



# **Institutional and Program Accreditation**

#### Northwest Commission on Colleges and Universities (NWCCU)

National University of Natural Medicine is accredited by the Northwest Commission on Colleges and Universities. Accreditation of an institution of higher education by NWCCU indicates that it meets or exceeds criteria for the assessment of institutional quality evaluated through a peer review process. An accredited college or university is one that has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial, but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

Inquiries regarding an institution's accredited status by NWCCU should be directed to the administrative staff of the institution. Individuals may also contact:

NWCCU

8060 165th Ave. NE, Suite 100, Redmond, WA 98052 425.558.4224  $\mid$  nwccu.org

#### Council on Naturopathic Medical Education (CNME)

The degree program in naturopathic medicine is accredited by the Council on Naturopathic Medical Education, a professional accrediting agency for naturopathic medicine programs.

**CNME** 

P.O. Box 178, Great Barrington, MA 01230 413.528.8877 | cnme.org

# The Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM)

NUNM's Master of Science in Oriental Medicine program is accredited under master's degree standards by the Accreditation Commission for Acupuncture and Oriental Medicine. ACAOM is a professional accrediting agency for programs preparing acupuncture and Oriental medicine practitioners.

ACAOM 8941 Aztec Dr., Eden Prairie, MN 55347 952.212.2434 | acaom.org

Other sources of information available to prospective students about NUNM include the Exploration Day program, campus visits and nunm.edu.

# For further information regarding NUNM programs, please contact:

Office of Admissions 049 SW Porter St., Portland, OR 97201 503.552.1660 | admissions@nunm.edu | nunm.edu

Information regarding a consumer or civil complaint can be filed

Oregon Department of Justice Consumer Protection Section 1162 Court St. NE, Salem, OR 97301-4096 1.877.877.9392 | help@oregonconsumer.gov Information regarding any violation of civil rights is available at:

U.S. Department of Education – Office for Civil Rights 400 Maryland Ave. SW, Washington, DC 20202 800.421.3481 | ed.gov/ocr

Student complaints, or other allegations that the university has failed or is failing to comply with the provisions of any laws or rules, can be filed with the Higher Education Coordinating Commission to investigate and resolve complaints:

State of Oregon: Higher Education Coordinating Commission (HECC)

Office of Private Postsecondary Education 775 Court St. NE, Salem, OR 97301 503.947.5716 | oregon.gov/highered/pages/index.aspx#

# **Equal Opportunity Statement**

NUNM complies with the Equal Opportunity Act of 1965, American Disabilities Act of 1990, Title IV of the Higher Education Act as federally reauthorized in 1998, and Title IX of the Educational Amendments of 1972. These acts and amendments prohibit discrimination on the basis of age, sex, race, national or ethnic origin, religion or disability, or veteran's status in any of its policies, procedures or practices. NUNM also complies with Oregon state discrimination laws that prohibit discrimination for sexual orientation, marital status, gender identity and family relationship. NUNM adheres to guidelines set forth by the Family Educational Rights and Privacy Act of 1974 (FERPA) and the Health Information Portability and Accountability Act (HIPAA), which pertain to limitations and rights of access to student records (FERPA) and patient-protected health information (HIPAA). To ensure compliance with these requirements, NUNM enacts policies and procedures, and articulates protocols in this catalog, the student and employee handbooks, and departmental policy and procedural

NUNM's nondiscrimination policy covers admission and access to, and treatment and employment in university programs and activities, including but not limited to academic admissions, financial aid, educational services and employment. Title IX prohibits gender-based harassment, which may include acts of verbal, nonverbal or physical aggression, intimidation, or hostility based on sex or sex-stereotyping, even if those acts do not involve conduct of a sexual nature.

The dean of students has been designated to handle inquiries regarding NUNM's Title IX policies and procedures.

#### Title IX Coordinator

Glenn Smith, EdD National University of Natural Medicine 049 SW Porter St., Portland, OR 97201 503.552.1602

Every effort has been made to ensure the catalog's informational accuracy. NUNM regularly reviews its policies to improve the institution and the quality of education provided. Changes to the catalog can be made without prior notice. This catalog is not a contract between NUNM and current or prospective students. This catalog can be downloaded in PDF format at nunm.edu.

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### **NUNM Mission Statement**

To educate and train physicians, practitioners and preprofessionals in the art, science and research of natural medicine

### **NUNM Values**

Respect, integrity, creativity/innovation, commitment, excellence

To guide NUNM's next regional NWCCU accreditation seven-year planning cycle (2018-2025), the university created core themes in support of achieving the NUNM mission, as well as objectives and indicators toward reaching these themes. The core themes, objectives and indicators are reflective of NUNM's overarching strategic plan, *Framework for Action III*, for 2017-2022. The graphic below provides an overview of the core themes and supporting objectives.

### Core Themes

#### **Student Success** Teaching and Learning **Professional Vitality** Support successful learning Deliver education that ensures Promote the success of our student achievement of graduates through our academic, competencies within the art clinical and research endeavors and science of natural medicine practice and research **Objectives** Ensure standards for admission Provide comprehensive and Prepare and support our graduates to work within the effective support to faculty in result in matriculation of students continuously improving their professions for which they who are academically and non-academically prepared for competency as educators are trained the rigors of medical school, graduate school and Deliver curricula that Prepare students to engage in undergraduate degrees enable graduates to achieve all scholarly activities that contribute program outcomes to a culture of inquiry Foster systems that support student success Ensure the inclusion of natural Foster a culturally safe medicine philosophical roots in environment that creates a sense curricula design of belonging

# Greetings from the Office of the President

Dear Prospective Student,

Welcome! You've chosen the best place to begin your journey into the profession of natural medicine. You're taking your first step toward becoming a naturopathic physician, a Chinese medicine practitioner, an integrative medicine researcher, or an expert in nutrition, global health, sports medicine or mental health. You'll soon learn the reason why NUNM is North America's most respected and longest-thriving accredited institution of postsecondary and undergraduate education for natural medicine.

NUNM has been a leader and an innovator since 1956. As the parent institution of naturopathic programs taught in North America, NUNM has educated and trained generations of naturopathic physicians for more than 60 years. Our naturopathic graduates prove the adage that the apple doesn't fall far from the tree. Over the span of decades, they have developed and advanced the concept of holistic health care, challenging long-held biomedical philosophies of care. They are, first and foremost, physicians. But they're also entrepreneurs. Scientific researchers. Hospital administrators. Published writers. Motivational speakers. Professors. Above all, our NDs are healers. And they're changing health care one patient at a time.

NUNM offers a world of opportunity to students seeking to bring profound healing to patients. Our College of Classical Chinese Medicine, founded in 1995, provides the most profound training of classical Chinese medicine offered anywhere in the United States. Both of our accredited degree programs, the Master of Science in Oriental Medicine and Doctor of Science in Oriental Medicine, cultivate clinical practitioners rooted in the ancient tradition of the wise medical scholar. Together with China's Guangxi College, NUNM is leading a worldwide movement to return classical Chinese medicine to the glory of its ancient roots.

Our School of Graduate Studies provides an unparalleled learning environment for students who want to contribute new and exciting solutions to the healthcare challenges of today. NUNM's Master of Science in Integrative Medicine Research, Master of Science in Nutrition, Master of Science in Global Health, and Master of Science in Integrative Mental Health degrees all offer hands-on, experiential training, a learning experience unique to NUNM. Our newest program, Master of Science in Sports Medicine, prepares professionals to work with athletes and other health-conscious individuals to train at their peak capacity.

Then there's NUNM's Helfgott Research Institute, the most respected natural medicine institute in the nation, where renowned research investigators champion critical studies in natural medicine. Students and faculty collaborate with highly regarded Western medical schools on NIH-funded research and interdisciplinary studies,



winning scientific awards and getting published in peerreviewed journals as they advance the natural medicine profession with their innovative research and inquiry.

NUNM's outstanding faculty are celebrated for contributions in their fields as well as their classroom and clinical education excellence. They'll put you through your paces to prepare you for an outstanding career in natural medicine—and they'll do it with skill and sensitivity. They are a powerful force individually and collaboratively in the professional formation of natural medicine in the U.S. and abroad. You will learn from the very best what natural medicine education has to offer.

All of this happens in the nation's most progressive city, known for its healthy lifestyle and leadership in sustainability. Portland is surrounded by the breathtaking beauty of the Pacific Northwest. You can see the snowy cap of Mount Hood from our classroom windows. It is Oregon's highest peak and one spot among many within the rich tapestry of ecosystems just an hour from our rapidly growing campus. Come join us. Bring your hiking boots, your snowboard or surf board—and your sense of adventure. Your life is about to transform.

NUNM will help you succeed in reaching your dreams, from the beginning of your educational journey until you leave with your diploma in hand—and beyond, as you launch your career. Talk to our Admissions counselors; ask a thousand questions. Become a healer, a researcher, an educator, a nutrition coach. Make your mark as health care continues to evolve into a patient-centric model. More and more, everything depends on outstanding, holistic clinical and theoretical knowledge, all focused on the patient. It all starts in Portland. We're waiting for you.

David John Schleid

David J. Schleich, PhD President of NUNM

# **NUNM**—The Home of Natural Medicine

NUNM is proud of its longstanding legacy of academic excellence. Founded in 1956, NUNM is the oldest naturopathic medical school in North America. NUNM's reputation for healthcare innovation and leadership grows as new generations of practitioners and healthcare professionals help change the course of health care in the U.S. through their research, exemplary patient care and publications. NUNM offers medical education programming in naturopathic and classical Chinese medicine, and in related health sciences disciplines. This includes 10 exceptional accredited degree programs—eight postgraduate degrees and two undergraduate degrees.

NUNM is an international leader in the training of naturopathic primary care physicians and Chinese medicine practitioners. While many graduates go on to clinical practice, they are also researchers, professors, public health educators, and political activists bringing natural medicine to the forefront of the national healthcare system. Students throughout the world come to NUNM for the opportunity to work with a faculty world-renowned for their expertise. NUNM cultivates exceptional curricula that offer medical students a rich combination of classroom study, hands-on research and patient care.

In addition to the campus NUNM Health Centers—Lair Hill, which is the largest natural medicine clinic in Oregon, and NUNM Health Centers—Beaverton, the university has access to more than a dozen local community clinics offering diverse clinical experiences to students. NUNM is home to a collaborative and inspiring learning environment, as well as a vital and groundbreaking research community. Our campus, located in the heart of Portland, Oregon, offers students and faculty the benefits and advantages of city living at its most sustainable within an urban setting infused with natural beauty, culture and social conscience.

# Breadth and Diversity of Programs

NUNM is also known for its rich curricula in a variety of other areas, including research, nutrition, global and mental health, and sports medicine. Our programs are developed with the understanding that education is reinforced through the application of hands-on, interactive learning. Whether it's developing a research study and interviewing focus group participants, or developing whole-food recipes in NUNM's professional teaching kitchen, or conducting fieldwork in underdeveloped countries, our students learn through their direct experiences.

# **Natural Medicine Today**

Health awareness is making giant strides—and interest in natural medicine and healthy lifestyles is rising significantly. Studies have shown that Americans are seeking more natural health products, alternatives and services than ever before. Natural medicine provides patients a wide variety of beneficial treatment options unavailable to conventional medical practitioners. At the same time, Western medical doctors at hospitals, medical clinics and research centers are opening the doors to naturopathic and Chinese medical practitioners as natural medicine experiences an exciting period of integration into the healthcare system. It is a rapidly growing and evolving field that is serving the escalating need for effective preventive health care for millions of Americans.

Natural medicine is known by many names: alternative medicine, integrative medicine, complementary medicine and others. One reason for its many labels is that natural medicine includes a variety of healing modalities. Your education at NUNM may include some or all of the following therapeutic methods, depending on your course of study.

- Traditional medical systems, such as naturopathic medicine, Chinese medicine, homeopathy and acupuncture
- Mind-body medicine
- Physical medicine, including hydrotherapy and naturopathic manipulation
- Botanical medicine and supplements
- Nutrition counseling
- Conventional therapies, including pharmaceuticals and minor surgery
- Mental health counseling

Each of these modalities present a tool for the physician to gain a better understanding of patient diagnosis and treatment for health conditions ranging from minor ailments to chronic and acute care. When these modalities are used in conjunction with conventional medicine, they have been called complementary medicine. When used as a substitute for conventional medicine, the same modalities may be called alternative medicine. When a conventional physician and a naturopathic physician work together to create the best healing plan for the patient, it's called integrative medicine. As more people seek combination treatments, future natural medicine practitioners and physicians will need to be knowledgeable about both conventional and natural medicine. Our graduates are able to bridge this gap.

# **Academic Calendar 2017–2018**

Summer quarter begins (clinic)	7/3/2017	Winter quarter begins	1/8/2018
July 4 holiday (campus & clinics closed)	7/4/2017	Martin Luther King Day (campus & clinics closed)	1/15/2018
Summer academic classes begin	7/10/2017	Last day to add or change sections	1/19/2018
	8/3, 8/25, 9/12/2017	Last day to pay tuition & fees	1/19/2018
(students attend one date)		Late payment fee assessed	1/22/2018
Summer academic classes end	9/1/2017	OSCE 2 & 3 exams	1/26-27/2018
Labor Day holiday (campus & clinics closed)	9/4/2017	Last day to drop classes	2/2/2018
New student academic orientation	9/13–14/2017	Make up for Martin Luther King Day	3/29/2018
Summer quarter ends	9/16/2017	Finals week	3/26-30/2018
		Winter quarter ends	3/31/2018
Fall quarter begins	9/18/2017	Spring break (no academic classes)	4/1-8/2018
Last day to add or change sections	9/29/2017	Clinic holiday – Spring break session	4/2-7/2018
Last day to pay tuition & fees	9/29/2017	, , ,	
Late payment fee assessed	10/2/2017	Spring quarter begins	4/9/2018
Last day to drop classes	10/13/2017	Last day to add or change sections	4/20/2018
Veterans Day (campus & clinics closed)	11/10/2017	Last day to pay tuition & fees	4/20/2018
Clinic holiday I – Thanksgiving week session	11/20-22/2017	Late payment fee assessed	4/23/2018
Thanksgiving break (no academic classes)	11/20-24/2017	OSCE 1 exams	4/27–28/2018
Thanksgiving holiday (campus & clinics closed	d) 11/23–24/2017	University Council	5/4/2018
Make up for Veterans Day	12/6/2017	Last day to drop classes	5/4/2018
Finals week	12/11-15/2017	Memorial Day (campus & clinics closed)	5/28/2018
Fall quarter ends	12/16/2017	Make up for Memorial Day	6/18/2018
Winter break (no academic classes) 1.	2/17/2017-1/7/2018	Finals week	6/25–29/2018
Clinic holiday II – Prewinter session	12/18-23/2017	Spring quarter ends	6/30/2018
Winter break (campus closed)	12/25-31/2017	Commencement	6/30/2018
New Year's Day (campus & clinics closed)	1/1/2018	Commencement	0/ 30/ 2010
Clinic holiday III – Post-winter session	1/2-6/2018		

1/5/2018

Orientation, January admits



# **NUNM Campus**

Situated in the beautiful Pacific Northwest city of Portland, Oregon, National University of Natural Medicine is located near the Willamette River waterfront, close to the heart of the city. Portland is the nation's hub for integrated medical education and sustainability.

