow-up care
- Reassesses treatment plans considering clinical outcomes, best practices, and patient needs
- Documents plan of care and revisions to plan of care
- Recognizes personal limitations, adheres to scope of practice, and makes referrals when appropriate
- Intervenes and/or refers in urgent and emergency care situations

Communication and Collaboration

Naturopathic medical graduates communicate effectively to optimize patient relationships and patient care. They refer, consult, and collaborate with other health professionals as appropriate when providing care.

The naturopathic medical graduate:

Communicates effectively with patients, and when appropriate their families and significant others

- Describes succinctly what naturopathic medicine is, and the role and responsibilities of naturopathic physicians
- Analyzes the patient narrative
- Communicates findings with patient

Educates patients regarding their diagnosis and prognosis

- Provides counsel on treatment options
- Promotes treatment plan adherence to achieve therapeutic goals

Demonstrates empathy, compassion, and objectivity in patient interactions

- Demonstrates sensitivity and respect for cultural identity including, but not limited to, age, sex, race, ethnicity, disability, religion, social status, gender identity, and sexual orientation
- Utilizes appropriate resources when experiencing barriers to communication

Consults with and/or refers to other health care professionals when care is outside of scope of practice or personal competence

- Conveys effective oral and written communication to other medical professionals
- Collaborates as a member of the patient's health care team to provide safe and effective care

Educates members of the patient's health care team regarding the role of naturopathic medicine and the naturopathic physician in patient care

- Recognizes and respects the roles and responsibilities of other professionals within the health care team.
- Collaborates as a member of the health care community to address public health issues such as access to care
- Provides leadership in the incorporation of the naturopathic physician as an integral member of the health care community
- Promotes naturopathic medicine and principles to the community at large

Professionalism

Naturopathic medical graduates demonstrate professional behavior, personal integrity, and altruism. They are aware of their limitations in expertise, operate within the jurisdictional scope of practice, and refer care when appropriate. They exemplify the principles of naturopathic medicine personally and professionally as health care professionals and leaders in the community.

The naturopathic medical graduate:

Maintains legal and ethical standards, including but not limited to

- Patient confidentiality
- Informed consent
- Documentation of care
- Scope of practice
- Mandatory reporting
- Professional boundaries
- Conflicts of interest

Demonstrates respect and integrity in professional interactions

- Fulfills professional commitments in a timely and responsible manner
- Provides and receives constructive feedback as a part of peer and self-evaluation of professional competence
- Recognizes and addresses ethical issues arising in practice
- Demonstrates a commitment to balancing patient care, self-care, and responsibilities to colleagues, community, family, and friends
- Mentors members of the profession

Career Development and Practice Management

Naturopathic medical graduates are able to establish a viable career in naturopathic medicine.

The naturopathic medical graduate:

Creates a realistic career plan

- Applies basic principles of marketing towards the establishment and growth of a patient base
- Adheres to best practices in management standards including financial practices, negotiation, inventory, and business
- Demonstrates the ability to plan and manage time and resources
- Maintains a professional network
- Promotes practice and relationships through effective public and professional communications
- Identifies and responds to practice challenges and opportunities
- Participates in continuous quality assessment and improvement
- Demonstrates key leadership attributes in practice management

Systems-Based Practice

Naturopathic medical graduates demonstrate an awareness of the developing role of naturopathic medicine within larger frameworks of health care and health care systems in order to advocate for optimal patient care.

The naturopathic medical graduate:

- Demonstrates a working understanding of available health care resources, both conventional and complementary, in order to address patient and community needs
- Influences community or population health through education, community initiatives, and other efforts to shape public and professional health care policy
- Demonstrates an ability to participate effectively within a health care team with respect to referral skills, collaboration, and co-management of care
- Practices cost-effective health care through evidence-informed management, preventive strategies, and lifestyle management with an aim at alleviating the overall health care burden

Practice-Based Learning, Research, and Scholarship

Naturopathic medical graduates critically appraise, assimilate, and apply scientific evidence to improve patient care. They demonstrate an understanding of the strengths and limitations of research. Naturopathic graduates are dedicated to ongoing personal reflection and lifelong learning.

The naturopathic medical graduate:

Applies the skills of evidence-informed practice to patient care

- Formulates a clinical research question to guide the design of the information search, using the principles and tools of evidence-based medicine
- Conducts a literature search efficiently, accessing appropriate resources in order to answer clinical questions
- Demonstrates an understanding of statistical tools
- Critically appraises relevant data to make judgments in integrating the information into clinical practice
- Applies levels of evidence in application and selection of therapeutics and patient management
- Critically evaluates patient care outcomes with respect to qualitative and quantitative measurements
- Advances the practice of naturopathic medicine through contributions to the development and dissemination of new knowledge

Demonstrates reflective practice in a commitment to lifelong learning

- Recognizes limitations in his/her own knowledge, skills, and attitudes
- Assesses professional competence using self-awareness, feedback from others and reflection on practice
- Demonstrates commitment to maintaining and improving knowledge, skills, and attitudes

**** Use of the term physician may vary based on jurisdictional legislation.*

Courses of the Acupuncture Curriculum

First Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
OM4405	Introduction to Oriental Medicine	45	0	0	45	3.00
OM4406	Physiology of Oriental Medicine	45	0	0	45	3.00
AC4461	Meridian Theory & Point Location 1	30	15	0	45	2.50
AC4463	Meridian Theory & Point Location 2	30	15	0	45	2.50
TM4492L	Asian Body Work (T1 or T2)	0	30	0	30	—
TM4491L	Tui Na (T1 or T2)	0	30	0	30	1.00
WB4400	Palpation Skills	0	15	0	15	0.50
WB4401	Medical Terminology	15	0	0	15	1.00
WB4407	Western Anatomy & Physiology (T1 or T2)	37.5	15	0	52.5	3.0
WB4402	Human Anatomy (T1 or T2)	15	45	0	60	2.50
WB4404	Principles of Biochemistry (T1 or T2)	15	0	0	15	1.00
WB4405	Neurology (T1 or T2)	30	0	0	30	—
Totals		217.5	90	0	307.5	17.50
		or	or	or	or	or
		195	120	0	315	17.00

* Some courses are offered in alternate trimesters, for example (T1 or T2).

Second Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
OM4411	Etiology & Pathogenesis of Oriental Medicine	45	0	0	45	3.00
OM5471	Diagnosis & Skills of Oriental Medicine 1	22.5	15	0	37.5	2.00
AC4462	Meridian and Point Energetics 1	30	0	0	30	2.00
TM4492L	Asian Body Work (T1 or T2)	0	30	0	30	1.00
TM4491L	Tui Na (T1 or T2)	0	30	0	30	—
WB4407	Western Anatomy & Physiology (T1 or T2)	37.5	15	0	52.5	3.00
WB4402	Human Anatomy (T1 or T2)	15	45	0	60	2.50
WB4404	Principles of Biochemistry (T1 or T2)	15	0	0	15	—
WB4405	Neurology (T1 or T2)	30	0	0	30	2.00
WD4441L	Western Physical Exam (T2 or T3)	0	30	0	30	1.00
WD4442L	Neuromusculoskeletal Exam (T2 or T3)	0	30	0	30	—
WB4412	Western Pathology (T2 or T3)	45	0	0	45	—
WB4411	Microbiology, Immunology & Public Health (T2 or T3)	45	0	0	45	3.00
CL4561L	Clinic Observation 1	0	0	60	60	2.00
Totals		187.5	120	60	367.5	18.50
		or	or	or	or	or
		210	90	60	360	19.00

* Some courses are offered in alternate trimesters, for example (T1 or T2) or (T2 or T3).

Third Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
OM5472	Diagnosis & Skills of Oriental Medicine 2	22.5	15	0	37.5	2.00
OM5441	Differential Diagnosis of Oriental Medicine 1 (T3 or T4)	45	0	0	45	3.00
OM5442	Differential Diagnosis of Oriental Medicine 2 (T3 or T4)	45	0	0	45	—
AC4464	Meridian and Point Energetics 2	30	0	0	30	2.00
AC5471	Acupuncture & Clean Needle Technique	22.5	15	0	37.5	2.00
ID4542L	Medical Qi Gong (T3 or T4)	0	30	0	30	—
ID4541L	Tai Chi (T3 or T4)	0	30	0	30	1.00
WD4441L	Western Physical Exam (T2 or T3)	0	30	0	30	—
WD4442L	Neuromusculoskeletal Exam (T2 or T3)	0	30	0	30	1.00
WB4412	Western Pathology (T2 or T3)	45	0	0	45	3.00
WB4411	Microbiology, Immunology & Public Health (T2 or T3)	45	0	0	45	—
CL4562L	Clinic Observation 2	0	0	60	60	2.00
CL4563L	Clinic Observation 3	0	0	60	60	2.00
<i>Internship Foundational Examination</i>						
Totals		165	90	120	375	18.00

* Some courses are offered in alternate trimesters, for example (T2 or T3) or (T3 or T4).

Fourth Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
OM5441	Differential Diagnosis of Oriental Medicine 1 (T3 or T4)	45	0	0	45	—
OM5442	Differential Diagnosis of Oriental Medicine 2 (T3 or T4)	45	0	0	45	3.00
OM6451	Advanced Diagnosis & Treatment Strategy (T4 or T5)	30	0	0	30	2.00
AC6481	Microsystems & Advanced Acupunctures (T4 or T5)	22.5	15	0	37.5	—
AC5472	Acupuncture & Accessory Techniques	0	30	0	30	1.00
ID4542L	Medical Qi Gong	0	30	0	30	1.00
ID4541L	Tai Chi (T3 or T4)	0	30	0	30	—
PD6543	Business, Marketing & Practice Management (T4 or T5)	30	0	0	30	—
PD6542	Evidence-Based Practice (T4 or T5)	30	0	0	30	2.00
WD5442	Clinical Laboratory Diagnosis (T4 or T5)	30	0	0	30	—
WD5441	Imaging Diagnosis (T4 or T5)	30	0	0	30	2.00
WC5422	Western Pharmacology & Toxicology (T4 or T5)	30	0	0	30	—
WC5421	Neurophysiology of Acupuncture (T4 or T5)	30	0	0	30	2.00
CL5571L	Associate Internship 1	0	0	60	0	2.00
CL5572L	Associate Internship 2	0	0	60	0	2.00
Totals		165.0	60	120	345.0	17.00
		or	or	or	or	or
		158	75	120	352.5	17.00

* Some courses are offered in alternate trimesters, for example (T3 or T4) or (T4 or T5).

Fifth Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
PD6541	Doctor & Patient Relationship (T5 or T6)	30	0	0	30	—
AC6452	Acupuncture Treatment Strategy (T5 or T6)	30	0	0	30	2.00
WD6441	Western Physical Diagnosis (T5 or T6)	30	0	0	30	—
OM6453	Nutrition & Food Therapy of Oriental Medicine (T5 or T6)	30	0	0	30	2.00
OM6451	Advanced Diagnosis & Treatment Strategy (T4 or T5)	30	0	0	30	—
AC6481	Microsystems & Advanced Acupunctures (T4 or T5)	22.5	15	0	37.5	2.00
PD6543	Business, Marketing & Practice Management (T4 or T5)	30	0	0	30	2.00
PD6542	Evidence-Based Practice (T4 or T5)	30	0	0	30	—
WD5442	Clinical Laboratory Diagnosis (T4 or T5)	30	0	0	30	2.00
WD5441	Imaging Diagnosis (T4 or T5)	30	0	0	30	—
PD6544	Practice Ethics & Risk Management Considerations (T5 or T6)	15	0	0	15	—
WC5422	Western Pharmacology & Toxicology (T4 or T5)	30	0	0	30	2.00
WC5421	Neurophysiology of Acupuncture (T4 or T5)	30	0	0	30	—
WI6501	Integrative Biomedicine II	22.5	15	0	37.5	2.00
TM5492L	Rehab & Physical Therapy of Oriental Medicine (T5 or T6)	0	30	0	30	—
TM5491L	Advanced Tui Na (T5 or T6)	0	30	0	30	1.00
CL5573L	Associate Internship 3	0	0	60	60	2.00
CL5574L	Associate Internship 4	0	0	60	60	2.00
<i>Senior Internship Advanced Examination</i>						
Totals		195	60	120	375	19.00
		or	or	or	or	or
		202.5	45	120	367.5	19.00

* Some courses are offered in alternate trimesters, for example (T4 or T5) or (T5 or T6).

Sixth Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
OS6531	Advanced Seminar 1 (T6 or T7)	30	0	0	30	2.00
OS6532	Advanced Seminar 2 (T6 or T7)	30	0	0	30	2.00
OS6533	Advanced Seminar 3 (T6 or T7)	30	0	0	30	—
OS6534	Advanced Seminar 4 (T6 or T7)	30	0	0	30	—
TM5492L	Rehab & Physical Therapy of Oriental Medicine (T5 or T6)	0	30	0	30	1.00
TM5491L	Advanced Tui Na (T5 or T6)	0	30	0	30	1.00
PD6541	Doctor & Patient Relationship (T5 or T6)	30	0	0	30	2.00
AC6452	Acupuncture Treatment Strategy (T5 or T6)	30	0	0	30	—
WD6441	Western Physical Diagnosis (T5 or T6)	30	0	0	30	2.00
OM6453	Nutrition & Food Therapy of Oriental Medicine (T5 or T6)	30	0	0	30	—
WT6455	Western Diet & Nutrition (T6 or T7)	15	0	0	15	1.00
WC5423	Psychopathology & Health Psychology (T6 or T7)	30	0	0	30	—
PD6544	Practice Ethics & Risk Management Considerations (T5 or T6)	15	0	0	15	—
CL6581L	Acupuncture Senior Internship 1	0	0	60	60	2.00
CL6582L	Acupuncture Senior Internship 2	0	0	60	60	2.00
CL6583L	Acupuncture Senior Internship 3	0	0	60	60	2.00
Totals		150	30	180	360	17.00
		or	or	or	or	or
		135	30	180	345	16.00

* Some courses are offered in alternate trimesters, for example (T5 or T6) or (T6 or T7).

Seventh Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
OS6531	Advanced Seminar 1 (T6 or T7)	30	0	0	30	—
OS6532	Advanced Seminar 2 (T6 or T7)	30	0	0	30	—
OS6533	Advanced Seminar 3 (T6 or T7)	30	0	0	30	2.00
OS6534	Advanced Seminar 4 (T6 or T7)	30	0	0	30	2.00
WT6455	Western Diet & Nutrition (T6 or T7)	15	0	0	15	—
WC5423	Psychopathology & Health Psychology (T6 or T7)	30	0	0	30	2.00
CL6584L	Acupuncture Senior Internship 4	0	0	60	60	2.00
CL6585L	Acupuncture Senior Internship 5	0	0	60	60	2.00
CL6586L	Acupuncture Senior Internship 6	0	0	60	60	2.00
CL6587L	Acupuncture Senior Internship 7	0	0	60	60	2.00
<i>Comprehensive Graduation Examination</i>						
Totals		90	0	240	330	14.00
		or	or	or	or	or
		105	0	240	345	15.00
Grand Totals		1177.5	435	840	2452.5	121.00

* Some courses are offered in alternate trimesters, for example (T6 or T7).

AC5472 **Acupuncture & Accessory Techniques** **Credits 1.0**

This course will train students in the use of the clinical tools and essential skills of the acupuncturist, direct and indirect moxa, cupping, Gua Sha, plum blossom, electrical stimulation, and blood-letting. In this course, students will learn not only various skills of different tools and modalities, but also what conditions can be used with which tools or modalities. Students will sharpen their needle handling techniques as well.

Prerequisite or Corequisite: AC5471

AC6452 **Acupuncture Treatment Strategy** **Credits 2.0**

This course will cover general theoretical and practical rules of acupuncture treatment including the principles of treatment and the basic guidelines for acupuncture point selection and combination of points among the five shu points, xi-cleft, yuan source, back-shu, front-mu, lux-connecting, eight confluent points, four and six command points, long distance vs. local point, etc.

Prerequisites: OM5441, OM5442

AC6481 **Microsystems & Advanced Acupunctures** **Credits 2.0**

Building on the skills already learned, students are introduced to a variety of specialized techniques of microsystem acupuncture, including scalp acupuncture, auricular acupuncture, Korean hand acupuncture, and cosmetic acupuncture. In this course, students are exposed to various styles of acupuncture techniques, furthermore, specific clinical applications of these techniques will be discussed based on various case presentations. Students will also be introduced to various unique acupuncture disciplines such as Saam Five Phase acupuncture, Japanese meridian acupuncture, Tong's acupuncture, etc. From this course, students will be inspired for further research and pursuing continuing education for a variety of styles of acupuncture.

Prerequisite: AC5471

CL4561L **Clinic Observation 1** **Credits 2.0**

The clinic observation courses are divided into three progressive stages. The first stage of observation is designed for beginning students to observe the clinical set-up and treatment procedures in acupuncture and oriental medicine. During this stage, the students observe how to perform history taking, physical examination, oriental medical diagnosis/differentiation, treatment plans, and acupuncture. The students get to observe how the basic theories they are learning are directly applied and realized in clinical practice. The observer is an integral part of the clinical experience at National University, and is involved throughout the clinic shift. Each observer is required to keep a clinic worksheet, which is graded at the end of the trimester. Here they record the clinic procedures, history, tongue, pulse, diagnosis, points and/or herbs used along with patient reactions, etc. There is also room for questions, personal observations, and other issues that can then be discussed with clinicians.

Prerequisite: None

CL4562L **Clinic Observation 2** **Credits 2.0**

In the second part of observation, the observer fulfills certain responsibilities in assisting the treating intern during each clinic shift, such as Gua Sha, Tui Na, and other simple non-invasive and non-provocative procedures.

Prerequisite: None

CL4563L **Clinic Observation 3** **Credits 2.0**

During this last stage of observation, the observer will progressively work toward increased involvement with supervised patient interactions. The observers will assist as needed in taking patient histories and familiarize themselves with writing SOAP notes (specific form in the NUHS AOM clinic) with supervision. Stage 3 observers will be familiar with diagnostic procedures and with formulating acupuncture therapy protocols and other treatment protocols with close supervision of clinician.

Prerequisites: AC4461, AC4463, CL4561L, OM4405, OM4406

**** Students must be available to cover the assigned clinic shift at the specified NUHS Whole Health Center and/or other assigned clinic facility, as hours vary at each location in order to serve the needs of patients and the community.***

CL5571L Associate Internship 1 Credits 2.0

The first stage of the clinical internship begins in Trimester 4, as students move out of the observation phase and begin to treat patients. Under close supervision, the intern conducts the patient interview including tongue and pulse diagnosis, and in collaboration with the supervisor makes a diagnosis and plans an acupuncture treatment. They then perform the acupuncture treatment with the clinical supervisor who is physically present at all times during the associate intern's diagnosis and treatment of the patient. At the end of each clinic shift, each intern has a chance to direct questions to their supervisor and get feedback. Interns are responsible for writing all of their medical records including history taking. During their associate internships, MSOM interns are not allowed to prescribe herbs for patients, but interns will discuss herbal formula if supervisor prescribes one.

Prerequisites: Successful completion of clinic foundational exam, CPR certificate, CL4563L, blood-borne pathogen training, immunization record

CL5572L Associate Internship 2 Credits 2.0

Prerequisites: Successful completion of clinic foundational exam, CPR certificate, CL4563L

Prerequisite or Corequisite: CL5571L

CL5573L Associate Internship 3 Credits 2.0

Throughout this second stage of clinical work, associate interns will continue the same work they did in the Associate Internships 1 and 2 and will gain further confidence and experience. The interns are able to continually add to and refine their diagnostic skills as well as their acupuncture techniques. More competency is required in the later trimesters, as interns are expected to take on more responsibility in treatment planning and patient education. During their associate internships, MSOM interns are not yet allowed to prescribe herbs for patients, but interns will discuss herbal formulas if the supervisor prescribes one.

Prerequisite or Corequisite: CL5571L, CL5572L

CL5574L Associate Internship 4 Credits 2.0

Prerequisite or Corequisite CL5571L, CL5572L, CL5573L

CL6581L Acupuncture Senior Internship 1 Credits 2.0

The different levels of clinic internships are designed to be progressive. To take this level of acupuncture, senior interns have to complete all of the prior levels of internships. From this level of training, the interns will be more independent and assume the role of primary care giver even though the interns will still have supervision from a licensed clinician. During this final stage of acupuncture senior internship, the interns must exhibit not only well developed skills in taking a history, performing physical exams, developing a diagnosis, prescribing acupuncture points, and choosing other treatment modalities, but also they must pay special attention to communication skills, patient education, marketing, insurance billing, and Illinois acupuncture policies, and so on. Even though senior acupuncture interns are independently practicing, they are still required to discuss their diagnosis with their findings and then submit their treatment plan including acupuncture and its accessories, diet and exercise protocol to their supervisor before performing their treatment or/and counseling their patients. The clinic supervisor does not have to be present in the examination room during the treatment although he/she must be available in the clinic.

Prerequisites: Successful completion of senior internship advanced exam, CL5571L, CL5572L, CL5573L, CL5574L

CL6582L Acupuncture Senior Internship 2 Credits 2.0

Prerequisites: Successful completion of senior internship advanced exam, CL5571L, CL5572L, CL5573L, CL5574L

Prerequisite or Corequisite: CL6581L

CL6583L Acupuncture Senior Internship 3 Credits 2.0

Prerequisites: Successful completion of senior internship advanced exam, CL5571L, CL5572L, CL5573L, CL5574L

Prerequisite or Corequisite: CL6581L, CL6582L

CL6584L **Acupuncture Senior Internship 4** **Credits 2.0**

Acupuncture Senior Internships 4 - 7 are the continuation of Acupuncture Senior Internships 1 - 3. During this internship, interns will pursue their own style of practice with their supervisor's permission and help. All practice modalities and scope of practice should be limited to what they learned from the curriculum or electives offered by the NUHS AOM program.

Prerequisite or Corequisite: CL6583L

CL6585L **Acupuncture Senior Internship 5** **Credits 2.0**

Prerequisites: CL6583L or Corequisite CL6584L, OS6531, OS6532, OS6533, OS6534

CL6586L **Acupuncture Senior Internship 6** **Credits 2.0**

Prerequisite or Corequisite: CL6583L or Corequisite CL6585L

CL6587L **Acupuncture Senior Internship 7** **Credits 2.0**

Prerequisite or Corequisite: CL6583L or Corequisite CL6586L

ID4541L **Tai Chi** **Credits 1.0**

Students learn the fundamentals of Tai Chi, a moving meditation that harmonizes the body and mind. Tai Chi also is an excellent way to become aware of one's own qi, the basis of Chinese medicine.

Prerequisite: None

ID4542L **Medical Qi Gong** **Credits 1.0**

Medical Qi Gong is one of the oldest branches of Chinese medicine, and is considered one of the most powerful. It is a therapeutic method that uses the training of the mind, the breath, and the physiological processes of the body for improving health and well being, maintaining body/mind balance and enhancing longevity. The first part of this course introduces a series of exercises and movements, which focus on cultivating one's internal energy, or qi. The second half of this course covers the movement and sensation of qi, as well as learning to guide qi internally through the meridians. Focus is on improving well-being and relieving symptoms of acute and chronic disorders. Students will be taught how to select different qi gong exercises according to various syndromes and disharmonies.

Prerequisite: None

OM4405 **Introduction to Oriental Medicine** **Credits 3.0**

This course is designed to introduce the development processes and philosophical background of oriental medicine. Students will have an opportunity to explore great Chinese physicians as well as great philosophers. They will study the root of oriental medicine with focuses on the Taoism, Confucianism and Buddhism. The class will discuss the unique thinking process and the characteristic outlook of oriental medicine. Furthermore, the class will examine some of the different approaches to oriental medicine in other parts of Asia such as Korea and Japan. Students will study the transplantation of oriental medicine into the western world. By the end of the course, students will have an overall sense of the history, development and basic foundational principles of oriental medicine with an eye toward the future of the field and their place in it.

Prerequisite: None

OM4406 **Physiology of Oriental Medicine** **Credits 3.0**

This course is a general introduction to oriental medicine in terms of Traditional Chinese/Oriental Medical Physiology. Students will learn to apply to the body the basic theories of oriental medicine: Yin/Yang, the concept of Qi, the Five Phases learned in the Introduction to Oriental Medicine class. Students will begin by looking at the Five Substances. The class will then move beyond these basic fundamental constituents of the body to the internal organs themselves, known as the Zang-Fu theory. Finally, the class will consider the primary question of etiology of disease in oriental medicine and the Three Categories of disease causes: Internal, External, and Miscellaneous (neither Internal nor External). Students will then be prepared to understand pathology in oriental medicine in future classes.

Prerequisite: None

OM4411 Etiology & Pathogenesis of Oriental Medicine Credits 3.0

In this course, the basic theory and characteristics of the etiology, pathology, sources of pathogens, and mechanisms of illness are covered. The topics include the six environmental excesses (Liu-Yin), seven emotions (Qi Qing), disharmony of Yin and Yang, the six channel pattern identification (Liu Jing Bian Zheng), and the abnormal function of Qi, blood, body fluid, and organs. General principles of treatment methods for each topic will be briefly covered. Prerequisites: OM4405 and OM4406

OM5441 Differential Diagnosis of Oriental Medicine 1 Credits 3.0

In this two-part course, students will learn different pattern diagnosis and introduction of treatment. This set of courses will cover the differentiation of patterns according to the different theories of oriental medicine. An in-depth discussion of the differentiation of patterns will include topics of pathological changes, Zhang-Fu patterns, I and blood patterns, six channel patterns, four aspect patterns, meridian and collateral patterns, San Jiao patterns, disease-evil patterns, and so on. The instructor will present how pattern identification applies to cases encountered in the NUHS AOM clinic. Treatment based on the differential diagnosis will be also discussed.

Prerequisite: OM4411

OM5422 Differential Diagnosis of Oriental Medicine 2 Credits 3.0

This course is continuation of Differential Diagnosis 1.

Prerequisite: OM4411

OM5471 Diagnosis & Skills of Oriental Medicine 1 Credits 2.0

This course introduces the Four Traditional Methods of Diagnosis: looking, hearing/smelling, asking, and feeling/palpating. The focus here is on tongue and pulse diagnosis. Students first learn the procedures of tongue inspection and pulse palpation by watching the instructor's demonstration and follow by performing and practicing the technique in class. Students also will identify and classify significant findings into eight principle categories in order to further understand them within the traditional patterns of disharmony. A significant amount of lab time will be spent on pulse diagnosis.

Prerequisites: OM4405, OM4406

OM5472 Diagnosis & Skills of Oriental Medicine 2 Credits 2.0

The second course in the diagnosis series continues with the Four Traditional Methods of Diagnosis, focusing specifically on the Ten Questions and writing SOAP notes. After learning each of the 10 categories of questions and their significance in terms of diagnosis, students will practice patient interviewing, focusing on review of systems questionnaire of "confidential history," combining it with the tongue and pulse exams. In this course, students will also learn how to palpate certain categories of points — mu and shu points, source points, ashi points, etc. — as part of the diagnostic procedures and will learn what important information can be gained. There will be significant lab time available for practicing all of these skills. Students will submit three full sets of mock patient medical records including review of systems questionnaire, "confidential history," by the end of the course.

Prerequisites: OM4405, OM4406

OM6451 Advanced Diagnosis & Treatment Strategy Credits 2.0

The format of this course will be case presentation. Students will have the opportunity to learn to incorporate the different models of pattern diagnoses and theories of oriental medicine based on clinical cases, and to develop accurate, fluent and sophisticated diagnoses, treatment plans and point selections for each patient as a unique individual. Included in these discussions are the patient-intern relationship, case management and referral, and general patient care issues. Special factors or symptoms are presented to help the student recognize the potential for increased risk to the patient, for example: cases such as the diabetic patient, the immune-compromised patient, etc.; when to modify standard therapeutic approaches, such as when treating infants and children or women who are pregnant; clinical presentation that may have a more serious cause; and how to make appropriate referrals.

Prerequisite: OM5442

Prerequisite or Corequisite: OM5441

OS6534**Advanced Seminar 4****Credits 2.0**

In this seminar series, students integrate all of the subjects that they have studied over the past two years. The format used to integrate this information is case-based seminars. A few of the topics covered include: chronic pain management, orthopedics, internal disorders, obstetrics and gynecology, pediatrics, geriatrics, dermatology, allergies, infertility, emergency care, and so on. However, this Advanced Seminar 4 will mainly focus on geriatric, pediatric, and multiple system-related conditions. Some seminar presentations may involve a patient in the grand rounds setting whenever possible. The class may be composed of large and small group activities. The large group session will present the case, introduce the related topics, and wrap up the case. Each small group session is responsible for a report on the cases that include: full patient information and physical examination results based on traditional four diagnosis methods and western medicine; differential diagnosis and assessments; principles of treatment; treatment protocol with specific acupuncture points and their point selection rationales; accessory techniques and prognosis. Students will also discuss patient management, business management and practice ethics, and proper patient referral to other health care providers.

Prerequisites or Corequisites: CL5571L, CL5572L, OM6451

PD6541**Doctor & Patient Relationship****Credits 2.0**

This course is designed to sensitize students to the patient's life situation and stimulate self-observation as students interact with patients. Lecture and discussion topics include: structures in doctor/patient interaction; models of the doctor/patient interaction; doctor/patient boundaries; the impact of the doctor/patient relationship on health care outcomes; the impact of the doctor/patient relationship on patient satisfaction; culturally responsive health care; the sociological context of patient suffering; co-creation of the patient's story in a therapeutic relationship; death, dying and palliative health care; management of the abused patient; and the doctor's responsibilities to the community and society. Group time will be used to discuss and practice relationship issues through guest case presentations, structured interpersonal exercises, article reviews, and discussion.

Prerequisite: None

PD6542**Evidence-Based Practice****Credits 2.0**

As professional health care practitioners, it is important to strive to educate oneself on the efficacy of one's applied art. The research literature provides the knowledge base to make sound clinical judgments in both diagnosis and treatment of health conditions. This course provides a means for developing the skills needed to critically evaluate research literature in general, and research literature specifically pertaining to complementary and alternative medicine. The topics covered include research design, validity and reliability, bias, searching the literature, critical appraisal of the literature, and elementary statistical methods of data analysis.

Prerequisite: None

PD6543**Business, Marketing, and Practice Management****Credits 2.0**

This course focuses on many of the various practice-related issues that face the acupuncture and/or oriental medicine practitioner. Topics addressed in this class include: writing a curriculum vitae; investigating various practice types; writing narrative reports; the informed consent process; marketing concepts for the practice with preparation of a comprehensive marketing plan; preparation of a comprehensive business plan; successful interviewing techniques; vicarious liability and independent contact issues; record keeping requirements; creating an effective referral network; and personal and professional insurance needs.

Prerequisite: None

PD6544**Practice Ethics & Risk Management Considerations****Credits 1.0**

This course focuses on many of the various practice-related risk management and provider/patient communication issues that face the acupuncture and/or oriental medicine practitioner. Topics addressed in this class include: boundary issues and preventive strategies involving sexual boundaries; treating friends and family members; self-disclosure; gifts and trade-offs; dual relationships; language; physical examination; physical contact; time and duration of appointments. Additional topics include: a health care provider's duties, responsibilities, and professional standards of care; a provider's duty regarding vicarious liability and the independent contract relationship; elements of successful communication skills in provider/patient relationships; recognizing and managing difficult/predatory patients; and should you say you're sorry if you hurt a patient?

Prerequisites: None

TM4491L **Tui Na** **Credits 1.0**

Tui Na is a traditional meridian bodywork therapy that originated in China over 2,000 years ago. It involves a variety of techniques including rolling, tapping, and pressure used for treating a broad range of disorders including orthopedic and stroke rehabilitation. It is also a widely used modality in pediatrics. In this course, students gain a working knowledge of basic Tui Na techniques, the general body routine, and Tui Na exercises to strengthen the body's constitution. An emphasis will be made on integrating Tui Na with oriental as well as biomedical evaluation and treatment methods of common disorders.

Prerequisite: None

TM4492L **Asian Body Work** **Credits 1.0**

In this course, students will learn many different forms of basic soft tissue works such as shiatsu, anma, acupressure, and so on. Students will learn meridian based acupressure or anma for various conditions of patient care.

Prerequisite: None

TM5491L **Advanced Tui Na** **Credits 1.0**

In this course, students will be introduced to more advanced skills of Tui Na while they sharpen the skills they have previously learned from the basic course.

Prerequisite: TM4491L

TM5492L **Rehabilitation & Physical Therapy of Oriental Medicine** **Credits 1.0**

Students will learn modern oriental medicine rehabilitation based on oriental medicine theory. Students will also learn hydrotherapy, infrared, ultrasound, Kinesio Taping, and many other newly developed equipment and tools. While learning function, indications, and contraindications of each modality, students will also discuss safety and legal issues.

Prerequisites: TM4491L, TM4492L

WB4400 **Palpation Skills** **Credits 0.5**

This course is designed for students to learn through study and practical exploration of the assessment of the skin, superficial fascia, and veins. Students will also develop palpation skills of the major superficial muscles, tendons, ligaments, and bony landmarks of the spine and extremities. Students will develop basic hands-on palpation skills and also will focus on the assessment of joint motions and normal posture.

Prerequisite: None

WB4401 **Western Medical Terminology** **Credits 1.0**

This course will introduce students to key word parts associated with body systems, disorders, conditions, procedures, and medical specialties. It will show students how to decipher difficult medical terms by breaking them down into these components. Pronunciation of the terms will be covered as well.

Prerequisite: None

WB4402 **Human Anatomy** **Credits 2.5**

Students will learn through cadaver dissection in lecture and laboratory. Lecture will cover the basic concepts of human anatomy with an emphasis on the cutaneous part of the human body. Students will discuss the function of major muscles and clinical and pathological conditions that present frequently in the clinic. In the laboratory, students will discover the relationship between anatomical structures, meridians, and major acupuncture points.

Prerequisite: None

WB4404 **Principles of Biochemistry** **Credits 1.0**

This course presentation starts with an introduction to the concepts of bio-molecules in the human body such as carbohydrates, lipids, proteins, and nucleic acid, etc. This course will also introduce the metabolic mechanism and processes involved in producing and transforming these molecules to generate energy for the body. Students will also be provided with a basis for understanding nutrition on a biochemical level, covering vitamins, minerals, co-enzymes, etc.

Prerequisite: None

WB4405 **Neurology** **Credits 2.0**

This course will serve as an introduction to the general neurological system. Knowledge of the neurological system is essential to understand the scientific basis and mechanisms of acupuncture. Topics covered in this course include the histology, anatomy, and physiology of the nervous system. The central, peripheral, and autonomic nervous systems, as well as the cranial nerves will be presented. The major nerve plexuses are discussed along with the common clinical pathologies.

Prerequisite: None

WB4407 **Western Anatomy and Physiology** **Credits 3.0**

In this course, students will learn in lecture and laboratory formats, the normal anatomy, and physiology of the major organ systems of the human body. The organ systems discussed are the cardiovascular, respiratory, lymphatic, endocrine, urinary, digestive, and reproductive as well as neuroanatomical structures. In addition, the interrelationships between organ systems will be explained as well as the interrelationships between structure and function of the organs and organ systems. The gross anatomy laboratory sessions will be presented using a regional approach and will be designed to support the lecture sessions and address related basic science issues.

Prerequisite: None

WB4411 **Microbiology, Immunology & Public Health** **Credits 3.0**

This course provides an introduction to microorganisms, immunology, public health, and their interaction with humans; concepts in public health as applied to communicable and non-communicable diseases; and an introduction to the basic changes in the morphology of the cells, tissues, and organs in diseased states. Extensive use of visual aids using the latest computer technology will aid students in visualizing and understanding these various fundamental topics. The appropriate clinical correlation with case studies is discussed as well.

Prerequisite or Corequisite: WB4401

WB4412 **Western Pathology** **Credits 3.0**

Considered in this course are the pathologies peculiar to and characteristic of the various systems of the body. The pathologies examined include myopathy, neuropathy, bone and joint pathology, immunopathology, hematopathology, and dermatopathology. Each condition is studied from the standpoint of general characteristics, gross and microscopic appearance, and clinical course. The systems examined include neurological, respiratory, cardiovascular, reproductive and mammary, gastrointestinal (inclusive of liver, gall bladder and pancreas), urinary, and endocrine.

Prerequisite or Corequisite: WB4401

WC5421 **Neurophysiology of Acupuncture** **Credits 2.0**

In this course, students will discuss acupuncture from a different angle. This course investigates how modern western scientific research starts unveiling the mystical functions and action mechanisms of acupuncture, and the relationship between acupuncture stimulation and brain reaction. By discussing current western research achievement about acupuncture, students will understand the neurological, physiological, and chemical basis of the acupuncture action mechanisms and its functions. Students will be inspired by this course to connect 5,000 years of traditional eastern acupuncture into modern western science.