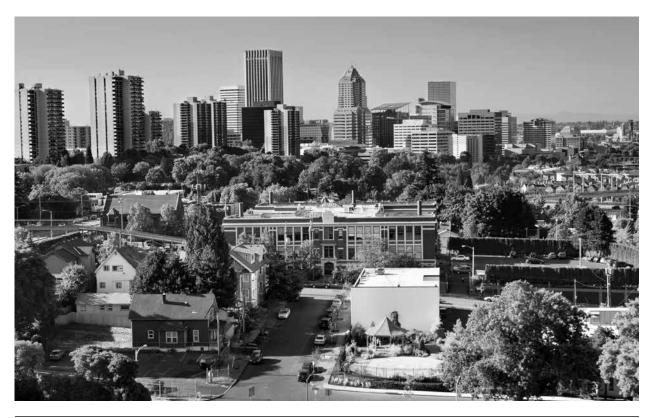
Close to NUNM's campus, students will find a unique collaborative alliance of medical schools, from Chinese and chiropractic medicine to Western biomedicine, as well as many affiliated health professions and public health programs. NUNM students have access to world-class research and medical school libraries, in addition to NUNM's own excellent collection, which includes one of the world's finest rare medical book collections.

NUNM resides in the greenest city in America. Portland is college-friendly and rich in arts and culture; the city offers an amazing music scene, fabulous restaurants and great shopping. NUNM students will be delighted by an array of natural food stores, as well as a thriving industry of local farmers markets with fresh organic produce and herbs. Student housing can be found throughout the city; the campus is easily accessible by bicycle, car, or one of the nation's best public transportation systems. Portland residents live near some of the most remarkable natural wonders in the country, including beautiful ocean beaches, snow-capped mountains, breathtaking waterfalls, stunning high-desert regions, and thousands of acres of state and urban forests that offer miles and miles of hiking and bicycle paths.

# **Campus Facilities**

Located just south of downtown Portland, NUNM's growing urban campus features academic, clinic and administrative facilities; as well as the Min Zidell Healing Garden, a botanical teaching garden for NUNM students and a place of refuge for the community; and the Galen's Way Garden, a community herb garden open to local school children. The 60,000 square-foot Academic Building combines quaint, early 20th-century architecture with bright, airy classrooms and laboratories, and the NUNM library.

In close proximity is the university's Administration Building, with offices for administrative staff and faculty; and Spaulding House, a community event center that includes offices for the NUNM Institutes. Also nearby is NUNM's Radelet Hall, a large student lecture hall that accommodates community events. At the other end of campus is NUNM Health Centers—Lair Hill, which offers naturopathic primary care services, acupuncture and Chinese herbal medicine. The 20,000 square-foot clinic includes treatment rooms for naturopathic and Chinese medicine, student-faculty conference rooms, a medical lab, botanical pharmacy and gift store. NUNM's clinical education also features experiential learning rotations at all NUNM Health Centers, including our affiliated community clinics throughout the greater Portland area.



Just a short walk from campus is NUNM's Helfgott Research Institute, which houses the School of Graduate Studies and Charlee's Kitchen, NUNM's ultramodern nutrition classroom and research kitchen that also supports community classes focused on healthy meals. Near the NUNM campus are Oregon Health & Science University and Portland State University. Both respected institutions partner with NUNM and offer educational opportunities to NUNM students.

# NUNM Health Centers—Lair Hill

NUNM's campus health center serves the local Portland community with a full range of primary care services, featuring 20,000 square feet of consultation, examination and treatment rooms. NUNM Health Centers-Lair Hill, recognized by the Oregon Health Authority as a top-tier Patient-Centered Primary Care Home, offers a wide range of medical services, including preventive health screenings for adults and children, hydrotherapy, physical medicine, homeopathy, gynecology, minor surgery, heavy metal testing, and specialized services, such as integrated oncology care and cardiac care. The Lair Hill Health Center also offers Chinese medicine treatments, including acupuncture, moxibustion, herbs and shiatsu complement classes in qigong. An on-site medicinary is open to the public, and the clinic's state-licensed laboratory services are available not only to NUNM naturopathic physicians, but to other licensed medical practitioners in the region. NUNM's Lair Hill Health Center is also home to the SIBO Center.

# **Off-Campus NUNM Health Centers**

The Beaverton Health Center, NUNM's first satellite clinic, opened in 2014 and offers full-service naturopathic and Chinese medical services at affordable rates. In 2015, the health center received a major grant from Washington County Health Department to help deliver primary healthcare services to the county's large population of uninsured patients. It is recognized by the Oregon Health Authority as a top-tier Patient-Centered Primary Care Home, and is staffed by bilingual patient services representatives and medical practitioners. The health center provides vaccinations and a full range of laboratory services, including blood draws and specialized tests.

The NUNM community health collaborative network was established in the early 1990s to provide primary healthcare services to a culturally and ethnically diverse, medically underserved population. NUNM maintains the community health centers program in collaboration with a broad network of community partners. NUNM



is on the board of the Coalition of Community Health Clinics and collaborates with community service agencies, including Multnomah, Washington and Clackamas Counties; Oregon Health & Science University; Portland Community College Workforce Training Center; Pacific University; Central City Concern; Volunteers of America and others. Our safety-net health centers offer low-cost family health care, while annually providing healthcare services to many thousands of patient visits at more than a dozen locations throughout the greater Portland metropolitan area. NUNM's community health collaborative network provides a rich clinical training experience for our naturopathic, integrative research and Chinese medicine students.

# Library

The NUNM Library has one of the largest and most unusual collections of natural medicine literature in the United States. NUNM's library occupies approximately 4,500 square feet on the first floor of the Academic Building. During the academic year the library is open six days a week.

### **General Circulating Collection**

Our general collection includes both classic and modern works of natural and Chinese medicine, as well as current books from the biomedical sciences. The collection consists of more than 21,000 volumes of books and audiovisual materials. By using their NUNM identification cards, our students can borrow circulating materials and access a vast array of electronic journals and databases off campus.

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#### Reciprocal Lending Relationships

NUNM library materials are available to students, faculty and staff of NUNM, Oregon Health & Science University, Oregon College of Oriental Medicine, University of Western States and Linfield College (Portland campus). With a current NUNM identification card, NUNM students, faculty and staff may also check out materials from these institutions.

#### Friedhelm Kirchfeld Rare Book Collection

The NUNM library maintains an extensive collection of rare and historic materials related to naturopathic medicine. This unique collection of rare books—2,076 bound volumes and periodicals, including materials from the estate of Benedict Lust—are housed in a separate rare book room. Dr. Lust, supported by his wife Louisa, was the founder of the first U.S. school of naturopathic medicine at the turn of the 20th century and is known as the "father of naturopathy" in the U.S.; he also published numerous naturopathic books and journals. In addition, the rare book room includes a significant homeopathy collection, anatomical models and antique medical equipment. Much of the material found in NUNM's Kirchfeld Collection is unavailable anywhere else in the world.

#### Other Collections

The library maintains a reference collection, a reserve collection of required and recommended texts, an audiovisual collection including lectures and presentations by well-known guest speakers, and a book collection at NUNM Health Centers—Lair Hill. Our periodicals collection consists of hundreds of print journal titles and thousands of online subscriptions on naturopathic medicine, nutrition, herbal medicine, homeopathy, Chinese medicine, complementary therapies and the

biomedical sciences. Reference books, rare books, clinic books and journals do not circulate.

The library's most recent special collection is built around a substantial gift from Mike and Simone Chilton. The Chiltons donated more than 2,000 books in the subject area of botanical sciences, including many valuable herbal books from the 16th, 17th, 18th and 19th centuries.

### **Chinese Herb Library**

This special collection contains 165 dried single herbs, providing a unique opportunity to interact with common Chinese medicinals.

#### Electronic Resources

The library has built an extensive electronic resource collection, including CHANT, UpToDate, Natural Medicines, Scopus, ScienceDirect and other full-text databases. The library maintains computers for student use, providing internet access, word processing and specialty software programs on nutrition, homeopathy and more.

# **NUNM Store**

The NUNM Store offers a variety of medical equipment, class supplies, gifts, logo merchandise, NUNM Press books, food, drinks and sundries. We are committed to helping decrease our ecological footprint by focusing on environmentally responsible products. We carry local, organic, fair trade and recycled products whenever possible. We also promote our community's talent by highlighting NUNM artists' jewelry, clothing, music, books, cards and artwork.

During the academic year, the NUNM Store is typically open 8 a.m. to 5 p.m., Monday through Friday, but hours are always subject to change.

## Scientific Research at NUNM

Research is vital to providing a body of evidencebased data to support the practice of natural medicine. NUNM is committed to fully integrating research with existing academic and clinical activities. Faculty members are currently participating in National Center for Complementary and Integrative Health (NCCIH) grants from the National Institutes of Health, including collaborations with Oregon Health & Science University (OHSU), University of Washington, and other biomedical schools or accredited natural medicine schools. While not all physicians and practitioners wish to become researchers, our goal is to train all of our graduates in the critical analysis of research studies so that they may accurately evaluate the quality of medical literature. In addition, learning about case analysis enables graduates to clearly investigate therapeutic results in their practices and share these results via publication in peer-reviewed journals. For those with an interest, there are many opportunities to participate in research at NUNM's Helfgott Research Institute.

# Helfgott Research Institute

Helfgott Research Institute conducts rigorous, highquality research on the art and science of healing. From basic science studies to clinical trials, Helfgott scientists from the fields of naturopathic medicine, Chinese medicinal herbs and acupuncture, immunology, biostatistics and nutrition apply their expertise to seek out natural medicine therapies that are effective, to discover why they work, and to develop methodologies for studying modalities that may not fall into the traditional biomedical model of research.

Established in 2003, Helfgott carries out strong clinical research and supports a diverse set of research projects. In addition to the Master of Science in Integrative Medicine Research program, students in NUNM's clinical programs and School of Graduate Studies have opportunities to participate in research during their course of study. Faculty and student research projects are regularly published in peer-reviewed journals and presented at national and international conferences. At Helfgott, we believe in collaborative research and make every effort to include conventional biomedical institutions as well as other complementary and alternative medicine institutions in our projects.

### The Institutes of NUNM

Beginning in fall 2012, NUNM embarked on an exciting mission to share its wealth of knowledge about health and wellness with students of all ages and levels of interest within the Portland metro community.

#### Women in Balance Institute

Introduced in 2012, NUNM's Women in Balance Institute (WIBI), was the first natural medicine educational association in the nation dedicated to education and research on women's health. The institute's goal is to educate women and the healthcare community about hormones and how they affect a woman's health at each stage of her life. NUNM medical students, working under the supervision of a lead physician, have the opportunity to play a role in women's health education and outreach.

#### Traditional Roots Institute

The Traditional Roots Institute launched in spring 2013 with a simple goal: to feed and grow natural medicine's herbal roots. The institute helps bring the people's medicine back to our communities through education and experiential learning. It offers opportunities for all types of healthcare providers to deepen their understanding of herbal medicine and advance their clinical practice. With the guidance of a lead physician, NUNM students help lead herb walks, organize educational events, and publish articles about herbs and their importance to health.

#### Food as Medicine Institute

Formally established in 2014, the goal of NUNM's Food as Medicine Institute (FAMI) is to adapt the intensive nutrition training that naturopathic and Chinese medicine students receive during their medical education into meaningful learning opportunities for community members. FAMI naturopathic physicians and NUNM students offer a variety of hands-on learning experiences through community-based nutrition and cooking programs, including the FAME (Food as Medicine Everyday) workshops. FAME is a 12-week series of interactive nutrition classes and whole-food cooking instruction available to families and individuals in the Portland area.

### Age Wise Institute

The mission of NUNM's Age Wise Institute (AWI), announced in 2016, is to change the paradigm of aging by promoting healthy living at every age and sharing wisdom across generations. The institute promotes healthy aging through community-based programs, education and research. Age Wise Institute seeks to support the specialized health needs of our aging population, who are increasingly interested in learning about preventive and integrative health approaches that can aid health and well-being.

# Life in Portland, Oregon

# The City

Portland's metropolitan area is home to more than 2 million residents and 95 neighborhoods, each with its own unique style. There's plenty of reasons Portland ranks as one of the most popular cities in the United States. The thriving food culture within the city offers an array of restaurants and food carts, ranging from gourmet to bistro, organic, vegetarian and more. Coffee houses, pubs, galleries, and a wide range of event venues support an exciting and diverse nightlife. Portland offers a multitude of urban amenities and abounds with parks and green space, including the 5,157-acre Forest Park, with its 80 miles of trails and forest roads, located near the heart of the city.

### Cascade Mountains and the Columbia Gorge

Situated in the Willamette Valley, Portland is nestled between the Coast Mountain Range to the west and the Cascade Range to the east. Prominent peaks, including Mount Hood, Mount St. Helens, Mount Adams and Mount Rainier, can be seen on clear days. Mount Hood offers hiking trails, snow sport areas and campgrounds. Only 30 minutes from downtown, to the east, is the spectacular Columbia River Gorge, with easy access to hiking trails, river beaches, inspiring views and the stunning Multnomah Falls. This series of dramatic waterfalls reaches 611 feet, making it the second highest year-round waterfall in the nation.

### **Pacific Coast**

The Pacific coast, with its rugged, rocky headlands and lush forests, is just a 90-minute drive from Portland. Three hundred miles of public beaches connect numerous coastal communities that offer visitors delicious food and lodging, along with a treasure trove of local art, crafts and collectibles.

# Agriculture

The Willamette Valley, home to a majority of the state's population, stretches from Portland south to Eugene. The region offers organic produce, locally roasted coffee, fresh bouquets of colorful flowers and fine wine. The valley's wineries are internationally acclaimed for their pinot noir grapes.

### Industry

Oregon's economy continues to grow at a rapidly accelerated rate—ranking third among states in terms of economic growth since 2001, according to a 2017 report from the Oregon Center for Public Policy. Seventy-five percent of the state's economy is generated in the Portland metro area. Top companies include OHSU, Providence Health

Systems, Nike, Intel, Legacy Health System, Wells Fargo, New Seasons, Columbia Sportswear, and a growing roster of biomedical research and technology firms, among others.

#### Climate

Portland, the "City of Roses," is known for its breath-taking spring, abundant with blossoming flowers and trees. The city enjoys a mild turn of the four seasons. The sunny summer days offer temperatures that typically average in the mid-70s with little to no precipitation, and its mild, damp winters deliver a dusting of snow. While Portland has a reputation for rain—on average 39 inches a year—most Eastern cities get more annual precipitation. A benefit of our mountain rainfall is an abundant water supply—among the purest in the nation.

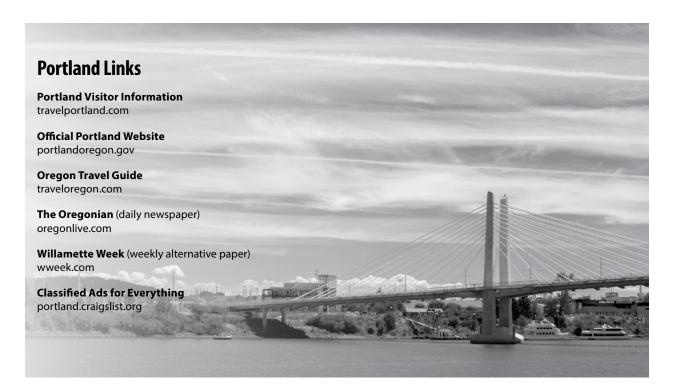
A haven for those seeking well-being, community, culture, and an environment steeped in natural beauty, Portland, Oregon, is an ideal place to study natural medicine

### Culture

The Portland area offers cultural events for all facets of its community. The largest and most famous of these is the Portland Rose Festival, an annual celebration for more than a century. The festival kicks off with fireworks on Memorial Day, and features several dozen events through June. The highlight is the Grand Floral Parade, one of the top two floral parades in the nation. Other festivals include the Waterfront Blues Festival, The Bite of Oregon (featuring Oregon's finest in food and wine tasting), Cinco de Mayo Fiesta (Oregon's largest multicultural event), Oregon Seafood and Wine Festival, and Oregon Brewers Festival—where 80+ breweries from Oregon and across the country present their best beers to many thousands of appreciative beer aficionados.

#### Attractions

Perennial attractions include the acclaimed Oregon Zoo, Oregon Museum of Science and Industry (OMSI), Portland Art Museum, Portland Japanese Garden, Lan Su Chinese Garden, Pittock Mansion, Portland Saturday Market (the largest weekend open-air crafts market in the nation) and Powell's City of Books, "the largest independent used and new bookstore in the world."



#### Arts

The Portland arts community is diverse and vibrantly creative. Live-music lovers can find virtually any musical genre they desire played somewhere, from rock and jazz in local pubs to classical music at the Arlene Schnitzer Concert Hall. Regular performing groups include the Oregon Symphony Orchestra, Portland Opera, Portland Youth Philharmonic and Oregon Ballet Theatre. While there are many small theaters, the Portland'5 Centers for the Arts attract large nationally acclaimed productions. The city also supports more than 90 art galleries and 10 museums. Area galleries promote new monthly exhibits during evening art walks on First Thursdays (downtown) and Last Thursdays (Alberta district).

# **Sports**

Sports fans can root for a wide variety of teams. There are Portland's professional teams—the NBA Trail Blazers, American Soccer League Timbers, National Women's Soccer League Thorns FC, and American Football League Thunder. There are also 14 semi-professional teams, including the Western Hockey League's Winterhawks, Minor League Baseball Hillsboro Hops, two Pacific Football League men's teams, and two Women's Football Alliance teams. Other teams include basketball, Frisbee, rugby, martial arts, Australian Rules football—and, finally, the popular Rose City Rollers—Portland's all-women roller derby league. Many of these sporting events are held at Portland's MODA Center and Providence Park. The Portland metro area also plays host to men's and women's professional golf tournaments.

### **Public Transportation**

Portland leads the country in light rail development and boasts one of the best transit systems in the country. TriMet, Portland's public transportation provider, is working with city government and urban planners to meet the needs of the metro area's growing population while also helping preserve the region's environmental air quality by designing and improving rapid transit and light rail commuter traffic. Portland, sometimes called "America's bicycle capital," has a flourishing bicycle culture due to continually improved lanes for biking enthusiasts and commuters. The City of Portland Parks & Recreation reports that Portland offers more than 155 miles of regional connecting trails for walkers, runners and hikers who enjoy the benefits of the city's urban outdoors.

# **Technology Magnet**

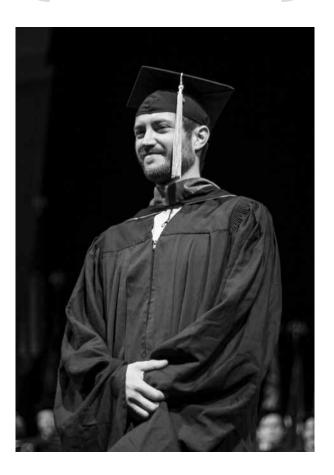
Intel is one of the area's largest employers, and a growing technology sector is calling Portland home. The city has been nicknamed "the Silicon Forest" due to its reputation as one of the most "wired" regions in the country. Oregon's tech sector employs over 92,000 people, and in 2016 computer and electronic products accounted for more than 43 percent of Oregon's total merchandise exports, or \$9.4 billion.

# **Choosing National University of Natural Medicine**

#### Alumni

NUNM has a network of over 2,800 graduates across the United States, Canada and in many other countries. Our alumni include dedicated physicians, acupuncturists and other health professionals who care for thousands of patients each year or work to advance the field of natural medicine. As part of their commitment, our alumni often talk with prospective students about careers in natural medicine. If you would like to visit with one of our alumni in your area, please call the Office of Admissions for a referral.

> Our alumni are dedicated natural medicine practitioners who treat thousands of patients each year; they are researchers expanding integrative medicine.



### Visit Our Campus

It is impossible to fully convey in writing the experience of being a student at NUNM. The best way to explore a future with NUNM is to either attend an NUNM Exploration Day or arrange for an individual visit.

### **NUNM Exploration Day**

Exploration Day provides a general overview of NUNM and all degree programs. These visit days provide greater insight into the curriculum, student life and faculty of the respective programs. The Office of Admissions invites all prospective students to attend one of these daylong programs where you will have the opportunity to meet members of the NUNM faculty, staff and student body; learn about our degree programs; tour the campus and our on-site health center; and explore careers in naturopathic medicine, classical Chinese medicine, global health, integrative medicine research, nutrition, sports medicine, and mental health.

### **Individual Campus Visits**

If an Exploration Day does not fit into your schedule, individual visits are welcomed. Just call to arrange your visit, and we will be happy to meet with you and provide a campus tour or arrange for you to observe a class. For any questions you might have regarding the application and admissions process, please visit nunm.edu or call 503.552.1660 (local) and 877.669.8737 (toll free).

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# **Admissions**

# **Undergraduate Programs**

NUNM offers two Bachelor of Science degrees—one in integrative health sciences and one in nutrition, which offer students the opportunity to complete the final two years of their program, while building a solid scientific foundation in pre-health/pre-med education.

Applicants interested in the Bachelor of Science in Integrative Health Sciences (BSiHS) or Bachelor of Science in Nutrition (BScN) programs must have earned at least 60 semester or 90 quarter credit hours from a regionally accredited college or university with a minimum 2.0 GPA.

NUNM requires a grade of "C" or better in basic proficiency skills, general education and required science courses. Basic proficiency skills include written and oral communication, critical thinking and quantitative reasoning. Required science coursework includes general chemistry, biology and mathematics. The general education requirement is fulfilled by coursework in the humanities/arts, life sciences, social sciences, and electives that can encompass other knowledge areas, such as ethical reasoning and cultural values and traditions.

### **Application Process**

Applicants for the School of Undergraduate & Part-Time Studies must submit the following required items to complete an application:

 Application for Admission: A file is created for the applicant once a complete application is received and accompanied by the application fee. Prospective students may start their applications at nunm.edu.

- \$50 Application Fee: This fee is nonrefundable.
- Transcripts: Applicants are required to submit official sealed transcripts from each college and/or university attended.
- Essays: Applicants are required to submit essays to be considered for admission. Essays provide applicants the opportunity to share their background, abilities, interests and experiences, and how these will make them a good candidate for the programs at NUNM. Applicants should share some personal experiences and genuine thoughts in their essays. Explaining why you are applying to NUNM and how you would enrich this community is also helpful. The Admissions Committee will look for writing ability, as well as content when reading the essays. The application for admission indicates the length or word limitation based on the program to which the applicant is applying.
- Letter of Recommendation: A recommendation should be written by a person who knows the applicant well and can evaluate the applicant's skills and abilities. We look especially for those skills that are transferable to the classroom (critical thinking, reasoning, writing, problem-solving, assessment, etc.). Professors make great recommenders (assuming the student has taken a class with them). If an applicant has been out of school for a while, employers are also acceptable sources.
- Resume: The resume should include work experience, research, activities, community service and any honors/ awards received.

Applicants are selected regardless of race, gender, gender identity, age, religion, national or ethnic origin, sexual orientation, marital status, disabilities, or any other protected class under local, state or federal law.

English Composition	2 courses
Math: must be algebra, calculus or math-based statistics.	1 course
Oral Communication/Public Speaking	1 course
<b>General Biology:</b> one academic year of general or principles of biology. These courses must be designed for science majors or pre-med students. As these courses require a laboratory component, they may not be taken online.	Full sequence (2-3 courses)
<b>General Chemistry:</b> one academic year of general or principles of chemistry. These courses must be designed for science majors or pre-med students. As these courses require a laboratory component, they may not be taken online.	Full sequence (2-3 courses)
Humanities/Arts and Letters: courses in the areas of art, religion, philosophy, literature, music and other related fields will satisfy this requirement.	3 courses
Social Sciences: one of these courses must be human psychology.	3 courses
Electives: a maximum of 3 quarter or 2 semester credits of physical education may be applied.	

### **Application Deadline**

NUNM begins to accept undergraduate applications Sept. 1, 2017, for fall 2018. The deadline to apply is May 1, 2018.

Please follow the application's detailed instructions and direct all application materials to:

Office of Admissions National University of Natural Medicine 049 SW Porter Street Portland, OR 97201

It is the sole responsibility of the applicant to ensure that materials are received by NUNM on time. Application materials become the property of NUNM and will not be returned or forwarded to other institutions.

# **Graduate and Professional Programs**

Applicants interested in the Doctor of Naturopathic Medicine (ND), Doctor of Science in Oriental Medicine (DSOM), Master of Science in Oriental Medicine (MSOM), Master of Science in Nutrition (MScN), Master of Science in Integrative Mental Health (MSiMH), Master of Science in Integrative Medicine Research (MSiMR), Master of Science in Sports Medicine (MScSM), and Master of Science in Global Health (MScGH) programs must have a bachelor's degree (or its equivalent) from a regionally accredited college or university. While at NUNM, students may undertake two programs concurrently.

There is no advantage to holding a Bachelor of Science rather than a Bachelor of Arts degree, as long as you have completed the program's prerequisites. Credit will only be given for prerequisite coursework earning a "C" or better. Applicants may apply with coursework still in progress; however, the Office of Admissions must receive all official transcripts showing completed coursework prior to matriculation. For the purpose of prerequisites, the Office of Admissions defines a "course" as either a quarter or semester term.

# Age of Course

Prerequisite courses not taken within seven years of matriculation into the program are subject to review. Additional coursework may be required.

### Application Process

Applicants for the graduate and professional programs must submit the following required items to complete an application:

**Application for Admission:** A file is created for the applicant once a complete application is received

- and accompanied by the application fee. Prospective students may start their applications at nunm.edu.
- \$75 Application Fee: This fee is nonrefundable.
- Transcripts: Applicants are required to submit official sealed transcripts from each college and/or university attended. For applicants who will have an undergraduate degree conferred after receiving an admission decision, an official and updated transcript must be submitted prior to matriculation at NUNM.
- Essays: Applicants are required to submit essays to be considered for admission. Essays provide applicants the opportunity to share their background, abilities, interests and experiences, and how these will make them a good candidate for the programs at NUNM. Applicants should share some personal experiences and genuine thoughts in their essays. Explaining why you are applying to NUNM and how you would enrich this community is also helpful. The Admissions Committee will look for writing ability, as well as content when reading the essays. The application for admission indicates the length or word limitation based on the program to which the applicant is applying.
- Letters of Recommendation: Applicants applying to the Doctor of Naturopathic Medicine, Doctor of Science in Oriental Medicine, and Master of Science in Oriental Medicine programs are required to submit one letter of recommendation, although we will take up to two. References may send their letter either directly to the Office of Admissions or have the applicant send it to the Office of Admissions in a sealed envelope. A recommendation should be written by a person who knows the applicant well and can evaluate the applicant's skills and abilities. We look especially for those skills that are transferable to the classroom (critical thinking, reasoning, writing, problem-solving, assessment, etc.). Professors make great recommenders (assuming the student has taken a class with them). If an applicant has been out of school for a while, employers are also acceptable sources. Recommendations from family members, significant others or close, personal friends are not viewed favorably by the Admissions Committee.
- Resume: The resume should include work experience, research, activities, community service and any honors/ awards received.
- Supplemental Materials: These include statements regarding academic dismissal, criminal charges, scholarship statements, diversity statements, and/ or an addendum with any additional information the applicant wishes to share with the Admissions Committee. Videotapes, DVDs, cassettes, CDs and lengthy manuscripts will not be reviewed, and will be returned to the applicant.