Prerequisites: WB4401, WB4405

WC5422 **Western Pharmacology & Toxicology** **Credits 2.0**

This course provides a basic understanding of the use of drugs in western medicine for the treatment of disease. Topics covered in this course will be descriptions of drug names and classification, general principles of drug action and metabolism. Factors influencing drug action and drug safety are addressed, too. This course also will discuss the drug actions on body systems including the entire major organ systems and the disorders and diseases in each of the systems. Included will be a description of the mechanism of action, major untoward effects and contraindications for each drug and drug category. A large part of this lecture will be focused on interactions with other drugs, Chinese herbs, and botanicals. Drug action on infection and immune system regulation as well as chemical dependency and substance abuse will be described. A discussion of poisons and their antidotes is included.

Prerequisite: WB4401, WB4404

WC5423**Psychopathology & Health Psychology****Credits 2.0**

This course includes:

(i) review and discussion of the major topics in health psychology including examination of the relationships of psychopathology, lifestyle, and personal relationships to physical health. Topics include risk factors and treatments for physical disorders such as cardiovascular disease, cancer and chronic pain, as well as the exploration of the co-morbidity of physical and psychological disorders;

(ii) an examination of the nine basic categories of psychopathology (depression, anxiety, somatoform, substance use disorders, sleep disorders, eating disorders, sexual dysfunction, cognitive disorders, and psychosis) with emphasis on screening, diagnosis, and management in a primary care setting. Students are asked to review current theories and their implication for practice.

Prerequisite: None

WD4441L**Western Physical Exam****Credits 1.0**

In this course, students will practice general physical exams of common western medical conditions through oriental and western medical integrative forms. In the lectures and lab, students will learn history taking, vitals, and general physical exams and their procedures. The students will be familiar with the major individual exam skill performance while they practice head-to-toe sequence exams. The course will also cover patient referral to other health care professions. Students will also practice SOAP note writing based on the NUHS AOM clinic patient SOAP note form.

Prerequisites: WB4401

Corequisites: WB4407

WD4442L**Neuromusculoskeletal Exam****Credits 1.0**

This laboratory course will cover the neurological examination and orthopedic examinations. Students will learn how to test the neurological systems including dermatome testing, muscle testing, deep tendon reflexes, etc. Students will also learn how to perform orthopedic examinations of the major joint systems of the human body. The examinations will help the student to determine if a lesion is present and the location of the lesion.

Prerequisites: WB4401, WB4402

WD5441**Imaging Diagnosis****Credits 2.0**

The basic principles of the major modalities of diagnostic imaging are discussed. The major outcomes include learning normal and common abnormal findings on conventional X-ray studies and becoming familiar with common abnormal findings yielded by the following modalities: conventional X-ray, MRI, CT, and nuclear imaging. This course is designed for the acupuncture practitioner in general practice who will request and receive radiographic and advanced diagnostic imaging reports and will learn how to apply this information to the overall patient status/disease process. Basic interpretation of such reports, knowing when and how to request them, and how to apply the information contained in the radiology report to their patient's condition is a major learning outcome.

Prerequisites: WB4401, WB4402, WB4412

WD5442**Clinical Laboratory Diagnosis****Credits 2.0**

The clinical laboratory plays a major role in the education of the student. Today's technology allows the health practitioner to examine the depths of the body in ways that were only imaginable a few short years ago. The modern health care provider, especially acupuncturist, needs to be able to know in what situations patients should be referred for diagnostic tests, how to interpret the information relative to its diagnostic or informative value, what other tests relate to this information, and what are the disadvantages or possibilities of error or false positive results. In this course, these aspects are addressed with regard to the common profiles of hematology, chemistries, urinalysis, fecal, and sputum studies.

Prerequisites: WB4401, WB4407, WB4411, WB4412

WD6441**Western Physical Diagnosis****Credits 2.0**

This course introduces the student to the methods used in the diagnosis and management of common conditions. The students in this course develop skills in interpretation, evaluation and correlation of normal and abnormal physical findings. Discussions concentrate on the development of diagnostic acumen and conservative management of selected conditions.

Prerequisites: WD4441L, WD4442L

Corequisite: WD5441

WI6501**Integrative Medicine II****Credits 2.0**

This course will review and sharpen core biomedicine knowledge and skills and focus on the comprehensive application of acquired cognitive knowledge, psychomotor clinical skills, and affective senses in actual clinical case problem-solving. In this course, students will discuss how to utilize and integrate the different subjects from each biomedicine class into real clinical case problem-solving situations. Students will also contend how to apply medical knowledge, manage patient care effectively, demonstrate professionalism, interpersonal and communication skills, and utilize all other appropriate information, while integrating the basic science and basic western diagnostic skills with certain treatment plans. Students will also review specific exam skills and be required to practice a hands-on format. The materials in this class will be delivered through class meetings and/or an online basis.

Prerequisites: WB4400, WB4401, WB4402, WB4411, WB4412, WB4441, WB4442

Prerequisites or Corequisites: WC5421, WC5422, WD5441, WD5442, PD6542

WT6455**Western Diet & Nutrition****Credits 1.0**

This course provides a basic understanding of the vital role of the western diet and nutrition in an overall approach to patient care. Topics will cover principles of human nutrition that stress a review of the macronutrients and micronutrients with emphasis on the health properties of each as well as the severe deficiency states for both micronutrients and macronutrients. Digestion, absorption, and transport of the nutrients, and consequences of malabsorption care are covered. Energy production, energy balance, and weight management are also described. Food habits in the United States and nutrition across the life cycle are discussed in the course. Male and female health, sports and exercise nutrition, enteral and parenteral nutrition procedures as well as an introduction to the science of food preparation and handling are included. An introduction to nutritional status assessment using food frequency questionnaires and diet history is given.

Prerequisite: WB4404

Courses of the Oriental Medicine Curriculum

First Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
OM4405	Introduction to Oriental Medicine	45	0	0	45	3.00
OM4406	Physiology of Oriental Medicine	45	0	0	45	3.00
AC4461	Meridian Theory & Point Location 1	30	15	0	45	2.50
AC4463	Meridian Theory & Point Location 2	30	15	0	45	2.50
TM4492L	Asian Body Work (T1 or T2)	0	30	0	30	—
TM4491L	Tui Na (T1 or T2)	0	30	0	30	1.00
WB4400	Palpation Skills	0	15	0	15	0.50
WB4401	Medical Terminology	15	0	0	15	1.00
WB4407	Western Anatomy & Physiology (T1 or T2)	37.5	15	0	52.5	3.0
WB4402	Human Anatomy (T1 or T2)	15	45	0	60	2.50
WB4404	Principles of Biochemistry (T1 or T2)	15	0	0	15	1.00
WB4405	Neurology (T1 or T2)	30	0	0	30	—
Totals		217.5	90	0	307.5	17.50
		or	or	or	or	or
		195	120	0	315	17.00

* Some courses are offered in alternate trimesters, for example (T1 or T2).

Second Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
OM4411	Etiology & Pathogenesis of Oriental Medicine	45	0	0	45	3.00
OM5471	Diagnosis & Skills of Oriental Medicine 1	22.5	15	0	37.5	2.00
AC4462	Meridian and Point Energetics 1	30	0	0	30	2.00
TM4492L	Asian Body Work (T1 or T2)	0	30	0	30	1.00
TM4491L	Tui Na (T1 or T2)	0	30	0	30	—
WB4407	Western Anatomy & Physiology (T1 or T2)	37.5	15	0	52.5	3.00
WB4402	Human Anatomy (T1 or T2)	15	45	0	60	2.50
WB4404	Principles of Biochemistry (T1 or T2)	15	0	0	15	—
WB4405	Neurology (T1 or T2)	30	0	0	30	2.00
WD4441L	Western Physical Exam (T2 or T3)	0	30	0	30	1.00
WD4442L	Neuromusculoskeletal Exam (T2 or T3)	0	30	0	30	—
WB4412	Western Pathology (T2 or T3)	45	0	0	45	—
WB4411	Microbiology, Immunology & Public Health (T2 or T3)	45	0	0	45	3.00
CL4561L	Clinic Observation 1	0	0	60	60	2.00
Totals		187.5	120	60	367.5	18.50
		or	or	or	or	or
		210	90	60	360	19.00

* Some courses are offered in alternate trimesters, for example (T1 or T2) or (T2 or T3).

Third Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
HM4511	Materia Medica 1	45	0	0	45	3.00
OM5472	Diagnosis & Skills of Oriental Medicine 2	22.5	15	0	37.5	2.00
OM5441	Differential Diagnosis of Oriental Medicine 1 (T3 or T4)	45	0	0	45	3.00
OM5442	Differential Diagnosis of Oriental Medicine 2 (T3 or T4)	45	0	0	45	—
AC4464	Meridian and Point Energetics 2	30	0	0	30	2.00
AC5471	Acupuncture & Clean Needle Technique	22.5	15	0	37.5	2.00
ID4542L	Medical Qi Gong (T3 or T4)	0	30	0	30	—
ID4541L	Tai Chi (T3 or T4)	0	30	0	30	1.00
WD4441L	Western Physical Exam (T2 or T3)	0	30	0	30	—
WD4442L	Neuromusculoskeletal Exam (T2 or T3)	0	30	0	30	1.00
WB4412	Western Pathology (T2 or T3)	45	0	0	45	3.00
WB4411	Microbiology, Immunology & Public Health (T2 or T3)	45	0	0	45	—
CL4562L	Clinic Observation 2	0	0	60	60	2.00
CL4563L	Clinic Observation 3	0	0	60	60	2.00
<i>Internship Foundational Examination</i>						
Totals		210	90	120	420	21.00

* Some courses are offered in alternate trimesters, for example (T2 or T3) or (T3 or T4).

Fourth Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
HM4512	Materia Medica 2 (T4 or T5)	45	0	0	45	3.00
HM4513	Materia Medica 3 (T4 or T5)	45	0	0	45	—
OM5441	Differential Diagnosis of Oriental Medicine 1 (T3 or T4)	45	0	0	45	—
OM5442	Differential Diagnosis of Oriental Medicine 2 (T3 or T4)	45	0	0	45	3.00
OM6451	Advanced Diagnosis & Treatment Strategy (T4 or T5)	30	0	0	30	2.00
AC6481	Microsystems & Advanced Acupunctures (T4 or T5)	22.5	15	0	37.5	—
AC5472	Acupuncture & Accessory Techniques	0	30	0	30	1.00
ID4542L	Medical Qi Gong	0	30	0	30	1.00
ID4541L	Tai Chi (T3 or T4)	0	30	0	30	—
PD6543	Business, Marketing & Practice Management (T4 or T5)	30	0	0	30	—
PD6542	Evidence-Based Practice (T4 or T5)	30	0	0	30	2.00
WD5442	Clinical Laboratory Diagnosis (T4 or T5)	30	0	0	30	—
WD5441	Imaging Diagnosis (T4 or T5)	30	0	0	30	2.00
WC5422	Western Pharmacology & Toxicology (T4 or T5)	30	0	0	30	—
WC5421	Neurophysiology of Acupuncture (T4 or T5)	30	0	0	30	2.00
CL5571L	Associate Internship 1	0	0	60	0	2.00
CL5572L	Associate Internship 2	0	0	60	0	2.00
Totals		210.0	60	120	390.0	20.00
		or	or	or	or	or
		202.5	75	120	397.5	20.00

* Some courses are offered in alternate trimesters, for example (T3 or T4) or (T4 or T5).

Fifth Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
HM4514L	Herbal Pharmacy Practicum	0	30	0	30	1.00
HM4512	Materia Medica 2 (T4 or T5)	45	0	0	45	3.00
HM4513	Materia Medica 3 (T4 or T5)	45	0	0	45	—
PD6451	Doctor & Patient Relationship (T5 or T6)	30	0	0	30	—
AC6452	Acupuncture Treatment Strategy (T5 or T6)	30	0	0	30	2.00
WD6441	Western Physical Diagnosis (T5 or T6)	30	0	0	30	—
OM6453	Nutrition & Food Therapy of Oriental Medicine (T5 or T6)	30	0	0	30	2.00
OM6451	Advanced Diagnosis & Treatment Strategy (T4 or T5)	30	0	0	30	—
AC6481	Microsystems & Advanced Acupunctures (T4 or T5)	22.5	15	0	37.5	2.00
PD6543	Business, Marketing & Practice Management (T4 or T5)	30	0	0	30	2.00
PD6542	Evidence-Based Practice (T4 or T5)	30	0	0	30	—
PD6544	Practice Ethics & Risk Management Considerations (T5 or T6)	15	0	0	15	—
WD5442	Clinical Laboratory Diagnosis (T4 or T5)	30	0	0	30	2.00
WD5441	Imaging Diagnosis (T4 or T5)	30	0	0	30	—
WC5422	Western Pharmacology & Toxicology (T4 or T5)	30	0	0	30	2.00
WC5421	Neurophysiology of Acupuncture (T4 or T5)	30	0	0	30	—
WI6501	Integrative Biomedicine II	22.5	15	0	37.5	2.00
CL5573L	Associate Internship 3	0	0	60	60	2.00
CL5574L	Associate Internship 4	0	0	60	60	2.00
Totals		240	60	120	420	22.00
		or	or	or	or	or
		247.5	45	120	412.5	22.00

* Some courses are offered in alternate trimesters, for example (T4 or T5) or (T5 or T6).

Sixth Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
HM5511	Herbal Formula 1 (T6 or T7)	45	0	0	45	3.00
HM5512	Herbal Formula 2 (T6 or T7)	45	0	0	45	—
OS6531	Advanced Seminar 1 (T6 or T7)	30	0	0	30	2.00
OS6532	Advanced Seminar 2 (T6 or T7)	30	0	0	30	2.00
OS6533	Advanced Seminar 3 (T6 or T7)	30	0	0	30	—
OS6534	Advanced Seminar 4 (T6 or T7)	30	0	0	30	—
PD6541	Doctor & Patient Relationship (T5 or T6)	30	0	0	30	2.00
AC6452	Acupuncture Treatment Strategy (T5 or T6)	30	0	0	30	—
WD6441	Western Physical Diagnosis (T5 or T6)	30	0	0	30	2.00
OM6453	Nutrition & Food Therapy of Oriental Medicine (T5 or T6)	30	0	0	30	—
WT6455	Western Diet & Nutrition (T6 or T7)	15	0	0	15	1.00
WC5423	Psychopathology & Health Psychology (T6 or T7)	30	0	0	30	—
PD6544	Practice Ethics & Risk Management Considerations (T5 or T6)	15	0	0	15	—
CL5591L	Herbal Associate Integrative Internship 1	0	0	60	60	2.00
CL5591L	Herbal Associate Integrative Internship 1	0	0	60	60	2.00
Totals		195	0	120	315	17.00
		or	or	or	or	or
		180	0	120	300	16.00

* Some courses are offered in alternate trimesters, for example (T5 or T6) or (T6 or T7).

Seventh Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
HM5511	Herbal Formula 1 (T6 or T7)	45	0	0	45	—
HM5512	Herbal Formula 2 (T6 or T7)	45	0	0	45	3.00
HM5513	Herbal Patent Medicine	15	0	0	15	1.00
HM6454	Herbal Treatment Strategy	45	0	0	45	3.00
OS6531	Advanced Seminar 1 (T6 or T7)	30	0	0	30	—
OS6532	Advanced Seminar 2 (T6 or T7)	30	0	0	30	—
OS6533	Advanced Seminar 3 (T6 or T7)	30	0	0	30	2.00
OS6534	Advanced Seminar 4 (T6 or T7)	30	0	0	30	2.00
WT6455	Western Diet & Nutrition (T6 or T7)	15	0	0	15	—
WC5423	Psychopathology & Health Psychology (T6 or T7)	30	0	0	30	2.00
CL5593L	Herbal Associate Integrative Internship 3	0	0	60	60	2.00
CL5594L	Herbal Associate Integrative Internship 4	0	0	60	60	2.00
CL5595L	Herbal Associate Integrative Internship 5	0	0	60	60	2.00
<i>Senior Internship Advanced Examination</i>						
Totals		195	0	180	375	19.00
		or	or	or	or	or
		210	0	180	390	20.00

* Some courses are offered in alternate trimesters, for example (T6 or T7).

Eighth Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
HS6531	Herbal Seminar 1 (T8 or T9)	30	0	0	30	2.00
HS6532	Herbal Seminar 2 (T8 or T9)	30	0	0	30	2.00
HS6533	Herbal Seminar 3 (T8 or T9)	30	0	0	30	—
HS6534	Herbal Seminar 4 (T8 or T9)	30	0	0	30	—
HM6524	Integration of Herbal Medicine (T8 or T9)	30	0	0	30	—
HM6523	Classics of Oriental Medicine (T8 or T9)	45	0	0	45	3.00
WT6456	Botanical Medicine	52.5	0	0	52.5	3.50
CL6601L	Herbal Senior Integrative Internship 1	0	0	60	60	2.00
CL6602L	Herbal Senior Integrative Internship 2	0	0	60	60	2.00
CL6603L	Herbal Senior Integrative Internship 3	0	0	60	60	2.00
CL6604L	Herbal Senior Integrative Internship 4	0	0	60	60	2.00

Comprehensive Graduation Examination at the end of 9th Trimester (Week 12)

Totals	157.5	0	240	397.5	18.50
	or	or	or	or	or
	142.5	0	240	382.5	18.50

* Some courses are offered in alternate trimesters, for example (T8 or T9).

Ninth Trimester		Lecture Clock Hours	Lab Clock Hours	Clinic Clock Hours	Total Clock Hours	Total Credits
HS6531	Herbal Seminar 1 (T8 or T9)	30	0	0	30	—
HS6532	Herbal Seminar 2 (T8 or T9)	30	0	0	30	—
HS6533	Herbal Seminar 3 (T8 or T9)	30	0	0	30	2.00
HS6534	Herbal Seminar 4 (T8 or T9)	30	0	0	30	2.00
HM6524	Integration of Herbal Medicine (T8 or T9)	30	0	0	30	2.00
HM6523	Classics of Oriental Medicine (T8 or T9)	45	0	0	45	—
CL6605L	Herbal Senior Integrative Internship 5	0	0	60	60	2.00
CL6606L	Herbal Senior Integrative Internship 6	0	0	60	60	2.00
CL6607L	Herbal Senior Integrative Internship 7	0	0	60	60	2.00
CL6608L	Herbal Senior Integrative Internship 8	0	0	60	60	2.00
Totals		90	0	240	330	14.00
		or	or	or	or	or
		105	0	240	345	14.00
Grand Total		1710	405	1200	3315	167.50

* Some courses are offered in alternate trimesters, for example (T8 or T9).

Oriental Medicine Course Descriptions

AC4461 Meridian Theory & Point Location 1 Credits 2.5

This course begins with an introduction to the meridians of acupuncture and how they form a complete circuit throughout the body. Relevant scientific research will be presented that examines the meridians and Qi in light of technological advances that are now able to detect them. Each channel will be studied, both its internal and external branches, and every student is encouraged to become aware of the energetics of the meridians as they are being palpated and understood. The six energetic axes are introduced along with how they correspond to different energetic zones in the body. Using lecture, demonstration, and small group practice, students learn the precise location for all of the acupuncture points on the 12 main channels, as well as the conception/ren and governing/du channels. Other commonly used extra points will be taught as well. Using the Chinese anatomical measurement system (cun) as well as precise anatomical landmarks, students palpate each point, learning location, depth, insertion technique, and contraindications. Adopted by the World Health Organization, students learn the nomenclature (name and number) for each point in English, and learn certain classical points in Chinese as well.

Prerequisite or Corequisite: WB4400

AC4462 Meridian & Point Energetics 1 Credits 2.0

This course focuses on the energetic properties and functions of the acupuncture points. Each point is studied individually as well as in comparison to other points on the meridian, and with points on different meridians with similar functions. The theory and usage of each acupuncture point is discussed in depth, along with special categories and groupings of points, e.g. lux connecting points, yuan source points, xi-cleft points, five element points, and mu and shu points. Methods of combining points into effective treatment prescriptions are discussed in depth; students learn how to select appropriate point combinations to effectively treat corresponding patterns of disease. In this two-series course, 12 regular meridian points, eight extraordinary meridian points, and major extra points will be covered.

Prerequisite: OM4405

AC4463 Meridian Theory & Point Location 2 Credits 2.5

This is a continuation of Meridian Theory and Point Location 1.

Prerequisite or Corequisite: WB4400

AC4464 Meridian & Point Energetics 2 Credits 2.0

The second in a series, this course continues focusing on the energetic properties and functions of each acupuncture point.

Prerequisite: OM4405

AC5471 Acupuncture & Clean Needle Technique Credits 2.0

Combining classroom lecture, demonstration, and supervised practice, this course lays the foundation for acquiring clinical acupuncture skills. This course starts with the introduction of acupuncture travel kit. This course will emphasize establishing and maintaining clean fields, and application of aseptic and sterile procedures. Universal precautions, including HIV/AIDS, HBV, and clean needle technique as set forth in the NCCAOM guidelines will be introduced. This course will also address emergency care in the acupuncture clinic such as patient fainting, semi-coma, severe nausea, vomiting, etc. Students will develop the basic skills of needling, including insertion and withdrawal, correct angle, depth, manipulation, and withdrawal of needles, tonification, and sedation techniques. Special emphasis is placed on developing De Qi sensitivity to patients' reactions to these procedures, as well as to safe techniques, precautions, and contraindications, and learning to recognize and respond to adverse treatment reactions. Students will spend significant time practicing needle insertion and withdrawal in small groups (three students per group). By the end of this course, students will be prepared to successfully pass the Clean Needle Technique exam sponsored by the Council of Colleges of Acupuncture and Oriental Medicine (CCAOM).

Prerequisites: AC4461, AC4463

AC5472 **Acupuncture & Accessory Techniques** **Credits 1.0**

This course will train students in the use of the clinical tools and essential skills of the acupuncturist, direct and indirect moxa, cupping, Gua Sha, plum blossom, electrical stimulation, and blood-letting. In this course, students will learn not only various skills of different tools and modalities, but also what conditions can be used with which tools or modalities. Students will sharpen their needle handling techniques as well.

Prerequisite or Corequisite: AC5471

AC6452 **Acupuncture Treatment Strategy** **Credits 2.0**

This course will cover general theoretical and practical rules of acupuncture treatment including the principles of treatment and the basic guidelines for acupuncture point selection and combination of points among the five shu points, xi-cleft, yuan source, back-shu, front-mu, lux-connecting, eight confluent points, four and six command points, long distance vs. local point, etc.

Prerequisites: OM5441, OM5442

AC6481 **Microsystems & Advanced Acupunctures** **Credits 2.0**

Building on the skills already learned, students are introduced to a variety of specialized techniques of microsystem acupuncture, including scalp acupuncture, auricular acupuncture, Korean hand acupuncture, and cosmetic acupuncture. In this course, students are exposed to various styles of acupuncture techniques, furthermore, specific clinical applications of these techniques will be discussed based on various case presentations. Students will also be introduced to various unique acupuncture disciplines such as Saam Five Phase acupuncture, Japanese meridian acupuncture, Tong's acupuncture, etc. From this course, students will be inspired for further research and pursuing continuing education for a variety of styles of acupuncture.

Prerequisite: AC5471

CL4561L **Clinic Observation 1** **Credits 2.0**

The clinic observation courses are divided into three progressive stages. The first stage of observation is designed for beginning students to observe the clinical set-up and treatment procedures in acupuncture and oriental medicine. During this stage, the students observe how to perform history taking, physical examination, oriental medical diagnosis/differentiation, treatment plans, and acupuncture. The students get to observe how the basic theories they are learning are directly applied and realized in clinical practice. The observer is an integral part of the clinical experience at National University, and is involved throughout the clinic shift. Each observer is required to keep a clinic worksheet, which is graded at the end of the trimester. Here they record the clinic procedures, history, tongue, pulse, diagnosis, points and/or herbs used along with patient reactions, etc. There is also room for questions, personal observations, and other issues that can then be discussed with clinicians.

Prerequisite: None

CL4562L **Clinic Observation 2** **Credits 2.0**

In the second part of observation, the observer fulfills certain responsibilities in assisting the treating intern during each clinic shift, such as Gua Sha, Tui Na, and other simple non-invasive and non-provocative procedures.

Prerequisite: None

CL4563L **Clinic Observation 3** **Credits 2.0**

During this last stage of observation, the observer will progressively work toward increased involvement with supervised patient interactions. The observers will assist as needed in taking patient histories and familiarize themselves with writing SOAP notes (specific form in the NUHS AOM clinic) with supervision. Stage 3 observers will be familiar with diagnostic procedures and with formulating acupuncture therapy protocols and other treatment protocols with close supervision of clinician.

Prerequisites: AC4461, AC4463, CL4561L, OM4405, OM4406

**** Students must be available to cover the assigned clinic shift at the specified NUHS Whole Health Center and/or other assigned clinic facility, as hours vary at each location in order to serve the needs of patients and the community.***

CL5571L Associate Internship 1 Credits 2.0

The first stage of the clinical internship begins in Trimester 4, as students move out of the observation phase and begin to treat patients. Under close supervision, the intern conducts the patient interview including tongue and pulse diagnosis, and in collaboration with the supervisor makes a diagnosis and plans an acupuncture treatment. They then perform the acupuncture treatment with the clinical supervisor who is physically present at all times during the associate intern's diagnosis and treatment of the patient. At the end of each clinic shift, each intern has a chance to direct questions to their supervisor and get feedback. Interns are responsible for writing all of their medical records including history taking. During their associate internships, MSOM interns are not allowed to prescribe herbs for patients, but interns will discuss herbal formula if supervisor prescribes one.

Prerequisites: Successful completion of clinic foundational exam, CPR certificate, CL4563L, blood-borne pathogen training, immunization record

CL5572L Associate Internship 2 Credits 2.0

Prerequisites: Successful completion of clinic foundational exam, CPR certificate, CL4563L

Prerequisite or Corequisite: CL5571L

CL5573L Associate Internship 3 Credits 2.0

Throughout this second stage of clinical work, associate interns will continue the same work they did in the Associate Internships 1 and 2 and will gain further confidence and experience. The interns are able to continually add to and refine their diagnostic skills as well as their acupuncture techniques. More competency is required in the later trimesters, as interns are expected to take on more responsibility in treatment planning and patient education. During their associate internships, MSOM interns are not yet allowed to prescribe herbs for patients, but interns will discuss herbal formulas if the supervisor prescribes one.

Prerequisite or Corequisite: CL5571L, CL5572L

CL5574L Associate Internship 4 Credits 2.0

Prerequisite or Corequisite CL5571L, CL5572L, CL5573L

CL5591L Herbal Associate Integrative Internship 1 Credits 2.0

In this level of training, the integrative herbal interns will focus on herbal prescription with close supervision. Interns and clinic supervisor will discuss each step of each case. Interns must report and discuss their findings from the patient history before performing physical exams including checking pulse, tongue, and others. Then, the intern and supervisor will discuss a treatment plan including herbal preparation and other modalities. Herbs can be prepared only after approval from the supervisor. The clinic supervisor does not have to be present during the acupuncture treatment and/or other modalities in the treatment room although he/she must be available in the clinic.

Prerequisite: CL5574L, HM4514L, OM6451

CL5592L Herbal Associate Integrative Internship 2 Credits 2.0

Prerequisite or Corequisite: CL5591L

CL5593L Herbal Associate Integrative Internship 3 Credits 2.0

Prerequisite or Corequisite: CL5592L

CL5594L Herbal Associate Integrative Internship 4 Credits 2.0

Prerequisite or Corequisite: CL5593L

CL5595L Herbal Associate Integrative Internship 5 Credits 2.0

Prerequisite or Corequisite: CL5594L

CL6601L Herbal Senior Integrative Internship 1 Credits 2.0

In these two final stages of herbal senior integrative internships, interns should be able to perform all of the clinic procedures by themselves without a supervisor's immediate assistance. The interns, however, are required to report all of their findings from the four traditional exams and others before they begin treatment. Based on these findings, interns will develop a differential diagnosis and formulate a treatment plan including an idea of herbal preparation before obtaining the clinic supervisor's advice. After a thorough discussion of the patient case with the supervisor, interns will start treatment and prepare an herbal formula. Along with patient care, the interns must pay special attention to communication skills, patient education, marketing, insurance billing, and Illinois acupuncturist policies, and so on. The clinic supervisor is not required to be present in the treatment room during the treatment but he/she must be available in the clinic.

Prerequisites: Successful passing of Herbal Senior Clinic advanced exam, OS6531, OS6532, OS6533, OS6534, CL5594L

CL6602L Herbal Senior Integrative Internship 2 Credits 2.0

Prerequisite or Corequisite: CL6601L

CL6603L Herbal Senior Integrative Internship 3 Credits 2.0

Prerequisite or Corequisite: CL6602L

CL6604L Herbal Senior Integrative Internship 4 Credits 2.0

Prerequisite or Corequisite: CL6603L

CL6605L Herbal Senior Integrative Internship 5 Credits 2.0

These final stages of the Herbal Senior Integrative Internship are a continuation of Herbal Senior Integrative Internships 1 - 4. During this internship, interns will pursue their own style of practice with their supervisor's permission and help. All of modalities and scope of practice should be limited to what they learned from the core curriculum or electives offered at NUHS in the AOM program.

Prerequisite or Corequisite: CL6604L

CL6606L Herbal Senior Integrative Internship 6 Credits 2.0

Prerequisite or Corequisite: CL6605L

CL6607L Herbal Senior Integrative Internship 7 Credits 2.0

Prerequisite or Corequisite: CL6606L

CL6608L Herbal Senior Integrative Internship 8 Credits 2.0

Prerequisite or Corequisite: CL6607L

HM4511 Materia Medica 1 Credits 3.0

This is the first course in a three-course series. It begins with an introduction to the history, development and fundamental theories of Chinese herbal medicine. Covered are the basic concepts underlying the properties and functions of herbs, including the four qis, the five tastes, channel entry and functional tendencies, as well as preparation methods, toxicity, and side effects. The Pinyin spelling and meaning of herbal names as well as the categories of single herbs, will be introduced. Students now begin the study of the Chinese Materia Medica, learning roughly the first 100 herbs arranged and presented in their traditional categories. The English, Latin, and Chinese names are learned, as well as the tastes, properties, channels, dosage, indications, major combinations, cautions / precautions, and preparations for each individual herb.

Prerequisites: OM4405, OM4406, OM4411

HM4512 Materia Medica 2 Credits 3.0

The second course of the Chinese Materia Medica examines approximately the next 100 commonly used herbs in their traditional categories. Major formulas related to each herb are presented, as well as TCM theory as it relates to the understanding of an herb in the context of diagnosis and treatment.

Prerequisite: HM4511

HM4513 **Materia Medica 3** **Credits 3.0**
The final course of the in-depth study of the Chinese Materia Medica covers the last 100 herbs. Each herb is studied within its traditional category, studying its tastes, properties, channels, dosage, preparation method, etc. Recent research pertaining to individual herbs is presented as well.
Prerequisite: HM4511

HM4514L **Herbal Pharmacy Practicum** **Credits 1.0**
Assisting in the Herbal Pharmacy in the dispensary, students become familiar with the properties of individual raw herbs, their proper storage, and handling, and how each herb is individually prepared to be part of an herbal formula. Under faculty supervision, students fill prescriptions written by student interns for patients in the clinic. By the end of the trimester, students should be able to identify major individual herbs. Students will schedule their dispensary attending hours with the chief clinician at the time of the registration for this class.
Prerequisite: HM4512 or HM4513
Prerequisite or Corequisite: CL5591L

HM5511 **Herbal Formula 1** **Credits 3.0**
In this class, students begin studying the traditional Chinese herbal formulas and their clinical applications. Students learn over 150 formulas by their Pinyin and English names. They study the constituent ingredients, how these separate herbs relate and interact, and the primary and secondary functions of each prescription. Formula modifications are shown for individualizing prescriptions. Ingredients, forms, traditional and modern applications, dosage, indications, and contraindications are discussed.
Prerequisites: HM4511, HM4513
Prerequisite or Corequisite: HM4512

HM5512 **Herbal Formula 2** **Credits 3.0**
Students continue to study the traditional herbal formulas — approximately 75 formulas are studied in each of these two courses. The practice of more extensive formula modification is taught. Recent research regarding modern applications of traditional and modified formulas is presented and discussed.
Prerequisites: HM4511, HM4512
Prerequisite or Corequisite: HM4513

HM5513 **Herbal Patent Medicine** **Credits 1.0**
This course covers the 100 most commonly used patent formulas in clinical practice in the U.S. today, and the classical formulas from which they were developed. Students will study a variety of products manufactured both in the U.S. and abroad, how they have been modified, and how to pick the most effective formulas and examine the variety of forms that patent medicines are available in, from pills, capsules and powders to tinctures and freeze-dried preparations. Manufacturing and safety considerations will be addressed, as well as ongoing issues with governmental regulating agencies.
Prerequisite or Corequisite: HM5511, HM5512

HM6454 **Herbal Treatment Strategy** **Credits 3.0**
This course is designed as an overview of the individual herbs and formulae to understand how the classic formula can be modified and prepared based upon clinical cases. In this final stage of herbal study, students will learn how to formulate individual raw herbs or classic formula based on oriental medical differential diagnosis. In the class, cases will be presented with detail of patient history, tongue, pulse, and other necessary medical records. Case presentation will be either by instructor or by students who have a unique case from the clinic. Based on the information, differential diagnosis will be discussed and then herbal formulation will be discussed. The cases will be further discussed for follow-up visits with the patient. Dependent on the patient conditions, the modification of herbal formulation will be discussed again. Through this course, students will learn how they can apply their herbal knowledge in the clinical situations.
Prerequisite: HM5511
Prerequisite or Corequisite: HM5512

HM6523 **Classics of Oriental Medicine** **Credits 3.0**

In this advanced course, students will study a number of the most important classical medical texts from China. Classical texts of Huang Di Nei Jing (Yellow Emperor's Inner Classic), Shang Han Lun (Treatise on Febrile Disease caused by Cold), Wen Bing (Warm Disease), Jin Gui Yao Lue (Synopsis of Prescription from the Golden Chamber), Nan Jing (Classic of Difficulties), and Compendium of Acupuncture and Moxibustion among others will be introduced. These texts have been primary oriental medicine resources for thousands of years and are still vitally relevant today. Prerequisite: OM6541

HM6524 **Integration of Herbal Medicine** **Credits 2.0**

This course helps to strengthen the student's herbal knowledge and creates a whole picture of Chinese herbal medicine, from Materia Medica and formulas through the classics. This is an advanced course in the integration of Chinese herbal medicine as well as a review and synthesis to help students prepare for the national board exam. Prerequisites: HM5511, HM5512, HM5513

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|---------------|-------------------------|--------------------|
| HS6531 | Herbal Seminar 1 | Credits 2.0 |
| HS6532 | Herbal Seminar 2 | Credits 2.0 |
| HS6533 | Herbal Seminar 3 | Credits 2.0 |
| HS6534 | Herbal Seminar 4 | Credits 2.0 |

This four-series seminar will also be accomplished in the same format as Senior Seminar series. These series of seminars will cover major internal disorders. Students will go over exactly the same format as the Senior Seminars, and will also focus on herbal prescriptions based on differential diagnosis. Students should be able to prescribe classic formula and also modify the traditional classic formula based on differential diagnosis. Through these series of seminars, students will review all individual herbs and formulas. Prerequisites: HM5511, HM5512, HM5513

ID4541L **Tai Chi** **Credits 1.0**

Students learn the fundamentals of Tai Chi, a moving meditation that harmonizes the body and mind. Tai Chi also is an excellent way to become aware of one's own qi, the basis of Chinese medicine. Prerequisite: None

ID4542L **Medical Qi Gong** **Credits 1.0**

Medical Qi Gong is one of the oldest branches of Chinese medicine, and is considered one of the most powerful. It is a therapeutic method that uses the training of the mind, the breath, and the physiological processes of the body for improving health and well being, maintaining body/mind balance and enhancing longevity. The first part of this course introduces a series of exercises and movements, which focus on cultivating one's internal energy, or qi. The second half of this course covers the movement and sensation of qi, as well as learning to guide qi internally through the meridians. Focus is on improving well-being and relieving symptoms of acute and chronic disorders. Students will be taught how to select different qi gong exercises according to various syndromes and disharmonies. Prerequisite: None

OM4405 **Introduction to Oriental Medicine** **Credits 3.0**

This course is designed to introduce the development processes and philosophical background of oriental medicine. Students will have an opportunity to explore great Chinese physicians as well as great philosophers. They will study the root of oriental medicine with focuses on the Taoism, Confucianism, and Buddhism. The class will discuss the unique thinking process and the characteristic outlook of oriental medicine. Furthermore, the class will examine some of the different approaches to oriental medicine in other parts of Asia such as Korea and Japan. Students will study the transplantation of oriental medicine into the western world. By the end of the course, students will have an overall sense of the history, development and basic foundational principles of oriental medicine with an eye toward the future of the field and their place in it. Prerequisite: None

OM4406 **Physiology of Oriental Medicine** **Credits 3.0**

This course is a general introduction to oriental medicine in terms of Traditional Chinese/Oriental Medical Physiology. Students will learn to apply to the body the basic theories of oriental medicine: Yin/Yang, the concept of Qi, the Five Phases learned in the Introduction to Oriental Medicine class. Students will begin by looking at the Five Substances. The class will then move beyond these basic fundamental constituents of the body to the internal organs themselves, known as the Zang-Fu theory. Finally, the class will consider the primary question of etiology of disease in oriental medicine and the Three Categories of disease causes: Internal, External, and Miscellaneous (neither Internal nor External). Students will then be prepared to understand pathology in oriental medicine in future classes.