Applicants are selected regardless of race, gender, gender identity, age, religion, national or ethnic origin, sexual orientation, marital status, disabilities, or any other protected class under local, state or federal law.

### **Application Deadlines**

Initial consideration goes to candidates who apply by the dates listed below. However, NUNM continues to consider applicants on a space-available basis thereafter. Applicants may apply up to one year in advance for admission.

#### Master of Science in Nutrition (MScN)

Fall 2018: April 1, 2018

#### School of Graduate Studies: Fall 2018

Scholarship Deadline: Feb. 1, 2018 Application Deadline: May 1, 2018

#### ND and CCM programs: Fall 2018

Scholarship Deadline: Feb. 1, 2018 Application Deadline: May 1, 2018

#### CCM programs: Winter 2018

Scholarship Deadline: Aug. 1, 2018 Application Deadline: Oct. 1, 2018

Candidates who have selected NUNM as their first choice are encouraged to apply on or before the scholarship deadline.

Please follow the application's detailed instructions and direct all application materials to:

Office of Admissions National University of Natural Medicine 049 SW Porter Street Portland, OR 97201

It is the sole responsibility of the applicant to ensure that materials are received by NUNM on time. Application materials become the property of NUNM and will not be returned or forwarded to other institutions.

### Prerequisites

Prerequisite courses are designed to ensure entering students are academically prepared for the curriculum of the program. Prerequisite courses may be substituted with comparable coursework if the Admissions Committee, utilizing the evaluation procedures set by that committee, determines that the learning objectives are met.

For programs within the College of Classical Chinese Medicine, the committee may allow a student to take physics as a corequisite with first-year coursework.



### **ND Program Prerequisites**

General Chemistry (science-major level): two courses. Lab work required.

**Organic Chemistry** (science-major level): two courses; or biochemistry may serve as a substitute for one organic chemistry course.

**General Biology** (science-major level): two semester or quarter courses, must include cellular biology. Competencies may be met through other courses, such as: anatomy, physiology, microbiology, genetics, botany, etc. Lab work required.

General Physics: one course to include mechanics

**Mathematics:** one course in college algebra, calculus or math-based statistics

**English Composition:** one course; AP and online credit accepted

**Psychology:** one course in human development; AP and online credit accepted

**Social Sciences and Humanities:** one course each; AP and online credit accepted

#### **Strongly Recommended Courses**

- · Cellular Biology
- Anatomy and Physiology
- Biochemistry
- Statistics
- · Business and/or Marketing

#### Other Suggested Courses

- · Biomedical Ethics
- Philosophy of Science
- Public Speaking
- Microbiology
- Immunology
- Public Health

# On-Campus Interview

Applicants to the Colleges of Naturopathic and Classical Chinese Medicine, who competitively meet requirements, will be required to complete an interview on campus. Telephone and video (Skype) interviews are normally not granted, but may be considered under extenuating circumstances. The interview allows students to visit the university and decide if it is a good fit. The School of Graduate Studies and School of Undergraduate & Part-Time Studies do not require an interview.

# MSOM/DSOM Program Prerequisites

General Chemistry	1 course
General Biology	1 course
Physics Must include mechanics	1 course
Social Sciences	1 course
Humanities	1 course

#### **Strongly Recommended Courses**

- · Anatomy and Physiology
- Chinese Language (old Mandarin; complex characters)
- · Systems Science
- · Mythology
- · Quantum Physics
- · Philosophy of Science
- Biochemistry
- · Cellular Biology
- Chinese History/Culture

# **MSiMH Program Prerequisites**

All candidates must meet the requirements for, and be concurrently enrolled in, a clinical degree program at NUNM (ND, DSOM or MSOM).

# **MSiMR Program Prerequisites**

General Chemistry	2 courses
General Biology with lab	1 course
Mathematics Precalculus, calculus 1 or math-based statistics	2 courses
Social Sciences Human psychology	1 course
Humanities English composition	1 course

#### **Strongly Recommended Courses**

- Statistics
- Cell Biology
- Ethics

General Biology Any discipline	1 course
Mathematics Algebra or statistics	1 course
Social Sciences Human psychology	1 course

MScN Program Prerequisites	
General Chemistry	1 course
General Biology	1 course
<b>Mathematics</b> Algebra or statistics	1 course
Social Sciences Human psychology	1 course

MScSM Program Prerequisites	
Anatomy and Physiology	1 course
Biochemistry	1 course
Mathematics Algebra or statistics	1 course
General Biology	1 course
Sociology or Psychology, or Human Behavior in the Social Environment	1 course
Recommended Course: Genetics	

# **International Applications**

In addition to the requirements previously outlined, international applicants must meet the following requirements:

- Complete an international student Certificate of Finance. This satisfies visa application requirements by verifying adequate financial resources to cover the anticipated period of study (required once applicant is admitted).
- If English is a second language, submit official scores from the Test of English as a Foreign Language (TOEFL). NUNM requires a score of 550 on the written exam, or 213 on the computer exam and 79 on the internet-based test.
  - Also accepted is the International English Language Testing System (IELTS) with a score of 6.0 or higher.
- Submit all non-U.S. accredited transcripts for translation and evaluation to one of the following approved evaluation services:

International Education Research Foundation, Inc. 310.258.9451 | ierf.org

Office of International Education Services 202.296.3359 | aacrao.org

World Education Services, Inc. 212.966.6311 | wes.org

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Transcripts from accredited Canadian colleges and universities are generally exempt from this requirement. NUNM reserves the right to require outside evaluation in certain cases. Transcripts in French must be submitted for translation to one of the services above.

# **Transfer Credit Policy**

Applicants wishing to transfer to any of NUNM's programs must meet the following requirements:

- An applicant who applies for transfer credit must meet the current admission requirements at NUNM on the date the student applies for admission, including the verification of good academic standing. All transfer students must meet the prerequisites as stated in the catalog.
- 2. Credits being considered for transfer to the graduate or first professional programs must be graduate level and completed at a U.S. Department of Education recognized and regionally accredited institution and/or a U.S. Department of Education approved programmatic accreditor. Transfer credit will only be approved for courses from a professional degree program or a graduate program closely related to the health sciences. \*See pp. 17-18 for specific program requirements.
- 3. Only credits recorded on an official transcript of the issuing institution with an equivalent grade of 2.0 or better on a 4.0 scale will be considered for transfer. If an application is received before coursework at another institution has been completed, transfer credit will be considered to be conditional until satisfactory completion of the outstanding coursework.
- 4. Credits accepted for transfer must be determined by NUNM to be substantially equivalent to the courses offered by NUNM. This determination is to be made by the program dean or designee. All requests for transfer credit are considered on a course-by-course basis, and a catalog or course description will be required. Challenge examinations may be required to determine whether coursework is comparable.
- 5. Credits accepted for the transfer of coursework must have been awarded within seven years of the date of admission to NUNM, except that NUNM may, at its discretion, accept older credits if the entering student holds a graduate degree in an academic discipline closely related to the health sciences and has been working in the field.
- 6. The ND, DSOM and MSOM degree programs could take a minimum of three years education at NUNM, even with maximum transfer credit awarded, due to differences between programs.
- 7. NUNM does not give transfer credit for life experience.

- 8. Applications for transfer credit must be accompanied by a letter from the applicant's previous program dean stating that the applicant is in good academic and behavioral standing at the time of application.
- 9. Credits will be evaluated preliminarily for transfer before an offer of admission is made. The applicant will receive a copy of the formal transfer credit evaluation with a list of courses that must be taken at NUNM and a tentative class schedule for their first term, if they are admitted. Students will sign a letter agreeing to the final list of approved transfer credits.
- 10. Any veteran receiving GI Bill® benefits while attending NUNM is required to obtain transcripts from all previously attended schools and submit them to the VA School Official (located in the Registrar's Office) for review of prior credit.

Second professional degree candidates, defined as a healthcare practitioner with a doctoral or master's level degree, may apply for fall or winter admission to the MSOM or DSOM programs. Depending upon prior completed coursework, a full-time schedule may not be available for one of these terms of entry. A proposed class schedule for the intended term of entry and a degree completion plan can only be created after a candidate's prior coursework has been evaluated.

Please note that there is a \$75 nonrefundable transcript evaluation fee.

The following are transfer policies specific to each NUNM college and school beyond those in the general transfer policy section above.

# Transfer Credit Specific to the College of Naturopathic Medicine

- Transfer credit will be considered for applicants to the ND program who are eligible to sit for a first professional medical licensing examination in the United States.
- Transfer credit will be allowed for first-year and some second-year ND courses. Credit for clinical experiences or clinical education at another school is not transferable.
- NUNM has a requirement that all ND students
  complete 16 elective credits, in addition to the required
  core curriculum, in order to encourage students to take
  additional coursework in areas of special interest and
  round out their education at NUNM. Transfer students
  may be allowed transfer credit for some of their noncore
  coursework if completed in a doctoral program at a
  regionally accredited institution. This determination
  will be made by the ND program dean or designee.

 Applicants seeking advanced-standing status into the ND program must hold a first professional medical degree. Accepted are medical (MD), osteopathic (DO) and chiropractic (DC) doctors who have graduated from a regionally accredited institution. Satisfaction of this requirement meets the NUNM prerequisite condition for a bachelor's level degree.

#### Transfer Credit Specific to the College of Classical Chinese Medicine

Due to the classical orientation of the MSOM and DSOM programs, only a limited number of credits from programs with a traditional orientation are transferable.

Applicants with completed coursework in U.S. institutions: Only AOM coursework completed at a school approved by the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM) will be accepted for transfer.

Applicants with completed coursework in international institutions: Transfer credit will be considered for applicants to the CCM degree programs who are deemed eligible to sit for NCCAOM licensing examinations. They must first submit their educational records to either the American Association of Collegiate Registrars and Admissions Officers (AACRAO) or World Education Services (WES) for a course-by-course educational transcript evaluation.

Applicants with completed coursework in China: All applicants who choose to apply to AACRAO must first have their credentials verified via the China Academic Degrees and Graduate Education Development Center (CDGDC) and submitted directly to AACRAO. To apply with CDGDC, go to: chinadegrees.cn./en/.

# Transfer Credit Specific to the School of Graduate Studies

Up to six (6) credits from regionally accredited, graduatelevel programs may be transferred to count toward core courses in the School of Graduate Studies. All transfer credits are evaluated for relevance and are subject to approval by the program chair or dean.

# Transfer Credit Specific to the School of Undergraduate & Part-Time Studies

Applicants to the School of Undergraduate & Part-Time Studies may transfer credit for courses that are substantially similar to courses offered as part of NUNM's undergraduate programs. Students are required to complete a minimum of 50 credits in the Bachelor of Science in Integrative Health Sciences program and 51 credits in the Bachelor of Science in Nutrition program at NUNM. All transfer credits must be completed at a regionally accredited institution, and are evaluated for relevance and subject to approval by the program chair or dean.

#### **Transfers from NUNM to Other Institutions**

Transfer of credit from NUNM to other institutions is at the discretion of the receiving institution. Credit generally depends on comparability of curricula and may depend on comparability of accreditation. NUNM is regionally accredited. Inquiries should be directed to the receiving institution to determine the transferability of credits from NUNM.

# Transfer of Core Credits Between NUNM Programs

#### **Graduate-Level Programs**

Some core course credits may be eligible for transfer among NUNM programs to satisfy program requirements. For more information regarding which courses might be transferable between programs, contact the Center for Academic Success and/or program dean. All transfer credits are subject to approval by the program chair or dean.

#### **Undergraduates Taking Graduate-Level Courses**

An undergraduate student who is pursuing a baccalaureate degree at NUNM may take one or more (maximum of nine credit-hours) graduate courses if the student meets all of the following conditions.

- 1. The student is within 45 credits of graduation
- 2. The student has an overall grade point average of 3.0 or better through the preceding term
- 3. The student meets the prerequisites for the course

# Transfer of Elective Credit Among NUNM Programs

For each program, at least half of the required number of elective credits must be taken from courses designated as electives within that program. Students may choose to fulfill the remaining elective requirements from electives in other degree programs if they meet the course prerequisites. All transfer credits are evaluated for relevance and are subject to approval by the program chair or dean. Core courses cannot count toward elective credits across programs unless approved by both program deans. For more information regarding which courses might be transferable, contact the Center for Academic Success and/or program dean.

Example: A student is required to take a total of 14 elective credits for their degree program. Seven elective credits must be taken from courses designated as electives within that program. The other seven elective credits may come from electives from other degree programs if the student meets the prerequisite requirements.

# **Technical Standards and Expectations**

Health sciences programs have a societal responsibility to train competent graduates, healthcare providers and scientists who demonstrate critical judgment, extensive knowledge and well-honed technical skills. Students and graduates are engaging in a profession that requires the highest standards of ethical conduct, honesty and professionalism. NUNM students are expected to conduct themselves in accordance with the high ethical standards expected of professionals who may be required to assume responsibility for the life, health and wellbeing of others. Every student is expected to demonstrate a level of competence consistent with these professional responsibilities and NUNM has the right to discipline, suspend or expel, at any time, any student considered unfit for a career as a practitioner of naturopathic and/ or Chinese medicine, in accordance with the policies and procedures set forth in in the university student handbook.

The technical standards define the essential functions that an applicant or student must be able to perform to be admitted to NUNM, progress satisfactorily through an NUNM program of study, and graduate.

To be qualified for health sciences programs at NUNM, those individuals must be able to meet both NUNM's academic standards and the technical standards, with or



without any reasonable accommodation as established by Section 504 of the Rehabilitation Act and the Americans with Disabilities Act.