Prerequisite: None

OM4411 **Etiology & Pathogenesis of Oriental Medicine** **Credits 3.0**

In this course, the basic theory and characteristics of the etiology, pathology, sources of pathogens, and mechanisms of illness are covered. The topics include the six environmental excesses (Liu-Yin), seven emotions (Qi Qing), disharmony of Yin and Yang, the six channel pattern identification (Liu Jing Bian Zheng), and the abnormal function of Qi, blood, body fluid, and organs. General principles of treatment methods for each topic will be briefly covered.

Prerequisites: OM4405 and OM4406

OM5441 **Differential Diagnosis of Oriental Medicine 1** **Credits 3.0**

In this two-part course, students will learn different pattern diagnosis and introduction of treatment. This set of courses will cover the differentiation of patterns according to the different theories of oriental medicine. An in-depth discussion of the differentiation of patterns will include topics of pathological changes, Zhang-Fu patterns, I and blood patterns, six channel patterns, four aspect patterns, meridian and collateral patterns, San Jiao patterns, disease-evil patterns, and so on. The instructor will present how pattern identification applies to cases encountered in the NUHS AOM clinic. Treatment based on the differential diagnosis will be also discussed.

Prerequisite: OM4411

OM5422 **Differential Diagnosis of Oriental Medicine 2** **Credits 3.0**

This course is continuation of Differential Diagnosis 1.

Prerequisite: OM4411

OM5471 **Diagnosis & Skills of Oriental Medicine 1** **Credits 2.0**

This course introduces the Four Traditional Methods of Diagnosis: looking, hearing/smelling, asking, and feeling/palpating. The focus here is on tongue and pulse diagnosis. Students first learn the procedures of tongue inspection and pulse palpation by watching the instructor's demonstration and follow by performing and practicing the technique in class. Students also will identify and classify significant findings into eight principle categories in order to further understand them within the traditional patterns of disharmony. A significant amount of lab time will be spent on pulse diagnosis.

Prerequisites: OM4405, OM4406

OM5472 **Diagnosis & Skills of Oriental Medicine 2** **Credits 2.0**

The second course in the diagnosis series continues with the Four Traditional Methods of Diagnosis, focusing specifically on the Ten Questions and writing SOAP notes. After learning each of the 10 categories of questions and their significance in terms of diagnosis, students will practice patient interviewing, focusing on review of systems questionnaire of "confidential history," combining it with the tongue and pulse exams. In this course, students will also learn how to palpate certain categories of points — mu and shu points, source points, ashi points, etc. — as part of the diagnostic procedures and will learn what important information can be gained. There will be significant lab time available for practicing all of these skills. Students will submit three full sets of mock patient medical records including review of systems questionnaire, "confidential history," by the end of the course.

Prerequisites: OM4405, OM4406

OM6451 **Advanced Diagnosis & Treatment Strategy** **Credits 2.0**

The format of this course will be case presentation. Students will have the opportunity to learn to incorporate the different models of pattern diagnoses and theories of oriental medicine based on clinical cases, and to develop accurate, fluent and sophisticated diagnoses, treatment plans and point selections for each patient as a unique individual. Included in these discussions are the patient-intern relationship, case management and referral, and general patient care issues. Special factors or symptoms are presented to help the student recognize the potential for increased risk to the patient, for example: cases such as the diabetic patient, the immune-compromised patient, etc.; when to modify standard therapeutic approaches, such as when treating infants and children or women who are pregnant; clinical presentation that may have a more serious cause; and how to make appropriate referrals.

Prerequisite: OM5442

Prerequisite or Corequisite: OM5441

OM6453 **Nutrition & Food Therapy of Oriental Medicine** **Credits 2.0**

Topics covered include the history of Chinese nutrition, basic principles, yin/yang, the four qis, the five flavors, the energetic qualities and uses of specific foods, and the role of nutrition in a complete treatment plan. Through learning about foods and their effect on health, students will be introduced to the five elements and the proper balance of these elements within a diet. Specific disorders will be discussed using food as a major healing tool. Students will also have the opportunity to experience nutritional therapy first hand through a trimester long nutrition project.

Prerequisites: OM4405, OM4406

OS6531 **Advanced Seminar 1** **Credits 2.0**

In this seminar series, students integrate all of the subjects that they have studied over the past two years. The format used to integrate this information is case-based seminars. A few of the topics covered include: chronic pain management, orthopedics, internal disorders, obstetrics and gynecology, pediatrics, geriatrics, dermatology, allergies, infertility, emergency care, and so on. However, this Advanced Seminar 1 will mainly focus on chronic pain management and neuromusculoskeletal conditions. Some seminar presentations may involve a patient in the grand rounds setting whenever possible. The class may be composed of large and small group activities. The large group session will present the case, introduce the related topics, and wrap up the case. Each small group session is responsible for a report on the cases that include: full patient information and physical examination results based on traditional four diagnosis methods and western medicine; differential diagnosis and assessments; principles of treatment; treatment protocol with specific acupuncture points and their point selection rationales; accessory techniques and prognosis. Students will also discuss patient management, business management and practice ethics, and proper patient referral to other health care providers.

Prerequisites or Corequisites: CL5571L, CL5572L, OM6451

OS6532 **Advanced Seminar 2** **Credits 2.0**

In this seminar series, students integrate all of the subjects that they have studied over the past two years. The format used to integrate this information is case-based seminars. A few of the topics covered include: chronic pain management, orthopedics, internal disorders, obstetrics and gynecology, pediatrics, geriatrics, dermatology, allergies, infertility, emergency care, and so on. However, this Advanced Seminar 2 will mainly focus on cardiovascular and pulmonary conditions, endocrinology, and hematology. Some seminar presentations may involve a patient in the grand rounds setting whenever possible. The class may be composed of large and small group activities. The large group session will present the case, introduce the related topics, and wrap up the case. Each small group session is responsible for a report on the cases that include: full patient information and physical examination results based on traditional four diagnosis methods and western medicine; differential diagnosis and assessments; principles of treatment; treatment protocol with specific acupuncture points and their point selection rationales; accessory techniques and prognosis. Students will also discuss patient management, business management and practice ethics, and proper patient referral to other health care providers.

Prerequisites or Corequisites: CL5571L, CL5572L, OM6451

OS6533**Advanced Seminar 3****Credits 2.0**

In this seminar series, students integrate all of the subjects that they have studied over the past two years. The format used to integrate this information is case-based seminars. A few of the topics covered include: chronic pain management, orthopedics, internal disorders, obstetrics and gynecology, pediatrics, geriatrics, dermatology, allergies, infertility, emergency care, and so on. However, this Advanced Seminar 3 will mainly focus on gastrointestinal, renal, and OB/GYN conditions. Some seminar presentations may involve a patient in the grand rounds setting whenever possible. The class may be composed of large and small group activities. The large group session will present the case, introduce the related topics, and wrap up the case. Each small group session is responsible for a report on the cases that include: full patient information and physical examination results based on traditional four diagnosis methods and western medicine; differential diagnosis and assessments; principles of treatment; treatment protocol with specific acupuncture points and their point selection rationales; accessory techniques and prognosis. Students will also discuss patient management, business management and practice ethics, and proper patient referral to other health care providers.

Prerequisites or Corequisites: CL5571L, CL5572L, OM6451

OS6534**Advanced Seminar 4****Credits 2.0**

In this seminar series, students integrate all of the subjects that they have studied over the past two years. The format used to integrate this information is case-based seminars. A few of the topics covered include: chronic pain management, orthopedics, internal disorders, obstetrics and gynecology, pediatrics, geriatrics, dermatology, allergies, infertility, emergency care, and so on. However, this Advanced Seminar 4 will mainly focus on geriatric, pediatric, and multiple system-related conditions. Some seminar presentations may involve a patient in the grand rounds setting whenever possible. The class may be composed of large and small group activities. The large group session will present the case, introduce the related topics, and wrap up the case. Each small group session is responsible for a report on the cases that include: full patient information and physical examination results based on traditional four diagnosis methods and western medicine; differential diagnosis and assessments; principles of treatment; treatment protocol with specific acupuncture points and their point selection rationales; accessory techniques and prognosis. Students will also discuss patient management, business management and practice ethics, and proper patient referral to other health care providers.

Prerequisites or Corequisites: CL5571L, CL5572L, OM6451

PD6541**Doctor & Patient Relationship****Credits 2.0**

This course is designed to sensitize students to the patient's life situation and stimulate self-observation as students interact with patients. Lecture and discussion topics include: structures in doctor/patient interaction; models of the doctor/patient interaction; doctor/patient boundaries; the impact of the doctor/patient relationship on health care outcomes; the impact of the doctor/patient relationship on patient satisfaction; culturally responsive health care; the sociological context of patient suffering; co-creation of the patient's story in a therapeutic relationship; death, dying and palliative health care; management of the abused patient; and the doctor's responsibilities to the community and society. Group time will be used to discuss and practice relationship issues through guest case presentations, structured interpersonal exercises, article reviews, and discussion.

Prerequisite: None

PD6542**Evidence-Based Practice****Credits 2.0**

As professional health care practitioners, it is important to strive to educate oneself on the efficacy of one's applied art. The research literature provides the knowledge base to make sound clinical judgments in both diagnosis and treatment of health conditions. This course provides a means for developing the skills needed to critically evaluate research literature in general, and research literature specifically pertaining to complementary and alternative medicine. The topics covered include research design, validity and reliability, bias, searching the literature, critical appraisal of the literature, and elementary statistical methods of data analysis.

Prerequisite: None

PD6543 Business, Marketing, and Practice Management Credits 2.0

This course focuses on many of the various practice-related issues that face the acupuncture and/or oriental medicine practitioner. Topics addressed in this class include: writing a curriculum vitae; investigating various practice types; writing narrative reports; the informed consent process; marketing concepts for the practice with preparation of a comprehensive marketing plan; preparation of a comprehensive business plan; successful interviewing techniques; vicarious liability and independent contact issues; record keeping requirements; creating an effective referral network; and personal and professional insurance needs.

Prerequisite: None

PD6544 Practice Ethics & Risk Management Considerations Credits 1.0

This course focuses on many of the various practice-related risk management and provider/patient communication issues that face the acupuncture and/or oriental medicine practitioner. Topics addressed in this class include: boundary issues and preventive strategies involving sexual boundaries; treating friends and family members; self-disclosure; gifts and trade-offs; dual relationships; language; physical examination; physical contact; time and duration of appointments. Additional topics include: a health care provider's duties, responsibilities, and professional standards of care; a provider's duty regarding vicarious liability and the independent contract relationship; elements of successful communication skills in provider/patient relationships; recognizing and managing difficult/predatory patients; and should you say you're sorry if you hurt a patient?

Prerequisites: None

TM4491L Tui Na Credits 1.0

Tui Na is a traditional meridian bodywork therapy that originated in China over 2,000 years ago. It involves a variety of techniques including rolling, tapping, and pressure used for treating a broad range of disorders including orthopedic and stroke rehabilitation. It is also a widely used modality in pediatrics. In this course, students gain a working knowledge of basic Tui Na techniques, the general body routine, and Tui Na exercises to strengthen the body's constitution. An emphasis will be made on integrating Tui Na with oriental as well as biomedical evaluation and treatment methods of common disorders.

Prerequisite: None

TM4492L Asian Body Work Credits 1.0

In this course, students will learn many different forms of basic soft tissue works such as shiatsu, anma, acupressure, and so on. Students will learn meridian based acupressure or anma for various conditions of patient care.

Prerequisite: None

WB4400 Palpation Skills Credits 0.5

This course is designed for students to learn through study and practical exploration of the assessment of the skin, superficial fascia, and veins. Students will also develop palpation skills of the major superficial muscles, tendons, ligaments, and bony landmarks of the spine and extremities. Students will develop basic hands-on palpation skills and also will focus on the assessment of joint motions and normal posture.

Prerequisite: None

WB4401 Western Medical Terminology Credits 1.0

This course will introduce students to key word parts associated with body systems, disorders, conditions, procedures, and medical specialties. It will show students how to decipher difficult medical terms by breaking them down into these components. Pronunciation of the terms will be covered as well.

Prerequisite: None

WB4402 Human Anatomy Credits 2.5

Students will learn through cadaver dissection in lecture and laboratory. Lecture will cover the basic concepts of human anatomy with an emphasis on the cutaneous part of the human body. Students will discuss the function of major muscles and clinical and pathological conditions that present frequently in the clinic. In the laboratory, students will discover the relationship between anatomical structures, meridians, and major acupuncture points.

Prerequisite: None

WB4404 **Principles of Biochemistry** **Credits 1.0**

This course presentation starts with an introduction to the concepts of bio-molecules in the human body such as carbohydrates, lipids, proteins, and nucleic acid, etc. This course will also introduce the metabolic mechanism and processes involved in producing and transforming these molecules to generate energy for the body. Students will also be provided with a basis for understanding nutrition on a biochemical level, covering vitamins, minerals, co-enzymes, etc.

Prerequisite: None

WB4405 **Neurology** **Credits 2.0**

This course will serve as an introduction to the general neurological system. Knowledge of the neurological system is essential to understand the scientific basis and mechanisms of acupuncture. Topics covered in this course include the histology, anatomy, and physiology of the nervous system. The central, peripheral, and autonomic nervous systems, as well as the cranial nerves will be presented. The major nerve plexuses are discussed along with the common clinical pathologies.

Prerequisite: None

WB4407 **Western Anatomy and Physiology** **Credits 3.0**

In this course, students will learn in lecture and laboratory formats, the normal anatomy, and physiology of the major organ systems of the human body. The organ systems discussed are the cardiovascular, respiratory, lymphatic, endocrine, urinary, digestive, and reproductive as well as neuroanatomical structures. In addition, the interrelationships between organ systems will be explained as well as the interrelationships between structure and function of the organs and organ systems. The gross anatomy laboratory sessions will be presented using a regional approach and will be designed to support the lecture sessions and address related basic science issues.

Prerequisite: None

WB4411 **Microbiology, Immunology & Public Health** **Credits 3.0**

This course provides an introduction to microorganisms, immunology, public health, and their interaction with humans; concepts in public health as applied to communicable and non-communicable diseases; and an introduction to the basic changes in the morphology of the cells, tissues, and organs in diseased states. Extensive use of visual aids using the latest computer technology will aid students in visualizing and understanding these various fundamental topics. The appropriate clinical correlation with case studies is discussed as well.

Prerequisite or Corequisite: WB4401

WB4412 **Western Pathology** **Credits 3.0**

Considered in this course are the pathologies peculiar to and characteristic of the various systems of the body. The pathologies examined include myopathy, neuropathy, bone and joint pathology, immunopathology, hematopathology, and dermatopathology. Each condition is studied from the standpoint of general characteristics, gross and microscopic appearance, and clinical course. The systems examined include neurological, respiratory, cardiovascular, reproductive and mammary, gastrointestinal (inclusive of liver, gall bladder and pancreas), urinary, and endocrine.

Prerequisite or Corequisite: WB4401

WC5421 **Neurophysiology of Acupuncture** **Credits 2.0**

In this course, students will discuss acupuncture from a different angle. This course investigates how modern western scientific research starts unveiling the mystical functions and action mechanisms of acupuncture, and the relationship between acupuncture stimulation and brain reaction. By discussing current western research achievement about acupuncture, students will understand the neurological, physiological, and chemical basis of the acupuncture action mechanisms and its functions. Students will be inspired by this course to connect 5,000 years of traditional eastern acupuncture into modern western science.

Prerequisites: WB4401, WB4405

WC5422 **Western Pharmacology & Toxicology** **Credits 2.0**

This course provides a basic understanding of the use of drugs in western medicine for the treatment of disease. Topics covered in this course will be descriptions of drug names and classification, general principles of drug action and metabolism. Factors influencing drug action and drug safety are addressed, too. This course also will discuss the drug actions on body systems including the entire major organ systems and the disorders and diseases in each of the systems. Included will be a description of the mechanism of action, major untoward effects and contraindications for each drug and drug category. A large part of this lecture will be focused on interactions with other drugs, Chinese herbs, and botanicals. Drug action on infection and immune system regulation as well as chemical dependency and substance abuse will be described. A discussion of poisons and their antidotes is included.

Prerequisite: WB4401, WB4404

WC5423 **Psychopathology & Health Psychology** **Credits 2.0**

This course includes:

(i) review and discussion of the major topics in health psychology including examination of the relationships of psychopathology, lifestyle, and personal relationships to physical health. Topics include risk factors and treatments for physical disorders such as cardiovascular disease, cancer and chronic pain, as well as the exploration of the co-morbidity of physical and psychological disorders;

(ii) an examination of the nine basic categories of psychopathology (depression, anxiety, somatoform, substance use disorders, sleep disorders, eating disorders, sexual dysfunction, cognitive disorders, and psychosis) with emphasis on screening, diagnosis, and management in a primary care setting. Students are asked to review current theories and their implication for practice.

Prerequisite: None

WD4441L **Western Physical Exam** **Credits 1.0**

In this course, students will practice general physical exams of common western medical conditions through oriental and western medical integrative forms. In the lectures and lab, students will learn history taking, vitals, and general physical exams and their procedures. The students will be familiar with the major individual exam skill performance while they practice head-to-toe sequence exams. The course will also cover patient referral to other health care professions. Students will also practice SOAP note writing based on the NUHS AOM clinic patient SOAP note form.

Prerequisites: WB4401

Corequisites: WB4407

WD4442L **Neuromusculoskeletal Exam** **Credits 1.0**

This laboratory course will cover the neurological examination and orthopedic examinations. Students will learn how to test the neurological systems including dermatome testing, muscle testing, deep tendon reflexes, etc. Students will also learn how to perform orthopedic examinations of the major joint systems of the human body. The examinations will help the student to determine if a lesion is present and the location of the lesion.

Prerequisites: WB4401, WB4402

WD5441 **Imaging Diagnosis** **Credits 2.0**

The basic principles of the major modalities of diagnostic imaging are discussed. The major outcomes include learning normal and common abnormal findings on conventional X-ray studies and becoming familiar with common abnormal findings yielded by the following modalities: conventional X-ray, MRI, CT, and nuclear imaging. This course is designed for the acupuncture practitioner in general practice who will request and receive radiographic and advanced diagnostic imaging reports and will learn how to apply this information to the overall patient status/disease process. Basic interpretation of such reports, knowing when and how to request them, and how to apply the information contained in the radiology report to their patient's condition is a major learning outcome.

Prerequisites: WB4401, WB4402, WB4412

WD5442 **Clinical Laboratory Diagnosis** **Credits 2.0**

The clinical laboratory plays a major role in the education of the student. Today's technology allows the health practitioner to examine the depths of the body in ways that were only imaginable a few short years ago. The modern health care provider, especially acupuncturist, needs to be able to know in what situations patients should be referred for diagnostic tests, how to interpret the information relative to its diagnostic or informative value, what other tests relate to this information, and what are the disadvantages or possibilities of error or false positive results. In this course, these aspects are addressed with regard to the common profiles of hematology, chemistries, urinalysis, fecal, and sputum studies.

Prerequisites: WB4401, WB4407, WB4411, WB4412

WD6441 **Western Physical Diagnosis** **Credits 2.0**

This course introduces the student to the methods used in the diagnosis and management of common conditions. The students in this course develop skills in interpretation, evaluation and correlation of normal and abnormal physical findings. Discussions concentrate on the development of diagnostic acumen and conservative management of selected conditions.

Prerequisites: WD4441L, WD4442L

Corequisite: WD5441

WI6501 **Integrative Medicine II** **Credits 2.0**

This course will review and sharpen core biomedicine knowledge and skills and focus on the comprehensive application of acquired cognitive knowledge, psychomotor clinical skills, and affective senses in actual clinical case problem-solving. In this course, students will discuss how to utilize and integrate the different subjects from each biomedicine class into real clinical case problem-solving situations. Students will also focus on how to apply medical knowledge, manage patient care effectively, demonstrate professionalism, interpersonal and communication skills, and utilize all other appropriate information, while integrating the basic science and basic western diagnostic skills with certain treatment plans. Students will also review specific exam skills and be required to practice a hands-on format. The materials in this class will be delivered through class meetings and/or an online basis.

Prerequisites: WB4400, WB4401, WB4402, WB4411, WB4412, WB4441, WB4442

Prerequisites or Corequisites: WC5421, WC5422, WD5441, WD5442, PD6542

WT6455 **Western Diet & Nutrition** **Credits 1.0**

This course provides a basic understanding of the vital role of the western diet and nutrition in an overall approach to patient care. Topics will cover principles of human nutrition that stress a review of the macronutrients and micronutrients with emphasis on the health properties of each as well as the severe deficiency states for both micronutrients and macronutrients. Digestion, absorption, and transport of the nutrients, and consequences of malabsorption care are covered. Energy production, energy balance, and weight management are also described. Food habits in the United States and nutrition across the life cycle are discussed in the course. Male and female health, sports and exercise nutrition, enteral and parenteral nutrition procedures as well as an introduction to the science of food preparation and handling are included. An introduction to nutritional status assessment using food frequency questionnaires and diet history is given.

Prerequisite: WB4404

WT6456 **Botanical Medicine** **Credits 3.5**

This 45-hour course on Kampo Japanese Herbal Medicine presents the fundamentals of why Kampo has been integrated successfully into mainstream Japanese medicine, with over 75% of Japanese MDs using it in their practice, and Japan's national health insurance paying for patient use. Abdominal palpation for nine areas of the abdomen, and Japanese pulse-taking to distinguish 12 different kinds of pulse will be taught, as a means to select the proper Kampo formula. Diagnostic score charts for Ki, blood, fluid, yin/yang, and excess and deficiency will also be employed to arrive at the proper pattern imbalance, and facilitate proper formula selection. Functional disorders of the heart, spleen, lung, kidney, and liver organ/energetics will also be addressed, in relation to 27 common Kampo herbal medicine formulas, along with the synergistic interaction of their botanical constituents, as it relates to the condition being treated. The use of Eight Principal and Six Stage score charts will also be demonstrated in order to sharpen Kampo formula selection.

Prerequisite: WB4404

Elective Course Descriptions

Not all courses listed below will be offered every trimester. Contact the Registrar for schedule details.

EL1030 **Medical Spanish** **Credits 3.0**
(Meets with COM103)

Clinical Spanish is a 45-hour elective focused on Spanish language skills used in clinical practice. The course emphasizes the key role of the patient history in making a diagnosis, the evaluation of clinical evidence such as patient symptoms, and relevant statistical concepts such as predictive value. The underlying pathophysiologic mechanisms underlying common symptoms are reviewed. This course is based on listening and speaking skills rather than on reading and writing. There are no written exercises and no written tests or exams.

EL1100 **Applied Kinesiology: A Survey Course Credit 1.0**

This survey course focuses on the procedures used in the practice of, and its relationship to health care outcomes of Applied Kinesiology (AK). Students will also explore the literature involved in AK in order to broaden their understanding of the issues in the field. Students will be exposed to the history of AK and to the description of mechanics of neurology. This material will be presented in discussion and lecture.

Prerequisite: None

EL1210 **Massage: Fundamentals** **Credits 2.0**
(Meets with MT121)

This introductory course provides the student with a solid foundation of fundamental Swedish massage techniques and methods, along with proper biomechanics, posture, and table management. Concepts in soft tissue physiology as they relate to massage also are stressed. Draping also will be covered in this laboratory.

EL2220 **Massage: Chair/Trigger Point/Sport** **Credits 1.5**
(Meets with MT222)

This 30-hour course will explore the role of massage therapy as it relates to pregnancy, infant massage, cancer patients, AIDS patients, and the geriatric population. Other topics of interest will include massage for people with degenerative neurological diseases such as multiple sclerosis, myasthenia gravis, Parkinson's disease, as well as other issues such as people with cerebral palsy, paraplegia, or quadriplegia from stroke or trauma, respiratory or metabolic disorders, and hospice patients. This course may also include a field trip to a rehabilitation facility to witness first hand, the challenges and adaptations required by the massage therapist as they encounter various environments such as a hospital or clinic, as well as patients who may still be catheterized, connected to oxygen or intravenous lines, or have other physical limitations due to their condition. An extension of this course would allow students to offer massage to people with special needs as part of the NUHS Massage Outreach Program. The special needs of the pregnant female, the infant, and the child also will be discussed with massage procedures being demonstrated and practiced.

Prerequisite: MT121

EL2240 **Massage: Special Populations** **Credits 1.0**
(Geriatric/Cancer/Infant-Pediatric/Pregnancy)
(Meets with MT224)

This laboratory gives hands-on experience in the art and science of orthopedics and sports massage. Students build on their previous hands-on skills and knowledge to begin to work with techniques for the structures of the body. Students will learn to adapt their skills to a wide range of client complaints by developing their ability to think critically and select appropriate courses of action with clients.

Prerequisite: MT121

This laboratory gives hands-on experience in the art and science of orthopedics and sports massage. Students build on their previous hands-on skills and knowledge to begin to work with techniques for the structures of the body. Students will learn to adapt their skills to a wide range of client complaints by developing their ability to think critically and select appropriate courses of action with clients.

Prerequisite: MT222

EL2290	Massage: Advanced Fundamentals/Variations (Meets with MT229)	Credits 1.0
<p>This 30-hour laboratory gives hands-on demonstration and experience in advanced general massage procedures and options due to body type and size. Prerequisite: MT121</p>		
EL2410	Biopsychology (Meets with BIOL241)	Credits 3.0
<p>This course provides an introduction to understanding the function of the human brain and its relation to behavior. The first goal of this course is for students to integrate a basic understanding of the anatomy and neurology of the brain information into their existing knowledge base. The second goal of this course is to provide students an adequate framework about basic principles in biopsychology so that information may be incorporated in an understanding of holistic health care. A topical format is employed focusing on relevant health care issues. Topics include the structure and function of the nervous system related to a combination of the following topics: human brain damage, vision, movement, eating and drinking, sex, sleep, drug addiction, learning and memory, neuroplasticity, lateralization, emotions, stress, mental disorders, and health. To accomplish these goals, the topical information will be presented through a combination of lectures, discussions and readings beyond the textbook.</p>		
EL6707	Certificate Test Preparation (Meets with COM110)	Credits 2.0
<p>The purpose of this course is to provide the student with the knowledge of human anatomy, physiology, neurology, endocrinology, and energy systems and other knowledge in order to pass the CSCS and other certifying exams such as: ACE, NSCA or ACSM Personal Training exam, or NSCA Certified Strength and Conditioning Special Examination. The course will then provide the student with an understanding of how these various forms of training affect these various systems. Topics that will be covered: Concepts & Applications of Exercise Science, Testing and Evaluation, Exercise Techniques, Program Design, and Organization and Administration. Prerequisite: Successful completion of Phase I</p>		
HY6221	Hydrotherapy & Traditional Naturopathy	Credits 2.0
Prerequisite: DCs Consent Only		
ID5515L	Medical Qi Gong I	Credits .50
ID5516	Medical Qi Gong II	Credits .50
Prerequisite: ID5515L		
NP4211	Naturopathic Counseling	Credits 1.5
Prerequisite: DCs Consent Only		
NT4201	Naturopathic Foundations I	Credits 2.0
Prerequisite: DCs Consent Only		
NT4202	Naturopathic Foundations II	Credits 2.0
Prerequisite: DCs Consent Only		
NU6261	Homeopathy I	Credits 1.0
Prerequisite: DCs Consent Only		
NU6262	Homeopathy II	Credits 4.0
Prerequisite: NU 6261 & DCs Consent Only		
ON6251	Oriental Medicine I	Credits 2.0
Prerequisite: DCs Consent Only		

Clinical Residency Programs

National University of Health Sciences has three residency programs available to doctors of chiropractic: Clinical Research (3 years), Diagnostic Imaging (3 years), and Family Practice (3 years). Application is to be made with the Dean of the College of Professional Studies – Illinois.

Clinical Research

This is a three-year (with optional fourth year), in-residence training program in research. The purpose of this program is to provide the resident with an advanced level of training in, and understanding of, the discipline of research. Special emphasis is placed on investigation of the efficacy and efficiency of chiropractic treatment of specific disorders using valid and reliable outcome measures. Additional focus is on the refinement of existing measures of treatment, the development of new, more sensitive measures of these effects, and investigations to expand the clinically relevant basic science knowledge base of the anatomical, biomechanical, physiological, neurological, and biochemical ramifications of spinal manipulative therapy. An MPH or PhD degree through the University of Illinois at Chicago is a mandatory part of this residency.

Diagnostic Imaging

This is a three-calendar-year program leading to eligibility to sit for examination by the American Chiropractic Board of Radiology and achieve status as diplomate of that board. The residency is a full-time, in-house program involving limited teaching, research, self-directed study, and training by radiologists (both chiropractic and medical) in all aspects of diagnostic imaging, with emphasis on neuromusculoskeletal imaging. The National College of Chiropractic was the first institution with a chiropractic program to develop and use a specialized Training and Assessment Center and the first to install and use an MRI for patient and research purposes. A Master of Science (MS) degree program in Diagnostic Imaging is a mandatory part of this residency.

Family Practice

This family practice residency is a three-calendar-year program focusing on the diagnosis and management of those disorders encountered in chiropractic general practice, including internal diseases. Emphasis is placed upon examination skills, including specialty diagnostic procedures, differential diagnosis, and clinical reasoning skills. Residents assist in the instruction of diagnosis courses, participate in patient care, and assist in the performance of specialty examinations and diagnostic consultations. Fulfillment of program requirements will satisfy board eligibility criteria. A Master of Science (MS) degree program in Advanced Clinical Practice is a mandatory part of this residency.



Bulletin

2018-2019

College of Allied Health Sciences and Distance Education

- Certificate Programs
- Undergraduate Degree Programs
- Graduate Degree Programs

Certificate Programs

Professor Jerrilyn Cambron — Dean, College of Allied Health Sciences and Distance Education; Assistant Professor Candace Passi, Assistant Dean

General Guidelines

National University of Health Sciences admits new certificate program classes each fall (September) and spring (January). Class sizes are limited and prospective students are urged to call the Admissions Office for official application deadlines.

Selection of Candidates

The Committee on Admissions approves applicants for matriculation. In addition to meeting National University's admission standards, the Committee on Admissions will admit only those candidates who in the judgment of the university are of good character, possess the physical, behavioral, emotional, and cognitive criteria regarded as essential requirements needed to participate and complete the entire spectrum of study, training, and experiences within the massage therapy program, and who show promise of becoming a credit to the profession and the university. Telephone or personal interviews may be required. For foreign applicants and others living a considerable distance from the university, university representatives in the area in which the applicant resides may be designated for such interviews.

Application Procedure

An application for admission is valid for up to two years from the date it was received by the university. The application must include the following:

1. A properly completed Application for Admission. The Application for Admission should be completed online or mailed to the Admissions Office.
2. Official high school transcript(s) by the high school(s) attended or GED certification, as well as official transcripts from college(s) and university(s) attended, if any, to be sent directly to the National University Admissions Office.
3. Successful completion of MT100 Introduction to Massage course (Massage Therapy Program only) during the first week of Trimester One of the program and must pass to continue the program.
4. Two character reference forms. (Reference forms from relatives will not be accepted.)
5. Proof of being a minimum of 18 years of age upon entry to the program.

Admissions Decisions

Applicants for admission are not fully approved by the Committee on Admissions until it receives documentation of completion of all requirements for admission. Conditionally approved students will be held to the following regulations and timelines:

1. Accepted students will be notified upon entry to the program that the matriculation file must be completed by the end of the 30th day of the term. Students whose application files are not complete by the end of the sixth week of the term will not be allowed to remain enrolled in the university.
2. If applicable, financial aid awards shall not be certified or released to students until the matriculation file is complete.
3. Students who demonstrated continuing attempts to complete the application file in a timely manner, but are not able to do so through no fault of their own, may be granted an extended period of time to

complete the file. The granting of the extended period of time must be approved by the Director of Admissions.

4. Students who do not complete the matriculation file by the end of the term will be required to start over from the beginning of the first trimester.
5. University policy on tuition and refunds will be adhered to for such students.
6. The university will attempt to help students with the completion of the matriculation file; however, it is the responsibility of students to do so.

Entry Requirements

1. Applicants must be high school graduates with a cumulative GPA of no less than 2.0 on a 4.0 scale or GED-certified.
2. Successful completion of MT100 Introduction to Massage course (Massage Therapy Program only) during the first week of Trimester One of the program and must pass to continue the program.
3. Applicants must be 18 years of age and of good moral character.

The massage licensure laws of the state of Illinois make the following stipulation for licensure. It is noted here for your information. In determining good moral character, the department may take into consideration conviction of any crime under the laws of the United States or any state or territory thereof that is a felony or a misdemeanor or any crime that is directly related to the practice of the profession. Such a conviction shall not operate automatically as a complete bar to a license, except in the case of any conviction for prostitution, rape or sexual misconduct, or where the applicant is a registered sex offender.

Home Schooled Applicants

Home schooled applicants wishing to apply to the Massage Therapy Certificate Program or the AAS Degree in Massage Therapy will be required to submit the following:

1. ACT or SAT test scores (minimum score requirements 20 ACT/940 SAT);
2. list of coursework completed;
3. transcript showing grades; and
4. essay statement discussing home schooling philosophy, grading scale and description of learning opportunities (e.g. field trips, conferences, etc.).

If a home schooled applicant has taken and passed the GED, they would not be required to submit the materials listed above.

Technical Standards for Admission

All applicants to the National University of Health Sciences' Massage Therapy Certification Program must be able to meet the University's technical standards. Technical standards are those physical, behavioral, emotional, and cognitive criteria that an applicant must already possess as personality traits, life skills, or acquired abilities before enrolling in the university. These qualities are regarded as essential requirements needed to participate and complete the entire spectrum of study, training, and experiences within the Massage Therapy Program. These standards are applied in addition to, and separate from, academic standards of qualification.

Applicants must review the technical standards and sign a form certifying they have read, understand, and are able to meet the standards (with or without reasonable accommodations) of that program. This information is provided

to help every student be more aware of the types of performance and expectations associated with the Massage Therapy Program. The use of technical standards is derived from Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. These laws provide a framework for individuals with documented disabilities to request reasonable accommodations to fulfill their educational objectives. Reasonable accommodations are defined as any change or modification in the way things are usually done that enables an individual with a disability to participate as fully as possible in the Massage Therapy Program. An effective accommodation for a disability can ensure that an otherwise qualified student with a disability is able to perform and be assessed on their ability rather than by their disability.

Candidates with documented disabilities who wish to request accommodations under the Americans with Disabilities Act must follow the university's procedure for requesting an accommodation. This procedure, in summary, requires submitting a written request for accommodations and supporting documentation of a life-limiting disability to the Dean of Students. The Dean will review the request and determine whether a reasonable accommodation can be made.

National University of Health Sciences does not discriminate against qualified individuals with disabilities in recruitment or admission to its programs, services, or activities. Any information disclosed by an applicant regarding disabilities will not adversely affect admissions decisions nor eligibility to remain enrolled.

The university reserves the right to reject requests for accommodations that would fundamentally alter the nature of the program, lower the academic standards, cause an undue hardship on the University, or endanger the health or safety of a student with a disability, other students, clinic patients, or any other member of the university community.

Massage therapy students must have abilities and skills of five varieties:

Sensory/Observation

A student must have sufficient sense of vision, hearing, and touch to perform palpation sufficient to note changes in soft tissue tone and consistency, and visual observation capable of noting changes in skin and eye color, posture and gait (walking). A student must also be able to observe classroom and laboratory demonstrations including, but not limited to, demonstrations on human cadavers, animals, microbiologic cultures, and microscopic studies of microorganisms and tissues in normal and pathologic states.

Communication

A student must be able to speak, hear, and observe the client in order to elicit information, describe changes in mood, activity, and posture, and perceive nonverbal communications. A student must be able to communicate effectively and sensitively in both oral and written form with clients and any other members of the health care team.

Motor/Strength/Coordination

A student must have sufficient motor function and strength to elicit information and perform therapeutic massage procedures on clients by palpation and by skillful movement of the limbs, head, and neck. A student must also have the strength and coordination to assist clients to assume comfortable positions, and the dexterity to handle equipment, devices, and assistive materials such as sheets, lubricants, orthotic pillows, etc. A student must be able to execute motor movements required to provide emergency and first aid care to clients such as CPR, applying pressure to stop bleeding, and opening an obstructed airway. Such actions require coordination of both gross and fine muscular movements, equilibrium, and the senses of touch and vision.

Conceptual, Integrative, and Quantitative Abilities

These abilities include measurement, calculations, reasoning, analysis, and synthesis. Problem solving and the planning and execution of tasks in group and individual settings require all of these intellectual abilities. Testing and evaluation of these abilities in the College of Allied Health Sciences and Distance Education employs periodic examinations as an essential component of the curriculum. Successful completion of these examinations is required

of all candidates as a condition for continued progress through the curriculum. Examples of these tests include essay, oral and/or multiple choice tests, typewritten papers, oral presentations, and lab practicals designed to assess a variety of cognitive and non-cognitive skills in a simulated or supervised clinical setting.