### **Technical Standards for all Programs**

For entry, participation and graduation from all NUNM academic programs, students must have/be able to:

#### I. Communication Skills

 Communicate effectively, accurately and sensitively with all community members (including but not limited to faculty, administrators, staff, peers, patients and/or clients) both orally and in writing.

#### **II.** Empathy Toward Diversity

- Recognize personal perspectives on cultural and personal identity, and the potential intersection with others' cultural identities.
- Actively work to subjugate their own biases so as to act in the best interest of others.

#### III. Flexibility

 Adapt to changing environments, display flexibility, and learn to function within the uncertainty inherent to situations encountered within diverse health sciences programs.

#### IV. Motor Skills

• Manipulate the equipment, instruments, apparatus and tools necessary to complete program requirements.

#### V. Observation and Participation

 Observe demonstrations and participate in laboratory work, such as dissection of cadavers, and gross and microscopic examination of specimens.

#### VI. Personal Responsibility

- Admit errors and assume personal responsibility for mistakes.
- Respond to feedback, suggestions and criticism in a constructive manner and modify behavior appropriately.

#### VII. Physical Capability

 Tolerate physically taxing workloads, environments, schedules and/or travel. Function effectively in times of stress.

#### VIII. Problem-Solving and Critical Thinking

- Solve problems and think critically to develop appropriate products and services.
- Acquire and synthesize information to develop and defend conclusions regarding observations and outcomes.



#### IX. Relationships

- · Maintain professional, respectful, mature and compassionate relationships with all community members. Demonstrate concern for others.
- Maintain appropriate professional boundaries.
- Demonstrate the ability to express opinions, alternative points of view, and/or support or challenge others in a nonconflictual manner.
- Contribute effectively within a team, as well as individually.

#### X. Self-Awareness

- Demonstrate self-awareness of one's emotional state and reactions, and how they impact others.
- Practice appropriate strategies for effectively dealing with stress, uncertainty and conflict.

#### XI. Timeliness

· Respond and complete all assignments, duties and requests in a timely manner.

#### XII. Trustworthiness

• Maintain standards of honesty and integrity, including intellectual honesty.

# **Technical Standards for Clinical Programs**

For entry, participation and graduation from NUNM's programs that include a clinical component, students must meet the criteria listed above in addition to the following:

#### **Communication Skills**

• Communicate effectively and efficiently with patients, their families and members of the healthcare team.

- During clinical training, obtain a medical history in a timely fashion, interpret nonverbal aspects of communication, and establish therapeutic relationships with patients.
- · Record information accurately and clearly; and communicate effectively with other healthcare professionals in a variety of patient settings.

#### II. Motor Skills

- Possess the capacity to perform physical examinations and diagnostic maneuvers.
- Respond to emergency situations in a timely manner and provide general and emergency care.
- Adhere to universal precaution measures and meet safety standards applicable to outpatient settings and other clinical activities.

#### III. Observation

- Accurately observe patients and assess findings.
- Obtain a medical history and perform a complete physical examination in order to integrate findings based on these observations, and develop an appropriate diagnostic and treatment plan. These skills require the use of vision, hearing and touch, or the functional equivalent.

#### IV. Professional Responsibilities

· Demonstrate the ability to meet the ethical and legal standards of the profession.

# Financial Policies 2017–2018

# **Tuition**

Beginning in summer 2017, tuition for credit courses is as follows:

Tuition	Rate
Undergraduate*	\$225 per credit
Graduate	\$422 per credit

<sup>\*</sup>Undergraduates who matriculated in 2016 continue at a \$199-per-credit rate.

Tuition and fee rates are reviewed annually and subject to change. For the most current tuition and fees, please refer to the current NUNM catalog online at nunm.edu.

# **Tuition and Fee Payment Policy**

When students register for classes at NUNM they incur charges on their account. Tuition and fees for each quarter are due and payable in full at the beginning of each term. Students are financially responsible for all classes for which they are registered by the due date, even if a class is added after the term has begun. Deadlines for payment are as follows:

- **End of second week** Registration and transcript holds are placed on accounts with balances.
- End of fourth week Late fees may be applied to accounts with outstanding balances.
- Adding a class If added within the first two weeks of term, the deadline is the same as above. If added after the second week, payment for added classes is due and payable at the time of registration.

Student billing is posted to the online billing system, Sonis. The university does not generate paper bills for students prior to the beginning of each term. The Business Office will strive to provide a courtesy paper statement to those with a balance due within the first two days of class. Students are not excused from paying their tuition bill by the posted deadlines if no paper statement is received since real-time billing is available online through their Sonis account.

All tuition and fees are listed in U.S. currency. NUNM maintains tuition, fee and refund policies that are fair and uniformly administered. The Business Office may apply a late payment fee of \$50 to a student's account unless the student has paid the balance due or made arrangements (i.e., a deferral promissory note) by the end of the fourth week of each quarter.

Students unable to pay their entire financial balance must see the Business Office to make payment arrangements before the due date. A promissory note may be written to defer payment of tuition until the last day of the quarter. There may be a \$20 fee assessed for each deferral. The Business Office may deny or rescind a student's eligibility for a promissory note if a student misses the required payment due dates, provides inaccurate or incomplete information, or has a poor credit history. Students are not permitted to register for a quarter until all money owed the university is paid in full from previous quarters.

All students who elect to pay their account balances with a credit card (Visa, MasterCard or Discover) will be charged a convenience fee of 3 percent of the amount paid at the time of processing. Payments made by debit card and/or check will not be charged a fee.

Credit for courses will not be given until tuition and fees have been paid in full. The Business Office may also block future registration until all debts have been paid in full. Transcripts or diplomas will not be issued to students if they owe the university any money, regardless of the source (e.g., outstanding clinic balances). Students with past due accounts who pay in full with a personal check will have transcripts or diplomas issued to them two weeks after payment.

Any adjustments or modifications to the schedule of tuition charges are subject to the approval of the chief financial officer.

### **Summer Quarter Financial Aid Considerations**

Summer is a non-standard term, and as such, students often find it difficult to enroll in courses that qualify for federal financial aid. In order to qualify for federal financial aid, students must meet the definition of half-time enrollment by enrolling in courses and/or electives that are required for degree completion in their program of enrollment. Students who have met their core and/or maximum number of elective requirements and who choose to enroll in additional summer terms are not eligible for financial aid.

# Change of Track

A change of track requires a signature from the program dean. All change of track requests must be completed by week eight of the quarter prior to the quarter in which the change takes effect.

# **Student Responsibilities**

 Students are responsible for ensuring that charges on their statement are correct and that all tuition for classes, lab fees, and other applicable fees have been applied. It is also the student's responsibility to pay all charges on their account by the due date, whether or not they have received a courtesy paper statement. If tuition and fees are being paid by parents or relatives on behalf of the student, the university regards this as a private arrangement between the student and the other third party. The university will deal directly with the student regarding the payment of fees or any queries regarding a student statement.

- Students experiencing financial problems in the payment of any tuition and fees are responsible for contacting the Business Office to make satisfactory arrangements.
- 3. Students are responsible for keeping NUNM informed of their current contact information, as addressed in Section 3.1 of the student handbook. Students must submit changes to their contact information to the Registrar's Office.
- 4. Any assessment or judgment against a student for damage to NUNM property, whether arising from a Student Conduct Code proceeding or a court action, shall be considered money due NUNM as if it were tuition. No transcripts or diplomas will be released to the student until the amount due the university has been paid. The Business Office may also block future registration.

NOTE: The university is not responsible for any loss of, or damage to, the personal property of a student.

# Other Expenses

Students are required to purchase textbooks and other personal equipment, as well as basic diagnostic equipment for use in courses and clinic. These costs vary from year to year.

# **Tuition and Fee Refund Policies**

# Adding/Dropping Courses

Students are responsible for formally withdrawing from classes they wish to drop. Students who fail to formally drop classes during the refund period are responsible for the tuition charges. Please note that fieldwork and cultural immersion trips are subject to a different refund schedule, detailed below. (See add/drop policy in Section 3.12 of the student handbook.)

Week of Quarter	<b>Tuition Refund Rate</b>
First week	100% tuition
Second week	75% tuition
Third week	50% tuition
Fourth week	25% tuition
Beyond fourth week	No refund

# Experiential Learning — Tuition and Deposit Refund Policies

Many off-campus experiential learning experiences at NUNM require that travel/accommodation/catering arrangements be made well in advance. These include retreats and travel-based (trip) courses. The tuition and fee refund policies for such events differ from those of standard on-campus courses.

Tuition will be refunded at the same schedule in Section 9.6 of the handbook if the student withdraws from the institution.

#### **Off-Campus Retreat Courses**

(e.g., qigong, CCM immersion and naturopathic medicine retreats)

Students formally dropping a retreat prior to the start of the retreat can get full tuition reimbursement. However, they are not eligible for a retreat fee refund once the term has started.

#### Shan Ren Dao Retreat

Students must submit an application for this two-week retreat, and be interviewed and accepted prior to registration. The tuition and retreat fee refunds policy is the same as for other off-campus retreat courses.

#### **Travel-Based (Trip) Courses**

(e.g., global health experience trips, China trip)

Students must apply and be accepted to travel-based (trip) courses. Once accepted, they will sign and submit an agreement to be registered for the travel, and are required to reserve their spot with a 50% deposit at the time of registration. The deposit will be charged to the student's NUNM account. The deposit is used to make travel arrangements, including accommodations and other travel-related expenses. The travel deposit may be assessed several months prior to the trip itself.

After the travel deposit has been assessed, a student who wishes to drop the trip must submit an add/drop form and is subject to the following refund rates:

Deposits for travel-based courses (excluding Shan Ren Dao and off-campus retreats) will be refunded at 100% up to eight (8) weeks prior to the departure date. If the course is dropped within eight (8) weeks of the start date, the deposit is non-refundable.

# Withdrawing from NUNM

If a student finds it necessary to withdraw from the institution, the following policies apply:

 The application fee, submitted with the initial application for acceptance to NUNM, is nonrefundable.

- The acceptance deposit fee will be forfeited by a student who withdraws after accepting admission, but before attending classes.
- Calculation of tuition refunds are based on the date the student begins NUNM's withdrawal process.
- Tuition refunds will first be applied to balances due NUNM. If a student receiving financial aid is eligible for a refund, that refund is returned to the Federal Financial Aid program.

Tuition refunds for withdrawing students are calculated according to NUNM's tuition and fee refund policy outlined below:

Week of Quarter	<b>Tuition Refund Rate</b>
First week	100% tuition
Second week	90% tuition
Third week	80% tuition
Fourth week	70% tuition
Fifth week	60% tuition
Sixth week	50% tuition
Beyond sixth week	No refund

Any refund of tuition and fees resulting from a withdrawal or a reclassification of tuition status must be applied to the recipient's financial aid awards before any payment is made to the student. Tuition refunds are calculated according to NUNM's tuition and fee refund policy. Return of federal Title IV funds is calculated according to Department of Education regulations. (See Financial Aid section for more information.) Students whose accounts were paid-in-full often have a balance due NUNM after withdrawal. The Title IV return of funds policy operates independently of the university's tuition refund policy. It is possible for a withdrawing student to owe NUNM money because aid must be returned to the Title IV program, but the student is not entitled to a refund of institutional charges.

Federal regulations for this refund policy allow the university to retain an administrative fee that reduces the institutional charges subject to refund. This fee is 5 percent of total charges, up to a maximum of \$100. Furthermore, federal regulations require that any student who has received a loan while attending NUNM and who leaves the university for any reason, including official leaves of absence, must participate in a loan exit interview. Exit interviews are conducted by the Financial Aid Office and can be arranged by calling that office. (See Financial Aid section for more information.)

Academic Fees			
CCM Initial Exit Exam (CM 996)	\$125		
CCM Clinic Exit Exam Retake (fee each) (payable before Retake can be taken)	\$75		
CCM Makeup Exam with an Excused Absence (written and quizzes)	no charge		
CCM Makeup Lab Exam with an Excused Absence (payable before Makeup can be taken)	\$60		
CCM Remediation Exam or Project (for FR/R grades) \$100 (payable before Retake can be taken)			
Challenge Examination Fee \$60 plus 50% of the per	credit rate		
Clinic Private Tutoring (6 weeks)	\$1,500		
Clinic Rotation Change Fee	\$50		
CPR Certification Fee (5 hours) (recertification required every two years)	\$52		
Independent Study Fee equal to one credit hour of t	uition rate		
ND Makeup Exam with an Excused Absence (written and quizzes) no charge			
ND Makeup Lab Exam with an Excused Absence	\$100		
ND OSCE 1 & 2 Initial Exam (charged to student's account)	\$185		
ND OSCE 3 Initial Exam (charged to student's account) \$350			
ND OSCE 1, 2 & 3 Retake (payable before Retake can be taken) \$150			
ND Remediation (Makeup) Quiz Fee \$.			
ND Remediation Exam or Project (for FR/R grades) (fee each) \$100 (payable before Remediation can be taken)			
Petition to Deviate \$50 each approved submission			
SGS Remediation Written Exam or Project (for FR/R grades)	\$100		
Undergraduate Makeup Exam with an Excused Absence (quizzes)	\$25		
Lab and Other Fees (All lab fees are nonrefundable)			
All Cooking and/or Teaching Kitchen Courses (each)	\$50		
BAS 5110L, 5120L, 5130L Structure and Function I-III Lab (each) \$30			
BAS 5111L, 5121L Clinical Anatomy I-II Lab (each) \$85			
CLE 716 Clinical Lab Practicum \$30			
CLE 827 Clinical Skills Enhancement Tutorial \$65			
CLE 828 ND OSCE Skills Tutorial \$350			
CLE 5120 Clinic Observation I \$42			
CLE 6212 Introduction to Clinic	\$25		
CLS 6210T Musculoskeletal, Ortho, Exercise Physiology & Rehab Tuto	rial \$25		
CLS 6210L Musculoskeletal, Ortho, Exercise Physiology & Rehab Lab	\$125		
CLS 6211L Neurology Lab \$20			
CLS 6220T Cardiology and Pulmonology Tutorial \$.			
CLS 6220L Cardiology and Pulmonology Lab	\$25		
CLS 6221L Hematology and Oncology Lab	\$25		
CLS 6230T Gastroenterology and Proctology Tutorial	\$220		
CLS 6230L Gastroenterology and Proctology Lab	\$55		
CLS 7310 Reproductive Lab \$210			
CLS 7311T Rheumatology and Clinical Immunology Tutorial \$45			
CLS 7320L EENT Lab \$18			
CLS 7321L Dermatology and Minor Surgery Lab	\$50		
CLS 7330T Pediatrics and Geriatrics Tutorial			
CLS 7331L Parenteral Therapy and Environmental Medicine Lab	\$40 \$85		