Behavioral and Social Attributes

A student must possess the emotional health required for full utilization of their intellectual abilities, the exercise of good judgment, and prompt completion of all responsibilities attendant to the care of clients. A student must be able to function effectively under stress. Compassion, integrity, concern for others, interpersonal skills, interest, and motivation are all personal qualities that a student must possess to successfully complete the challenges encountered in training.

Transfer Students and Advanced Standing

National University will consider granting transfer credit from other licensed and approved schools of massage therapy and advanced standing from college(s) where the credits are germane and equivalent to the credits of the curriculum of National University.

Credits for advanced standing must have been earned within five years of entering National University. Exception may be made for those who have an advanced degree that utilizes the content in question. Students must take a minimum of nine credits over a minimum of two trimesters to graduate from National University.

Non-certificate Students

National University makes a limited number of courses available to individuals who wish to take classes as non-certificate seeking students. Students taking coursework in this capacity do not go through the normal admission process and are not admitted to a certificate program. Interested individuals should contact the Admissions Office for guidance and course availability. Course enrollment is handled through the Registrar. The Registrar, in consultation with the appropriate dean, will determine if a student can enroll in any specific course as a non-certificate seeking student.

To obtain credit for courses, non-certificate students must complete the entire trimester and successfully pass all required examinations. Tuition is paid by the non-certificate student by the per clock hour fee.

Textbooks and Supplies

MBS Direct is National University's online resource for textbooks, references and other supplies. Students access the bookstore via the MyNU Student Portal. A student supply center is located in Janse Hall for the sale of additional supplies needed in the curriculum.

Student Complaint Procedures

Questions or complaints of an academic nature should first be addressed to the instructor. Unresolved complaints or any other issues pertaining to academic matters are to be directed to the appropriate dean.

In order to ensure an effective response, initial complaints should be prepared in a typed or written format. Complainants should describe the issue in their own words and include their full name and contact information. Complainants should also include dates and list any college officials who were involved or have been contacted. Any supporting documentation, such as emails or other correspondence should be included in order to help others understand the nature, context, actions, or events that lead to the complaint. Finally, the complainant should state what, if any, remedy is sought.

NUHS is committed to resolving complaints at the earliest and most informal level, conducting internal investigations in a timely and effective manner, adhering to the procedures as outlined, and providing prompt corrective action if discrimination is believed to have occurred. The date upon which a written complaint is received shall be referred to as the date of complaint. NUHS will make every reasonable attempt to resolve all complaints within 60 days.

In order to file an internal academic or non-academic complaint, contact the following:

- Complaints regarding the Financial Aid Program: Director of Financial Aid, 2nd floor, Janse Hall, Lombard, Illinois; 630-889-6517
- Complaints regarding the College of Allied Health Sciences and Distance Education: Dean of the College of Allied Health Sciences and Distance Education, 630-889-6545
- Complaints regarding non-academic university Issues (discipline, discrimination, sexual misconduct, harassment, disabilities, privacy, misuse of computing resources, student safety, and security, etc.);
- Dean of Students. 630-889-6546, email studentservices@nuhs.edu or via the online complaint form: <https://www.nuhs.edu/student-services/support-services/complaints/student-complaint-form/>

Placement Assistance

The National University of Health Sciences College of Allied Health Sciences and Distance Education provides employment experience and networking opportunity through clinical practicum. The Alumni Services Office keeps a file of available employment positions. Professional opportunities are posted on the University website, www.nuhs.edu.

Academic Policies, Regulations, Procedures

Massage Therapy Program

The curriculum includes 705 classroom, lab, and clinical hours of instruction in anatomy and physiology, cadaver laboratory, massage history and theory, clinical massage, terminology, interpersonal communication, wellness, relaxation therapies, hydrotherapy, assessment, practice management, ethics, and public health.

A certificate is awarded upon completion of the 705-clock-hour course of study. The program may be completed in three trimesters. Students may attend on a part-time basis, but may not be eligible for federal financial aid. Please contact the Financial Aid Office if considering carrying less than a full course load.

The following academic policies, regulations, and procedures apply to all students of the National University of Health Sciences College of Allied Health Sciences and Distance Education Massage Therapy Program. Failure to conform with policies, regulations, and procedures may jeopardize or negate a student's opportunity to pursue and/or complete the course of study leading to the massage therapy certificate.

Full-time Student

A full-time student in the Massage Therapy Program at National University is one who enrolls in no less than four academic credit hours of coursework.

Trimester Credit

The trimester hour is the unit of credit. A trimester hour of credit is defined as one lecture period or two laboratory periods each week during the trimester. The class period is 50 minutes in duration. The formal hours of the program are generally scheduled Monday through Thursday from 6 to 10 p.m. except for the clinical practicum.

Attendance (in Person)

Students are permitted 10% absenteeism in each class after which they will be issued a grade of F for that course. Students are admonished to maintain a record of attendance for themselves, although the record of the faculty member will be the official record. These absenteeisms are to be used for emergencies, not to just be used and then plead for mercy when an emergency takes absences over the 10% limit. Faculty members will notify each student if the attendance record indicates that the student is in jeopardy. The instructor of record for said class, in consultation with the appropriate dean, may make excused absences on a case-by-case basis. Exceptions to the 10% rule cannot exceed the equivalent of two weeks of course work in a given class during a trimester. Excused absences must be submitted prior to the day of the class, however, where extenuating circumstances prohibit prior notice, the request must be made without delay. The instructor of record may require that excused absence requests be made in writing, with documentation supporting the request.

Attendance (Online)

Students are expected to attend all online course sessions through class participation. The method of participation (such as discussion board posts or submission of assignments) is defined by each faculty member, and these requirements can be found in each course syllabus. Online class posts are date- and time-stamped upon receipt on the university servers, which operate on Central Time. Each course syllabus will define due dates. Typically, the online course week starts on Wednesday at midnight. For absence due to illness or personal emergency, the student is expected to contact the faculty as soon as possible.

Repeated Course

Students must repeat any required courses in which a grade of F, W, or WF is received. Students will only be allowed to repeat courses in which they received a D or below. In the case of a D or F, the most recent grade received will replace the grade received for the previous attempt and be calculated into the Cumulative GPA. The initial grade is flagged with an RPT indicating that the course has been repeated. All original and repeated courses will be counted

as attempted credits in satisfactory academic progress calculations. Students may repeat a course two additional times from the first attempt for a total of three attempts. Failure to pass a course after three attempts shall result in expulsion.

Attendance, Tardiness, Make-up Work

National University has established the following policy:

Students may miss up to 10% of the total hours for each course and laboratory (Clinic Internship may be more stringent) without being required to make up the missed work. Absence beyond the allowed 10% results in a grade of F or U unless the student qualifies for an excused absence or does all make-up work to the extent allowed by the appropriate dean. The student must meet one of the following requirements: verified death of an immediate family member; grave personal illness or injury; personal catastrophe; or non-reschedulable military service requirement. An excused absence may only be granted by the appropriate dean and must be made up. Tardiness contributes toward absenteeism. Tardy is defined as being late to class by 15 minutes or less. Three tardies will be counted as a one-hour absence. Arriving at class greater than 15 minutes late counts as a one-hour absence. (Clinic Internship policy is more stringent.)

Make-up Final Examination Policy

This policy permits students the opportunity to make up course or laboratory final examinations when the requirements noted below are met. Missed (with excused absence) final examinations may be made up. The make-up examination will be scheduled by the faculty member during the first week of class of the following trimester. If examinees are not present at the scheduled make-up exam time, they will receive the grade of 0 for the exam.

Repeating a Failed Massage Program Examination

Because all courses are not offered every trimester, failing a course will create a trimester gap in a student's education if the current typical process is continued. In an effort to help students to continue their education without the loss of time, the following changes will allow a student to pass the course with grade of D.

A. Students who fail midterms and/or final examinations will be offered the opportunity to repeat the exam(s) up to three times with one-week intervals. Written exams will be proctored by the Dean's Office if necessary. Practical exams will be offered by the faculty, who will be paid for their time via a charge to the student through the usual Cashier processes.

B. Students who fail the course subsequent to the examination repeats offered above may repeat the course via an independent study format if they choose, with the current course faculty being paid an independent study stipend.

Final Comprehensive Examinations

Final examinations are an integral part of the course evaluation and are scheduled at the end of the course. Each examination is scheduled at a specific time. Students who present themselves to the exam site late (greater than 15 minutes or after the first student leaves the exam site, whichever comes first) may be required to follow the make-up exam policy. Final examinations may not be given at times other than the regularly scheduled periods or the make-up periods.

Passing the final comprehensive examination is required to pass a course. Laboratory final examinations are given during their last regularly scheduled time.

The nature of each course and laboratory requires various means of evaluation. Course managers and laboratory instructors have the responsibility for developing appropriate evaluation criteria. Course managers must explain them to their students at the beginning of the trimester and must stipulate them in the course syllabi filed with the appropriate dean.

No student will be permitted to sit for a final examination who has not completed all the work, including tests, practical examinations, class assignments, attendance, etc., required by the course manager and laboratory instructor prior to the final examination.

To receive the grade of I, a student who has not completed all the required work prior to the time of the final examination must seek the permission of the course manager who must consult with the appropriate dean.

Unexcused (no grade of I granted) absence from, or failure of the second administration of the final examination, will be noted as a grade of F for the course or laboratory.

The format of the final comprehensive examinations will be determined by the course manager and specified in the syllabus.

Co-Curricular Learning (CCL)

National University of Health Sciences graduates are called to take their place as health professionals and leaders in their communities. While at National, all students are required to participate in community service activities that support both the University and the public, providing excellent training for future leadership roles. Co-curricular Learning (CCL) is a program that all degree-seeking students are required to complete for graduation.

By participating in CCL, students are ascribing to the NUHS mission by demonstrating their abilities in leadership and management, cultural diversity and ethics, and advancement of education.

CCL incorporates learning experiences that complement, in some way, what students are learning in their programs. Students will engage in service programs, projects and volunteer opportunities that serve NUHS and its surrounding communities. Students are asked to submit short written assignments reflecting on their own learning experiences therein. A master list of opportunities will be maintained by the Office of Student Services.

<u>Program Requirements</u>	<u>Required Assignments</u>
MT, AAS, BS, MSACP and MSDI	3

Academic Warning

A student will be issued an Academic Warning when that student receives a trimester GPA of less than 2.0 even though that student is in good academic standing.

Academic Probation

Probation alerts students to the fact that they are no longer in good academic standing (CGPA is less than 2.0) and are subject to various requirements that are intended to improve academic performance. Each probationary period is one trimester in length. Two probations normally result in expulsion from the university. A student may appeal to the Committee on Academic Standards, Grades, and Records through the office of the appropriate dean if extenuating circumstances warrant an additional opportunity.

Academic performance criteria that may lead to the actions of suspension or expulsion follow:

1. a combination of academic probation(s), warning(s) and deficiencies;
2. not maintaining good academic standing;
3. failing the same course (includes Massage Clinic Internship 1 and 2 as a "same course") or laboratory more than once (expulsion, three times);
4. not maintaining satisfactory progress.

Withdrawal

Students who stop attending National University of Health Sciences must officially withdraw from the university. Students desiring to withdraw in good standing must secure a Request for Authorized Withdrawal from the Registrar that must be properly completed and deposited with the Registrar. Returning students must direct their requests for readmission to the Registrar if withdrawn for three or less trimesters. If the withdrawal is for more than three trimesters, the student must reapply for admission.

Separation

A student may be expelled or suspended from the university for, among other reasons, academic deficiency or for academic dishonesty, such as, but not limited to, the use of dishonest means in any examination, the plagiarism of class assignments, and/or the falsification of previous academic records. Students who have been separated from the university for academic reasons for less than one calendar year must direct their request for readmission to the Registrar. Any conditions relative to readmission are established by the appropriate dean with the advice of the Committee on Academic Standards, Grades and Records and the Admissions Committee.

Massage Therapy Program

Professor Jerrilyn Cambron — Chair, Massage Therapy Program

The National University of Health Sciences, College of Allied Health Sciences and Distance Education Massage Therapy Program emphasizes the potential for massage as a therapeutic regimen to provide significant benefit to many individuals with various health conditions. This program also provides an opportunity for personal growth and individual empowerment.

The foundation for a career in massage therapy is found in the basic sciences and it is for that reason that National University requires a solid grounding in anatomy and physiology. Upon that foundation, students will learn to cultivate the sensitivity and skill to offer massage therapy and hands-on-care in a way that empowers and invites inquiry on the part of the client. Massage therapy will also promote an awareness and sensitivity of the importance and value of the relationship between therapist and client as a part of the therapeutic encounter.

The 705-hour curriculum includes extensive instruction in the subjects necessary for students to succeed as massage therapists and provide the highest quality service to clients. Courses include anatomy and physiology, massage theory and history, clinical massage, business practices, and ethics. A 30 contact hour elective must be successfully completed as part of the 705-hour curriculum. National's extensive facilities also provide a unique and exciting learning environment where students interact with highly qualified faculty, serve clients in diverse clinical experiences, and work closely with colleagues in other health care disciplines.

Students completing requisite courses at an accredited institution may apply for an Associate in Applied Science degree in conjunction with the Massage Therapy Program. The degree is accredited by the Higher Learning Commission (www.hlcommission.org). Any eligible transfer hours must have been taken within five years of the application for the degree.

General Information

The art and science of massage therapy continues to flourish as part of a host of therapies that lend themselves to human wellness. Massage promotes circulation, lymphatic flow, muscle relaxation, and the reduction or elimination of musculoskeletal pain.

The client's needs should always be considered first when providing physical and emotional support to reduce stress and all of the concomitant things that also are included.

History

The National University of Health Sciences College of Allied Health Sciences and Distance Education Massage Therapy Program was established in 1999 as a program of The National College of Chiropractic that was established in 1906 in Davenport, Iowa. In 1908, the college settled in Chicago, Illinois, where it was chartered and incorporated under the laws of the state of Illinois.

In 1941, National College became a not-for-profit educational and research institution in accord with the corporate laws of Illinois and the requirements of the United States Department of the Treasury governing tax-exempt institutions. The Office of the Superintendent of Public Instruction of the State of Illinois granted official status to National College as a degree-granting institution in 1966. In 1981, the college was accredited by the North Central Association of Colleges and Secondary Schools.

In 1963, National moved to Lombard, Illinois, where, on approximately 35 acres, it provides the finest science-based curriculum and clinical experience for its massage students.

Nature and Institutional Purposes

The purposes of the three-trimester massage therapy program are as follows:

1. The National University of Health Sciences College of Allied Health Sciences and Distance Education Massage Therapy Program has as its first purpose the provision of specialized education requisite to qualify men and women as competent massage therapists. Thus, the program educates its students in the basic and clinical sciences as well as in related health subjects.
2. The National University of Health Sciences College of Allied Health Sciences and Distance Education Massage Therapy Program has as its second purpose the provision of general educational components for the express purpose of helping students appreciate and use their intellect, examine their values, evaluate and appreciate divergent views, participate in the free exchange of ideas and attitudes, and acquire and enhance those interpersonal skills, including touch, necessary for ethical performance as a massage therapist.
3. The National University of Health Sciences College of Allied Health Sciences and Distance Education Massage Therapy Program has as its third purpose the offering of continuing education to massage therapists and other health care professionals and technical level personnel, the provision of post-certificate specialty programs through extension study provided at various sites that are offered through the Lincoln College of Postgraduate and Continuing Education.

National University of Health Sciences does not discriminate on the basis of race, color, age, gender, pregnancy, religion, sexual orientation, ancestry, national origin, disability (please see Technical Standards for Admission in the Admissions section of this Bulletin), military status, unfavorable military discharge other than dishonorable, marital status, or any other characteristic protected by federal, state or local law in admission, access to treatment, or employment in its programs and activities that receive or benefit from federal financial assistance, in accordance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, or the Age Discrimination Act of 1975, and the Americans With Disabilities of 1990.

Accreditation

The Massage Therapy Certification Program is accredited by the Commission on Massage Therapy Accreditation (COMTA).

Membership

National is a member of the American Massage Therapy Association (AMTA).

Dean's List and Honor Roll

At the end of each trimester, recognition of the Dean's List of Students for Distinguished Academic Achievement is awarded to those students who have completed at least 180 clock hours and have achieved a GPA of at least 3.5 on a 4.0 scale for the trimester with no grade lower than a C. Recognition on the Honor Roll of Students for Exemplary Academic Achievement is awarded to those students who have completed at least 180 clock hours and have achieved a GPA of at least 3.0 (on a 4.0 scale) for the trimester with no grade lower than a C.

Valedictorian/Salutatorian

The valedictorian and salutatorian are respectively the first and second highest ranking scholars in the graduating class. The students must have earned at least 90% of their core curriculum credits at National University of Health Sciences. The rankings are determined by the cumulative grade point average of the core.

If there is a tie, elective courses will be used to calculate the cumulative GPA. In the event there is a tie for the valedictorian position (there may be more than one), there will be no salutatorian. In the event there is a tie for the salutatorian position, there may be more than one.

The selection of the student commencement speaker is determined at the discretion of the University administration.

Graduation Requirements

The Certificate in Massage Therapy is conferred on the individual who:

1. meets all stipulated academic requirements for the certificate and has been a resident student at National University for at least the last two academic trimesters of coursework;
2. has successfully completed all the required courses, laboratories and clinic requirements within four (4) calendar years;
3. has successfully completed an elective course offered by NUHS valued at 30 or more clock hours;
4. has successfully completed all required Co-Curricular Learning assignments
5. is in good academic standing and is clinically competent;
6. is recommended for graduation by the faculty of the University;
7. is free of all indebtedness and other obligations to the University;
8. has performed the equivalent of 90 one-hour massages;
9. has submitted a completed and signed Petition for Degree Completion Form; and
10. has participated in the commencement ceremony.

Graduation Rate for Massage Therapy

The checkpoint completion rate for students entering the Massage Therapy program from July 1, 2014, through June 30, 2016, was 90.32%. This is the percentage of graduates or still active students who enrolled in the program during that time frame.

Faculty/Student Ratio

The faculty/student ratios will be no greater than the following levels: Lecture – 1 to 40; Laboratory – 1 to 16 (8 practicing, 8 on tables).

National Certification

The Massage and Bodywork Licensing Examination (MBLEx) is the nationally accredited exam that is accepted for licensure requirements in Illinois. The program is accredited by the Federation of State Massage Therapy Boards (FSMTB).

A summary of the MBLEx application process can be found at www.fsmtb.org.

Pass Rate for Massage Therapy Graduates

Students of the NUHS Massage Therapy Certification Program who took the Massage and Bodywork Licensing Examination (MBLEx) between July 1, 2016, and June 30, 2017, earned an 87.5% first time pass rate.

Placement Rate for Massage Therapy Graduates

The checkpoint placement rate for Massage Therapy program graduates between February 2016 and January 2017 is 67%. This represents graduates who were working as massage therapists or waiting for licensure 6 months after graduation. Questions related to this data should be directed to the Dean of the College of Allied Health Sciences and Distance Education.

Massage Program Educational Objectives

- Graduates of the Massage Therapy Program will be able to evaluate clients to create, perform, and document an appropriate and effective treatment plan using massage and other modalities.
- Graduates of the Massage Therapy Program will be able to practice self-care techniques to maintain physical well-being and career longevity.
- Graduates of the Massage Therapy Program will be able to develop a successful practice, massage therapy employment, or continuation of their health care education.
- Graduates of the Massage Therapy Program will be able to develop successful and ethical client/therapist relationships.
- Graduates of the Massage Therapy Program will be able to complete professional development and continuing education.
- Graduates of the Massage Therapy Program will be able to exhibit knowledge of integrative therapies commonly used in conjunction with massage therapy and will understand the massage therapist's scope of practice and collaborative purpose within the health care field.

Massage Program Courses of Instruction

First Trimester		Lecture Credits	Lab Credits	Total Credits	Hours/Week	Total Hours
BIOL 211	Anatomy & Physiology 1: Fundamentals	3	0	3	3	42
BIOL212	Gross Anatomy Laboratory 1	0	0.5	0.5	1	14
MT100	Introduction to Massage	0	0	0	15	15
MT111	Assessment 1: Palpation	0	1	1	2	28
MT121	Massage Fundamentals	0	2	2	4	56
MT141	Ethical Practice Management 1	2	0	2	2	28
MT171	Interpersonal Communication & Ethics	1	0	1	1	14
PM112	Assessment 2: Clinical Pathology/Microbiology	1	0	1	1	14
TERM161	Medical Terminology	1	0	1	1	14
Total		8	3.5	11.5	30	225

Second Trimester		Lecture Credits	Lab Credits	Total Credits	Hours/Week	Total Hours
BIOL 213	Anatomy & Physiology 2: Systems	3	0	3	3	45
BIOL214	Anatomy & Physiology 3: Kinesiology	3	0	3	3	45
BIOL215	Gross Anatomy Laboratory 2	0	0.5	0.5	1	15
MT131	Non-Western Medicine & Evidence Informed Practice	1	0	1	1	15
MT222	Massage: Chair/Trigger/Point/Sport	0	1.5	1.5	3	45
MT224	Massage: Special Populations (Geriatric/Cancer/Pregnancy/Infant/Pediatric)	0	1	1	2	30
MT323	Clinic Internship 1	0	1	1	2	30
Total		7	4	11	15	225

Third Trimester		Lecture Credits	Lab Credits	Total Credits	Hours/Week	Total Hours
MT142	Ethical Practice Management 2	1	0	1	1	15
MT225	Massage: Orthopedic/Syndromes/Chiropractic Setting	0	1.5	1.5	3	45
MT313	Assessment 3: Signs/Symptoms/Systemic Conditions/ Exam Procedures	2	0	2	2	30
MT325	Clinic Internship 2	0	2	2	4	60
NU151	Wellness 1: Nutrition	1	0	1	1	15
PT352	Wellness 2: Rehabilitation/Therapeutic Exercise/Hydrotherapy	1	0	1	1	15
WELL126	Relaxation Therapies: Yoga/Qi Gong	0	1.5	1.5	3	45
Total		5	5	10	15	225
Core Program Totals		20	12.5	32.5	45	675

MT111 **Assessment 1: Palpation** **Credit 1.0**
Students will learn through study and practical application the major superficial muscles and body landmarks. Basic palpation skills are developed in laboratory hands-on activities.
Corequisite: BIOL211, BIOL212

MT121 **Massage: Fundamentals** **Credits 2.0**
This introductory course provides the student with a solid foundation of fundamental Swedish massage techniques and methods, along with proper biomechanics, posture and table management. Concepts in soft tissue physiology as they relate to massage also are stressed. Draping also will be covered in this laboratory.
Corequisite: BIOL211, BIOL212, MT111, MT141, MT171, PM112, TERM161

MT141 **Ethical Practice Management 1** **Credits 2.0**
Massage therapy students will learn about the scope of practice, use of client forms, the therapist-client relationship, developing a good working relationship with other health care practitioners including giving and receiving referrals, maintaining professional, ethical, sexual, and emotional boundaries with clients, recognizing potential problem areas, and providing guidelines for use in unclear and/or unsafe situations.
Prerequisite: None

MT171 **Interpersonal Communication & Ethics** **Credit 1.0**
This course teaches skills required as a speaker and listener as well as the basics of body language and non-verbal cues. The subject of ethical behavior is important to all massage professionals. In this course, participants will discuss personal and professional codes of ethics. This course focuses on different theories of ethics, ethical considerations involved in a massage business, and codes of ethics of professional massage associations.
Corequisite: MT141

PM112 **Assessment 2: Clinical Pathology/Microbiology** **Credit 1.0**
This course introduces students to the basics of pathology, including the basics of inflammation and repair, infectious disease, universal precautions, and conditions of the integumentary, musculoskeletal, nervous, cardiac, respiratory, immune, endocrine, gastrointestinal, urinary, and reproductive systems. Students will learn to recognize basic signs and symptoms as well as indications and contraindications of massage as they progress through the systems.
Prerequisite: None

TERM161 **Medical Terminology** **Credit 1.0**
Students will learn terminology for use in the massage therapy environment and terminology necessary to communicate with other health care providers.
Prerequisite: None

Second Trimester – Offered in Spring and Summer

BIOL213 **Anatomy & Physiology 2: Systems** **Credits 3.0**
This course includes the basic structure and function of the major systems of the human body with an emphasis on neuromuscular physiology. Also covered will be cell/tissues; integument; muscle physiology; nervous tissue; spinal cord and nerves, brain and cranial nerves; special senses, sensory and motor systems; autonomic nervous system; endocrine system and the stress response; cardiovascular system – heart, blood, vessels; lymphatic system; respiratory physiology; physiology of the digestive system and metabolism; physiology of the urinary system, and reproductive physiology (development and inheritance). Students will learn the terminology and functional anatomical structures.
Prerequisites: BIOL211 and BIOL212

BIOL214 **Anatomy & Physiology 3: Kinesiology** **Credits 3.0**

This course includes the basic structure and function of the musculoskeletal system of the human body. Students will learn terminology and functional anatomical structures with a detailed study of the origin, insertion, and action of the major muscles of the human body.

Prerequisite: BIOL211, BIOL212

BIOL215 **Gross Anatomy Laboratory 2** **Credit 0.5**

Under close supervision, students have the opportunity to observe and palpate prosected human cadavers. Tissues covered in Anatomy and Physiology 2 and 3 will be specifically covered.

Prerequisite: BIOL211, BIOL212

Corequisite: BIOL213, BIOL214

MT131 **Non-Western Medicine and Evidence Informed Practice (EIP)** **Credit 1.0**

Massage therapy as practiced today incorporates various principles and objectives. Although a therapist need not be proficient in all types and styles of massage, an understanding of some of the more common variations utilized by therapists will assist a practitioner. This course provides an overview of some of the non-western approaches to medicine, as well as a brief overview of various energetically-based applications of massage.

All health care professionals depend on research results for new information in their field. This course provides the foundation for understanding basic research methods, building research literacy skill, and learning how the application of research findings can strengthen one's practice.

Prerequisite: None

MT222 **Massage: Chair/Trigger Point/Sport** **Credit 1.5**

This laboratory gives hands-on experience in the art and science of chair massage, trigger point therapy, and sports massage. Students build on their previous hands-on skills and knowledge for a variety of client needs. Students will learn to adapt their skills to a wide range of client complaints by developing their ability to think critically and select appropriate courses of action with clients.

Prerequisite: MT121

MT224 **Massage Therapy for Special Populations:
Geriatric/Cancer/Pregnancy/Infant/Pediatric** **Credit 1.0**

This 30-hour course will explore the role of massage therapy as it relates to special populations. Lecture will discuss how to provide a safe and effective massage based on a thorough understanding of the anatomical and physiological stages and conditions of the client who may have special needs based on specific conditions or age. The course will address special needs of populations of patients such as: geriatric patients, the terminally ill, the pregnant female, the infant, and the child with hands-on massage procedures being demonstrated and practiced.

Prerequisite: MT121

MT323 **Clinic Internship 1** **Credit 1.0**

Students will participate in Internship 1 in the university's clinics. Students must complete the equivalent of 30 one-hour therapy sessions. The clinical experiences improve confidence and client interaction and provide opportunities to learn and experience a greater diversity of treatment plans. The experience includes orientations and on-site seated or table massage. The clinic and assigned clinic hours are matched to the request of each student when possible; students will be assigned when requests cannot be accommodated. Second and third trimester internships comprise a minimum of 32 continuous weeks beginning with the second trimester and ending with the third trimester. Students are expected to maintain clinical internship hours during the course break between second and third trimesters. Internship 1 and 2 must be taken as one unit. Withdrawal from a second trimester course also requires withdrawal from massage internship.

Prerequisite:

1. Successfully complete all courses in the first trimester (MT121 with a grade of C or higher). (Students who do not enter clinic immediately upon finishing MT121 must pass a massage competency assessment before scheduling clients.)

2. Complete freshman physical.
3. Present proof of a current American Heart Association Basic Life Support for Health Care Providers with AED card that will not expire prior to the end of the clinic internship.
4. If taking full second and third trimester course loads: Concurrent enrollment in all second trimester courses. If any second trimester courses are NOT successfully completed, Massage Internship 1 (MT323A) must be repeated with the failed course.
5. If taking a partial load in second trimester and planning to take the full course load in third trimester: Concurrent enrollment in all remaining second trimester courses. If any second trimester courses are NOT successfully completed, Massage Internship 1 (MT323A) must be repeated with the failed course. If circumstances change at the successful conclusion of second trimester, and third trimester is taken via partial load, the student must repeat Massage Internship 1 (MT323A) with the initial partial load of the third trimester courses (second-to-last trimester of attendance before graduation).
6. If planning to take partial loads in third trimester: Internship 1 must be taken in the second-to-last trimester of attendance prior to graduation. Internship 2 must be taken in the trimester in which the student graduates (last trimester of attendance). If any third trimester courses are NOT successfully completed, Massage Internship 1 (MT323A) must be repeated unless all remaining courses are taken from the third trimester (unless the failed course was Internship 1) including Internship 2 to finish the program.

Note: The use of MT323A on a transcript indicates that an additional 15 hours of massage have been added to the student's requirement for graduation due to extenuating circumstances.

Corequisite: BIOL213, MT222, MT224, BIOL214, BIOL215

Third Trimester – Offered in Summer and Fall

MT142 **Ethical Practice Management 2** **Credit 1.0**
 Massage therapists commonly desire to start their own small business in providing massage therapy to clients. Information is discussed on the subjects of setting up and building a successful client base, bookkeeping, taxes, marketing, and compliance with local and state laws.
 Prerequisite: MT141

MT225 **Massage: Orthopedic/Syndromes/Chiropractic Setting** **Credit 1.5**
 This laboratory gives hands-on experience in the art and science of orthopedics. Students build on their previous hands-on skills and knowledge to begin to work with techniques for the structures of the body. Students will learn to adapt their skills to a wide range of client complaints by developing their ability to think critically and select appropriate courses of action with clients.
 Prerequisite: BIOL213, BIOL214, BIOL215, MT222

MT313 **Assessment 3: Signs/Symptoms/Systemic Conditions/Exam Procedures** **Credit 2.0**
 This course will give students insight into what to look for and listen for during the history and assessment of the client to help them determine an appropriate massage therapy plan or to consider referral. This course also helps students to understand examination procedures used in health care offices and how those procedures help to determine conditions of the major human systems and how they relate to wellness.
 Prerequisite: BIOL213, BIOL214, BIOL215

MT325 **Clinic Internship 2** **Credit 2.0**
 Students will participate in Internship 2 in the university's clinics and a variety of sites in the community. Students must complete the equivalent of 60 one-hour therapy sessions. The clinical experience improves confidence and client interaction, and provides opportunities to learn and experience a greater diversity of treatment plans. The experience includes orientations and on-site seated or table massage. The clinic and assigned clinic hours are matched to the request of each student when possible; students will be assigned when requests cannot be accommodated. Community sites are offered to provide experience outside the university campus and aid in job placement. These may include athletic clubs, rehabilitation clinics, senior centers, hospitals, corporate offices, police

and fire departments, and sports and dance venues. Second and third trimester internships comprise a minimum of 32 continuous weeks beginning with the second trimester and ending with the third trimester. Students are expected to maintain clinical internship hours during the course break between second and third trimesters. Internship 1 and 2 must be taken as one unit.

Prerequisite:

1. Successful completion of all second trimester courses.
2. Concurrent enrollment in all third trimester courses.
3. Must be taken during the last trimester of attendance (the trimester in which the student graduates). If any third trimester courses must be repeated, Internship 2 (MT325A) must be repeated.

Note: The use of MT325A on a transcript indicates that an additional 15 hours of massage have been added to the student's requirement for graduation due to extenuating circumstances.

Corequisite: NU151, WELL126, MT313, PT352, MT142, MT225

NU151 Wellness 1: Nutrition Credit 1.0

This course is an introduction to the fundamentals of human nutrition. Introductory topics include a description of the basic science aspects of the proteins, carbohydrates, fats, vitamins (macronutrients), minerals, and metals (micronutrients) used by the body to obtain maximal health status. Topics presented in this course include a discussion of the severe deficiency states for both micronutrients and macronutrients. Energy production and weight management are described. Food habits in the United States and nutrition for sports and exercise are introduced. An introduction to the use of botanical medicines is also presented.

Prerequisite: None

PT352 Wellness 2: Rehabilitation/Therapeutic Exercise/Hydrotherapy Credit 1.0

This course discusses the scientific application of rehabilitation procedures, therapeutic exercise and hydrotherapy for therapeutic purposes, and wellness. Students will learn the correct uses of rehabilitation procedures, therapeutic exercise, and applications of ice packs and hot packs.

Prerequisite: BIOL213, BIOL214, BIOL215

WELL126 Relaxation Therapies: Yoga/Qi Gong Credit 1.5

Stress reduction is one of the main benefits of massage therapy. This laboratory teaches how to recognize stress and the physiological and psychological effects of stress. A variety of stress intervention techniques such as yoga and Qi Gong for the reduction of stress will be learned and practiced.

Prerequisite: None

Electives

At least one of the following electives is required for graduation.

MT229 Massage: Advanced Fundamentals & Variations Credit 1.0

This 30-hour laboratory gives hands-on demonstration and experience in advanced general massage procedures and optional techniques.

Prerequisite: MT121

Open Enrollment Courses

COM100 Student Success Credit 0
(15 Clock Hours)

This non-credit course will help students to understand how to achieve academic success in a health profession program. The course will help students set academic goals, manage stress, and understand grade point average calculation. The course will also help students determine their primary learning style and improve communication skills, study skills, and test taking skills. Students of any program may benefit from this course as a preparatory course. Others may find it useful if expectations have not been met.

Prerequisite: None

Offered: Fall, Spring, Summer

Associate of Applied Science Degree

Students interested in the massage therapy certificate program who have completed or plan to complete their general education requirements may also wish to inquire about the Associate of Applied Science Degree in Massage Therapy. Please refer to the Department of Undergraduate Studies, Degree Programs, for further information on this degree.

Graduate Education

Lincoln College of Postgraduate and Continuing Education, a division of National University of Health Sciences, is dedicated to offering accredited graduate educational programs to help the massage therapist maintain expertise, and to allow for clinical specialty advancement. For information regarding specific course content, contact the Lincoln College of Postgraduate and Continuing Education.

Massage Therapy Licensure Information

Licensing requirements in other states and local municipalities may differ. National University students who desire detailed information relative to state regulations should contact the state regulating body. Access state licensure information on the AMTA website: <http://www.amtamassage.org/regulation/stateRegulations.html>.

The state of Illinois requires massage therapists to be licensed by the state. For Illinois information, go to: <http://www.amtamassage.org/regulation/detail/17>. Be aware that some municipal codes and ordinances may also apply. The regulatory board is the Illinois Department of Financial & Professional Regulation in Springfield, Illinois. Education must be received at an approved school. The program must contain a minimum of 600 clock hours of education. You must be 18 years of age and of good moral character, submit an application form, submit electronic fingerprints from authorized vendors or the Illinois State Police, pass a licensure examination, and pay the licensure fee. Licensure must be renewed every two years with documentation of 24 continuing education credits.

Undergraduate Degree Programs

Professor Jerrilyn Cambron — Dean, College of Allied Health Sciences and Distance Education; Assistant Professor Candace Passi, Assistant Dean

The Department of Undergraduate Studies currently offers two degree programs: a Bachelor of Science Degree in Biomedical Sciences, a completion program which includes the Prerequisite Program; and an Associate of Applied Science Degree in Massage Therapy.

Bachelor of Science Degree in Biomedical Sciences

General Information

The Office of the Superintendent of Public Instruction of the State of Illinois, through the Advisory Council of Degree-Granting Institutions, has approved National University of Health Sciences as an academic degree-granting institution as well as a professional degree-granting institution.

This bachelor of science degree completion program is a stand-alone program that can be used to meet the entrance requirements of the first professional degree programs or may be a terminal degree for students. This degree completion program includes the science requirements for entry to the first professional degree programs. These science courses are offered in an accelerated format as part of National University's Prerequisite Program. Students may also take these courses for transfer to other institutions.

Emphasis in Nutrition

A student may receive a Bachelor of Science Degree designated with "Emphasis in Nutrition" by completing 19 credits in nutrition (with a grade of C or higher)

History

National University of Health Sciences was established in 2000 from the institution formerly named The National College of Chiropractic, which was founded in 1906 in Davenport, Iowa. In 1908, the college settled in Chicago, Illinois, where it was chartered and incorporated under the laws of the state of Illinois.

In 1941, National College became a not-for-profit educational and research institution in accord with the corporate laws of Illinois and the requirements of the United States Department of the Treasury governing tax-exempt institutions. The Office of the Superintendent of Public Instruction of the State of Illinois granted official status to National College as a degree-granting institution in 1966. In 1981, the college was accredited by the North Central Association of Colleges and Secondary Schools.

In 1963, National moved to Lombard, Illinois, where, on approximately 35 acres, it provides the finest science-based curriculum and clinical experience for students in its graduate, undergraduate, and certificate programs.

Nature and Institutional Purposes

The National University of Health Sciences, College of Allied Health Sciences and Distance Education, Undergraduate Degree Program has as its purposes:

1. To provide specialized human science education requisite to qualify men and woman as competent in the biomedical sciences;
2. To provide general educational components for the express purpose of helping students appreciate and use their intellect, examine their values, evaluate and appreciate divergent views, participate in the free exchange of ideas and attitudes, and acquire and enhance interpersonal skills;
3. To provide public open enrollment courses;
4. To prepare a college level student for a career in the field of health care sciences;
5. To deliver high level courses beyond the typical bachelor of premed program courses;

6. To expand learning choices with additional majors in individual health care sciences;
7. To prepare students for a medical health care field degree;
8. To increase the student's knowledge of various professional health care fields, such as naturopathic medicine, chiropractic medicine, osteopathic medicine, pharmacy, and nursing;
9. To mentor students by guiding them to an appropriate health care field for their level of interest and knowledge.

Program Goals

1. To prepare a college level student for a career in the field of health care sciences;
2. To deliver high level courses that are not given in a typical bachelor of premed program, such as pharmacology and immunology;
3. To develop other bachelor's degree completion programs in individual health care sciences such as a bachelor's in nutrition;
4. To prepare students for an end-level degree useful for the medical technology programs available in the health care field;
5. To develop faculty trained in the health care field to deliver high-level science courses;
6. To increase the knowledge of bachelor's degree students of professional health care fields, such as chiropractic and naturopathic medicine, osteopathic medicine, pharmacy, and nursing, among others;
7. To mentor bachelor's degree students by directing them to the appropriate field for their level of interest and knowledge.

Undergraduate Educational Objectives

- Graduates of the Bachelor of Science Degree Program will have a broad knowledge of biological and physical sciences as related to human biology.
- Graduates of the Bachelor of Science Degree Program will be able to organize, analyze, and critically evaluate and interpret scientific data, and communicate such science concepts for peer and professional audiences.

Admission Information

General Guidelines

All individuals who wish to achieve a health care related bachelor's degree are encouraged to apply for admission to the university. National University admits new classes each fall, spring, and summer trimester.

Completion of this program does not guarantee admission to a professional school. Each professional school has specific admission requirements. Students are responsible for meeting the requirements of the professional school to which they choose to apply. Students must plan their course of study carefully in order to meet their specific professional objectives.

Selection of Candidates

Applicants are approved for matriculation by the Committee on Admissions. In addition to meeting the National University admission standards, the Committee on Admissions will admit only those candidates who in the judgment of the university are of good character, are capable of performing in the BS completion program in its entirety, and who show promise of becoming a credit to their chosen profession and the university. Telephone or personal interviews may be required.

Application Procedure

The application must include the following:

1. A properly completed Application for Admission. Applications for admission should be completed online or mailed to the Admissions Office.
2. An application fee of \$55. The fee is not refundable.

3. Official transcripts from college(s) and university(s) attended should be sent directly to the National University Admissions Office.

Admission Decisions

Applicants for admission are not fully approved by the Committee on Admissions until it receives documentation of completion of all requirements for admission. Conditionally approved students will be held to the following regulations and timelines:

1. Accepted students will be notified upon entry to the program that the matriculation file must be completed by the end of the 30th day of the term. Students whose application files are not complete by the end of the sixth week of the term will not be allowed to remain enrolled in the university.
2. If applicable, financial aid awards shall not be certified or released to students until the matriculation file is complete.
3. Students who demonstrated continuing attempts to complete the application file in a timely manner, but are not able to do so through no fault of their own, may be granted an extended period of time to complete the file.
4. Students who do not complete the matriculation file by the end of the term will be required to start over from the beginning of the first trimester.
5. University policy on tuition and refunds will be adhered to for such students.
6. The university will attempt to help students with the completion of the matriculation file, however, it is the responsibility of students to do so.

Entry Requirements

1. The overall GPA must be a 2.0 on a 4.0 scale.
2. All courses in the core requirements must be completed with a grade of "C" or higher (2.0 on a 4.0 scale).
3. Students should have a minimum of 30 credits of general education courses and up to 30 credits of elective courses.

NOTE: A minimum 3.0 (on a 4.0 scale) cumulative GPA in all college and university coursework is required to enter the professional programs at NUHS. Students with a cumulative grade point average between a 2.75 and 2.99 may be considered for admission through the Alternative Admissions Track Plan (AATP). Please consult the individual programs at other health care institutions for their specific admission requirements.

Specific Course Requirements

The bachelor of science requires the successful completion of 30 semester or 60 quarter hours in the following coursework in order to be considered for the degree program:

- 6 credits in English Composition
- 3 credits in Public Speaking
- 9 credits in Social/Behavioral Sciences *
- 9 credits in Humanities and Fine Arts **
- 3 credits in General Psychology

Students should also have earned an additional 30 elective credits in any General Education, Liberal Arts, Life, or Physical Science course. (Algebra is recommended; it is a requirement for Physics.) If these credits are not completed prior to entry into the BS program, they must be earned while enrolled at NUHS.

* Courses may be taken from the following areas: anthropology, economics, history, human geography, political science, psychology, and sociology.

** Courses may be taken from the following areas: language, history, literature, philosophy, religious and cultural studies, performing arts (e.g. music/dance/ theater appreciation or history), visual arts (e.g. art appreciation, film studies).

Credit by Proficiency Examination

The following rules apply:

1. No more than 20 semester hours, or the equivalent, of a candidate's general education requirements can be acquired through proficiency exams or coursework such as the College Level Examination Program (CLEP), Advanced Placement (AP), International Baccalaureate (IB), Defense Action for Non-Traditional Educational Support (DANTES), American College Testing Program (ACT), Program Evaluation Procedure (PEP), and New York Board of Regents College Examinations, or through challenge courses.
2. Such equivalence will only be acceptable if the applicant has had certification of the credits by an institution accredited at the college level by an accrediting organization that is listed as nationally recognized by the Secretary of Education of the U.S. Department of Education.
3. No more than 34 credit hours of NUHS courses of the BS completion program may be granted credit through any means such as transfer, AP, CLEP, etc.

Transfer Students and Advanced Standing

National University will consider granting transfer credit from regionally accredited college(s) where the credits are germane and equivalent to the credits of the curriculum of National University. A maximum of 34 credits of advanced standing credit may be requested toward the 64 required NUHS credits for graduation.

Non-degree Students

National University makes a limited number of courses available to individuals who wish to take classes as non-degree seeking students. Students taking coursework in this capacity do not go through the normal admission process and are not admitted to a degree program. Interested individuals should contact the Admissions Office for guidance and course availability. Course enrollment is handled through the Registrar.

To obtain credit for courses, non-degree students must complete the entire trimester and successfully pass all required examinations. Tuition is paid by the non-degree student by the per credit hour fee.

Full-time Student

A full-time baccalaureate student at National University is one who enrolls in no less than 12 academic credit hours of coursework per trimester.

Trimester Credit

The trimester hour is the unit of credit. A trimester hour of credit is defined as one lecture period or two laboratory periods each week during the trimester. The class period is 50 minutes in duration. The formal hours of the Bachelor of Science in Biomedical Science Program are generally scheduled Monday through Friday from 4 to 10 p.m. except for the laboratories.

Textbooks and Supplies

MBS Direct is National's online resource for textbooks, references, and other supplies. Students access the bookstore via the MyNU Student Portal. A campus store is located in Janse Hall for additional supplies as needed.

Student Complaint Procedures

Questions or complaints of an academic nature should first be addressed to the instructor. Unresolved complaints or any other issues pertaining to academic matters are to be directed to the appropriate dean.

In order to ensure an effective response, initial complaints should be prepared in a typed or written format. Complainants should describe the issue in their own words and include their full name and contact information. Complainants should also include dates and list any college officials who were involved or have been contacted. Any

supporting documentation, such as emails or other correspondence should be included in order to help others understand the nature, context, actions, or events that lead to the complaint. Finally, the complainant should state what, if any, remedy is sought.

NUHS is committed to resolving complaints at the earliest and most informal level, conducting internal investigations in a timely and effective manner, adhering to the procedures as outlined, and providing prompt corrective action if discrimination is believed to have occurred. The date upon which a written complaint is received shall be referred to as the date of complaint. NUHS will make every reasonable attempt to resolve all complaints within 60 days.

In order to file an internal academic or non-academic complaint, contact the following:

- Complaints regarding the Financial Aid Program: Director of Financial Aid, 2nd floor, Janse Hall, Lombard, Illinois; 630-889-6517
- Complaints regarding the College of Allied Health Sciences and Distance Education: Dean of the College of Allied Health Sciences and Distance Education, 630-889-6545
- Complaints regarding Non-academic University Issues (discipline, discrimination, sexual misconduct, harassment, disabilities, privacy, misuse of computing resources, student safety, and security, etc.); Dean of Students. 630-889-6546, email studentservices@nuhs.edu or via the online complaint form: <https://www.nuhs.edu/student-services/support-services/complaints/student-complaint-form/>

Dean's List and Honor Roll

At the end of each trimester, recognition of the Dean's List of Students for Distinguished Academic Achievement is awarded to those students who have completed at least 12 credit hours and have achieved a GPA of at least 3.5 on a 4.0 scale for the trimester with no grade lower than a C. Recognition on the Honor Roll of Students for Exemplary Academic Achievement is awarded to those students who have completed at least 12 credit hours and have achieved a GPA of at least 3.0 (on a 4.0 scale) for the trimester with no grade lower than a C.

Valedictorian/Salutatorian

The valedictorian and salutatorian are respectively the first and second highest ranking scholars in the graduating class. The students must have earned at least 50 credit hours of their core curriculum credits at National University of Health Sciences. The rankings are determined by the cumulative grade point average.

In the event there is a tie for the valedictorian position (there may be more than one), there will be no salutatorian. In the event there is a tie for the salutatorian position, there may be more than one. The selection of the student commencement speaker is determined at the discretion of the University administration.

Academic Policies, Regulations, Procedures

Bachelor of Science in Biomedical Sciences

The curriculum includes classroom and lab courses in anatomy and physiology, cadaver laboratory, terminology, interpersonal communication, chemistry, physics, and a variety of biological science courses.

A degree is awarded upon completion of the 124 credit hours of study. The BS completion program may be completed in four trimesters. Students may attend on a part-time basis.

The following academic policies, regulations, and procedures apply to all students of the National University of Health Sciences College of Allied Health Sciences and Distance Education. Failure to conform with policies, regulations, and procedures may jeopardize or negate a student's opportunity to pursue and/or complete the course of study leading to the Bachelor of Science in Biomedical Sciences.

Full-Time Student

A full-time student in the BS completion program at National University is one who enrolls in no less than 12 academic credit hours of coursework.

Trimester Credit

The trimester hour is the unit of credit. A trimester hour of credit is defined as one lecture period or two laboratory periods each week during the trimester. The class period is 50 minutes in duration. The formal hours of the program are generally scheduled Monday through Friday from 4 to 10 p.m.

Attendance, Tardiness Make-up Work

National University has established the following policy:

Students may miss up to 10% of the total hours for each course and laboratory without being required to make up the missed work. Absence beyond the allowed 10% results in a grade of F or U unless the student qualifies for an excused absence or does all make-up work to the extent allowed by the appropriate dean. The student must meet one of the following requirements: verified death of an immediate family member; grave personal illness or injury; personal catastrophe; or non-reschedulable military service requirement.

An excused absence may only be granted by the appropriate dean and must be made up. Tardiness contributes toward absenteeism. Tardy is defined as being late to class by 15 minutes or less. Three tardies will be counted as a one-hour absence. Arriving at class greater than 15 minutes late counts as a one-hour absence.

Make-up Final Examination Policy

This policy permits students the opportunity to make up course or laboratory final examinations when the requirements noted below are met. Missed (with excused absence) final examinations may be made up. The make-up examination will be scheduled by the program director during the first week of class of the following trimester. If examinees are not present at the scheduled make-up exam time, they will receive the grade of F or U.

Final Comprehensive Examinations

Final examinations are an integral part of the course evaluation and are scheduled during the final examination period that is composed of the last week of the trimester. Each examination is scheduled at a specific time. Students who present themselves to the exam site late (greater than 15 minutes or after the first student leaves the exam site, whichever comes first) may be required to follow the make-up exam policy. Final examinations may not be given at times other than the regularly scheduled periods or the make-up periods.

No student will be permitted to sit for a final examination who has not completed all the work, including tests, practical examinations, class assignments, attendance, etc., required by the faculty member and laboratory instructor prior to the final examination.

The format of the final comprehensive examinations will be determined by the faculty member and specified in the syllabus.

Academic Difficulty

Depending upon the degree of academic difficulty, a student may be issued an Academic Deficiency, an Academic Warning, or placed on Academic Probation. A combination of academic warnings and academic probations may result in the student being suspended or expelled from the university. Decisions in this regard may be referred to the Committee on Academic Standards, Grades, and Records through the appropriate dean's office.

Definitions of the categories of academic difficulty follow.

Academic Deficiency

A notice of Academic Deficiency will be sent to a student whenever that student receives a grade of F or U in one course or laboratory in a trimester without meeting the criteria of Academic Warning or Academic Probation.

Academic Warning

A student will be issued an Academic Warning when that student receives a trimester GPA of less than 2.0 even though that student is in good academic standing.

Academic Probation

Probation alerts students to the fact that they are no longer in good academic standing (CGPA is less than 2.0) and are subject to various requirements that are intended to improve academic performance. Each probationary period is one trimester in length. Three consecutive probations normally result in expulsion from the university. A student may appeal to the Committee on Academic Standards, Grades, and Records through the office of the appropriate dean if extenuating circumstances warrant an additional opportunity.

Academic performance criteria that may lead to the actions of suspension or expulsion follow:

1. a combination of academic probation(s), warning(s) and deficiencies;
2. not maintaining good academic standing;
3. failing the same course or laboratory more than once (expulsion, three times);
4. not maintaining satisfactory progress.

Withdrawal

Students who stop attending National University of Health Sciences must officially withdraw from the university. Students desiring to withdraw in good standing must secure a Request for Authorized Withdrawal from the Registrar, which must be properly completed and deposited with the Registrar. Returning students must direct their requests for readmission to the Registrar if withdrawn for three or less trimesters. If the withdrawal is for more than three trimesters, the student must reapply for admission.

Separation

Students may be expelled or suspended from a program of the university for, among other reasons, academic deficiency or for academic dishonesty, such as, but not limited to, the use of dishonest means in any examination, the plagiarism of class assignments, and/or the falsification of previous academic records.

Students who have been separated from the university for academic reasons must direct their request for readmission to the Registrar within one year of leaving. After one calendar year, academically dismissed students are not eligible for readmission. Any conditions relative to readmission are established by the appropriate dean in consultation with the Committee on Academic Standards, Grades, and Records and with the advice of the Admissions Committee.

Graduation Requirements

The degree of bachelor of biomedical science is conferred on the individual who:

1. has successfully completed 124 trimester hours of coursework with 64 of these hours earned at National University of Health Sciences;
2. has successfully completed all of the required courses and laboratories;
3. has successfully completed all required Co-Curricular Learning assignments
4. is in good academic standing;
5. is recommended for graduation by the faculty of the university;
6. is free of all indebtedness and other obligations to the university;
7. has passed the final comprehensive examination;
8. has submitted a completed and signed Petition for Degree Completion Form; and
9. has participated in the commencement ceremony.

Note: To receive the “Emphasis in Nutrition” designation, students must successfully complete 19 credits of nutrition courses.

Academic Calendar

Please refer to the university calendar section of this Bulletin.

BIOL305 **Genetics** **Credits 3.0**

Genetics has emerged as a central discipline in biology, and with the now-completed sequencing of the human genome, it is evident that all fields of biology can be related to the DNA possessed by the organism. This course will provide the fundamental tools required to understand the language of genetics.

Prerequisite: None

Offered: Fall

BIOL306 **Cell Biology** **Credits 3.0**

This course is designed to provide a first look at what is known and how scientists are going about trying to understand the way in which living things operate at the most fundamental (but perhaps least understood) level — the molecular level. It is also a goal of this course to have students expose themselves to research concerning molecular biology that is reported in the primary research journals of science.

Furthermore, Cell Biology 306 is a transition course in both the biology and biochemistry majors. It is built upon a foundation of introductory biology and chemistry and is designed to prepare students for upper division work in biochemistry, molecular biology, neurobiology, developmental biology, and immunology. These disciplines, in turn, form the foundation of modern medicine.

Prerequisite: BIOL203

Offered: Fall, Spring

BIOL333 (Online) **Immunology** **Credits 3.0**

This course will introduce students to the body's defenses. Different components of immune system, nonspecific and specific immunity will be discussed. The different cellular elements and biochemical mediators involved in immune response will be discussed in detail. Students will explore the applications of immunology to modern diagnostics, biotechnology, and therapeutics. There will be an introduction to immunologic disorders. The course will consist of didactic and group discussion format. Students will be assessed with periodic quizzes and exams in multiple choice, essay, and modified essay format.

Prerequisite: BIOL203

Offered: Fall, Summer

BIOL337 (Online) **Pathophysiology** **Credits 3.0**

The pathophysiology course is designed to introduce the student to basic pathologic processes and their applications to major pathologic conditions. The course work will include study of mechanisms of disease, causative and contributory factors, and an introduction to traditional as well as complementary and alternative management approaches. The instruction will be in the form of online learning resources including power points. The assessment will be based on discussion forums and online multiple choice tests, midterm, and final exams.

Prerequisite: BIOL201 or any biology course

Offered: Fall, Spring

BIOL400 (Online) **Independent Study** **Credits 1.0 – 3.0**

Prerequisite: May be taken only to fulfill graduation requirements

Offered: Fall, Spring, Summer

BIOL403 (Online) **Introduction to Epidemiology** **Credits 3.0**

The definition of epidemiology is the "study of disease." Originally, epidemiologists only studied infectious disease epidemics such as plague and cholera; however, today's society is also interested in the prevalence of chronic diseases such as heart disease, asthma, and low back pain. This course covers all aspects of an epidemiological investigation, from risk factors for disease, to rate calculations, to surveillance methods to determine changing disease patterns. Modern epidemics will be discussed.

Prerequisite: BIOL133

Offered: Fall, Summer

- CHEM111** **General Chemistry 1** **Credits 3.0**
Foundations of chemistry, atoms, and molecules. Principles of stoichiometry, chemical reactions, properties of gases, periodicity and chemical bonding. Energy changes in chemical systems and electronic structure of atoms, and molecules. Examination of the chemical reactivity of common elements, inorganic and organic compounds.
Prerequisite: None
Offered: Fall, Spring, Summer
- CHEM113** **General Chemistry 2** **Credits 3.0**
Properties of liquids and solutions, and principles of acid-base equilibria, solubility, and electrochemical processes. Examination of chemical kinetics and equilibria.
Prerequisite: CHEM111 or equivalent
Offered: Fall, Spring, Summer
- CHEM115 (Online)** **General Chemistry Lab** **Credit 1.0**
Illustrative computer experiments in general chemistry involving gas equilibrium, Le Chatelier's principle, acid/base titrations, and qualitative inorganic analysis.
Corequisite: CHEM111 or equivalent
Offered: Fall, Spring, Summer
- CHEM201** **Organic Chemistry for the Health Professions** **Credits 3.0**
This course will examine the structure and bonding of organic compounds and the nomenclature and fundamental reactions of alkanes, alkenes, aromatic compounds, alcohols, aldehydes, ketones, carboxylic acids, and amines. Stereoisomerism, as well as substitution and elimination reactions, will be investigated.
Prerequisite: CHEM113, College Algebra (MATH135) or equivalent
Offered: Fall, Spring, Summer
- CHEM201S (Online)** **Organic Chemistry 1** **Credits 3.0**
Structure and bonding in organic chemistry, Isomerism, and stereoisomerism in organic compounds. Chemistry of alkanes, cycloalkanes, alkenes, and alkynes. Aromatic compounds and mechanisms of aromatic substitution. Nucleophilic addition and substitution reactions. Chemistry of alcohols, ethers, aldehydes, and ketones.
Prerequisite: CHEM113 or equivalent, College Algebra (MATH135) or equivalent
Offered: Fall, Spring, Summer
- CHEM203S (Online)** **Organic Chemistry 2** **Credits 3.0**
Chemistry of carboxylic acids and their derivatives, as well as amines and related nitrogen compounds. Applications of spectroscopic techniques in organic chemistry. Introduction to biochemistry, which will examine amino acids, carbohydrates, lipids, and nucleic acids. Structure and properties of proteins and enzymes.
Prerequisite: CHEM201 or equivalent
Offered: Summer Only
- CHEM205 (Online)** **Organic Chemistry Laboratory** **Credit 1.0**
Illustrative computer experiments in organic synthesis and organic qualitative analysis utilizing basic organic techniques (distillation, crystallization), reactions (esterification, oxidation, addition, substitution, elimination), and spectrometry instrumentation (NMR and IR).
Prerequisite or corequisite: CHEM201
Offered: Fall, Spring, Summer
- CHEM301** **Biochemistry** **Credits 4.0**
This course focuses on the chemistry of amino acids, carbohydrates, lipids, and nucleic acids, with special emphasis on representative proteins and enzymes, including hemoglobin, myoglobin, and cytochromes P450.
Prerequisite: BIOL203 or any biology course
Offered: Fall, Spring, Summer

CHEM401**Principles of Pharmacology****Credits 4.0**

This course provides an introduction to the use of drugs in western medicine for the treatment of disease. Topics covered in this course will be a description of drug names and classification, general principles of drug action and metabolism. A large part of this course will be a description of the drug actions on body systems including all the major disorders and diseases in each of the system of the body. Included will be a description of the mechanism of action, major side effects and contraindications for each drug and drug category. Interactions with other drugs and botanicals as well as a description of the nutrients that are depleted by each of the drugs will be covered. Drug actions on infection and immune system regulation as well as drug abuse, chemical dependency, and drug abuse will be described.

Prerequisite: CHEM301

Offered: Fall Only

COM101**Introduction to Health Care Professions****Credit 1.0**

This course will allow the bachelor of science student and students in the Prerequisite Program to obtain information regarding the rights, responsibilities, scope of practice, and daily routine of the following doctorate and master of science health care professions such as, but not limited to: allopathic, chiropractic, dental, naturopathic, oriental, and osteopathic medicine, PhD, pharmacology, and physical therapy forms of health care. Students will obtain seven hours of in-class discussions regarding the individual health care fields and an on-site visit for the remaining eight hours, and/or clinical observation of the practices based upon the students' interest and the course directors' determination. Students will report their observations and distribute information obtained during their on-site experiences to the class in a written format and discuss their insight into these fields of medicine.

Prerequisite: None

Offered: Spring, Summer

COM103**Medical Spanish****Credits 3.0**

Clinical Spanish is a 45-hour elective focused on Spanish language skills used in clinical practice. The course emphasizes the key role of the patient history in making a diagnosis, the evaluation of clinical evidence such as patient symptoms, and relevant statistical concepts such as predictive value. The underlying pathophysiologic mechanisms underlying common symptoms are reviewed. This course is based on listening and speaking skills rather than on reading and writing. There are no written exercises and no written tests or exams.

Prerequisite: None

Offered: Summer Only

COM105 (Online)**Computer Applications for Health Professionals****Credits 3.0**

Using hands-on activities and projects, this blended course allows students to gain a working knowledge of three distinct areas of technology applicable to health professional students and future professionals: Microsoft Office applications, social media networking/web presence building, and resources in the LRC. Students will learn skills used in a health profession setting to maintain and promote a practice (using Facebook, Instagram, Twitter, LinkedIn, and a business website). Real life examples of web presence and marketing from alumni will be included and explored as possible, and the resources in the LRC (Anatomage table, journals, texts, etc.) will be explored for applicability in a professional setting. Information provided in this course relates to concepts that students can use to develop confidence, independence, and resourcefulness in college, and in other courses. Students interested in acquiring or improving their knowledge and skill in new technologies and technologies relating to promoting and maintaining a practice or being a medical student would benefit from this course.

Prerequisite: None

Offered: Fall, Spring, Summer

COM107**Diagnostic Art****Credits 2.0**

This course explores and describes the observational skills used by artists in depicting various medical problems, and emphasizes related observational skills used in clinical practice. The key role of observation in the diagnostic process is emphasized, supported by concepts and methods of evidence-based medicine as they relate to clinical diagnosis. Relevant mechanisms of perception are reviewed, and the links between art history and the history of medicine.

Analysis of medically relevant visual art is used as an instructional strategy comparable to the use of critical incidents or case histories. Analogies of visual images as related in music are also discussed.

Prerequisite: None

Offered: Fall and Summer Only

COM110 (Online) Certificate Test Preparation Credits 2.0
for the Strength and Conditioning Specialist and Personal Trainer

The purpose of this course is to provide the student with the knowledge of human anatomy, physiology, neurology, endocrinology, and energy systems, and other knowledge in order to pass the CSCS Exam. The course will then provide the student with an understanding of how these various forms of training affect these various systems. Topics which will be covered include: concepts and applications of exercise science; testing and evaluation, exercise techniques, program design, and organization and administration. Note: This course does NOT count toward the BS degree.

Prerequisites: For the CSCS, a BS degree; for the personal trainer, a biology course.

Offered: Fall, Spring, Summer

MATH135 College Algebra Credits 3.0

The study of algebra with emphasis on applications. Topics include functions, inequalities, polynomials, conic sections, exponential and logarithmic functions, determinants, matrices, sequences, and series. Applications will be made in the social and medical sciences.

Prerequisite: None

Offered: Fall, Spring, Summer

MATH145 Trigonometry/Pre-Calculus Credits 3.0

A formal study of algebra with strong emphasis on concepts needed for calculus. Topics include functions, inequalities, polynomials, rational functions, basic logarithmic and exponential functions, combinatorial mathematics, determinants, and matrices. Basic trigonometric functions and identities will also be studied. Applications will be made.

Prerequisite: MATH135

Offered: Spring

MATH155 Calculus for Biological Sciences Credits 3.0

This is a one-semester course designed to provide an introduction to the essentials of calculus covering techniques, methods, and applications of differentials and integrals. Topics include: an overview of derivatives and integrals (antiderivatives), the definite integral, the fundamental theorem of calculus, and applications in health science.

This course emphasizes the mastery of key concepts with the primary aim of helping students to learn, understand, explain, and use calculus. In addition, it is desired that students will improve their mathematical skills and further their understanding of mathematics and its applications to health sciences.

Prerequisite: MATH145

Offered: Summer

NU201 (Online) Basic Nutrition Credits 3.0

Basic principles of human nutrition, including the physical and chemical nature of carbohydrates, proteins, fats, vitamins, minerals, and metals will be discussed. Included in this course are cell metabolism and energy balance. Water and electrolyte balance and acid base balance are covered as well as absorption, distribution metabolism and excretion of the elements discussed.

Prerequisite: BIOL201

Offered: Fall, Spring, Summer

NU301 **Nutrition in Health & Disease** **Credits 4.0**

This is an introductory course to the utilization of nutrients and supplements for the prevention and treatment of major diseases found in western culture, including diseases of the heart, blood vessels, lungs, skin, and gastrointestinal tract, as well as metabolic disorders. There will be a special emphasis on wellness and dietary issues. The major emphasis is an explanation of the disease process as a totality of dietary and lifestyle concerns in the western world. Wellness theory as a holistic matter is covered in a general manner.

Prerequisite: NU201

Offered: Fall, Spring only

NU302 (Online) **Advanced Human Nutrition** **Credits 3.0**

This course is a continuation of NU301, Nutrition in Health and Disease, but issues such as school and hospital dietary eating plans are included. The dietary issues covered in NU301 will be expanded to include supplemental, dietary and some introduction to botanical and pharmacological influences on nutrients, wellness, and health and disease. Special emphasis will be on cardiovascular and metabolic diseases as they relate to the western diet. Fad diets as they influence society in the western culture are covered in this course.

Prerequisite: NU301

Offered: Summer

NU303 **Nutrition in the Life Cycle** **Credits 3.0**

Nutrition during pregnancy and lactation, growth and development, infants, pediatrics, adolescence, teenage young adults, adults, and geriatric issues are covered. The nutrition issues that change and those that become necessary as we go through the stages of life are covered in detail. A special emphasis on pediatric and geriatric issues will be addressed considering the importance of these two populations as our citizens become older on the average and our newborn infants are exposed to increasingly negative challenges such as xenobiotics and allergens.

Prerequisite: NU201

Offered: Spring, Summer

NU304 **Food Science** **Credits 3.0**
(Emphasizing Microbiology and Safety)

In this course, food safety concerns such as pesticides, drugs additives, food labeling laws, government control regulations, and food-borne diseases are addressed. Special emphasis will be on microbiological issues, such as those found in food processing, food storage and food preparation. All of the microbes that are involved in food poisoning will be discussed.

Prerequisite: NU201

Offered: Fall, Spring

NU305 **Sports and Physical Performance Nutrition** **Credits 3.0**

Energy sources for physical and athletic performance and sports are covered in the course. Stress management and physical fitness as it relates to nutrition, diet, and exercise will be stressed as well as performance-enhancing nutrients and drugs. IOC regulations are also addressed. Special emphasis will be on the biochemical pathways and the physiological responses to the supplements utilized by those athletes in endurance and strength and body building events. The concepts of anaerobic threshold as well as lactic acid build-up are addressed.

Prerequisite: NU201

Offered: Fall, Summer

NU307 (Online) **Introduction to Botanicals and Herbs** **Credits 3.0**

The purpose of this course is to provide students with the knowledge and understanding of herbal supplements for common ailments and prevention of diseases that are encountered in every day life. The following topics will be discussed in this course: mechanism of botanical action, indications, and contraindications of botanicals, clinical problems, and a listing of botanicals.

Prerequisite: NU201

Offered: Spring, Summer

NU308 (Online) Cultural Perspectives of Food Credits 2.0

This course is a survey of present and past food practices around the globe. Understanding religious and ethnic foods, diverse dietary patterns, and food production with application to disease prevalence will be examined. Functional foods will be highlighted for each global dietary pattern.

Prerequisite: NU201

Offered: Fall

NU310 (Online) Community Nutrition Credits 1.0

This course examines the principles of public health, community nutrition, epidemiology, health, legislation, and nutrition policy. Evaluation of current community nutrition programs throughout the lifecycle will be emphasized.

Prerequisite: NU201

Offered: Spring

NU311 (Online) Nutrition Education Credit 1.0

This course focuses on communication skills for nutrition education. Strategies, techniques, and theories of behavioral change are discussed. Application of nutrition education material and evaluation of nutrition programs will be emphasized.

Prerequisite: NU310

Offered: Spring

PHYS111S Physics 1 Credits 3.0

Non-calculus-based study of classical linear and rotational kinematics and dynamics (including work, energy, impulse, momentum, and collisions), fluids, periodic motion, sound and wave motion.

Prerequisite: College Algebra (MATH135) or equivalent

Offered: Fall, Spring, Summer

PHYS113S Physics 2 Credits 3.0

Non-calculus-based study of electrostatics, electric fields, Gauss' law, capacitance, current, resistance, magnetic forces and fields, electromagnetic induction, DC and AC circuits, electromagnetic waves, optics, and modern physics, as well as an introduction to quantum physics.

Prerequisite: Physics111S

Offered: Summer

PHYS115 (Online) General Physics Laboratory Credit 1.0

Interactive computer experiments dealing with the fundamental properties of the physical world. The laboratories are designed in a way that allows for the manipulation of various parameters, which result in real time changes in the simulated experiment.

Prerequisite or Corequisite: PHYS111 or PHYS113S

Offered: Fall, Spring, Summer

PHYS117 Physics Laboratory 2 Credit 1.0

This is a course that will allow students to learn/experience a "hands-on" approach to physics that would be a companion course to the Physics111S lecture or taken independently. The lab will comprise those experiments that are important to the understanding of the Laws and Concepts of College Physics as it prepares the students for a course in science that furthers their education, or prepares them for a career in the arena of science-based health care.

Prerequisite or Corequisite: PHYS111S

Offered: Summer Only

PHYS211**Kinesiology****Credits 3.0**

Understanding human activity from a mechanical and physiological perspective so to address major issues, which include reducing the risk of injury, optimizing exercise prescription, and understanding clinical evaluations. Functional anatomy, muscle and passive tissue mechanics, anthropometry, electromyography, and linked segment mechanics are introduced and applied to clinical, occupational and athletic situations. Basic concepts of cardiovascular, respiratory, and thermoregulatory responses to physical activity.

Prerequisite: None

Offered: Fall and Spring Only

PUBH211 (Online)**Introduction to Public Health****Credits 3.0**

Considered in this course are the basic concepts related to public and community health. Many students of the "sciences" focus on the details of each discipline of science (biology, chemistry, etc.) without understanding how these disciplines play roles in the health of the public in general. This course is designed to introduce the science of public health, including epidemiology, environmental health, and health education. The history of public health and the basics of the U.S. health care system are also covered.

Prerequisite: BIOL133 (Research)

Offered: Fall and Spring Only

TERM181 (Online)**Medical Terminology****Credits 3.0**

This course is designed for students in the health care curriculum who need to be familiar with medical terms. It provides a framework for building a medical vocabulary. Emphasis will be on understanding basic medical terms, abbreviations and their meanings, and how they are used in documenting and reporting patient care procedures. Information provided in this course will help students to succeed in their chosen health care careers by familiarizing them with how medical terms are formed and by providing a systematic learning structure. Practical applications are provided by exercises and medical record analysis.

Students interested in acquiring or improving their knowledge of the language of health care would benefit from this course. The goal is to develop a basic working knowledge of the language of health care to serve as a basis for individual expansion.

Prerequisite: None

Offered: Fall, Spring, Summer

Prerequisite Program

Students who desire a first professional health care education but have undergraduate degrees with a non-science major or those who fall short of the required credit hours in science to meet National University admission requirements, may enroll in the Prerequisite Program. The Prerequisite Program is offered on the Illinois campus only.

Under the NUHS Prerequisite Program, students can take one or several required bachelor's level science courses. General Chemistry is offered in an accelerated format during two 8-week sessions prior to starting their graduate program. The two sessions are offered during each 15-week trimester to allow students to complete their science requirements in just one trimester. The other courses are available in non-accelerated 15-week sessions, which include Organic Chemistry 1, Biochemistry, Physiology 1, Physiology 2, Physics 1, Kinesiology, and the required laboratories.

Prerequisite Session 1, Weeks 1-8, includes General Chemistry 1. Prerequisite Session 2, Weeks 8-15, includes General Chemistry 2 with a required laboratory.

The Prerequisite Program courses are generally scheduled Monday through Friday from 4 to 10 p.m. with an independent laboratory scheduled in Weeks 8-15 of the trimester at the student's convenience. A student typically completes all four course disciplines in two 15-week trimesters.

Students must apply for one of the NUHS Professional Studies programs to receive a 50% tuition discount on their prerequisite coursework.

Admission Information

General Guidelines

Students wishing to enroll in the Prerequisite Program may do so at any time. National University admits new students into this program each fall, spring and summer trimester. An application is required, which can be obtained in the Admissions Office. Upon completion of the application process, students will be contacted for advising and course registration.

Application Procedure

Students interested in the Prerequisite Program should complete the following process:

1. Complete a Prerequisite Application for Admission (No application fee is required.)
2. Submit transcripts from all regionally accredited undergraduate institutions attended.

Student Financial Aid

Financial Aid Programs

NUHS participates in the Federal Direct Loan Program. Undergraduate students enrolled in the Prerequisite Program are eligible to participate in the Direct Loan Program only.

Qualifications to participate in the loan program are as follows:

- may only receive aid for courses listed in their admissions letter that are necessary for admittance to their graduate program;
- must apply for admission into one of the NUHS Professional Studies programs;
- must enroll in a minimum of six total credit hours for the trimester(s);
- must complete the prerequisite courses within two trimesters. (Loan funds can only be awarded for two terms — four mini terms — within a calendar year);
- must have completed a financial aid application for the term(s) enrolled.

Eligible Loan Amounts

Students who complete the Free Application for Federal Student Aid (FAFSA) as an undergraduate dependent student may be eligible to borrow \$3,750 per trimester. Money that students borrow for the Prerequisite Program may impact the amount that can be borrowed when they begin their graduate program.

Students who complete the Free Application for Federal Student Aid (FAFSA) as an undergraduate independent student may be eligible to borrow \$6,250 per trimester. Money that students borrow for the Prerequisite Program may impact the amount that can be borrowed when they begin their graduate program.

Loans

Direct Subsidized Loan

The Direct Subsidized Loan is a need-based loan where the federal government pays the interest that accrues while students are attending school on at least a half-time basis and during the 6-month grace period following graduation or withdrawal. This is a variable fixed rate loan based on the rate announced each July 1.