CLC 7222T Described and an Alberta Haralth Tutanial	ć20	CCCII 001 Cultural Income antica Torond
CLS 7332T Psychology and Mental Health Tutorial	\$20 \$35	GSGH 001 Cultural Immersion Travel \$2,000 GSGH 002 Pre-Global Health Fieldwork \$2.000
CM 11E Bazi Suanming	·	
CM 15E, 25E, 35E, 45E, 55E, 65E Shiatsu I-VI (each) CM 43E Introduction to Chinese Tea	\$10 \$60	GSGH 630 Global Health Fieldwork \$3,500 GSGH 714E Wilderness First Aid \$200
	\$60	·
CM 514, 524, 534, 614, 624, 634 Acu-Moxa Techniques I-VI (each)	\$35 \$35	
CM 515, 525, 535 Palpation and Perception I-III (each) CM 526 Herbs II	\$25 \$75	GSGH 832E Thailand Global Health Experience \$1,400 GSGH 833E Nicaraqua Global Health Experience \$800
CM 530 Intro to Clinic	\$75 \$40	GSGH 833E Nicaragua Global Health Experience^ \$800 GSGH 835E, 836E Ghana Global Health Experience^ \$2,300
CM 556, 566 Herbs I-II Practicum (each)	\$ <del>1</del> 0	GSGH 844E Taos Self-Care Retreat/\ \$1,000
CM 576 Herbs III Practicum	\$10 \$15	GSN 577E Nutrition Career Strategies Retreat \$125
CM 615 Asian Bodywork	\$10	GSN 838 Israel Culinary and Cultural Immersion ^ TBD
CM 656, 666, 676 Herbs IV-VI Practicum (each)	\$20	NDEB 5201E Cascade Mountain Herb Intensive \$175
CM 714, 724 Advanced Acu-Moxa Techniques I-II (each)	\$35	NDEB 6200E Ethnobotany Intensive \$1,850
CM 735 Applied Palpation and Perception	\$35	PHL 5130 Naturopathic Medicine Retreat \$85
CM 826 Herbs Review/Medicinary Practicum	\$5 \$5	Qigong Retreats I-IX (each)*^ \$230
GSMH 603 Practice Strategies III	\$150	*Nonrefundable after term begins   ^Trip fees vary depending on itinerary
GSMH 724E, 734E Applied Psychophysiology II-III (each)	\$100	Nonnerandable arter term begins   . Trip rees vary depending on tanetary
IM 311 Undergraduate Introduction to Integrative Medicine	\$100	Miscellaneous Fees
NDEB 5110E, 5130E Northwest Herbs I-II (each)	\$45	Advanced-Standing Transcript Evaluation Fee (one-time application fee) \$75
NDEB 5210E Herbal Garden Processing	\$45	Audit Fee 80% of the per credit rate
NDEC 6350E Simulation Lab	\$220	Bike Room Fee \$25 per quarter
NDER 8430E Natural Childbirth V: Neonatology	\$170	Bus Pass Fee \$25 per quarter
NDET 5120E, 5130E, 5140E Bodywork I-III (each)	\$170	Bus Pass Replacement Fee Prorated — TBD
NDET 5121E, 5131E, 5141E, 6121E Somatic Re-Education I-IV (each)	\$20	Credit Card Fee 3.0% of the total charged
NDET 6140E Aromatherapy	\$20 \$15	Diploma (replacement) \$50
NDET 6250E Nature Cure Lab	\$40	Graduation Fee (fall quarter billing) \$160
NDET 8423E Advanced Minor Surgery	\$50	HIPAA Training (annual fee) \$30
NMT/Orthopedic Synthesis II, III, IV & V (each)	\$25	Late Payment Fee \$50 per quarter
NOS 615 GYN Lab	\$210	NMSA Fee (winter quarter billing, cannot be waived) \$60
NOS 723 Proctology Lab	\$40	NSF Check Returned \$30 per check
NS 312 Undergraduate Anatomy and Physiology Lab	\$85	Orientation Fee (one-time fee for all new students) \$100
NS 331 Undergraduate Organic Chemistry Lab	\$135	Parking Fee \$107 per quarter
NS 342E Undergraduate Plants of the Northwest	\$30	Repeat Courses (educational enhancement) 30% of the per credit rate
NS 432 Undergraduate Physics Lab	\$35	Stop Payment Fee Online \$25 per check
NU 423E Undergraduate Foundations of Cooking Techniques	\$50	Student Activity Fee \$30 per quarter
NU 431 Undergraduate Whole Food:	750	Transcript Fee \$10 per transcript
Rethinking the Science of Nutrition Lab	\$50	Tuberculosis Testing Fee \$60
PHM 523L Physiotherapy	\$35	(can be waived to new students who have documentation of testing)
PHM 621, 631 Minor Surgery Lab I-II (each)	\$50	Tuberculosis Retesting Fee \$60  (for students who return from trins in foreign countries during the good mis year)
PHM 710L IV Therapy Lab	\$85	(for students who return from trips in foreign countries during the academic year)
RES 620 Intro to Laboratory Methods	\$75	Tuition Deferment Fee (per deferral) \$20
RES 622E Botanicals: Bench to Bedside	\$100	Application Fees
THR 5120L, 5131L Therapeutics I-II Lab (each)	\$50	Graduate/Professional (nonrefundable) \$75 all programs
Retreats and Fieldwork		Undergraduate (nonrefundable) \$50 all programs
	., .	Non-Degree (nonrefundable) \$25
CM 01E China Trip^	Varies	Acceptance Tuition Deposits
CM 16E Five-Element Retreat*^	\$125	(nonrefundable, applied toward first quarter tuition)
CM 44E Taili Patrant* A	\$1,275	Colleges of Naturopathic and Classical Chinese Medicine \$500
CM 44E Taiji Retreat*^	\$230	School of Graduate Studies \$300
CM 501 Immersion Retreat*^	\$260	School of Undergraduate & Part-Time Studies \$200

# **Financial Aid**

At National University of Natural Medicine, we understand that furthering your education will mean a significant investment of your time, energy and resources. NUNM participates in federal Title IV aid programs. Federal Title IV aid program availability is outlined in the policies and provisions mandated by the federal government, and currently provides grants, loans and work-study funds to eligible students enrolled in school.

Financial aid is available to students enrolled at least half time. NUNM's definition of full-time enrollment in undergraduate programs is 12 credits and half time is 6 credits. All other programs define full time as 11 credits and half time as 5.5 credits, except for those programs identified in the School of Graduate Studies, for which the full-time credit load is defined as 8 credits and half time is 4 credits. All students applying for federal financial aid are required to file a Free Application for Federal Student Aid (FAFSA) form. This document becomes available each year through the FAFSA website at fafsa.ed.gov. Eligibility for financial aid is determined using a federal methodology formula outlined by the U.S. Department of Education. The financial aid awarding process begins in early spring of each academic year for all students entering in summer term, and late spring for students entering in the fall. Prospective students must have been accepted for enrollment and paid all required fees and deposits at NUNM to receive an official financial aid award package. NUNM's early-bird packaging date is Feb. 15 for need-based aid consideration. Federal Pell, Federal Supplemental Educational Opportunity Grant (FSEOG), Oregon Opportunity Grant and federal work-study are considered need-based aid awards and awarded to the highest need students as determined by the U.S. Department of Education. Due to limited funding allocations in these programs, eligible students who apply after the priority deadline date risk losing the opportunity to receive these awards. There are no guarantees; however, those students interested in federal work-study will be placed on a waitlist in the event that funds become available later in the year.

Students receiving federal financial aid are required to disclose to the Financial Aid Office all outside resources received on their behalf. These resources will be included and calculated as part of their financial aid award packet, and other aid may be reduced to accommodate any additional resource. To continue to receive financial aid, the student must make satisfactory academic progress, as defined by academic policies, and must be enrolled at least half time to qualify for federal aid. The Financial Aid Office can advise the student about sources of financial aid and budgeting strategies. This office is available as a resource even after the student leaves the university. Alumni may contact the Financial Aid Office for information about lender and servicer contacts, as well as guidance about confidential counseling pertaining to student indebtedness and loan repayment.

We want to provide you with clear and concise information about financial aid. Following is a brief overview of federal financial aid deadlines and programs available to eligible students at NUNM.

To be considered an "eligible student," you must be a U.S. citizen or permanent resident and be enrolled at least half time at the university. Students who attend NUNM on an F-1 visa (foreign students) are not eligible to participate in federal student aid programs.

### Free Application for Federal Student Aid (FAFSA)

To apply for federal student financial aid, and to apply for many state student aid programs, students must complete a Free Application for Federal Student Aid (FAFSA). The information you provide on your FAFSA determines if you are eligible for financial aid. The federal Title IV school code for NUNM is B07624. The application and other relevant information is located at fafsa.ed.gov.

#### Financial Aid Census Date

In accordance with federal regulations, the Financial Aid Office will recalculate federal, state and institutional student aid awards based on enrollment status as of the published census date by the Office of the Registrar, which is the first Monday of the third week of each term: summer, fall, winter and spring. This policy typically coincides with the end of the add/drop period for each semester. All federal, state and institutional aid will be based upon the census date enrollment status.

After census date, students cannot request changes to the federal Pell grant and federal work-study (FWS) programs. Changes to Federal Direct Subsidized, Unsubsidized and PLUS loan programs are allowed if a student wishes to decrease or decline loan(s) or increase a loan if the student had previously declined a portion of or all of any one of these loans, as long as all other eligibility requirements are met. Eligibility for these federal programs may be affected for those who have had FAFSA information or corrections submitted after the census date. Please note that you must be enrolled full time [at least 12 credit hours for undergraduate and 11 for graduate students (varies by program)] to receive FSEOG and FWS forms of financial aid, in addition to other types of aid for which you may be eligible.

A student whose census date enrollment is less than half time is not eligible for any federal student loans. In this case, the entire loan amount for the term must be returned to the Department of Education. The return of loan funds may create an outstanding balance on a student's NUNM account, and also reduces the outstanding principal balance of the student loan.

#### Students who drop credits prior to the 10th day of class

(the census date) may be required to repay some or all of aid that was disbursed if they do not, at that time, meet the enrollment requirements for the types of aid awarded.

**Students who add credits after the 10th day of class** (the census date) will not be eligible to receive additional financial aid.

The Financial Aid Office is not able to adjust all types of aid after the census date. Students experiencing unusual circumstances can request an appointment with the Director of Financial Aid.

This policy does not apply to students who withdraw from all courses. Complete withdrawals from the institution are subject to federal, state and institutional refund policies.

If students drop classes (or change their class status to audit) after the census date, they may also have future financial aid eligibility issues. Please review the add/drop policies in the student handbook for more information on the requirements to maintain financial aid eligibility.

# **Scholarships**

Money received from scholarship sources does not have to be repaid. At NUNM there are limited scholarships available for both entering and matriculated students. NUNM matriculated scholarships are administered by the Advancement Office. In order to be assured of full consideration for available scholarships, completed applications for admission and scholarship awards, along with all supporting documentation, must be received in the Admissions or Advancement Offices by the appropriate deadline dates.

NUNM anticipates awarding scholarships to both new and returning students enrolled during the academic year. The amount and availability varies for all scholarships from year to year. Scholarship recipients must maintain satisfactory academic progress as a condition for receiving a scholarship. Failure to do so will result in cancellation of the scholarship. This policy applies to both internal and external scholarship funding sources.

# **Admissions Scholarships**

Decisions on scholarship awards for incoming students are based on a holistic evaluation of the entire application file and are made at the same time admissions decisions are made. Applicants do not need to complete a separate application for these scholarships.

Since these awards are given on a rolling basis, the probability of receiving a scholarship decreases for applications received later in the year. As of the end of January, approximately half of the available scholarships have been awarded. For more information about these

scholarships, please contact the Admissions Office at 503.552.1660.

### **NUNM Enrolled Student Scholarships**

All current full-time students in good academic standing are encouraged to apply for student scholarships. Finalists are selected based on a record of outstanding academic achievement, leadership, service to the university and community, dedication to the profession of natural medicine, and a commitment to honoring and celebrating diversity. Scholarship applications are available late in spring term of each year. Selected recipients are announced after spring term and scholarships are awarded evenly over the students' following academic year. Additional criteria may apply.

The Office of Advancement operates the university's scholarship program. More information about scholarship availability can be obtained by contacting the vice president of advancement at 503.552.1512.



### Grants

#### Pell Grant

A federal Pell grant, unlike a loan, does not have to be repaid. The federal Pell grant program provides funds to students demonstrating financial need, and are awarded only to undergraduate students who have not earned a bachelor's or professional degree.

# Federal Supplemental Educational Opportunity Grant (FSEOG)

Students who will receive federal Pell grants, and have the most financial need, will receive FSEOGs first. The FSEOG does not need to be repaid. Unlike the federal Pell grant program, FSEOG funds are often exhausted before the end of the school year. Interested students should be sure to submit their FAFSA applications as early as possible.

### **Oregon Opportunity Grant**

The Oregon Opportunity Grant program was created by the Oregon State Legislature to help needy Oregon students to attend Oregon colleges. Oregon residents who attend NUNM may be eligible to receive an Oregon Opportunity Grant. These grants are awarded on the basis of financial need, based upon the information provided on your FAFSA. Students who already have a bachelor's degree are not eligible to receive an Oregon Opportunity Grant. More detailed information regarding the Oregon Opportunity Grant is at oregonstudentaid.gov/oregon-opportunity-grant.aspx.