Direct Unsubsidized Loan

The Direct Unsubsidized Loan is a non-need based loan where students are responsible for all interest that accrues from the day of disbursement. This is a variable fixed rate loan based on the rate announced each July 1.

All loans must be repaid. Direct Loans must be disbursed in two installments. For students who are receiving a loan for only one trimester, half the funds will be sent at the beginning of the term and the other half will be sent at the mid-point of the trimester. Repayment for Direct Loans begins six months after the student is no longer enrolled at least half-time.

Prerequisite Course Descriptions

BIOL201S **Human Physiology 1: Control Systems** **Credits 3.0**
(3 hrs/wk lecture, 45 clock hours)

The anatomy and physiology of the cell and human biological control systems. Topics include cell structure and function, movement of molecules across cell membranes, homeostatic mechanisms and cellular communication, neural control mechanisms, sensory system, hormonal control systems, muscle physiology, and control of body movements.

Prerequisite: None

BIOL203S **Human Physiology 2** **Credits 3.0**
(3 hrs/wk lecture, 45 clock hours)

The anatomy and physiology of the major organ systems of the human body. Topics include the cardiovascular, respiratory, excretory, digestive, reproductive, and immune systems, and the components of blood.

Prerequisite: At least one first-year biology course with an emphasis on physiology or cell biology or equivalent

BIOL205 (Online) **Human Physiology Lab** **Credit 1.0**

Students will perform 10 laboratory exercises illustrating fundamental principles in physiology. The labs will involve exercises covering the following topics: cell transport and membrane permeability; skeletal muscle and neurophysiology; mechanisms involving the endocrine, cardiovascular and respiratory systems; as well as, function and regulation in renal system physiology and acid-base balance.

Corequisite: BIOL203

BIOL221 **Anatomy 1 & Laboratory** **Credits 4.0**
(3 hrs/wk lecture, 2 hrs/wk lab, 75 clock hours)

In this course, students will learn, in both lecture and laboratory formats, the basic concepts of human anatomy with an emphasis on the relationship between structure and function. Basic concepts such as anatomical terminology, position, and relationship will be discussed in order to provide a foundation onto which other anatomical concepts will be taught. In addition, the normal gross anatomy of the musculoskeletal system (including the osteology, arthrology, and myology of the different anatomical regions) and the spinal cord will be presented. The gross anatomy laboratory sessions will be presented using a regional approach in order to facilitate greater integration of the lecture material.

Prerequisite: None

BIOL223 **Anatomy 2 & Laboratory** **Credits 4.0**
(3 hrs/wk lecture, 2 hrs/wk lab, 75 clock hours)

In this course, students will learn in lecture and laboratory formats, the normal gross structures of the human brain (including special senses and the autonomic nervous system) and organ systems. The organ systems discussed are the cardiovascular, respiratory, lymphatic, endocrine, urinary, digestive, and reproductive. In addition, the structural interrelationships between organ systems will be explained as well as the interrelationships between structure and function of organs and organ systems. The gross anatomy laboratory sessions will be presented using a regional approach and will be designed to support the lecture sessions and address related basic science issues.

Prerequisite: BIOL221

BIOL302 **Exercise Physiology** **Credits 3.0**
(3 hrs/wk lecture, 45 clock hours)

Exercise physiology is an applied discipline that combines knowledge of metabolic biochemistry, cellular and organ system physiology, and anatomic structure and function in order to understand and explain physical and athletic performance. In this course, students will be introduced to the metabolic, muscular, and cardio-respiratory adaptations to both acute and chronic exercise in humans. The emphasis will be for students to learn and understand major concepts in terms of normal physiologic responses in healthy individuals.

Prerequisite: BIOL201 or any biology course

Offered: Spring, Summer

CHEM111	General Chemistry 1 (6 hrs/wk lecture, 45 clock hours)	Credits 3.0
<p>Foundations of chemistry, atoms, and molecules. Principles of stoichiometry, chemical reactions, properties of gases, periodicity, and chemical bonding. Energy changes in chemical systems and electronic structure of atoms and molecules. Examination of the chemical reactivity of common elements, inorganic and organic compounds. Prerequisite: None</p>		
CHEM113	General Chemistry 2 (6 hrs/wk lecture, 45 clock hours)	Credits 3.0
<p>Properties of liquids and solutions, and principles of acid-base equilibria, solubility, and electrochemical processes. Examination of chemical kinetics and equilibria. Prerequisite: CHEM111 or equivalent</p>		
CHEM115 (Online)	General Chemistry Virtual Lab (2 hrs/wk lab, 30 clock hrs)	Credit 1.0
<p>Illustrative computer experiments in general chemistry involving gas equilibrium, Le Chatelier's principles, acid/base titrations, and qualitative inorganic analysis. Corequisite: CHEM111 or equivalent</p>		
CHEM201	Organic Chemistry for the Health Professions (3 hrs/wk lecture, 45 clock hours)	Credits 3.0
<p>This course will examine the structure and bonding of organic compounds and the nomenclature and fundamental reactions of alkanes, alkenes, aromatic compounds, alcohols, aldehydes, ketones, carboxylic acids, and amines. Stereoisomerism, as well as substitution and elimination reactions, will be investigated. Prerequisite: CHEM113 or equivalent</p>		
CHEM201S (In Class & Online)	Organic Chemistry 1 (3 hrs/wk lecture, 45 clock hours)	Credits 3.0
<p>Structure and bonding in organic chemistry, Isomerism, and stereoisomerism in organic compounds. Chemistry of alkanes, cycloalkanes, alkenes, and alkynes. Aromatic compounds and mechanisms of aromatic substitution. Nucleophilic addition and substitution reactions. Chemistry of alcohols, ethers, aldehydes, and ketones. Prerequisite: CHEM113 or equivalent, College Algebra (MATH135) or equivalent</p>		
CHEM203S (Online)	Organic Chemistry 2 (3 hrs/wk lecture, 45 clock hours)	Credits 3.0
<p>Chemistry of carboxylic acids and their derivatives, as well as amines and related nitrogen compounds. Applications of spectroscopic techniques in organic chemistry. Introduction to biochemistry, which will examine amino acids, carbohydrates, lipids, and nucleic acids. Structure and properties of proteins and enzymes. Prerequisite: CHEM201/201S or equivalent</p>		
CHEM205 (Online)	Organic Chemistry Virtual Lab (4 hrs/wk lab, 30 clock hours)	Credit 1.0
<p>Illustrative computer experiments in organic synthesis and organic qualitative analysis utilizing basic organic techniques (distillation, crystallization), reactions (esterification, oxidation, addition, substitution, elimination), and spectrometry instrumentation (NMR and IR). Prerequisite or Corequisite: CHEM201 or equivalent</p>		
CHEM301	Biochemistry (4 hrs/wk lecture, 60 clock hours)	Credits 4.0
<p>This course focuses on the chemistry of amino acids, carbohydrates, lipids, and nucleic acids, with special emphasis on representative proteins and enzymes, including hemoglobin, myoglobin, and cytochromes P450. Prerequisite: BIOL203 or any biology course</p>		

PHYS111S	Physics I (3 hrs/wk lecture, 45 clock hours)	Credits 3.0
<p>Non-calculus-based study of classical linear and rotational kinematics and dynamics (including work, energy, impulse, momentum, and collisions), fluids, periodic motion, sound and wave motion. Prerequisite: College Algebra (MATH135) or equivalent</p>		
PHYS113S	Physics 2 (3 hrs/wk lecture, 45 clock hours)	Credits 3.0
<p>Non-calculus-based study of electrostatics, electric fields, Gauss' law, capacitance, current, resistance, magnetic forces and fields, electromagnetic induction, DC and AC circuits, electromagnetic waves, optics, and modern physics, as well as an introduction to quantum physics. Prerequisite: PHYS111S</p>		
PHYS115 (Online)	General Physics Virtual Lab (4 hrs/wk lab, 30 clock hours)	Credit 1.0
<p>Interactive computer experiments dealing with the fundamental properties of the physical world. The laboratories are designed in a way that allows for the manipulation of various parameters, which result in real time changes in the simulated experiment. Prerequisite or Corequisite: PHYS111 or PHYS113S</p>		
PHYS117	Physics Laboratory 2 (2 hrs/wk lab, 30 clock hours)	Credit 1.0
<p>This is a course that will allow students to learn/experience a "hands-on" approach to physics that would be a companion course to the Physics111S lecture or taken independently. The lab will comprise those experiments that are important to the understanding of the Laws and Concepts of College Physics as it prepares students for a course in science that furthers their education or prepares them for a career in the arena of science-based health care. Prerequisite or Corequisite: PHYS111S</p>		
PHYS211	Kinesiology (6 hrs/wk lecture, 45 clock hours)	Credits 3.0
<p>Understanding human activity from a mechanical and physiological perspective so to address major issues, which include reducing the risk of injury, optimizing exercise prescription, and understanding clinical evaluations. Functional anatomy, muscle and passive tissue mechanics, anthropometry, electromyography, and linked segment mechanics are introduced and applied to clinical, occupational, and athletic situations. Basic concepts of cardiovascular, respiratory, and thermoregulatory responses to physical activity. Prerequisite: None</p>		

Associate of Applied Science Degree in Massage Therapy

The AAS degree is accredited by the Higher Learning Commission. Financial aid is available to those who qualify under the same rules as listed in the Bachelor of Science Degree section of this Bulletin.

The AAS degree program is available to students enrolled in the Massage Therapy Certification Program who also have successfully completed a minimum of 30 credit hours of general education courses at a regionally accredited institution of higher education including the following required courses:

- English Composition 6 credits
- Public Speaking..... 3 credits
- Social/Behavioral Sciences* 9 credits
- Humanities and Fine Arts** 9 credits
- General Psychology 3 credits

* Courses may be taken from the following areas: anthropology, economics, history, human geography, political science, psychology, and sociology.

** Courses may be taken from the following areas: language, history, literature, philosophy, religious and cultural studies, performing arts (e.g. music/dance/ theater appreciation or history), visual arts (e.g. art appreciation, film studies).

Applied Science Degree Options

Students wishing to obtain the Associate of Applied Science (AAS) in Massage Therapy degree may do so in the following ways.

General Education Coursework Completed Prior to Program Entry

Students who have completed the general education requirements for the AAS degree prior to program entry, may choose to enter directly into the associate program. Those students may be eligible for a higher level of financial aid.

Students wishing to enter the Massage Therapy Certification Program rather than enter directly into the AAS program may do so and transfer the general education credits they completed previously to the AAS program at a later date (within five years of completing the Massage Therapy Certification Program).

General Coursework Completed During or After Program Completion

Students who have not completed the general education requirements for the AAS degree program prior to entry, but who complete those requirements during or after their program start, are also eligible to receive the AAS degree. Students should apply directly into the Massage Therapy Certification Program and upon completion of the general education requirements, apply for the AAS degree through the Registrar.

Students have up to five years from the date of completion of the Massage Therapy Certification Program to transfer all of the 33 successfully completed general education course credits (listed above) to NUHS for the AAS degree. All coursework will be evaluated by NUHS for appropriate transfer credit.

Home Schooled Applicants

Home schooled applicants wishing to apply to the Associate of Applied Science Degree (AAS) in Massage Therapy will be required to submit appropriate documentation. Please see Entry Requirements at the beginning of the College of Allied Health Sciences and Distance Education Certificate Programs section.

Graduate Degree Programs

Master of Science Degrees

Professor Jerrilyn Cambron, Dean, College of Allied Health Sciences and Distance Education; Assistant Professor Candace Passi, Assistant Dean

National University of Health Sciences' College of Allied Health Science and Distance Education offers the Master of Science Degree in Advanced Clinical Practice to first professional degree holders as a distance learning program. The college also offers a Master of Science Degree in Diagnostic Imaging with the completion of 49 credit hours earned in conjunction with and by the end of the three year, full-time residency in diagnostic imaging.

Admission Requirements

The prospective student for master of science degrees must apply for admission through the Admissions Office of National University of Health Sciences. Applications for admission should include:

- formal application to the program;
- a non-refundable application fee of \$55; a bachelor's degree from an accredited institution;
- a bachelor's degree from an accredited institution;
- successful completion of a first professional degree with a minimum overall GPA of 2.50 or better on a 4.0 scale;
- official transcripts from all post-secondary institutions.

Notification of Acceptance

Those applicants accepted by the University will be notified promptly. Upon receipt of notice of acceptance, applicants shall remit a matriculation fee of \$225. This includes a \$150 tuition deposit (applicable toward the first trimester tuition) and a \$75 reservation fee. Generally, the deposit is due within 20 days from the date posted on the applicant's official letter of acceptance to the program. However, if the application is received close to the application deadline date(s), the deposit may be due before the 20-day time period. The matriculation deposit is required to reserve a seat in the desired class and is paid with the understanding that it will not be refunded if the applicant fails to report for registration to the University.

General Policies

The master of science degree programs follow the basic policies found in the Student Life section and the Financial Aid and Academic Policy sections of the College of Professional Studies programs of this Bulletin.

Student Enrollment

Students who are enrolled for at least 5 and up to 10 credits per trimester are considered half-time, and therefore eligible to apply for federal student aid programs. Should enrollment drop below half-time during any trimester of study, the student may apply for non-federal credit-based loans.

MS ACP 510 **Clinical Pharmacology** **Credits 3.0**

The purpose of this course is to review common pharmacologic agents utilized in the primary care setting related to various medical diagnoses. Discussion will include an overview of various clinical conditions and the related pharmacologic agents, classifications, mechanisms of action, and appropriate utilizations. Common drug reactions and interactions will be discussed, including interactions with botanicals and other over-the-counter dietary supplements.

MS ACP 520 **Research Methodology and Biostatistics** **Credits 4.0**

This course will increase the knowledge regarding critical appraisal of research articles including accessing articles, assessing the research methods and results, and determining potential biases. Emphasis will be placed on preparing students to identify pertinent research findings that may enhance clinical outcomes. The student will learn to write succinct critiques and discuss research articles in a scientific manner.

MS ACP 530 **Advanced Clinical Laboratory Functional Medicine** **Credits 2.0**

The purpose of this course is to review common laboratory tests, procedures, and appropriate utilization in the primary care setting. Current reference ranges for blood (cells and chemistries), urine, cerebrospinal fluid, and other serous fluids will be reviewed. Also, essential functional lab testing such as heavy metal, organic acid, and salivary/hormonal testing will be presented. This course will also provide an advanced understanding of clinical laboratory medicine through detailed case review and algorithms for medical conditions in which abnormal laboratory values occur.

MS ACP 540 **Clinical Neurophysiology** **Credits 3.0**

This course will explore the clinical significance and functional activities of peripheral nerve fibers, the spinal cord, brainstem, and brain in the context of visceral and musculoskeletal disorders. The student will gain an advanced understanding of the anatomy, genetics, biochemistry, and physiology of pain in relation to various clinical syndromes. Nutritional biochemistry related to nociception and pain will be incorporated. Implementation of this information into therapeutic programs will be emphasized.

MS ACP 550 **Clinical Neurology** **Credits 3.0**

The purpose of this course is to provide an advanced understanding of the systematic investigation of common and complex neurological complaints including headache, dizziness, weakness, numbness, and ataxia. This course will focus on the pathophysiology, symptomatology, and management of pain in relation to headache and other neurologic conditions, with the capacity to distinguish serious from benign pain syndromes.

Year 2

MS ACP 600 **Clinical Problem Solving for the Primary Care Physician** **Credits 3.0**

The purpose of this course is to enhance comprehensive history taking and regional physical examination skills in the context of common and complex internal disorders. The student will be able to effectively develop an accurate differential diagnosis with consideration of appropriate documentation, diagnostic testing, and follow-up.

MS ACP 610 **Advanced Diagnostic Imaging** **Credits 3.0**

The purpose of this course is to study utility and limitations of the various diagnostic imaging modalities, including conventional radiography, computed tomography, magnetic resonance imaging, and nuclear imaging. The student will also improve their interpretation of diagnostic imaging reports, define effective imaging strategies in specific clinical scenarios, approach an imaging study with greater confidence, and determine referral decisions and prognostic indicators.

MS ACP 620 **Clinical Injectables and IV Functional Medicine** **Credits 3.0**

This course will provide a description of the importance of nutrients that can be injected to prevent, control, and cure certain conditions in patients. It will include a case-based description of the condition and explanation of the technique used by the clinician to administer each nutrient via intravenous, intramuscular, and subcutaneous means. The mechanisms of action of these substances will be discussed.

MS ACP 630 Advanced Clinical Applications in Special Populations Credits 3.0

This course offers an overview of subgroups that have been identified as special populations, such as pediatric and geriatric populations. The main focus will be on common medical concerns in terms of pathophysiology, differential diagnosis, and effective integrative treatment strategies.

MS ACP 640 Psychological issues of Chronic Illness and Disease Credits 2.0

The purpose of this course is to present the ways in which psychological issues influence illness. The course will present information relative to the proper probing for psychosocial areas of concern and understanding how and when to refer to a mental health professional.

MS ACP 650 Independent Research Credits 4.0

This course, as a Capstone Project, reinforces exploration in critical appraisal of published research and discussion of journal articles in a scientific manner. Students will be expected to choose a topic of interest from previously presented material in relation to a selected clinical case in order to write a case report for publication.

Master of Science – Diagnostic Imaging

Program Summary

Overview: 51 credit hours completed in conjunction with and by the end of the three year, full-time residency in diagnostic imaging.

The Master of Science Degree in Diagnostic Imaging is granted upon satisfactory completion of 51 credit hours consisting of core and research courses and the Capstone Project, in conjunction with and by the end of a three-year, full-time residency in diagnostic imaging at National University of Health Sciences.

Upon admission to the program, the master's student will complete a minimum of four credit hours per trimester consisting of core courses and a research course. The core courses and research courses may be taken in any sequence. In addition to the core courses and research coursework, the master's student will be involved in daily film readout sessions and interpretation, radiological technology work, large and small group teaching experiences, and personal study. Opportunities for further clinical imaging elective rotations are being added to the program to expand the elective catalog and opportunities for students.

The student must successfully complete all required coursework with a grade of "C" or better in all attempted courses. For core courses, students will be assessed at the end of each trimester with essay questions and practical view box interpretation stations. Research courses must have advisor-approved examinations, case study papers, teaching file portfolios, and a written and orally presented Capstone Project, with defense in front of the Capstone Project Committee for final approval.

Admission Requirements

The prospective student for this degree program must apply for admission through the Admissions Office of National University of Health Sciences. The application process must be completed 15 weeks prior to the expected matriculation date. The process includes:

1. formal application to the program;
2. successful completion of a first professional degree with an overall GPA of 2.75 or better on a 4.0 scale;
3. complete transcripts from all post-secondary institutions;
4. three letters of recommendation from individuals who are well acquainted with the prospective student;
5. a complete curriculum vitae;
6. a detailed letter of application indicating the reason for interest in candidacy and expectations of the program;
7. submission to a background check (including criminal conviction history, malpractice, and physician databank inquiries) initiated by the university; and
8. payment of application fees.

Notification of Acceptance

After the university has obtained the application and supporting documents, the Admissions Committee will evaluate the prospective student for admission. The Admissions Committee will contact references and verify credentials. Upon completion of this process, the committee shall make a recommendation for or against acceptance. The accepted student shall be notified in writing six weeks prior to the trimester in which the student will enter the program. The decision of the committee is final. Upon acceptance, the student will be informed of the assigned faculty advisor for their program. The faculty advisor will guide the student through their program of study and serve as a member of the Capstone Project Committee.

Graduation Requirements

The Master of Science Degree in Diagnostic Imaging is conferred on the individual who:

1. meets all the stipulated academic requirements for the degree and has been a resident student at National University of Health Sciences for at least eight trimesters of study;
2. has successfully completed all the required core courses and research courses including written case studies, pathology file portfolio, and Capstone Project;
3. has successfully completed all required Co-Curricular Learning assignments;
4. is in good academic standing;
5. is recommended for the degree by the faculty advisor of the university;
6. has met all financial obligations to the university;
7. has submitted a completed and signed Petition for Degree Completion Form; and participates in the commencement ceremony in the trimester the degree is to be granted.

Educational Objectives

- Graduates of the Master of Science in Diagnostic Imaging Program will be able to provide knowledgeable, appropriate, and safe services as a radiologist.
- Graduates of the Master of Science in Diagnostic Imaging Program will be able to apply knowledge in radiologic and clinical settings, evaluate diagnostic images, and provide medically accurate diagnostic imaging reports and patient recommendations.

Course Listings

MSDI	501	Hematopoietic Disturbances of Bone	2 Credit Hours
MSDI	502	Infectious Disorders of Bone	2 Credit Hours
MSDI	503	Congenital Anomalies and Skeletal Dysplasias	2 Credit Hours
MSDI	504	Arthritides	2 Credit Hours
MSDI	505	Physical Injury of the Skeletal System	2 Credit Hours
MSDI	506	Internal Derangements of Joints	2 Credit Hours
MSDI	507	Neoplastic and Neoplastic-like Lesions of Bone	2 Credit Hours
MSDI	508	Metabolic, Endocrine, and Nutritional Disorders	2 Credit Hours
MSDI	509	Neuroradiology	4 Credit Hours
MSDI	510	Chest Imaging	4 Credit Hours
MSDI	511	GI/GU Imaging	4 Credit Hours
MSDI	512	Principals of Diagnostic Imaging and Radiation Health 1	1 Credit Hour
MSDI	513	Principals of Diagnostic Imaging and Radiation Health 2	1 Credit Hour
MSDI	530	Medical Ethics	2 Credit Hours
MSDI	540	Pathology Teaching File Portfolio 1	4 Credit Hours
MSDI	541	Pathology Teaching File Portfolio 2	4 Credit Hours
MSDI	550 (DL)	Advanced Diagnostic Imaging I – Spine	1 Credit Hour
MSDI	560 (DL)	Advanced Diagnostic Imaging II – Extremities	1 Credit Hour

42 Credits

Research Requirements

(Must complete these courses sequentially)

MSDI	520	Biostatistics and Research Methodology	1 Credit Hour
MSDI	620	Independent Research 1	2 Credit Hours
MSDI	621	Independent Research 2	2 Credit Hours
MSDI	622	Independent Research 3	2 Credit Hours
MSDI	623	Independent Research 4	2 Credit Hours

9 Credits

Diagnostic Imaging Program Summary

1. Academic: Completion of core radiology courses and research requirements. Course material for core courses will be delivered in small group format in daily one- to two-hour sessions with five hours of didactic education and five hours practical interpretation sessions per week. Assessment for core and elective courses will include a final examination including both essay and multiple choice questions and film interpretation practical stations.
2. Clinical: Participation in daily film read-out sessions of NUHS clinic studies, NUHS Interpretation Service consultation, as well as radiological technical work as needed.
3. Education: The master's student may be assigned to teach diagnostic imaging lectures, national board reviews, and diagnostic imaging laboratories as assigned by the director of the master's program.
4. Scholarly Work: Preparation of two (2) case study articles with submission to peer-reviewed journals. (Independent Research course). Produce four pathology teaching file cases with oral presentation.

5. Complete Capstone Project, which will require developing either (1) a thorough literature review (annotated bibliography), OR (2) original research project to be submitted to a peer-reviewed journal. Written and oral components will need approval of the Capstone Project Assessment Committee.

Diagnostic Imaging Course Descriptions

NOTE: Core courses do not have specific prerequisites and may be completed in any order. The order determined by timing of entrance into the program and will be sequenced in the most appropriate and in an individualized manner with the counsel of the MS Diagnostic Imaging Advisor / Chair of Diagnostic Imaging.

MSDI 501 Hematopoietic Disturbances of Bone Credits 2.0

This course outlines the key clinical and imaging manifestations of disease resulting from abnormal blood cells and marrow replacement disorders, both benign and malignant. The specific characteristics of marrow imaging are emphasized including the common and often overlooked entity of avascular necrosis. The master's student will learn to develop a reasonable differential diagnosis for hematopoietic disturbances of bone, and will learn proper follow-up and management of these disorders.

MSDI 502 Infectious Disorders of Bone Credits 2.0

Specific infectious organisms, route of contamination, and spread of infectious disease are discussed in addition to specific radiographic patterns of osteomyelitis, septic arthritis, and soft tissue infection exhibited by conventional radiography, CT, MRI, and nuclear imaging. The master's student will become familiar with clinical and radiographic findings that will expedite further investigation with special imaging procedures necessary for proper and adequate diagnosis of osteomyelitis, septic arthritis, and soft tissue infection.

MSDI 503 Congenital Anomalies and Skeletal Dysplasias Credits 2.0

This course covers musculoskeletal developmental defects manifested at birth and later in life, categorized by spinal or extremity involvement. Key associations and complications of these disease processes are emphasized making their distinction significant in patient management. Findings rendered from conventional radiography, CT, and MR imaging are emphasized.

MSDI 504 Arthritides Credits 2.0

This course highlights the clinical, pathologic, and radiographic patterns of articular pathology. The student will learn to classify different joint pathologies into categories — degenerative, inflammatory, and crystal-induced disorders. Pathologic processes of articular disease are studied in conjunction with radiologic disease patterns so as to facilitate an understanding of articular disease.

MSDI 505 Physical Injury of the Skeletal System Credits 2.0

This course covers important features of fracture analysis including: mechanism of injury, specifics of alignment, complications, and evaluation for stability. The student will become skilled at identifying fractures and dislocations and associated soft tissue injury. Conservative and invasive surgical procedures in the treatment of fractures and dislocations will be studied in order to direct the clinician towards the appropriate standard of care and treatment of physical injuries.

MSDI 506 Internal Derangements of Joints Credits 2.0

A detailed joint-by-joint analysis of internal derangements includes detailed study of anatomical structures and an in-depth study of various manifestations of joint injury demonstrated on advanced imaging, with an emphasis on Magnetic Resonance Imaging. Injury of internal and external ligamentous restraints, changes of the appearance of bone marrow, and analysis of muscular and tendinous structures and the evaluation of articular cartilage injury will be studied.

MSDI 540 **Pathology Teaching File Portfolio I** **Credits 4.0**
MSDI 541 **Pathology Teaching File Portfolio II** **Credits 4.0**

In these two courses, master's students must select four specific topics of interest for further study and presentation as their Capstone Project. The topics should be based upon a clinical case with imaging and must include the following: three musculoskeletal case studies all of which must have plain films and at least one of which must be of the spine and at least one of which must have advanced imaging; and one other case study, in either chest, abdomen, or neuroradiology topic areas. In the first course, the student will be expected to choose the cases and conduct a literature review of each case-driven topic area. In the second course, the student will prepare four clinical case presentations based on their previous work, each presentation organized in a specific format that includes pertinent patient history, clinical, radiographic, and follow-up information. The student must present and defend their cases before a review panel selected by the Chair of Diagnostic Imaging. The collective scoring of this panel will determine the final grade for the Capstone Project.

MSDI 550 (DL) **Advanced Diagnostic Imaging I – Spine** **Credits 1.0**
MSDI 560 (DL) **Advanced Diagnostic Imaging II – Extremities** **Credits 1.0**

The purpose of these distance learning courses is to review the history of diagnostic imaging, explain the utility and limitations of the various diagnostic imaging modalities, improve interpretation of diagnostic imaging reports, define effective imaging strategies in specific clinical scenarios, and approach an imaging study with greater confidence.

The courses focus on the functionality of powerful and sophisticated imaging tools currently available: conventional radiography, computed tomography, magnetic resonance, and nuclear imaging. Students will be taken through multiple imaging case studies from start to finish, with emphasis on the thought processes associated with diagnostic imaging interpretation. As these imaging studies are presented, human anatomy, conspicuity of pathology, correlating findings, and appropriate clinical action will be emphasized; this includes treatment options, referral decisions, and prognostic indicators. The student will be familiarized with the pathological entities that are best demonstrated by each imaging modality. The courses will also provide examples of strategies for implementing an effective imaging plan while understanding the need for cost containment.

Research Courses

MSDI 520 **Biostatistics and Research Methodology** **Credits 1.0**

This course will introduce the fundamental concepts of biostatistics and the processes of interpretation and critical analysis of research studies. Emphasis will be placed on preparing students to identify pertinent research findings that will enhance clinical outcomes. Students will be competent in describing the components of a journal article and the general guidelines of critical appraisal for clinical and diagnostic imaging research. In addition, they will be able to identify, define, and decipher the validity and or limitations of basic study designs. Various research sources found in on-line search engines and in health sciences libraries will be identified and explored. Appropriate search strategies surrounding clinical and radiological topics utilizing scientific evidence to build credibility, cultural authority, and promote skill in diagnostic imaging and clinical practice will be discussed. The student will be able to recognize ethical issues in clinical research and outline the steps in planning, writing, and publishing a case report.

MSDI 620 **Independent Research I** **Credits 2.0**
MSDI 621 **Independent Research II** **Credits 2.0**

Independent Research I and II build upon the information learned in MSDI 520 (Biostatistics & Research Methodology). The student will learn to perform critical appraisals, write succinct critiques, and discuss research articles in a scientific manner, which will enable the student to acquire pertinent research articles to develop a case study manuscript. An institutional review board (IRB) application regarding the case study must be approved, and the completed case study will then be presented before a research review panel. Submission of the manuscript to a peer-reviewed scientific journal will be encouraged.

MSDI 622
MSDI 623

Independent Research III
Independent Research IV

Credits 2.0
Credits 2.0

Independent Research III and IV reinforce exploration of critical appraisal of published research and discussion of journal articles in a scientific manner. Students will be expected to choose a topic of interest from previously presented material, which corresponds with a selected clinical case and acquire relevant research through the use of online database literature search. The student will work with one of the program faculty, as a content expert, to write a case study for publication. The student will be responsible for drafting and submitting an institutional review board (IRB) application and manuscript for publication. This will culminate in a presentation before a research review panel.



National
University
Of Health Sciences



Bulletin

2018 - 2019

Lincoln College of Postprofessional,
Graduate and Continuing
Education

Lincoln College of Post-graduate and Continuing Education

Jenna Glenn, MS, DC, ND — Dean of Lincoln College

Lincoln College of Postgraduate and Continuing Education of National University of Health Sciences is dedicated to offering accredited post-professional educational programs for “first professional degree” holders to maintain present-day general practice expertise and to allow for clinical specialty advancement. Lincoln College also offers continuing education programs for licensed acupuncturists, massage therapists, physical therapists, physical therapist assistants, and other licensed health care professionals. Lincoln College is structured according to specific objectives of academic excellence and is answerable to its various accrediting and certifying agencies.

Post-professional Education

Since the early 1900s, National has provided post-professional educational opportunities to assist doctors in keeping abreast of developments in the clinical sciences, expanding their undergraduate education, and providing good service to their patients. The need for excellent post-professional programs continues and is ever increasing. Those who pursue advanced education and specialty training are leaders. As the economy fluctuates, technology progresses and the health care industry is more closely examined, the physician must proactively prepare for the specific challenges of today by being enriched with the most current information and abilities.

Many professionals participate in post-professional programs to learn a variety of skills and knowledge from several specialty areas. These professionals seek specific information for their practices rather than seeking a specialty diplomate. First professional degree holders are required to participate in post-professional activities approved by state boards for re-licensure and these requirements vary with each state. Post-professional activities for re-licensure can include specialty programs, topics of interest, conventional education programs, new topic areas, clinical skills, basic science concepts, and specific procedures for outcome measurement.

After graduation, a doctor of chiropractic (DC) may elect to complete a full-time post-professional residency program for three years to gain specialty training in clinical research, diagnostic imaging, or family practice. The residents attend classes, workshops and clinical training sessions, and have written and clinical examinations. These doctor of chiropractic residents become eligible to sit for specialty board examinations leading to diplomate status in the chosen discipline.

Special Students

Graduates of currently or previously chartered chiropractic institutions or naturopathic colleges or persons holding a first professional degree in the health sciences may be admitted to the NUHS / Lincoln College of Postgraduate and Continuing Education for the purpose of taking postgraduate courses or courses offered within the context of the DC degree program. These additional professional studies are designed to broaden the individual’s knowledge base or to qualify the individual for certain state board examinations. These persons may be admitted as special students. Persons registered as special students may not be candidates for the DC degree. Special students ordinarily enter at the beginning of a trimester. To obtain credit for the studies, special students must complete the entire trimester and successfully pass all required examinations. Tuition is paid by the special student at the post-professional rate. Alternative schedules and fees may be arranged by petition to the Dean of Lincoln College and requires agreement by both.

Other Students

Students at allopathic, chiropractic and naturopathic institutions, nurses, allied health professionals, and other professionals and paraprofessionals in health care delivery, may, in specific instances be permitted to apply for classes within these courses of study. Entrance to any course or class requires prior approval of the Dean of Lincoln College. A continuing education certificate may be awarded to those individuals who successfully fulfill the requirements, if appropriate.

Programs Offered

The following courses and programs are available through Lincoln College of Postgraduate and Continuing Education. For detailed program information, please contact Lincoln College or our website at <http://www.nuhs.edu/academics/college-of-continuing-education/>.

Continuing Education

Programs Leading to Diplomate Certification: Acupuncture, Orthopedics, Rehabilitation, Sports Physician.

Specialty Programs: Acupuncture, Korean Acupuncture, Traditional Chinese Medicine, Dry Needling, Clinical Nutrition, Clinical Orthopedics, Diagnostic Imaging, Disability Assessment and Impairment Rating, Hot Stone Massage, Improving Documentation, Electrodiagnosis, Functional Rehabilitation, Headaches and Head Trauma, Joint Manipulation, Myofascial Taping, Pediatrics, Pain Mechanisms, Post-Surgical Spine, Sports Physician, Instrument Assisted Soft Tissue, Cox Technique®, McKenzie Method®.

Post-professional Educational Programs

Post-professional educational programs of the University include credit and non-credit courses of instruction. The following is a listing of programs and courses under the auspices of Lincoln College of Post-graduate and Continuing Education.

Further information may be obtained by contacting Lincoln College or visiting our website at <http://www.nuhs.edu/academics/college-of-continuing-education/>

Acupuncture

This program consists of a basic 100-hour training program and a 200-hour advanced program. An accelerated version of the 300-hour program is also offered.

ACU 100 Protocols of Acupuncture

No.	Title	Hours
ACU 100-1	Introduction to Acupuncture	12.5
ACU 100-2	Clean Needle Technique, Meridians I	12.5
ACU 100-3	Meridians II	12.5
ACU 100-4	Meridians III, Tongue Diagnosis	12.5
ACU 100-5	Auriculotherapy and Instrumentation	12.5
ACU 100-6	Adjunctive Patterns I	12.5
ACU 100-7	Adjunctive Patterns II	12.5
ACU 100-8	Research & Review / Final Examinations	12.5

Advanced Acupuncture

No.	Title	Hours
ADV ACU-1	Acupuncture's TCM	12.5
ADV ACU-2	Meridians and Acupoints	12.5
ADV ACU-3	Differentiation of Syndromes I	12.5
ADV ACU-4	Differentiation of Syndromes II	12.5
ADV ACU-5	Pulse Diagnosis	12.5
ADV ACU-6	Microsystems of Acupuncture	12.5
ADV ACU-7	Accessory Acupuncture Techniques	12.5
ADV ACU-8	Comprehensive Acupuncture Review & Examination	12.5
ADV ACU-10	Women's Issues	12.5
ADV ACU-11	Pediatric Conditions	12.5
ADV ACU-12	Neurologic Based Conditions	12.5
ADV ACU-13	Digestive System and Dermatology Issues	12.5
ADV ACU-14	Electrical & Magnetic Forces	12.5
ADV ACU-15	Clinical Applications of Acupuncture	12.5
ADV ACU-16	Comprehensive Acupuncture Review & Final Examination	12.5

Chiropractic Sports Physician

This is a course of study leading to certification in the evaluation and management of sports and athletic injuries and maintenance of physical fitness. Completion of Part I enables the doctor to sit for the examination offered by the Academy of Chiropractic Sports Physicians for the status designated as CCSP (Certified Chiropractic Sports Physician).

Completion of Part II leads to eligibility to sit for the examination for diplomate given by the American Chiropractic Board of Sports Physicians. Part I must be taken and successfully completed before Part II can be taken.

Part I

No.	Title	Hours
SP 100-1	Concepts of a Team Physician	
SP 100-2	Sports Preparticipation Examination	12.5
SP 100-3	Assessment, Diagnosis & Management of Injuries to the Spine & Pelvis	12.5
SP 100-4	Management of Injuries to the Lower Extremity	12.5
SP 100-5	Management of Injuries to the Upper Extremity	12.5
SP 100-6	Emergency Procedures	12.5
SP 100-7	Extremity Taping / Strapping & Adjustive Technique	12.5
SP 100-8	Management of Special Populations, Review & Final Exam	12.5

Part II

No.	Title	Hours
SP 200-1	Taping & Wrapping Procedures for the Sports Physician	12.5
SP 200-2	Diagnostic Imaging of Sports	12.5
SP 200-3	Soft Tissue Techniques I	12.5
SP 200-4	Medications, Steroids & Drug Nutrient Interactions II	12.5
SP 200-5	Spinal Injuries & Athletics	12.5
SP 200-6	Emergency Care for the Injured Athlete	12.5
SP 200-7	Manual Therapies of the Extremities for the Team Physician	12.5
SP 200-8	Special Populations: Geriatrics & Pediatrics	12.5

Part III

No.	Title	Hours
SP 300-1	Sports Preparticipation Exam II	12.5
SP 300-2	Biomechanics of Sports	12.5
SP 300-3	Physiology of Exercise	12.5
SP 300-4	Sport Specific Treatment – Lower Extremity	12.5
SP 300-5	Sport Specific Treatment – Upper Extremity	12.5
SP 300-6	Strength & Conditioning	12.5
SP 300-7	Physical Rehabilitation of the Athlete	12.5
SP 300-8	Final Review & Examination	12.5

Traditional Chinese Medicine

This 36-hour (three session) program is an introduction of Traditional Chinese Medicine. Students will learn the etiology, diagnosis, and treatment of common conditions using Traditional Chinese Medicine principles. This course allows practitioners to develop an understanding of Traditional Chinese Medicine theory, demonstrate proficiency in applying Traditional Chinese Medicine theory to common clinical conditions, and confidently expand their clinical practice to address a new area of conditions.

X-Ray, MRI & Cadaver Anatomy

A common challenge in clinical practice is that many practitioners “don’t know where to start” when faced with an advanced imaging study. There are so many images and so many structures on each image that viewing an advanced imaging study can seem overwhelming. This course is designed to provide practitioners with an organized approach

to reviewing advanced imaging studies and an understanding of the common jargon used by reading radiologists. A basic overview addressing the indications for magnetic resonance imaging (MRI) and the types of imaging sequences will be presented.

A review of normal gross anatomy, using cadaveric specimens with correlation to conventional radiographs and cross-section MR images, will serve as a foundation for the anatomy appreciated on MRI studies. This course will consist of lecture style presentations alternating with viewing of gross anatomic specimens. Basic imaging of the spine, shoulder, hip, and knee will be discussed and pathology/injuries relating to these regions that are commonly encountered in clinical practice will be also addressed.

Licensure Information

Chiropractic Licensure Information

The accredited educational program of National University of Health Sciences has been designed to meet the professional educational requirements of the licensing boards in the 50 states of the United States of America, the District of Columbia, Puerto Rico, the provinces of Canada, and all other foreign countries where the practice of chiropractic is regulated by statute. Thus, a student who has successfully completed the entire program of study at National University of Health Sciences and received the doctor of chiropractic degree from the university is eligible to sit for all licensure examinations, providing that the student has met all other statutory licensing requirements, age, citizenship, character, pre-admissions, and so forth. This eligibility is subject to changes in licensing requirements and regulations by individual states.

Students of National University of Health Sciences who desire detailed information relative to licensure should contact the Registrar, the Alumni Services Office, or the regulating body governing chiropractic practice where they wish to be licensed. Information also may be obtained by contacting the Program Administrator, Federation of Chiropractic Licensing Boards, 5401 West 10th Street, Suite 101, Greeley, CO 80634-4400. The Federation of Chiropractic Licensing Boards also publishes annually an Official Directory of Chiropractic Licensure and Practice Statistics. Copies may be ordered online at <http://directory.fclb.org>

National University of Health Sciences is accredited to award the doctor of chiropractic degree by the Commission on Accreditation of the Council on Chiropractic Education, 8049 N. 85th Way, Scottsdale, AZ 85258-4321. Tel: 480-443-8877; e-mail, cce@cce-usa.org

The information above and in the following pages relative to licensure, educational requirements, and the examination of the National Board of Chiropractic Examiners is predicated upon the latest information available to the university from organizations such as the Federation of Chiropractic Licensing Boards and the National Board of Chiropractic Examiners.

Naturopathic Medicine Licensure Information

Currently, 20 states, the District of Columbia, the U.S. territories of Puerto Rico and the U.S. Virgin Islands, and five Canadian provinces have licensing laws for naturopathic medical doctors. In these states, naturopathic doctors are required to graduate from a four-year, residential naturopathic medical school and pass an extensive postdoctoral board examination series (NPLEX) in order to receive a license.

Licensed naturopathic physicians must fulfill state-mandated continuing education requirements annually, and will have a specific scope of practice defined by their state's law.

The states that currently have licensing laws for naturopathic physicians are: Alaska, Arizona, California, Colorado, Connecticut, Hawaii, Kansas, Maine, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, North Dakota, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, Washington, the District of Columbia, and the U.S. Territories of Puerto Rico and the Virgin Islands. The Canadian provinces with naturopathic medicine regulation are Alberta, British Columbia, Manitoba, Ontario, and Saskatchewan.

Acupuncture and Oriental Medicine Licensure Information

Most states in the U.S. currently license the practice of acupuncture and oriental medicine. Licensing requirements vary from state to state as well as guidelines regarding the scope of practice. Students can obtain information about a specific state from the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) at www.nccaom.org/diplomates/state_licensure.html. For information on state licensing requirements see http://www.acupuncture.com/events_ceu/ceunotice.htm.

The NCCAOM administers the national board exams for acupuncture, Chinese Herbology, Asian bodywork, and biomedicine. Although they do not license anyone directly, most states include the exam as part of their licensing requirements. For licensure information in Illinois, please contact the Illinois Department of Professional Regulation at 217-782-8556 or www.ildpr.com. The educational programs at National University of Health Sciences exceed the educational standards of the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM) in both classroom and clinical work for the master of science in acupuncture and the master of science in oriental medicine. However, it is the student's responsibility to contact the state in which he or she wishes to practice for licensing information.

Massage Therapy Licensure Information

Forty-five states and the District of Columbia regulate massage therapists. In each state, massage therapists must meet certain standards established by the state. Each state law is different and has different requirements, so a massage therapist may be referred to as licensed, state certified or registered. In most cases, only those individuals who have the state designation may perform massage and/or use a title indicating that person does massage. In the absence of state licensure, local municipal codes and ordinances may apply.

The states that currently have licensing laws for massage therapists are: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, and Wisconsin, plus the District of Columbia and Puerto Rico.

<http://www.amtamassage.org/about/lawstate.html>

Websites of Interest

Websites for Chiropractic Students

- American Chiropractic Association
<http://www.acatoday.org>
- Student American Chiropractic Association
<http://www.amerchiro.org/about/saca>
- The National Board of Chiropractic Examiners
<http://www.nbce.org>
- The Federation of Chiropractic Licensing Boards
<http://www.fclb.org>
- World Federation of Chiropractic (WFC)
<http://www.wfc.org>

Websites for Naturopathic Students

- The American Association of Naturopathic Physicians
<http://www.naturopathic.org>
- The North American Board of Naturopathic Examiners
<http://www.nabne.org>
- Illinois Association of Naturopathic Physicians
<http://www.ilanp.org>
- Council on Naturopathic Medical Education
<http://www.cnme.org>
- Canadian Association of Naturopathic Doctors
<http://www.cand.ca>

Websites for Oriental Medicine and Acupuncture Students

- Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM)
<http://www.acaom.org>
- National Certification Commission for Acupuncture and Oriental Medicine
<http://www.nccaom.org>
- Council of Colleges of Acupuncture and Oriental Medicine
<http://ccaom.org>
- American Association of Acupuncture and Oriental Medicine
<http://www.aaaomonline.org>

Websites for Massage Therapy Students

- American Massage Therapy Association
<http://www.amtamassage.org>
- Associated Bodywork & Massage Professionals
<http://abmp.com>
- Commission on Massage Therapy Accreditation
<http://www.comta.org>
- Massage Therapy Foundation
<http://www.massagetherapyfoundation.org>
- Federation of State Massage Therapy Boards (FSMTB) and Massage and Bodywork Licensing Examination (MBLEx)
<http://fsmtb.org>

Examining Boards

National Board of Chiropractic Examiners

The National Board of Chiropractic Examiners (NBCE) was incorporated June 19, 1963. The national board is composed of 11 members. The board employs the services of a specialist in measurement and statistics who assists the board in the preparation of the examination and evaluation of the scores.

Purpose of Program

The purpose for conducting a chiropractic examination program at the national level is to provide a service to the state boards of examiners, the chiropractic colleges, and the doctor of chiropractic.

Requirements for Participation

Students are eligible to take the examination only when certified by the dean, registrar, or vice president of their college. Doctors of chiropractic who possess a chiropractic college diploma acceptable to the national board, but issued more than eight months prior to the date of application for examination, must present evidence of professional and moral fitness by means of a letter from either a state society in which they practice or from the secretary of the board of examiners of the state in which they practice or have practiced.

Application

Applications may be obtained from the Executive Vice President, 901 54th Ave., Greeley, CO 80634, or the dean's office of a chiropractic college. Application forms properly completed must be received by the executive secretary of the board 10 weeks before the date of the examination. Two complete examinations are given each year in March and September. The exact dates are announced well in advance for the information of all concerned. The examination consists of three parts: Part I, a battery of six tests in basic sciences; Part II, six tests and one elective in the clinical sciences; Part III, the written clinical competency examination; Part IV is a standardized-patient practical examination required by many states.

Acceptance of the Program

All 50 states and the District of Columbia require Parts I through IV of the NBCE examinations. The minimum passing score for each part/section is 375. Some state boards do require higher scores in order to obtain licensure in those states.

Performance Disclosures

In keeping with the Council on Chiropractic Education Standards requirements concerning public disclosure of student performance on national board examinations, up-to-date student performance on national board examinations must be disclosed on each chiropractic program's website. NBCE data must be updated for public disclosure by August 1 annually.

North American Board of Naturopathic Examiners

NPLEX (Naturopathic Physicians Licensing Examination) is the standard examination used by all licensing jurisdictions for naturopathic physicians in North America. NPLEX's sole focus is the development and production of a transnational board licensing examination.

The North American Board of Naturopathic Examiners (NABNE) is responsible for gathering input from the various constituencies involved in the profession (jurisdictions, schools, associations, etc.). The NABNE board will be responsive to the input of an advisory committee comprised of appointees from the jurisdictions, the schools, the Council on Naturopathic Medical Education (CNME), the Federation of Naturopathic Physicians Licensing Authorities (FNPLA), and the national associations, as well as several public members. Input from the advisory committee will be critical for setting examining standards and for coordinating the effort.

NABNE is the point of application for students and candidates who want to take the NPLEX. NABNE also sets up testing centers in the U.S. and Canada for administration of the exams.

For information on Naturopathic Physicians Licensing Examination Board (NPLEX):
<https://www.nabne.org/home/exam-overview/>

For information on the North American Board of Naturopathic Examiners (NABNE):
NABNE
Suite 119, #321
9220 S.W. Barbur Blvd.
Portland, OR 97219
503-778-7990
info@nabne.org

National Certification Commission for Acupuncture and Oriental Medicine

The NCCAOM is a non-profit organization that was established in 1982. Its mission is to establish and promote recognized standards of competence and safety in acupuncture and oriental medicine for the protection and benefit of the public.

NCCAOM offers four distinct national certification programs in Oriental Medicine, Acupuncture, Chinese Herbology, and Asian Bodywork Therapy. Certification is granted to those who meet the eligibility criteria and pass the examinations. Requirements vary for each program. Examinations are administered during the year at various test sites in North America and consist of two days of testing. Depending upon which certification you are applying for, the variety of exams that are given include: Foundations of Oriental Medicine Module; Acupuncture Module; Point Location Module; Biomedicine Module; Chinese Herbology Module; Asian Bodywork Therapy Exam.

NCCAOM certification is the only nationally recognized certification available to qualified practitioners of Acupuncture and Oriental Medicine; it is a requirement for licensure in most states.

Contact information for the NCCAOM:

NCCAOM
76 South Laura Street, Suite 1290
Jacksonville, FL 32202
904-598-1005
www.nccaom.org

Massage and Bodywork Licensing Examination

The Massage and Bodywork Licensing Examination (MBLEx) is the nationally accredited exam that is accepted for licensure requirements in Illinois. The program was accredited by the Federation of State Massage Therapy Boards (FSMTB).

FSMTB serves the massage therapy and regulatory communities as the most appropriate, lone entry-level licensure examination. The MBLEx is currently utilized for licensure in 44 of the 48 regulated states, the District of Columbia, as well as the territories of Puerto Rico and the U.S. Virgin Islands. Please note, passing the MBLEx is only one of the steps necessary for licensure in your state. Please check with the state licensing board or agency regarding the licensure requirements for where you plan to practice.

To ensure MBLEx reflects current practice, 50 content experts, with the guidance of 15 testing and psychometric experts, developed a Job Task Analysis Survey (JTS). The JTA was validated by input from 7,646 massage, bodywork, and somatic professionals from across the United States. Accordingly, the MBLEx is administered through Pearson VUE at high-security test centers located throughout all 50 states, the District of Columbia, and U.S. territories.

For more information, please contact:

Massage & Bodywork Licensing Examination Office
150 4th Avenue North, Ste. 800
Nashville, TN 37219
Phone: 866-962-3926
Email: mblex@fsmtb.org

FSMTB Executive Office
10801 Mastin Boulevard, Ste. 350
Overland Park, KS 66210
Phone: 913-681-0380
Email: info@fsmtb.org



Bulletin

2018-2019

University Personnel

Personnel

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Yesenia Maldonado, MBA.....Dean of Students
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Robert Shiel, PhD.....Dean of the College of Professional Studies – Illinois
Fraser Smith, MA, ND.....Assistant Dean, Naturopathic Medicine
Daniel Strauss, DC.....Dean of the College of Professional Studies – Florida
Zhanxiang Wang, MD (China), PhD, Lac.....Assistant Dean, Acupuncture & Oriental Medicine
Vacant.....Assistant Dean for Institutional Effectiveness

Administrative Faculty

Robert Appleyard, PhD.....	Chair, Department of Basic Sciences – Illinois
William Bogar, DC, DACBR.....	Director, Diagnostic Imaging Residency
Jerrilyn Cambron, MPH, PhD, DC.....	Chair, Massage Therapy Program
Patricia A. Coe, MS, DC, ND.....	Supervisor, Massage Therapy Clinic
Kristina Conner, MSOM, ND.....	Chair, Department of Clinical Sciences – Illinois
Manuel Duarte, MSAc, DC.....	Chair, Department of Clinical Practice
Bart Green, MEd, PhD, DC.....	Associate Editor, NUHS Journals
Claire Johnson, MEd, PhD, DC.....	Editor-in-Chief, NUHS Journals
Sridharan Manavalan, MSc.....	Chair, Department of Basic Sciences – Florida
Steven Freeman, DC.....	Chair, Department of Clinical Sciences – Florida

Administrative Staff

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Sue Unger, CPA.....	Director of Financial Services
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Marc Yambao, BA.....	Director of Financial Aid
Vacant.....	Director of Alumni & Development
Vacant.....	Assistant Director of Alumni & Development
Vacant.....	Assistant Director – Financial Aid
Vacant.....	Assistant Director – LRC

Faculty and Administrators Emeriti

William Bachop, PhD.....	Professor Emeritus
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Faculty

Faculty who teach at National's Florida site are indicated with “– Florida” after their academic rank.

Christina Acampora.....	Lecturer, Clinical Sciences
BS, San Jose State University, 1989	
DC, Palmer College of Chiropractic – West, 1992	
Joe Adkins.....	Lecturer, Allied Health Sciences
CMT, National University of Health Sciences, 2005	
Kristine Aikenhead.....	Associate Professor, Clinical Sciences
BS (Biology), Loyola University, 1979	
BS, DC, National College of Chiropractic, 1982, 1983	
Family Practice Residency (Board Qualified), National College of Chiropractic, 1983-85	
Brian Anderson.....	Instructor, Clinical Practice
BS, Northern Illinois University, 1999	
DC, MS, National University of Health Sciences, 2004, 2014	
MPH, Benedictine University, 2008	
CCN, Clinical Nutrition Certification Board, 2004	

Kenton Anderson.....Lecturer, Clinical Sciences
 BS, Northern Illinois University, 1984
 ND, National University of Health Sciences, 2012

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 BS, MS, PhD, Washington State University, 1975, 1979, 1986

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 BS, Indiana University, 2002
 BS, DC, MS, National University of Health Sciences, 2003, 2005, 2014
 Fellow, International Academy of Medical Acupuncture

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 BS, University of South Florida, 1990
 MA, University of South Florida, 1993
 EdD, University of Sarasota, 2000

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 BS, University of Illinois at Chicago, 1994
 MSOM, Midwest College of Oriental Medicine, 2000

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 BS, Colorado State University, 1980
 DC, Palmer College of Chiropractic, 1979
 Diplomate: American Chiropractic Board of Radiology, 1993

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 BS, University of Illinois at Chicago, 1995
 MBA, Dominican University, 1999
 BS, DC, National University of Health Sciences, 2002, 2003
 MS, Illinois Institute of Technology, 2013
 Diplomate: American Association for Integrative Medicine

Edward J. Bifulco.....Instructor, Clinical Sciences
 AB, Cornell University, 1982
 BS, DC, National College of Chiropractic, 1985, 1987

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 BA, University of Connecticut, 2000
 ND, Bastyr University, 2010

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 BS, DC, National College of Chiropractic, 1982, 1984
 Diplomate: American Chiropractic Board of Radiology

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 BS, University of Maryland, 2010
 DC, ND, MS, National University of Health Sciences, 2014, 2015, 2017

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 BS, DC, National College of Chiropractic, 1984, 1987

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 MD (China), Guang Zhou University of Traditional Chinese Medicine, 1970
 PhD (China), Guang Zhou University of Traditional Chinese Medicine, 2004
 Diplomate, Acupuncture and Herbology
 Licensed Acupuncturist

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 BS, DC, National College of Chiropractic, 1989, 1991
 MPH, University of Illinois at Chicago, 1999
 PhD, University of Illinois at Chicago, 2005
 CMT, National University of Health Sciences, 2006
 Certified in Public Health

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 CMT, National University of Health Sciences, 2012

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 BS, West Virginia University, 2005
 DC, National University of Health Sciences, 2010

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 BS, University of Illinois-Chicago, 2007
 DC, National University of Health Sciences, 2010
 MS, Logan University, 2018

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 BS, Eastern Illinois University, 2006
 BS, Eastern Illinois University, 2008
 MS, Capella University, 2017

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 BS, Millikin University, 2001
 BS, DC, MS, National University of Health Sciences, 2002, 2004, 2012

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 BLAS, University of Illinois at Chicago, 2003
 ND, National University of Health Sciences, 2010

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 BS, University of Pittsburgh, 1992
 BS, DC, National College of Chiropractic, 1995, 1997
 MS, ND, National University of Health Sciences, 2011, 2012
 Massage Therapist

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 BA, St. John's College, 1994
 ND, Bastyr University, 2001
 MSOM, National University of Health Sciences, 2013
 Diplomate: National Certification Commission for Acupuncture & Oriental Medicine

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 BS, Ball State University, 1991
 ND, National University of Health Sciences, 2013
 Massage Therapy Certificate, Connecticut Center of Massage Therapy, 2003

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 BS, Florida State University, 2005
 DC, Palmer College of Chiropractic Florida, 2011

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 BS, DC, National College of Chiropractic, 1977, 1979
 PhD, Medical College of Ohio, 1987

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 BS, Governors State University, 2004
 BS, DC, National University of Health Sciences, 2005, 2007

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 BA, Millikin University, 1974
 PhD, University of Illinois, 1980

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 CMT, National University of Health Sciences, 2000
 Illinois Licensed Massage Therapist
 BS, National University of Health Sciences, 2010

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 BA, George Williams College, 1973
 BS, DC, National College of Chiropractic, 1977, 1978

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 BS, Brooklyn College, 1977
 MS, Long Island University, 1978
 BS, DC, National College of Chiropractic, 1984, 1986
 MSAc, National University of Health Sciences, 2013
 Diplomate: American Board of Chiropractic Orthopedists
 Diplomate: American Chiropractic Board of Sports Physicians
 Diplomate: American Board of Chiropractic Acupuncture

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 BS, Governors State University, 2006
 ND, DC, National University of Health Sciences, 2010, 2012

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 ND, National College of Naturopathic Medicine, 1988
 LAc, The Oregon College of Oriental Medicine, 1989

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 BS, Indiana University, 1999
 DC, ND, National University of Health Sciences, 2011, 2014

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 DC, Cleveland Chiropractic College, 1987

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 Licensed Acupuncturist

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 BS, DC, National University of Health Sciences, 1996, 1998
 Diplomate, American Chiropractic Board of Radiology, 2001

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 BS, Loyola Marymount University-Los Angeles, 1981
 MD, Michigan State University-College of Human Medicine, 1985
 Family Practice Residency, Saginaw (Michigan) Cooperative Hospitals, 1988

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 BA, Rutgers University, 1988
 DC, Life College, 1992

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 MS, Avila College, 1985
 ND, National College of Natural Medicine, 1999

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 AB, Augustana College, 1974
 BS, DC, National College of Chiropractic, 1977, 1979
 Diplomate: American Board of Chiropractic Orthopedists

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 BS, Pennsylvania State University, Erie, 2006
 DC, MS, ND, National University of Health Sciences, 2009, 2012, 2012

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 DC, Los Angeles College of Chiropractic, 1992
 MEd, University of Southern California, 2000
 PhD, Public Health, Epidemiology, Walden University, 2016
 Diplomate: American Chiropractic Board of Sports Physicians

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 BS (Chemistry), State University of New York, College at Oswego, 1987
 BS, DC, National University of Health Sciences, 2005, 2007
 MPH, University of Illinois at Chicago, 2011

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 Certified Chiropractic Sports Physician, 1992, 2009

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 BA, Carson-Newman College, 1997
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 BA, Warren Wilson College, 1978
 DC, National College of Chiropractic, 1987

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 BA, Lake Forest College, 2005
 DC, National University of Health Sciences, 2008

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 BA, American Intercontinental University, 2004
 MA, Institute of Transpersonal Psychology, 2008
 PhD, Institute of Transpersonal Psychology, 2011

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 Certified Chiropractic Sports Physician, 1994

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 DC, National College of Chiropractic, 1971
 DN, Chicago National College of Naprapathy, 1991
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 Fellow, International Academy of Medical Acupuncture, 2005

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 BA, Nasson College, 1968
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 BS, DC, National College of Chiropractic, 1982, 1984
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 BA, Northern Illinois University, 1976
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 BA, University of California - San Diego, Revelle, 1987
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 BS, The London School of Osteopathy, 1999
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 BA, Illinois Wesleyan University, 2006
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 BSc, MSc, Chung Ang University, 1989, 1991
 BS, DC, National University of Health Sciences, 2001, 2002
 BSc, MSOM, Midwest College of Oriental Medicine, 2002, 2002
 PhD (China), Tianjian University of Traditional Chinese Medicine, 2010

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 BS, Purdue University, 1990

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 DC, National College of Chiropractic, 1959
 Diplomate: American Chiropractic Board of Radiology

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 Bachelor, Master, PhD of Medicine, Shandong University, 1986, 1990, 1993,

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 CMT, National University of Health Sciences, 2012

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 MAN, Professional Training Hospital Center, Kirovsk Central District Hospital, 1990
 MD (Russia), St. Petersburg State Pediatric Medical Academy, 1997

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 BS, University of Illinois at Urbana-Champaign, 2008
 DC, National University of Health Sciences, 2013
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 BS, MS, PhD, University of Karachi (Pakistan), 1998, 2000, 2012

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 BSc, MSc, University of Madras, 1994, 1997

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 BS, Northern Illinois University, 2006
 DC, National University of Health Sciences, 2009
 MSAC, National University of Health Sciences, 2011

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 BS, Midwestern University, 2000
 PharmD, Midwestern University, 2001

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 BS, BA, University of Waterloo, 1991, 1997
 BS, DC, National University of Health Sciences, 1999, 2001
 MSc, University of Bridgeport, 2002
 Certified Nutrition Specialist
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 Diplomate: American Clinical Board of Nutrition
 Fellow: American College of Nutrition

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 BA, University of Mississippi, 1991
 Massage Therapy Certificate, National University of Health Sciences, 2006
 MSAC, National University of Health Sciences, 2009
 PhD Candidate in Traditional Chinese Medicine, Nanjing University of Traditional Chinese Medicine

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 BFA Millikin University, 2003
 CMT, Cortiva Institute, 2007

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 BS, MS, Western Illinois University, 2000, 2006

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 BA, MS, PhD, University of South Florida, 2000, 2007, 2010

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 MD, Gazi University School of Medicine, 2007
 SM, Specialist Microbiologist, Istanbul University, Istanbul School of Medicine, 2014

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 BS, Loyola University of Chicago, 1980
 MS, Loyola University of Chicago, 1983
 MS, Northwestern University, 1988
 PhD, Northwestern University, 1995

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 BS, Duke University, 1967
 MD, Johns Hopkins School of Medicine, 1971

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 BS, Indiana University, 2003
 DC, ND, MS, National University of Health Sciences, 2010, 2013, 2013
 Family Practice Residency, National University of Health Sciences, 2011-2014

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 BS, University of Oregon, 1975
 MSOM, Midwest College of Oriental Medicine, 2007
 Licensed Acupuncturist

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 BS, University of Illinois, 2004
 DC, MS, National University of Health Sciences, 2009, 2013
 Diplomate: American Chiropractic Board of Radiology

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 DC, Northwestern College of Chiropractic, 1986
 MS, National University of Health Sciences, 2011

Kathryn Rioch.....Lecturer, Allied Health Sciences
 BA, Illinois Wesleyan University, 2000
 RD, University of Illinois, 2002

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 BS, DVM, Purdue University, 1985, 1986
 Fellow, American College of Functional Neurology

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 BS, PhD, Post-doctorate, University of Illinois-Chicago, 2001, 2006, 2007

James Salvatore.....Instructor, Basic Sciences
 BS, Saint Joseph’s College, 2000
 MS, Northern Illinois University, 2013
 DC, National University of Health Sciences, 2005

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 BS, DC, National College of Chiropractic, 1975, 1977
 MPH, Northern Illinois University, 1997
 Diplomate: American Chiropractic Board of Radiologists

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 BA, Northeastern Illinois University, Chicago, 1984
 MS, Public Health, University of Illinois, Chicago 1979

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 BA, Trinity Christian College, 1998
 MS, DePaul University, 2004
 PhD, Loyola University, 2004

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 BS, University of Southern Florida, 1993
 PhD, University of Kentucky, 1996

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 BS, MS, Eastern Illinois University, 2003, 2005
 DC, National University of Health Sciences, 2009

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 BA, MA, PhD, University of Notre Dame, 1974, 1976, 1982

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 BS, University of Illinois at Chicago, 1999

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 BA, University of Toronto, 1991
 ND, Canadian College of Naturopathic Medicine, 1997
 MA, Roosevelt University, 2014

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 CMT, National University of Health Sciences, 2009

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 BS (Natural Health Sciences), Bastyr University, 1998
 MS (Acupuncture), Bastyr University, 1999
 ND, Bastyr University, 2000

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 BS, Northern Illinois University, 1998
 CMT, National University of Health Sciences, 2006

Jasmine Stark.....Lecturer, Clinical Practice – Florida
 Massage Therapy Certificate, Northwestern Health Sciences University, 2016

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 BS, Anderson University, 1976
 MS, Southeast Missouri State University, 1982

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 BS, Ball State University, 1995
 BS, DC, MS, National University of Health Sciences, 2002, 2004, 2007
 EdD, Argosy University, 2013

Daniel Strauss.....Associate Professor, Clinical Sciences–Florida
 BS, State University of New York College at Brockport, 1998
 DC, New York Chiropractic College, 2001

George Stretch.....Lecturer, Clinical Sciences
 DN, National College of Naprapathic Medicine, 1988
 LAc, Midwest College of Acupuncture and Oriental Medicine, 1992

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 BS, DC, National College of Chiropractic, 1977, 1977
 MHPE, University of Illinois-Chicago, 1991

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 BS, Loyola University of Chicago, 2002
 DC, National University of Health Sciences, 2006

Joseph Vazquez.....Instructor, Clinical Sciences
 BS, Austin Peay State University, 2008
 ND, National University of Health Sciences, 2013

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 BA, Eckerd College, 2005
 MA, University of South Florida, 2008

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 MD (China), Beijing University of Chinese Medicine, 1989
 PhD, China Academy of Chinese Medicine Sciences, Beijing, 2001
 Licensed Acupuncturist
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BS, DC, National University of Health Sciences, 1994, 1996

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BS, DC, National College of Chiropractic, 1983, 1985

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Diplomate: American Chiropractic Board of Radiology

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Licensed Acupuncturist

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BS, Liaoning University, China, 1982
MSOM, Midwest College of Oriental Medicine, Racine, Wisconsin, 2000
PhD, Guang Zhou University of Traditional Chinese Medicine, 2013
Licensed Acupuncturist

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BS, Gannon University, 2000
DC, Palmer College of Chiropractic Florida, 2006
Diplomate: American Chiropractic Board of Sports Physicians

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BA, MA, Notre Dame University, 1961, 1963
MSOM, Midwest College of Oriental Medicine, 1999
PhD (China), Guang Zhou University of Traditional Chinese Medicine, 2002

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MD (China), Shandong Medical University, 1983
MS (China), Shanghai University of Traditional Chinese Medicine, 1989
Licensed Acupuncturist
Diplomate, National Certification Commission for Acupuncture & Oriental Medicine

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MD (China), Gangsu College of Traditional Chinese Medicine, 1983
MS (China), Shanghai University of Chinese Medicine and Pharmacology
Licensed Acupuncturist

Post-professional Faculty

Greg Abbott.....	General Chiropractic
BS, Elon University, 2007	
DC, Life University, 2011	
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BS, Northern Illinois University, 1999	
DC, MS, National University of Health Sciences, 2004, 2014	
MPH, Benedictine University, 2008	
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BA, University of Central Florida, 1985	
BS, DC, MS, National University of Health Sciences, 1987, 1988, 2011	
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BS, University of Illinois, 1994	
MSOM, Midwest College of Oriental Medicine, 2000	
Sarah Ballantyne.....	Nutrition
PhD, Western University, Ontario, 2003	
Brandon Brock.....	Functional Medicine, Neurology
DC, Parker University, 1999	
BSN, Hardin-Simmons University, 2009	
MSN, NP-C, Samford University, 2011	
RN, Duke University, 2017	
Diplomate: American Board of Chiropractic Acupuncture	
Diplomate: American Board of Chiropractic Neurology	
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BS, MPT, Loma Linda University, 1998, 1998	
DPT, The College of St. Scholastica, 2015	
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DC, Palmer College of Chiropractic, 1973	
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BA, University of Colorado, 1997	
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Licensed Acupuncturist	
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BS, DC, National College of Chiropractic, 1989, 1991	
MPH, University of Illinois at Chicago, 1999	
PhD, University of Illinois at Chicago, 2005	
CMT, National University of Health Sciences, 2006	
Certified in Public Health	
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DC, Life University, 2011	
BSN, Duke University, 2014	
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BS, University of Pittsburgh, 1992	
BS, DC, National College of Chiropractic, 1995, 1997	
MS, ND, National University of Health Sciences, 2011, 2012	
Massage Therapist	

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 BS, DC, National College of Chiropractic, 1977, 1979
 PhD, Medical College of Ohio, 1987

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 BS, Governors State University, 2004
 BS, DC, National University of Health Sciences, 2005, 2007

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 BSc, University of Alberta, 1998
 DC, Life Chiropractic College West, 2002
 RMT, Northwestern School of Massage & Stillpoints Clinics, 2002

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 BA, Millikin University, 1974
 PhD, University of Illinois, 1980

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 BA, Queens College, 1992
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 BS, Brooklyn College, 1977
 MS, Long Island University, 1978
 BS, DC, National College of Chiropractic, 1984, 1986
 MSAc, National University of Health Sciences, 2013
 Diplomate: American Board of Chiropractic Orthopedists
 Diplomate: American Chiropractic Board of Sports Physicians
 Diplomate: American Board of Chiropractic Acupuncture

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 BS, Loyola University, 1994
 BS, DC, National University of Health Sciences, 1996, 1998
 Diplomate, American Chiropractic Board of Radiology, 2001

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 BS, Willamette University, 1984
 DC, Western States Chiropractic College, 1988
 Diplomate, American Chiropractic Board of Sports Physicians

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 South Macomb School of Radiological Technology, 1976
 BA, Wayne State University, 1983
 DC, Palmer College of Chiropractic, 1986
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 DC, Western States Chiropractic College, 1983

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 BS, University of California, 1998
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 BS, University of Miami, 1984
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 Certified Chiropractic Sports Physician, 1992, 2009

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 BSc, Andhra University, India, 1970
 DMIT, Madras Institute of Technology, India, 1974
 MTech, Indian Institute of Technology, India, 1975
 MEng, McMaster University, 1980
 PhD, University of Cincinnati, 1989

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 BA, Brooklyn College, 1955
 DC, Lincoln Chiropractic College, 1958
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 Diplomate, American Board of Chiropractic Orthopedists

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 BS, University of Wisconsin, 1991
 BS, DC, National University of Health Sciences, 1996, 1998

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 DC, MS, National University of Health Sciences, 2008, 2011

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 BS, University of the State of New York, 1999
 DC, Southern California University of Health Sciences (Los Angeles College of Chiropractic), 1999
 MS, University of Bridgeport, 2001
 DHSc, Nova Southeastern University, 2007
 MS, Carrick Institute of Graduate Studies, 2009
 Diplomate: American Board of Chiropractic Neurology
 Diplomate: American Clinical Board of Nutrition
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 MSOM, Midwest College of Oriental Medicine, 2003
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 MS, Michigan Technology University, 1999
 PhD, University of Minnesota, 2014

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 BS, National University of Health Sciences, 1979
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 MD, Stanford University, 1973
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 BA, Rutgers University, 1991
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 BS, North Dakota State University, 1990
 DC, Northwestern Health Sciences University, 1996
 Diplomate: American Chiropractic Board of Physicians

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 Diplomate: College of Clinical Nutrition
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Hongji Zhang.....Acupuncture
 MD (China), Beijing University of Chinese Medicine, 1989
 MS (China), China Academy of Chinese Medicine Sciences, 1994
 Licensed Acupuncturist

Xiajing Zhou.....Acupuncture
 MD (China), Shandong Medical University, 1983
 MS (China), Shanghai University of Traditional Chinese Medicine, 1989
 MSOM, Midwest College of Oriental Medicine, 2008
 Licensed Acupuncturist

Yu Zhu.....Acupuncture
 MD (China), Gansu College of Traditional Chinese Medicine, 1983
 Licensed Acupuncturist

Adjunct and Visiting Faculty

Katherine Bogaard.....	Lecturer, ND Program
BA, Whittier College, 2007	
ND, National University of Health Sciences, 2012	
Thomas B. Clark.....	Diagnostic Imaging
BS, University of Miami, 1975	
BS, DC, National College of Chiropractic, 1977, 1978	
Ryan Diana.....	Chiropractic Practice
BPS, DC, New York Chiropractic College, 2010, 2012	
Jason Gibson.....	Chiropractic Practice
BGS, Indiana University, 2005	
DC, National University of Health Sciences, 2010	
Janet Lintala.....	Chiropractic Practice
BS, The Ohio State University, 1981	
DC, National University of Health Sciences, 1994	
Jason Napuli.....	Chiropractic Practice
BA, City University of New York at Brooklyn College, 1999	
DC, New York Chiropractic College, 2003	
MBA, Binghamton University Graduate School of Management, 2006	
Charles R. Portwood.....	Chiropractic Practice
BS, Oklahoma Christian University of Science and Arts, 1984	
BS, DC, Logan College of Chiropractic, 1991	
David Radford.....	Chiropractic Practice
BS, Robert Morris College, 1972	
DC, National College of Chiropractic, 1977	
MS, National University of Health Sciences, 2009	
Joel Shepperd.....	Clinical Sciences
BA, University of California at Santa Cruz, 1969	
MD, University of Illinois College of Medicine, 1973	
Gary Tarola.....	Chiropractic Orthopedics
BA, Marshall University, 1973	
DC, Palmer College of Chiropractic, 1976	
Kristine Tohtz.....	Pediatrics/Acupuncture
BS, University of Illinois, Urbana-Champaign, 1996	
BS, DC, MAc, National University of Health Sciences, 1999, 2001, 2014	
Certified, Pediatrics, Academy of Family Practice in Pregnancy, ICPA	
Diplomate: American Board of Chiropractic Acupuncture	

Students with Instructional Duties

Residents

Rishi Bodalia.....Diagnostic Imaging
BS, McMaster University 2014

Joseph Heston.....Diagnostic Imaging
BS, Loras College, 2013
DC, Palmer College of Chiropractic, 2017

Fellows

Haley Doherty.....Clinical Research
BS, Mississippi State University, 2013

Katherine Emrich.....Anatomy
BS, Bradley University, 2015

Michael Robinson.....Clinical Sciences
BS, Benedictine University, 2013

Standing Committees of the University

The President of the University is an ex-officio member of all committees.