# **Federal Loans**

Loans comprise the majority of financial aid at NUNM. Approximately 96 percent of students attending the university find it necessary to borrow some funding while completing their program. However, students should keep in mind that these loans are not designed to meet the total student budget to attend programs at NUNM, and that the money borrowed will have to be repaid with interest.

### Federal Direct Loan Program

National University of Natural Medicine currently processes federal loans through the Federal Direct Loan program, wherein borrowers obtain loan funds directly from the U.S. Department of Education.

# Aggregate Graduate Loan Limits for Master's Degree Programs

The maximum amount of student education loans is limited federally to \$20,500 per nine-month period (academic year), and cannot exceed a maximum borrowing

amount of \$138,500—of which no more than \$65,500 can be in subsidized loans. This aggregate limit includes undergraduate loan debt and applies to students enrolled solely in master's degree programs.

# Aggregate Undergraduate Loan Limits

The maximum aggregate amount of federal loans is limited to students enrolled in an undergraduate degree program. The maximum aggregate amount of DEPENDENT undergraduate loans a student may be eligible for is \$31,000—of which no more than \$23,000 may be in the form of a subsidized loan. The maximum aggregate amount of INDEPENDENT undergraduate loans a student may be eligible for is \$57,500—of which no more than \$23,000 may be in the form of a subsidized loan. Students who have received more than their aggregate cap are considered to have been over-awarded, and as such, must resolve the over-award prior to being considered eligible for federal Title IV financial aid. Annual loan limits apply and students should contact the Office of Financial Aid for further information.

# Types of Federal Loans

Ninety-six percent of students attending NUNM find it necessary to receive some form of financial assistance. However, loans comprise the majority of financial aid at NUNM. Student loan borrowers must sign a Master Promissory Note (MPN) that details the terms of their agreement with the U.S. Department of Education. As a condition of signing the MPN, the student agrees to restrict use of student loan funds to pay for current year educationally related expenses only, and as such, agrees to immediately repay any loan proceeds that cannot be attributed to educational expenses for attendance, on at least a half-time basis, at NUNM.

The amount of education loans available will depend on a student's program(s) of enrollment. The student should keep in mind the amount of loans they choose to borrow and their overall indebtedness, and that the money borrowed will have to be repaid with interest. All students interested in federal loans must complete and submit the Free Application for Federal Student Aid (FAFSA).

#### Federal Direct Subsidized Stafford Loan

Subsidized Stafford Loans are one of three programs in the Federal Direct Loan program. Subsidized Stafford Loans have both interest and principal payments waived during enrollment (at least half time) periods and during the grace period. Eligibility for this program is based upon need, class level, annual limits and cumulative limits. Only undergraduate students can be awarded subsidized loans. Students who borrow Subsidized Stafford Loans must complete entrance counseling and a Master Promissory Note (MPN). For more information, go to studentloans.gov.

#### Federal Direct Unsubsidized Stafford Loan

Unsubsidized Stafford Loans are covered under the Federal Direct Loan program. Unsubsidized Stafford Loans have principal payments waived during enrollment (at least half time) and during the grace period. The student borrower must elect to make interest-only payments while attending school or defer payments. Deferred interest payments will be capitalized (added to the principal balance) at repayment. Eligibility for this program is based upon dependent status, class level, and annual and cumulative limits. Student borrowers who elect to borrow both Subsidized and Unsubsidized Stafford Loans (if eligible for both) may complete one MPN for both programs. Borrowers who have not completed entrance counseling must do so before completing an MPN. For more information, go to studentloans.gov.

# Federal Direct Parent Loan for Undergraduate Students (PLUS)

The PLUS loan program is available to parents of undergraduate students. The PLUS loan program is credit-score based. This loan is limited to the difference between the student's cost of education and the student's financial aid. Parents who want to borrow a PLUS loan must complete a PLUS Loan Certification Request form. If a parent borrower is unable to secure a PLUS loan, the undergraduate dependent student may be eligible for additional unsubsidized loans to help pay for his or her education.

#### Federal Direct Graduate PLUS Loan Program

This program is available to students to help offset the cost of their education. This loan is in addition to the Federal Direct Stafford Loan program to fill the gap between any other forms of financial aid the student may receive, and additional money needed for school up to the student's cost of attendance budget. Students should keep in mind that the interest on these loans continues to accrue while enrolled in school, and that the interest rates are generally higher than the Federal Direct Stafford Loan program. A credit check is required and an endorser option may be available. There is no grace period on this loan and repayment begins 60 days after the final loan disbursement; however, students are eligible to request an in-school deferment on this loan. For more information, contact the Financial Aid Office.

# Alternative Loans

Alternative (private) loans are administered and processed by private lending institutions, and are to be used for educational costs after first exhausting potentially more favorable federal and state financial aid options. Contact the Financial Aid Office or visit nunm.edu to search for an alternate loan product through ELMSelect.

#### **Exhaust Federal Student Aid Options First**

Alternative loans are not part of the federal student loan programs, and should only be used in circumstances where you have exhausted all other options in regard to financing your education. It is highly recommended that students apply for financial aid using the Free Application for Federal Student Aid (FAFSA) prior to seeking an alternative loan. You may be eligible for the William D. Ford Federal Direct Loan program. Additional information about direct loans can be found by contacting the Financial Aid Office or visiting nunm.edu.

Benefits of direct loans over an alternative loan may include lower interest rates and better repayment options. Eligible students who elect to decline participation in the Federal Direct Loan program to borrow an alternative loan must contact the NUNM Financial Aid Office to schedule a counseling session and sign a "Federal Student Loan Waiver" form.

# **NUNM Emergency Loans**

The university provides emergency loan assistance on a short-term basis to students experiencing financial hardship resulting from unexpected emergency situations. A maximum of \$500 may be borrowed, and a \$10 processing fee is charged for each loan. Emergency loans are considered a loan of last resort and available at the discretion of the director of financial aid to students with an acute immediate need. Additional criteria for this loan is outlined in the application process. Students cannot borrow more than one emergency loan per academic year, cannot borrow this loan in the final term of an academic year, and must have this loan repaid in full prior to the end of the respective term. For more information, students can make an appointment to meet with the director of financial aid for consideration.

#### **Emergency Loan Examples:**

- Personal/Family Crisis a situation or period in which things are very uncertain, difficult or painful; especially a time when action must be taken to avoid complete disaster or breakdown
- Disaster an event that causes serious loss, destruction, hardship or death
- Tragedy serious illness, financial ruin or fatality
- Theft having property stolen, vehicle damage, etc.

# Student Loan Fund Disbursement Procedures

The Financial Aid Office receives the details of student loan fund disbursements in paper and electronic format. The Financial Aid Office is responsible for recording receipt date and fund amounts for each student, verifying

enrollment status, and certifying the student is not on academic probation. Federal loan disbursements are received at the institution approximately at the start of each term. This detailed information is then forwarded to the Business Office where personnel will verify the total credit hours for each recipient enrolled at the time of disbursement (or when the loan funds received are credited to the student's account).

# Methodology/Frequency of Student Financial Assistance Disbursements

NUNM operates on a quarter system. This system includes summer, fall, winter and spring quarters. Summer is the header term and begins the academic year at NUNM. For financial aid purposes, the academic year begins July 1 and ends June 30 of each year.

All financial aid funds are disbursed quarterly through the Business Office. The Business Office applies financial aid funds to a student's account for unpaid tuition and fees at the time funds are received by the institution. If financial aid funds are in excess of tuition and fees, the resulting credit balance will be refunded to the student to use for other education-related expenses. Refund checks that are available at the start of fall/winter/spring terms are distributed by the Business Office staff on the first day of the term. Refund checks that become available after the first day of classes, or at any time during summer term, are placed in student mailboxes.

If a student receives financial aid after the term begins, any resulting credit balance will be refunded by the Business Office within 10 business days of receipt of the funds by the institution. The refund check will be placed in the student's mailbox.

Credit balances resulting from any other financial activity, such as dropped classes, in the first three weeks of the term will be refunded in week four of the term (after the add/drop period has ended and tuition has become due). Credit balances resulting after week three from any activity other than receipt of financial aid funds will be refunded in weeks six, eight, ten or twelve of the term. Refund checks will be placed in student mailboxes.

# **Professional Judgment Review**

The U.S. Department of Education gives the director of financial aid the authority to make adjustments to a student's financial aid package in cases involving unusual circumstances through a process known as professional judgment. Students experiencing unusual/unexpected financial circumstances during the academic year can request a meeting with the director of financial aid to request a review. An academic year is defined as a period

of enrollment during the current FAFSA year. Students under review are required to act professionally and respond appropriately, and will be required to sign a release to provide specific documentation. The professional judgment review process is solely at the discretion of the director of financial aid, and all outcomes whether approved or denied are final and ineligible for appeal.

# Change of Program Track and Adding/ Dropping Courses — Effect on Financial Aid

Students receiving federal financial aid must provide their Student Status Change form or Add/Drop form, and schedule a meeting with the Financial Aid Office staff to discuss program changes that may affect their eligibility for financial aid.

# Federal Title IV Refund Procedure

Title IV funds are awarded under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws they may no longer be eligible for the full amount of Title IV funds that they were originally scheduled to receive. Students who withdraw from the program before week eight of any quarter may be eligible for a refund. If a student receiving financial aid is eligible for a refund, that refund is returned to the Federal Financial Aid program. If the amount of the refund exceeds the total amount of aid, the excess will be returned to the student.

Students whose accounts were paid in full often have a balance owed to NUNM after withdrawal. The Title IV Return of Funds policy operates independently of the university's tuition refund policy. It is possible for a withdrawing student to owe NUNM money because aid must be returned to the Title IV program, but the student is not entitled to a refund of institutional charges.

Federal Title IV funds are always returned in the order mandated by the U.S. Department of Education:

- For graduate-level students, the order is:
  - 1. Federal Direct Unsubsidized Stafford Loan
  - 2. Federal Direct Graduate PLUS Loan
- For undergraduate-level students, the order is:
  - 1. Federal Direct Unsubsidized Stafford Loan
  - 2. Federal Direct Subsidized Stafford Loan
  - 3. Federal Direct Parent PLUS
  - Pell Grant
  - FSEOG

The calculation of Title IV funds earned by students has no relationship to their incurred institutional charges. Up through the 60 percent (60%) point in each payment period or period of enrollment, a prorated schedule is used to determine the amount of Title IV funds students have earned at the time of withdrawal.

After the 60 percent (60%) point in the payment period or period of enrollment, students earn 100 percent (100%) of the Title IV funds they are scheduled to receive during the period. For a student who withdraws after the 60 percent (60%) point-in-time, there are no unearned funds. However, an institution must still determine whether that student is eligible for a post-withdrawal disbursement.

Federal refund calculations are independent of NUNM's tuition refund policies. NOTE: The federal Title IV refund calculations only apply to withdrawals from all classes. However, if a student changes track and there is an adjustment made to the tuition charges, the Financial Aid Office will recalculate the student's cost of attendance budget for aid eligibility.

Federal regulations require that any student who has received a loan while attending NUNM and who leaves for any reason, including official leaves of absence, must participate in a loan exit interview. Exit interviews are conducted online at studentloans.gov. Additional information may be obtained by contacting the Financial Aid Office.

# Federal Work-Study Program

The federal work-study program (FWSP) provides job opportunities that complement and reinforce our students' educational and career goals. The program is available to students as an alternate resource to earn money to help cover educational expenses. Student employees earn an hourly wage and are paid monthly.

Part-time employment while enrolled in school can help make ends meet. However, due to the demands of the programs, students generally find their schedules limit the amount of time they can work to 20 hours per week or less. The Financial Aid Office administers the federal work-study program and maintains an online timesheet database.

NUNM has a priority packaging date for need-based aid consideration. Students with demonstrated financial need, and who indicate on the FAFSA application an interest in work-study, are eligible to receive an award. However, due to fund limitations, only those students with the highest need will receive an award.

FWSP is a federally subsidized program with a limited allocation. The number of students receiving an award is limited by the program funding received by the university, and is awarded to students as applications are received, until the funding is fully utilized. Allocated funds could be exhausted regardless of whether or not a student applies by the priority deadline.

# Federal Work-Study Conditions and Limitations

The following are mandated conditions and limitations regarding student employment, and are summarized as follows:

- Federal work-study is governed by any and all applicable federal, state and/or local laws.
- Federal work-study must not displace employees or impair existing service contracts. Replacement is interpreted as displacement.
- Federal work-study employees must be paid for all hours worked. The Fair Labor Standards Act prohibits employers from accepting voluntary services from any person who has been compensated for those worked hours.
- Students receiving, or eligible to receive, federal work-study funds may not receive institutional student employment funds.

The federal work-study program allows students to work on- or off-campus to earn money to be applied to education-related expenses. The FWSP award varies from year to year and is dependent on the total federal allocation received by the institution. Federal work-study jobs include positions such as teaching assistant, grader, library assistant, medicinary support, front desk help, patient coordinator and reading tutor, to name a few.



To view a list of current work-study opportunities, please visit nunm.edu/workstudy. Search all departments to see all jobs posted for the year. Only eligible federal work-study students currently attending NUNM are eligible to apply for these positions.

# **Student Employment Program**

The student employment program (STEP) provides job opportunities that complement and reinforce our students' educational and career goals. The program is available to students as an alternate resource to earn money to help cover educational expenses. Student employees earn an hourly wage and are paid monthly. STEP operates independently from the federal work-study program. Limited positions exist and students employed by this program are subject to the budgeted funds of the hiring department. Students employed through STEP cannot work under the federal work-study program.

## **Student Employment Conditions and Limitations**

The following are mandated conditions and limitations regarding student employment, and are summarized as follows:

- Student employment is governed by any and all applicable federal, state and/or local laws.
- Student employment must not displace employees or impair existing service contracts. Replacement is interpreted as displacement.
- Student employees must be paid for all hours worked.
  The Fair Labor Standards Act prohibits employers
  from accepting voluntary services from any person
  who has been compensated for those worked hours.
- Student employees are provided with limited funds determined by the hiring department each budget year.
- Students receiving, or eligible to receive, student employment funds may not receive federal work-study funds.