President's Alumni Advisory Council

Darren Hancock, DC, Chair
Shawn Breton, DC
Richard Fay, DC
Olivia Friedman, LAc, MSOM

Administrative Liaisons:

Daniel Driscoll, DC
Tracy McHugh, BS, MBA
Ron Mensching, BS
Randy Swenson, DC, MHPE

University Council

Tracy McHugh, MBA, Co-Chair
Randy Swenson, DC, MHPE, Co-Chair
Ron Mensching, BS, Vice-Chair
Jerrilyn Cambron, DC, PhD
Nicholas Chancellor, MS, DC
Gregory Cramer, DC, PhD
Daniel Driscoll, DC
Izabela Dubak, MBA
Mark Galvanoni, BS
Patricia Genardo, MA, MLIS
Jenna Glenn, MS, DC, ND
Claire Johnson, MEd, DC, PhD
Theodore Johnson, MS, DC
Yesenia Maldonado, MBA
Robert Shiel, PhD
Daniel Strauss, DC
Victoria Sweeney, MEd
Sue Unger, CPA
Marc Yambao, BS
Andrew Wozniak, BS
Director of Alumni and Development
Student Council President
Faculty Senate Chair
Faculty Member at Large

Faculty Senate

14 elected faculty members

Academic Assessment

Thomas Grieve, DC, MPH, Chair
Robert Appleyard, MS, PhD
Christopher Arick, DC, MS
Kevin Curtin, DC
Anna Jurik, DC
Marc McRae, MSc, DC
Nakiesha Pearson, DC, ND, MS
Candace Passi, PhD
Derek Schramm, PhD

Fraser Smith, MA, ND
Zhanxiang Wang, MD (China), PhD (China)
Consultant:
Nicholas Chancellor, DC, MS

Academic Standards, Grades and Records

Kristina Connor, ND, Chair
Antonio Bifero, MS, MBA, DC
Amanda Bose, DC, ND
Manuel Duarte, MSAc, DC
Michael Fergus, DC
Terry Elder, DC
Muhammad Khan, MD (Pakistan)
Mackenzie Ott, PhD
Candace Passi, PhD
Faculty-at-Large Member
Alternates:
Janet Kelly, PhD
Yuri Korvatko, DC
Yihyun Kwon, PhD, DC, MSOM, LAc
Mark Weiland, DC
Joseph Vazquez, DC
Consultants:
Jerrilyn Cambron, DC, MPH, PhD, LMT
Izabela Dubak, MBA
Yesenia Maldonado, MBA
Daniel Strauss, DC
Robert Shiel, PhD
Marc Yambao, BS

Admissions

Victoria Sweeney, MEd, Chair
Christopher Arick, DC, MS
Patricia Coe, DC, ND, MSACP
Susan Darby, PhD
Teri Hatfield, MBA
Yesenia Maldonado, MBA
Sridharan Manalavan, MSc
Candace Passi, PhD
Fraser Smith, MA, ND
Zhanxiang Wang, MD (China), PhD
Marc Yambao, BS
Consultant:
Izabela Dubak, MBA

Animal Care and Use

Gregory Cramer, DC, PhD, Chair
Antonio Bifero, MBA, DC, MS
Michelle Ennsman, DC, ND
Pedro Rivera, DVM
2 Public Members
Student

Clinic Systems Risk Management

Manuel Duarte, MSAc, DC, Chair
Jennifer Green, ND
Hyundo Kim, PhD, MSOM, LAc
Teri Reinke, DC, MS
Robert Shiel, PhD
Consultant:
Director of MIS

Clinical Clerkship

Theodore Johnson, DC, MS, Chair
Brian Anderson, DC, MS
Christopher Arick, DC, MS
Amanda Bose, DC, ND
Nicholas Chancellor, MS, DC
Manuel Duarte, MSAc, DC
Hyundo Kim, PhD, MSOM, LAc
Tari Reinke, DC, MS
Fraser Smith, MA, ND
Joseph Vazquez, ND

Zhanxiang Wang, MD (China), PhD, LAc

Clinical Quality Management

Theodore Johnson, DC, MS, Chair
Christopher Arick, DC, MS
Amanda Bose, DC, ND
Patricia Coe, DC, ND, MSACP
W. Scott Harrison, DC
Hyundo Kim, PhD, MSOM, LAc
Lorae Kornaus
Erin Quinlan, DC, MS
Fraser Smith, MA, ND
Zhanxiang Wang, MD (China), PhD, LAc

Curriculum

Jenna Glenn, MS, DC, ND, Co-Chair
Robert Shiel, PhD, Co-Chair
Daniel Strauss, DC, Co-Chair
Robert Appleyard, PhD
Christopher Arick, DC, MS
Jerrilyn Cambron, DC, MPH, PhD, CMT
Nicholas Chancellor, MS, DC
Patricia Coe, DC, ND, MSACP
Kristina Conner, ND, MSOM

Gregory Cramer, DC, PhD
Manuel Duarte, MSAc, DC
Steven Freeman, DC
Theodore Johnson, DC, MS
Sridharan Manavalan, MSc
Christopher Olsen, MS
Candace Passi, PhD
Fraser Smith, MA, ND
Zhanxiang Wang, MD (China), PhD, LAc
Student (Allied Health)
Student (First Professional)
Student (Lincoln College)
Consultant:
Izabela Dubak, MBA
Randy Swenson, DC, MPHE
Observer:
Patricia Genardo, MA, MLIS

Faculty and Staff Development

Lorinda Sorensen, MS, ND, Co-Chair
Lynn Zoufal, MBA, CPA, Co-Chair
Lauren Evitt
Frank Frydrych, DC
Patricia Genardo, MA, MLIS
Pam Jones, BA, MFA
Muhammad Khan, MD (Pakistan)
Krissé Lively, BA
Donn Nelson
Chris Olsen, MS
Andrew Wozniak, BS

Financial Assistance and Scholarships

Marc Yambao, BS, Chair
Deb Bechtel
Izabela Dubak, MBA
Teri Hatfield, MBA
Michelle Jourdan, DC
Derek Schramm, PhD
Sue Unger, CPA
Representative from Alumni and Development
Consultant:
Tracy McHugh, BS, MBA

Financial Aid / Satisfactory Academic Progress

Ron Mensching, BS, Chair
Robert Appleyard, PhD
Jerrilyn Cambron, DC, MPH, PhD, CMT
Sridharan Manavalan, MSc
Marc Yambao, BS

Infection Control and Chemical Safety

Antonio Bifero, MBA, DC, MS, Chair
Hui Yan Cai, MD, PhD
Mark Galvanoni, BS
Nagehan Pakasticali, MD (Turkey), SM (Turkey)
Public Member
Mark Wieland, DC
Andrew Wozniak, BS
Consultant:
 Theodore Johnson, DC, MS

Institutional Review Board

Thomas Grieve, DC, MPH, Chair
Jennifer Green, ND
Brett Martin, DC
Joseph Vazquez, ND
2 Public Members
Student Representative

Learning Resource Center

Patricia Genardo, MA, MLIS, Chair
Russ Iwami, MALS
Kurt Faler, AAS
Robin Fan, MS
Brett Martin, DC
Ron Mensching, BS
Erin Myover-Piotrowski, BA, MT
Lorinda Sorensen, MS, ND
Student
Consultants:
 Yesenia Maldonado, MBA
 Claire Johnson, DC, MEd, PhD

Lecture and Cultural Affairs

Deb Bechtel, Chair
Diana Bacigalupo
Mark Galvanoni, BS
Pam Jones, MFA
Holly Kapsalis, MSIMC
Erin Myover-Piotrowski, BA, MT
Donn Nelson
Lorinda Sorensen, MS, ND
Student
Leah Weber, DC

Massage Therapy Advisory

Jerrilyn Cambron, DC, MPH, PhD, CMT, Chair
Alumnus
Patricia Coe, DC, ND, MSACP
Employer
Leah Weber, DC
Public Member
Student
Consultant:
 Randy Swenson, MHPE, DC

Post-professional, Graduate and Continuing Education

Jenna Glenn, MS, DC, ND, Chair
Hui Yan Cai, MD (China), PhD (China)
Carlo Guadagno, DC
Yuri Korvatko, DC
Joseph Vazquez, ND
Xiaojing Zhou, MD (China)

Rank and Promotion

William Bogar, DC, DACBR, Chair
Chris Arick, DC, MS
Michelle Jourdan, DC
Muhammad Khan, MD (Pakistan)
Fraser Smith, MA, ND
Xiaojing Zhou, MD (China)
Alternates:
 Manual Duarte, DC, MSAc, DABCO, DACBSP
 Tari Reinke, DC

Research

Gregory Cramer, DC, PhD, Chair
Jerrilyn Cambron, DC, MPH, PhD, CMT
Jennifer Green, ND
Dana Madigan, MPH, DC
Nagehan Pakasticali, MD (Turkey), SM (Turkey)
Consultants:
 Claire Johnson, MEd, DC, PhD
 Yihyun Kwon, PhD, DC, MSOM, LAc

Residency

Robert Shiel, PhD, Chair
 Christopher Arick, DC, MS
 Brian Benttenchuk, DC
 Jamine Blesoff, ND
 William Bogar, DC, DACBR
 Jerrilyn Cambron, DC, MPH, PhD, CMT
 Manuel Duarte, DC, MSAC, DABCO, DACBSP
 Theodore Johnson, DC, MS
 Yuri Kurvatko, DC
 Fraser Smith, MA, ND
 Zhanxiang Wang, MD (China), PhD (China)

Safety

Ron Mensching, BS, Co-Chair
 Daniel Driscoll, DC, Co-Chair
 Antonio Bifero, DC, MS, MBA
 Mark Galvanoni, BS
 Theodore Johnson, DC, MS
 Pam Jones, BA, MFA
 Marina Machini, MD (Russia)
 Yesenia Maldonado, MBA
 Victoria Sweeney, MEd
 Andrew Wozniak, BS
 Consultant:
 Tracy McHugh, MBA

Self-Study Committee

Nicholas Chancellor, DC, MS, Chair
 Christopher Arick, DC, MS
 Yesenia Maldonado, MBA
 Candace Passi, PhD
 Fraser Smith, MA, ND
 Zhanxiang Wang, MD (China), PhD
 Erin Myover-Piotrowski, BFA, CMT
 Student Representative

Title IX Employee Hearing Committee

Robert Shiel, PhD, Chair
 Nicholas Chancellor, DC, MS
 Mark Galvanoni, BS
 Patricia Genardo, MA, MLIS
 Daniel Strauss, DC
 Victoria Sweeney, Med
 Randy Swenson, DC, MHPE
 Sue Unger, CPA
 Marc Yambao, BS
 Andrew Wozniak, BS
 Director of Alumni and Development

Tenure

Marc McRae, DC, LDN, Chair
 Robert Appleyard, PhD
 Kristina Conner, ND, MSOM
 Kevin Curtin, DC
 Russ Iwami, MALS
 Lorinda Sorenson, ND, MSAC
 Alternates:
 Kristine Aikenhead, DC
 Robert Humphreys, MS, DC

University Discipline

Daniel Driscoll, DC, Chair
 Patricia Coe, DC, MS, ND
 Sridharan Manavalan, MSc
 Tari Reinke, MS, DC
 Zhanxiang Wang, MD (China), PhD (China)
 Student Council Officer
 Alternates:
 Steven Freeman, DC, CHCQM
 Nakiesha Pearson, DC, ND
 Consultants:
 Izabela Dubak, MBA
 Yesenia Maldonado, MBA



Bulletin

2018-2019

Calendar and Maps

Fall 2018 Trimester

SEPTEMBER

SU	MO	TU	WE	TH	FR	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

OCTOBER

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

NOVEMBER

SU	MO	TU	WE	TH	FR	SA
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

DECEMBER

SU	MO	TU	WE	TH	FR	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Aug. 31.....	New Student Orientation-Illinois
Sept. 3.....	Labor Day Holiday
Sept. 4.....	New Student Orientation-Florida
Sept. 4.....	Start of Fall Trimester
Sept. 7.....	Last day to add classes. No admission to classes after this date.
Oct. 12.....	Last day to drop CAHS Session I courses (by 5pm CST)
Oct. 22-23.....	CAHS Fall I accelerated courses final exams
Oct. 24.....	CAHS Fall II accelerated courses start
Nov. 5.....	Registration for Spring Trimester begins
Nov. 12.....	Veteran's Day Holiday
Nov. 23.....	Last day to drop 15-week courses (by 5pm CST)
Nov. 22-23.....	Thanksgiving Holiday
Dec. 7.....	Last day to drop CAHS Session II courses (by 5pm CST)
Dec. 12-13.....	CAHS Fall II accelerated courses final exams
Dec. 14.....	Commencement
Dec. 14.....	End of trimester
Dec. 18.....	End of trimester grades due

**Please note that these dates may be subject to change.*

Spring 2019 Trimester

JANUARY

SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY

SU	MO	TU	WE	TH	FR	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

MARCH

SU	MO	TU	WE	TH	FR	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

APRIL

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

- Jan. 4.....New Student Orientation-Illinois
- Jan. 7.....New Student Orientation-Florida
- Jan. 7.....Start of Spring Trimester
- Jan. 11.....Last day to add classes. No admission to classes after this date.
- Jan. 21.....Martin Luther King Day Holiday
- Feb. 15.....Last day to drop CAHS Session I courses (by 5pm CST)
- Feb. 18.....President’s Day Holiday
- Feb. 25-26.....CAHS Spring I accelerated courses final exams
- Feb. 27.....CAHS Spring II accelerated courses start
- March 11.....Registration for Summer Trimester begins
- March 29.....Last day to drop 15-week courses (by 5pm CST)
- April 12.....Last day to drop CAHS Session II courses (by 5pm CST)
- April 17-18.....CAHS Spring II accelerated courses final exams
- April 19.....Commencement
- April 19.....End of trimester
- April 24.....End of trimester grades due

**Please note that these dates may be subject to change.*

Summer 2019 Trimester

MAY							JUNE						
SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA
			1	2	3	4							1
5	6	7	8	9	10	11	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29
							30						

JULY							AUGUST						
SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28	29	30	31

- May 3.....New Student Orientation-Illinois
- May 6.....New Student Orientation-Florida
- May 6.....Start of Summer Trimester
- May 10.....Last day to add classes. No admission to classes after this date.
- May 27.....Memorial Day Holiday
- June 14.....Last day to drop CAHS Session I courses (by 5pm CST)
- June 24-25.....CAHS Summer I accelerated courses final exams
- June 26.....CAHS Summer II accelerated courses start
- July 4.....Independence Day Holiday
- July 8.....Registration for Fall Trimester begins
- July 26.....Last day to drop 15-week courses (by 5pm CST)
- Aug. 9.....Last day to drop CAHS Session II courses (by 5pm CST)
- Aug. 14-15.....CAHS Summer II accelerated courses final exams
- Aug. 16.....Commencement
- Aug. 16.....End of trimester
- Aug. 21.....End of trimester grades due

**Please note that these dates may be subject to change.*

Fall 2019 Trimester

SEPTEMBER

SU	MO	TU	WE	TH	FR	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER

SU	MO	TU	WE	TH	FR	SA
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6	7	8	9	10	11	12
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20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER

SU	MO	TU	WE	TH	FR	SA
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3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER

SU	MO	TU	WE	TH	FR	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Aug. 30.....	New Student Orientation-Illinois
Sept. 2.....	Labor Day Holiday
Sept. 3.....	New Student Orientation-Florida
Sept. 3.....	Start of Fall Trimester
Sept. 6.....	Last day to add classes. No admission to classes after this date.
Oct. 11.....	Last day to drop CAHS Session I courses (by 5pm CST)
Oct. 21-22.....	CAHS Fall I accelerated courses final exams
Oct. 23.....	CAHS Fall II accelerated courses start
Nov. 11.....	Veteran's Day Holiday
Nov. 18.....	Registration for Spring Trimester begins
Nov. 22.....	Last day to drop 15-week courses (by 5pm CST)
Nov. 28-29.....	Thanksgiving Holiday
Dec. 6.....	Last day to drop CAHS Session II courses (by 5pm CST)
Dec. 11-12.....	CAHS Fall II accelerated courses final exams
Dec. 13.....	Commencement
Dec. 13.....	End of trimester
Dec. 17.....	End of trimester grades due

**Please note that these dates may be subject to change.*

Spring 2020 Trimester

JANUARY

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

FEBRUARY

SU	MO	TU	WE	TH	FR	SA
						1
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16	17	18	19	20	21	22
23	24	25	26	27	28	29

MARCH

SU	MO	TU	WE	TH	FR	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

APRIL

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

- Jan. 10.....New Student Orientation-Illinois
- Jan. 13.....New Student Orientation-Florida
- Jan. 13.....Start of Spring Trimester
- Jan. 17.....Last day to add classes. No admission to classes after this date.
- Jan. 20.....Martin Luther King Day Holiday
- Feb. 17.....President’s Day Holiday
- Feb. 21.....Last day to drop CAHS Session I courses (by 5pm CST)
- March 2-3.....CAHS Spring I accelerated courses final exams
- March 4.....CAHS Spring II accelerated courses start
- March 23.....Registration for Summer Trimester begins
- April 3.....Last day to drop 15-week courses (by 5pm CST)
- April 17.....Last day to drop CAHS Session II courses (by 5pm CST)
- April 22-23.....CAHS Spring II accelerated courses final exams
- April 24.....Commencement
- April 24.....End of trimester
- April 29.....End of trimester grades due

**Please note that these dates may be subject to change.*

Summer 2020 Trimester

MAY							JUNE						
SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA
					1	2		1	2	3	4	5	6
3	4	5	6	7	8	9	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28	29	30				
31													

JULY							AUGUST						
SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA
			1	2	3	4							1
5	6	7	8	9	10	11	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	29
							30	31					

- May 8.....New Student Orientation-Illinois
- May 11.....New Student Orientation-Florida
- May 11.....Start of Summer Trimester
- May 15.....Last day to add classes. No admission to classes after this date.
- May 25.....Memorial Day Holiday
- June 19.....Last day to drop CAHS Session I courses (by 5pm CST)
- June 29-30.....CAHS Summer I accelerated courses final exams
- July 1.....CAHS Summer II accelerated courses start
- July 3.....Independence Day Holiday
- July 20.....Registration for Fall Trimester begins
- July 31.....Last day to drop 15-week courses (by 5pm CST)
- Aug. 14.....Last day to drop CAHS Session II courses (by 5pm CST)
- Aug. 19-20.....CAHS Summer II accelerated courses final exams
- Aug. 21.....Commencement
- Aug. 21.....End of trimester
- Aug. 26.....End of trimester grades due

**Please note that these dates may be subject to change.*

Fall 2020 Trimester

SEPTEMBER

SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER

SU	MO	TU	WE	TH	FR	SA
				1	2	3
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11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

SU	MO	TU	WE	TH	FR	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER

SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

- Sept. 4.....New Student Orientation-Illinois
- Sept. 7.....Labor Day Holiday
- Sept. 8.....New Student Orientation-Florida
- Sept. 8.....Start of Fall Trimester
- Sept. 11.....Last day to add classes. No admission to classes after this date.
- Oct. 16.....Last day to drop CAHS Session I courses (by 5pm CST)
- Oct. 26-27.....CAHS Fall I accelerated courses final exams
- Oct. 28.....CAHS Fall II accelerated courses start
- Nov. 11.....Veteran's Day Holiday
- Nov. 16.....Registration for Spring Trimester begins
- Nov. 25.....Last day to drop 15-week courses (by 5pm CST)
- Nov. 26-27.....Thanksgiving Holiday
- Dec. 11.....Last day to drop CAHS Session II courses (by 5pm CST)
- Dec. 16-17.....CAHS Fall II accelerated courses final exams
- Dec. 18.....Commencement
- Dec. 18.....End of trimester
- Dec. 22.....End of trimester grades due

**Please note that these dates may be subject to change.*

Spring 2021 Trimester

JANUARY

SU	MO	TU	WE	TH	FR	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FEBRUARY

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

MARCH

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

APRIL

SU	MO	TU	WE	TH	FR	SA
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

- Jan. 8.....New Student Orientation-Illinois
- Jan. 11.....New Student Orientation-Florida
- Jan. 11.....Start of Spring Trimester
- Jan. 15.....Last day to add classes. No admission to classes after this date.
- Jan. 18.....Martin Luther King Day Holiday
- Feb. 15.....President’s Day Holiday
- Feb. 19.....Last day to drop CAHS Session I courses (by 5pm CST)
- March 1-2.....CAHS Spring I accelerated courses final exams
- March 3.....CAHS Spring II accelerated courses start
- March 10.....Registration for Summer Trimester begins
- April 2.....Last day to drop 15-week courses (by 5pm CST)
- April 16.....Last day to drop CAHS Session II courses (by 5pm CST)
- April 21-22.....CAHS Spring II accelerated courses final exams
- April 23.....Commencement
- April 23.....End of trimester
- April 27.....End of trimester grades due

**Please note that these dates may be subject to change.*

Summer 2021 Trimester

MAY							JUNE						
SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA
						1			1	2	3	4	5
2	3	4	5	6	7	8	6	7	8	9	10	11	12
9	10	11	12	13	14	15	13	14	15	16	17	18	19
16	17	18	19	20	21	22	20	21	22	23	24	25	26
23	24	25	26	27	28	29	27	28	29	30			
30	31												

JULY							AUGUST						
SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA
				1	2	3	1	2	3	4	5	6	7
4	5	6	7	8	9	10	8	9	10	11	12	13	14
11	12	13	14	15	16	17	15	16	17	18	19	20	21
18	19	20	21	22	23	24	22	23	24	25	26	27	28
25	26	27	28	29	30	31	29	30	31				

May 7.....	New Student Orientation-Illinois
May 10.....	New Student Orientation-Florida
May 10.....	Start of Summer Trimester
May 14.....	Last day to add classes. No admission to classes after this date.
May 31.....	Memorial Day Holiday
June 18.....	Last day to drop CAHS Session I courses (by 5pm CST)
June 28-29.....	CAHS Summer I accelerated courses final exams
June 30.....	CAHS Summer II accelerated courses start
July 5.....	Independence Day Holiday (observed)
July 12.....	Registration for Fall Trimester begins
July 30.....	Last day to drop 15-week courses (by 5pm CST)
Aug. 13.....	Last day to drop CAHS Session II courses (by 5pm CST)
Aug. 18-19.....	CAHS Summer II accelerated courses final exams
Aug. 20.....	Commencement
Aug. 20.....	End of trimester
Aug. 24.....	End of trimester grades due

**Please note that these dates may be subject to change.*

Fall 2021 Trimester

SEPTEMBER

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

OCTOBER

SU	MO	TU	WE	TH	FR	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

NOVEMBER

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

DECEMBER

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

- Sept. 3.....New Student Orientation-Illinois
- Sept. 6.....Labor Day Holiday
- Sept. 7.....New Student Orientation-Florida
- Sept. 7.....Start of Fall Trimester
- Sept. 10.....Last day to add classes. No admission to classes after this date.
- Oct. 15.....Last day to drop CAHS Session I courses (by 5pm CST)
- Oct. 25-26.....CAHS Fall I accelerated courses final exams
- Oct. 27.....CAHS Fall II accelerated courses start
- Nov. 8.....Registration for Spring Trimester begins
- Nov. 11.....Veteran’s Day Holiday
- Nov. 25-26.....Thanksgiving Holiday
- Nov. 26.....Last day to drop 15-week courses (by 5pm CST)
- Dec. 10.....Last day to drop CAHS Session II courses (by 5pm CST)
- Dec. 15-16.....CAHS Fall II accelerated courses final exams
- Dec. 17.....Commencement
- Dec. 17.....End of trimester
- Dec. 21.....End of trimester grades due

**Please note that these dates may be subject to change.*

Spring 2022 Trimester

JANUARY

SU	MO	TU	WE	TH	FR	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

FEBRUARY

SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

MARCH

SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

APRIL

SU	MO	TU	WE	TH	FR	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

- Jan. 7.....New Student Orientation-Illinois
- Jan. 10.....New Student Orientation-Florida
- Jan. 10.....Start of Spring Trimester
- Jan. 14.....Last day to add classes. No admission to classes after this date.
- Jan. 17.....Martin Luther King Day Holiday
- Feb. 18.....Last day to drop CAHS Session I courses (by 5pm CST)
- Feb. 21.....President’s Day Holiday
- Feb. 28 – March 1.....CAHS Spring I accelerated courses final exams
- March 2.....CAHS Spring II accelerated courses start
- March 14.....Registration for Summer Trimester begins
- April 1.....Last day to drop 15-week courses (by 5pm CST)
- April 15.....Last day to drop CAHS Session II courses (by 5pm CST)
- April 21-22.....CAHS Spring II accelerated courses final exams
- April 22.....Commencement
- April 22.....End of trimester
- April 26.....End of trimester grades due

**Please note that these dates may be subject to change.*

Summer 2022 Trimester

MAY

SU	MO	TU	WE	TH	FR	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE

SU	MO	TU	WE	TH	FR	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

JULY

SU	MO	TU	WE	TH	FR	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

AUGUST

SU	MO	TU	WE	TH	FR	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	28	30	31			

- May 6.....New Student Orientation-Illinois
- May 9.....New Student Orientation-Florida
- May 9.....Start of Summer Trimester
- May 13.....Last day to add classes. No admission to classes after this date.
- May 30.....Memorial Day Holiday
- June 17.....Last day to drop CAHS Session I courses (by 5pm CST)
- June 27-28.....CAHS Summer I accelerated courses final exams
- June 29.....CAHS Summer II accelerated courses start
- July 4.....Independence Day Holiday (Observed)
- July 11.....Registration for Fall Trimester begins
- July 29.....Last day to drop 15-week courses (by 5pm CST)
- Aug. 12.....Last day to drop CAHS Session II courses (by 5pm CST)
- Aug. 18-19.....CAHS Summer II accelerated courses final exams
- Aug. 19.....Commencement
- Aug. 19.....End of trimester
- Aug. 23.....End of trimester grades due

**Please note that these dates may be subject to change.*

Fall 2022 Trimester

SEPTEMBER							OCTOBER						
SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA
				1	2	3							1
4	5	6	7	8	9	10	2	3	4	5	6	7	8
11	12	13	14	15	16	17	9	10	11	12	13	14	15
18	19	20	21	22	23	24	16	17	18	19	20	21	22
25	26	27	28	29	30		23	24	25	26	27	28	29
							30	31					

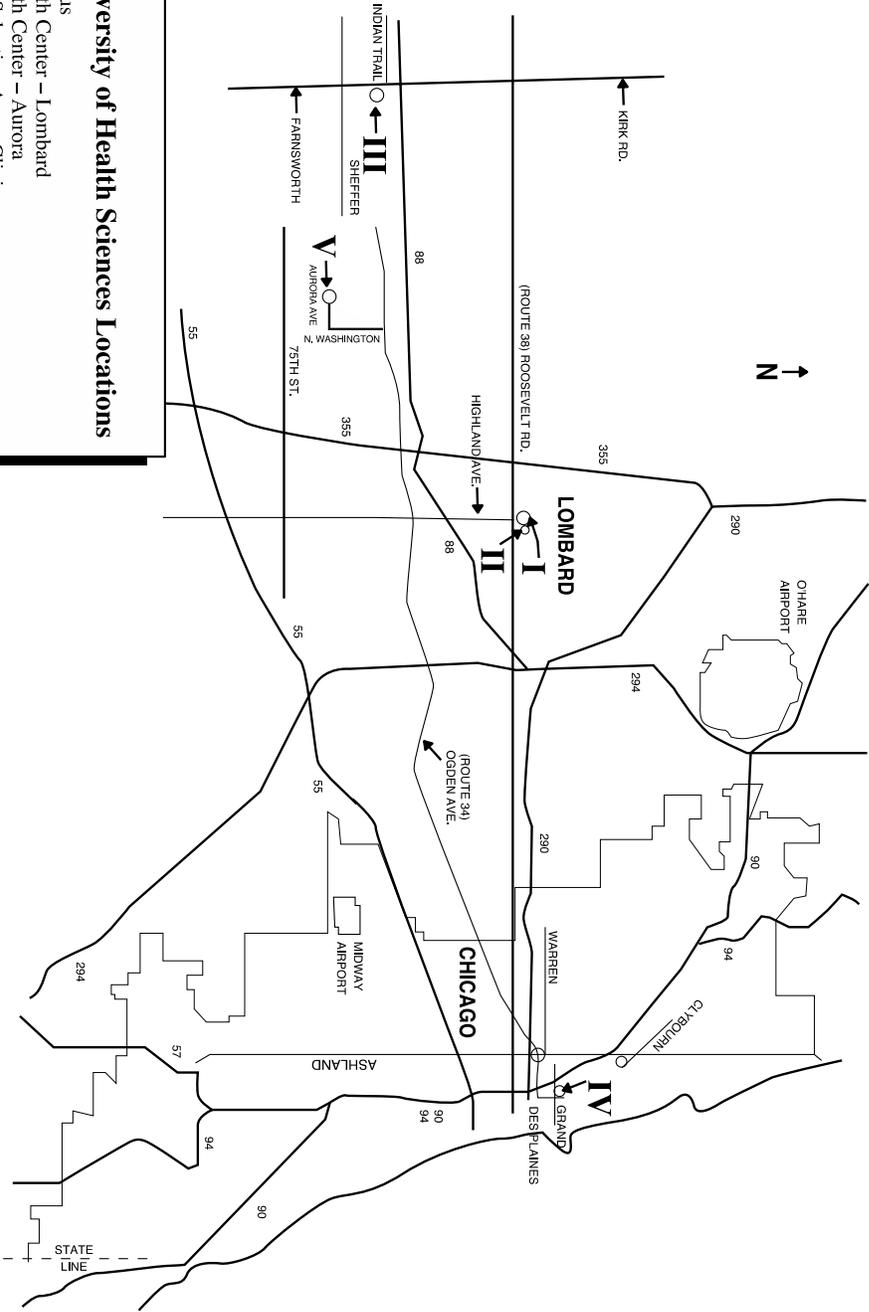
NOVEMBER							DECEMBER						
SU	MO	TU	WE	TH	FR	SA	SU	MO	TU	WE	TH	FR	SA
		1	2	3	4	5					1	2	3
6	7	8	9	10	11	12	4	5	6	7	8	9	10
13	14	15	16	17	18	19	11	12	13	14	15	16	17
20	21	22	23	24	25	26	18	19	20	21	22	23	24
27	28	29	30				25	26	27	28	29	30	31

- Sept. 2.....New Student Orientation-Illinois
- Sept. 5.....Labor Day Holiday
- Sept. 6.....New Student Orientation-Florida
- Sept. 6.....Start of Fall Trimester
- Sept. 9.....Last day to add classes. No admission to classes after this date
- Oct. 14.....Last day to drop CAHS Session I courses (by 5pm CST)
- Oct. 24-25.....CAHS Fall I accelerated courses final exams
- Oct. 26.....CAHS Fall II accelerated courses start
- Nov. 7.....Registration for Spring Trimester begins
- Nov. 11.....Veteran’s Day Holiday
- Nov. 24-25.....Thanksgiving Holiday
- Nov. 25.....Last day to drop 15-week courses (by 5pm CST)
- Dec. 9.....Last day to drop CAHS Session II courses (by 5pm CST)
- Dec. 15-16.....CAHS Fall II accelerated courses final exams
- Dec. 16.....Commencement
- Dec. 16.....End of trimester
- Dec. 20.....End of trimester grades due

**Please note that these dates may be subject to change.*

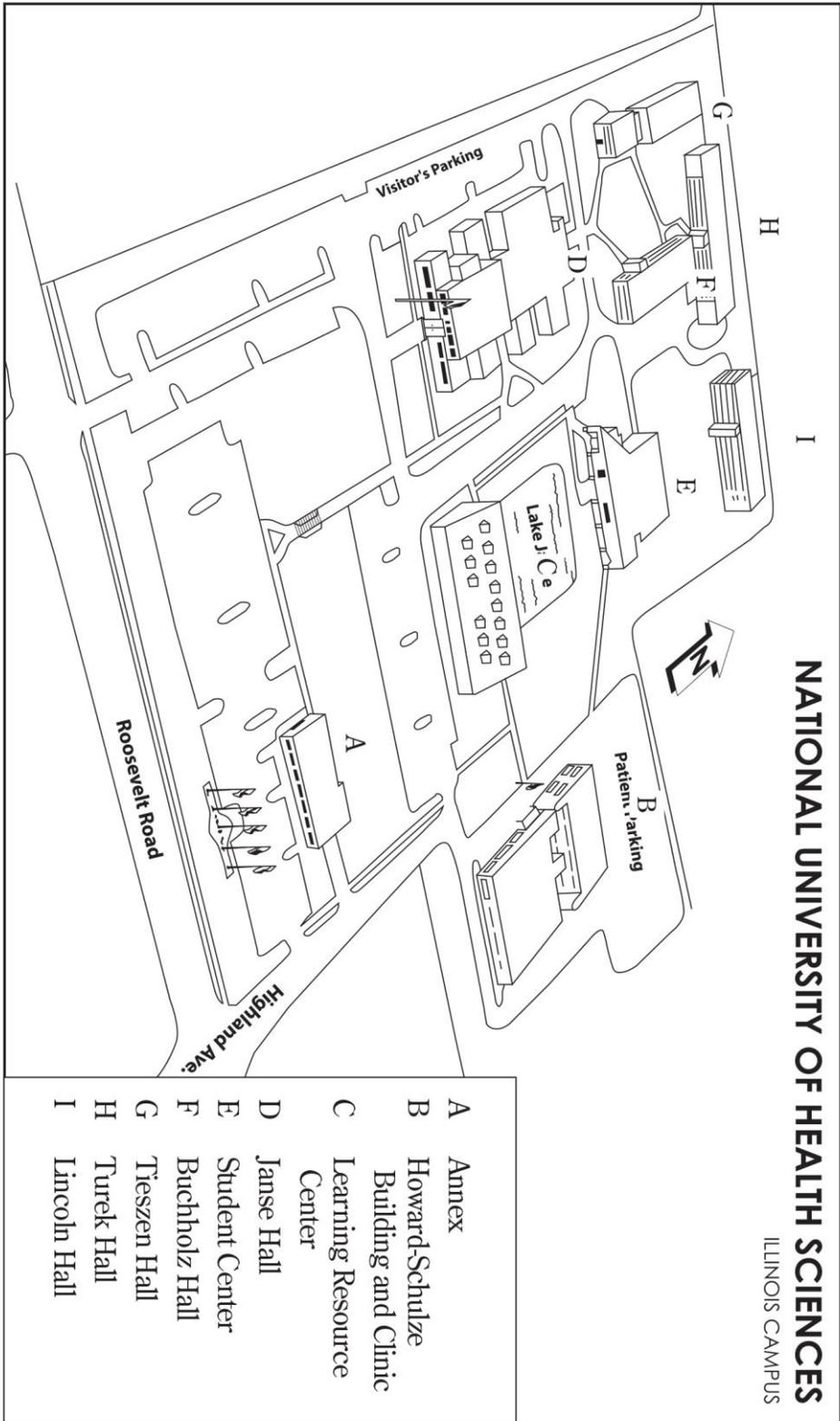
MAPS

- National University of Health Sciences Locations**
- I. Main Campus
 - II. Whole Health Center – Lombard
 - III. Whole Health Center – Aurora
 - IV. Des Plaines Salvation Army Clinic
 - V. Whole Health Center – Naperville



NATIONAL UNIVERSITY OF HEALTH SCIENCES

ILLINOIS CAMPUS



- A Annex
- B Howard-Schulze Building and Clinic
- C Learning Resource Center
- D Janse Hall
- E Student Center
- F Buchholz Hall
- G Tieszen Hall
- H Turek Hall
- I Lincoln Hall

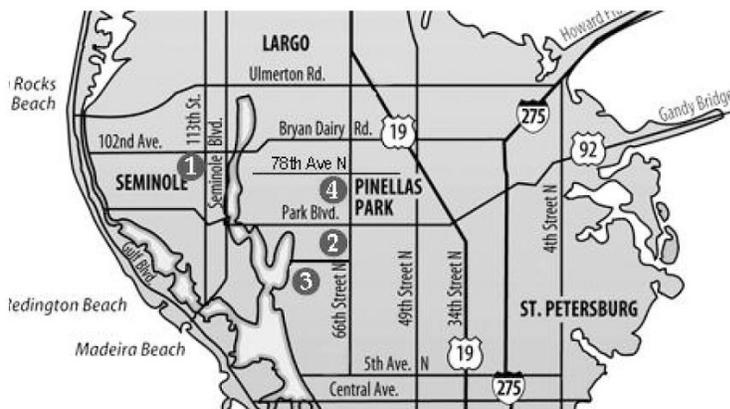
**National University of Health Sciences Florida locations
on the campuses of St. Petersburg College
in conjunction with the SPC University Partnership Center**

1. Dean's Office
9200 113th Street N
Seminole, FL 33772-2800
1-727-394-6217

2. Caruth Health Education Center
7200 66th Street N
Pinellas Park, FL 33781-4005
1-727-341-3760

3. Health Education Center Annex
6698 68th Avenue N
Pinellas Park, FL 33781-5015
1-727-803-6120

4. NUHS Whole Health Center – Pinellas Park
6630 78th Avenue N
Pinellas Park, FL 33781
1-727-873-7870



St. Petersburg College