STEP awards are included in the cost of attendance budget as an outside resource and other aid may be reduced.

# **Student Employment Criteria**

In order to participate in the student employment program (STEP), a student must be an international student, be ineligible for the federal work-study program, or have voluntarily relinquished their FWSP award.

NOTE: students missing the financial aid priority deadline or failing to file the FAFSA are not eligible for STEP funds.

# Financial Aid Satisfactory Academic Progress Policy

Federal regulations require schools to monitor the academic progress of each applicant for federal financial assistance, and that the institution certify that the applicant is making satisfactory academic progress (SAP). Students who meet SAP requirements maintain their eligibility for federally funded programs.

Students must maintain SAP toward a degree in order to continue in the program and to continue to receive federal, state and institutional financial aid. "Satisfactory Academic Progress" is defined as passing all program requirements, maintaining pace of progression to complete their degree, and completing their program of enrollment within the published timeframe. Students who do not meet the minimum standards will find their financial aid eligibility in jeopardy. For a complete explanation of the financial aid SAP policy for both graduate and undergraduate programs, contact the Financial Aid Office.

# Financial Aid Policy and Drug-Related Convictions

Students are ineligible for federal Title IV aid if convicted of an offense involving the possession or sale of illegal drugs. The period of ineligibility is contingent upon the offense committed and on whether the student is a first-time or repeat offender. (Information on Oregon and federal sanctions, and periods of ineligibility, is available from the Office of Financial Aid and in the student handbook.)

### **Eligibility and Rehabilitation**

#### **Drug Rehabilitation**

To restore Title IV eligibility early, students must successfully complete a qualified drug rehabilitation program. This program must conduct two unannounced drug tests and receive, or be qualified to receive, funds directly or indirectly from a federal, state or local government program.

#### **Government Program**

An acceptable government program is one that is administered or recognized by a federal, state or local government agency or court. The drug rehabilitation program must be qualified to receive, or is currently receiving, payment directly or indirectly from a statelicensed insurance company; or administered or recognized by a state-licensed hospital, health clinic or medical doctor.

# College of Naturopathic Medicine

# Naturopathic Medicine

Naturopathic medicine is a patient-centered primary care approach to health care that focuses on restoring and optimizing health. It is a distinct system of health care—an art, science, philosophy and practice of diagnosing, treating and preventing disease. Heir to the vitalistic tradition of medicine in the Western world, naturopathic medicine emphasizes the treatment of disease through the stimulation, enhancement and support of the inherent healing power of the body. Methods of treatment are chosen that respect the natural healing process whenever possible.

### A Brief History: Naturopathic Medicine in the U.S. and NUNM

While the framework for naturopathic medicine can be traced back through history to Hippocrates, it was Drs. Benedict and Louisa Lust who brought nature cure medicine from Europe to the United States in 1896 and

helped develop the term naturopathy. Benedict Lust is widely known for his historic role in establishing naturopathic medicine in North America. However, it is less well-known that Louisa Lust hired Dr. Lust and financed the first naturopathic

The mission of the College of Naturopathic Medicine is to educate and train physicians in the art, science and research of naturopathic medicine

college. NUNM honors both Lusts as the architects of naturopathic medicine in North America.

By the early 20th century, naturopathic medicine was flourishing throughout the country. Naturopathic doctors were licensed in a majority of states. There were more than 20 naturopathic medical colleges; the most prominent was Lust's American School of Naturopathy in New York City. Naturopathic medical conventions attracted more than 10,000 naturopathic physicians.

At the same time, there was strong support for what is now known as conventional allopathic medicine or biomedicine. The Flexner Report of 1910 was commissioned through the Carnegie Foundation as a critical examination of medical education in the United States and Canada. Its goal was to lend credence to the standardization of medical education admissions, licensing and practice.

In his report, Abraham Flexner, a high school teacher whose highest degree at the time was a Bachelor of Arts, eschewed all medical approaches that he deemed lacking in scientific research and validity, or did not advocate the use of treatments such as pharmaceutical drugs.

Naturopaths, in particular, came under greater scrutiny as the medical profession questioned the viability of naturopathic medicine. Pressure to close naturopathic schools and eliminate the profession began to gain momentum.

Naturopathic medicine experienced a precipitous decline in the 1940s and '50s with the emergent rise of pharmaceutical medicine and technological advances. The concept that Flexner introduced, that naturopathic medicine was quackery or charlatanism, became prevalent. Naturopathic licensing was largely discontinued. Schools either complied with the call to eliminate curricula for naturopathy or closed their doors.

#### From NCNM to NUNM

As the last naturopathic degree program was terminated at Western States College of Chiropractic and Naturopathy in Portland, Oregon, naturopathic doctors banded together to find a way to save the profession from extinction. NDs

> from around the country raised money to create a school they would fight to keep open for generations to come. In 1956, Drs. Frank Spaulding, W. Martin Bleything and Charles Stone signed incorporation papers, establishing National College of Naturopathic Medicine

(NCNM) in Portland, Oregon. From its founding until 1979, NCNM was the only naturopathic medical college

Established by those who began practicing in the 1920s and '30s, NUNM (first known as National College of Naturopathic Medicine, more recently as National College of Natural Medicine, and now as National University of Natural Medicine) has been at the center of the profession for more than 60 years, preserving and extending the legacy of naturopathic medicine by training future physicians. The profession has experienced resurgence and tremendous growth in the past two decades as a health-conscious public has sought alternatives for conditions that conventional medicine has not adequately addressed. This growth is in direct response to the changing needs of our society. The public is demanding a medical model in which the individual plays a more active role in their health and healing process, and doctors want a practice that is more patient-centered and holistic.

Today, NUNM is alma mater to thousands of naturopathic physicians. Our graduates practice in a rapidly growing number of U.S. states, territories, Canadian provinces

and foreign countries. Many are nationally acclaimed healthcare experts, as well as successful physicians. Since 1956, when a determined group of NDs launched a new era in naturopathic education, NUNM alumni have carved new pathways in the advancement of the naturopathic profession. This is an exciting time to join the profession and continue making history in the field of naturopathic medicine.

### Scope of Practice

Naturopathic physicians' scope of practice varies by jurisdiction. Many jurisdictions regard NDs as primary care physicians and provide them with a diagnostic and therapeutic scope of practice necessary to offer a wide range of options for their patients. These include general and preventive health care, as well as diagnosis and treatment for acute and chronic conditions. In those jurisdictions in which NDs are not licensed, the scope of practice excludes the diagnosis and treatment of disease.

The naturopathic physician is defined by the U.S. Department of Labor as one who: "Diagnoses, treats and cares for patients, using a system of practice that bases treatment of physiological functions and abnormal conditions on natural laws governing [the] human body: Utilizes physiological, psychological and mechanical methods, such as air, water, light, heat, earth, phytotherapy, food and herb therapy, psychotherapy, electrotherapy, physiotherapy, minor and orificial surgery, mechanotherapy, naturopathic corrections and manipulation, and natural methods and modalities, together with natural medicines, natural processed foods and herbs and nature's remedies. Excludes major surgery, therapeutic use of X-ray and radium, and use of drugs, except those assimilable substances containing elements or compounds which are components of body tissues and are physiologically compatible to body processes for maintenance of life." (However, many states, including Oregon, have broad drug formularies that allow NDs to prescribe drugs.)

# Licensing and Certification of Naturopathic Physicians

Naturopathic doctors are legally recognized to practice medicine throughout the United States and U.S. territories, Canada, as well as many other countries. NDs are fully licensed in: Alaska, Arizona, California, Colorado, Connecticut, Hawaii, Kansas, Maine, Maryland, Massachusetts, Minnesota, Montana, New Hampshire, North Dakota, Oregon, Pennsylvania, Utah, Vermont and Washington. They are also licensed in Washington D.C., the U.S. territories of Puerto Rico and the Virgin



Islands, and in the Canadian provinces of Alberta, British Columbia, Manitoba, Ontario, Nova Scotia and Saskatchewan. In other U.S. and Canadian jurisdictions, a varying scope of naturopathic practice may be permitted or protected by court decisions, attorney general opinions or local regulations. It should be noted that the state of Utah requires a one-year residency before licensing NDs. Like other physicians, recently graduated NDs are encouraged to seek additional clinical experience under the supervision of a licensed physician in the form of residencies and mentorships. Efforts to enact licensing laws are underway in several American states, and licensure legislation is in the final stages of consideration in a few states. The best sources of current information about the legal status of naturopathic medicine in a particular area are the American Association of Naturopathic Physicians (818 18th St. NW, Suite 250, Washington, DC 20006, or naturopathic.org), state or provincial naturopathic associations, and individual naturopathic physicians practicing in those areas.

Currently, all states that license naturopathic physicians require graduation from a residential course of study offered through an institution approved by the examining jurisdiction. NUNM meets all requirements of, and is accredited by, the Council on Naturopathic Medical Education (CNME). Completion of the ND degree at NUNM or another CNME-recognized institution qualifies candidates to sit for a licensing examination that every applicant must pass to be licensed. Similarly, NUNM graduates are eligible to sit for examination in Canadian provinces that license naturopathic medicine. While each jurisdiction has its own examination requirements, an increasing number use the Naturopathic Physicians Licensing Exam (NPLEX) as part or all of the required testing.

# **Educational Outcomes of the Program**

- Medical Knowledge: Apply appropriate biomedical knowledge and clinical skills to patient-centered naturopathic primary care.
- Patient Management: Apply the philosophy of naturopathic primary care to effectively encourage prevention, treat health problems, and foster optimal health.
- **Communication and Collaboration:** Apply communication skills that result in an effective connection with patients, their loved ones, and other health professionals.
- **Practice-Based Learning and Improvement:** Appraise, assimilate and apply scientific evidence to improve patient care.
- Ethics and Professionalism: Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.
- Practice Management and Business Skills: Identify opportunities and develop resources for establishing and maintaining a viable career using your naturopathic medical education.
- Systems-Based Practice: Effectively call on system resources to provide care that is of optimal value.

# The Six Philosophical Principles of Naturopathic Medicine

The practice of naturopathic medicine emerges from six principles of healing. These principles are based on the objective observation of the nature of health and disease, and are examined continually in light of scientific analysis. These principles stand as the distinguishing marks of the profession:

#### First Do No Harm

primum non nocere

Therapeutic actions that are complementary to, and synergistic with, the body's innate healing process reduce harm to patients. Naturopathic physicians follow three precepts to avoid harming the patient:

- Use methods and medicinal substances that minimize the risk of harmful effects, and apply the least possible force or intervention necessary to diagnose illness and restore health.
- Whenever possible, avoid symptom suppression as it can interfere with the healing process.
- Respect and cooperate with the vis medicatrix naturae in diagnosis, treatment and counseling.

#### The Healing Power of Nature

vis medicatrix naturae

The body has the inherent ability to establish, maintain and restore health. The healing process is ordered and intelligent; nature heals through the response of the life force. The physician's role is to facilitate and augment this process, to identify and remove obstacles to health and recovery, and to support the creation of a healthy internal and external environment.

#### **Identify and Treat the Cause**

tolle causam

Illness does not occur without cause. Underlying causes of disease must be discovered, and removed or treated, before a person can recover completely from illness. Symptoms are expressions of the body's attempt to heal, but are not the cause of disease; therefore, naturopathic medicine addresses itself primarily to the underlying causes of disease, rather than to the symptoms. Causes may occur on many levels, including physical, emotional, mental and spiritual. The physician must evaluate fundamental underlying causes on all levels, directing treatment at root causes as well as seeking relief of symptoms.

#### Treat the Whole Person

in perturbato animo sicut in corpore sanitas esse non potest

Health and disease are conditions of the whole organism, involving a complex interaction of physical, spiritual, mental, emotional, genetic, environmental and social factors. The physician must treat the whole person by taking all of these factors into account. The harmonious functioning of all aspects of the individual is essential to recovery from and prevention of disease, and requires a personalized and comprehensive approach to diagnosis and treatment.

#### The Physician as Teacher

docere

Beyond an accurate diagnosis and appropriate prescription, the physician must work to create a healthy, sensitive interpersonal relationship with the patient. A cooperative doctor-patient relationship has inherent therapeutic value. The physician's major role is to educate and encourage the patient to take responsibility for her/his own health. The physician is a catalyst for healthful change, empowering and motivating the patient to assume responsibility. It is the patient, not the doctor, who ultimately creates or accomplishes healing. The physician must strive to inspire optimism as well as understanding. The physician must also make a commitment to her/his personal and spiritual development in order to be a good teacher.

#### **Prevention**

principiis obsta: sero medicina curatur

The ultimate goal of naturopathic medicine is prevention of disease. This is accomplished through education and promotion of lifestyle habits that foster good health, and through secondary prevention modalities, including those promoted by the U.S. Preventive Services Task Force. The physician assesses risk factors and hereditary susceptibility to disease, and counsels patients on methods to avoid further harm and risk. The physician places the greatest emphasis on building health. Because it is difficult to be healthy in an unhealthy world, it is the responsibility of both physician and patient to create a healthier environment in which to live.

# **Diagnostic Techniques**

NDs are trained in diagnostic techniques, such as physical exam, laboratory testing, diagnostic imaging and psychological assessment. NDs endeavor to identify disease states in the context of the individual's overall health.

# Therapeutic Techniques

Naturopathic practice includes the use of any medicinal substances that contain elements which are components of bodily tissues, or can be utilized by the body for the maintenance of life and the repair of tissues. The current scope of practice in Oregon includes minor surgery techniques.

"Scope of practice" is specifically defined by legislation in the various states and provinces that license or regulate naturopathic medicine, and practice varies significantly among states, provinces and countries.

**Botanical Medicine:** Many plant substances are powerful medicines. Where isolated, chemically derived drugs may address only a single problem, botanical medicines are able to address a variety of problems simultaneously. When properly administered, most botanical medicines can be applied effectively with minimal chance of side effects.

Clinical Nutrition: Food is the best medicine and is a cornerstone of naturopathic practice. Many medical conditions can be treated effectively with foods and nutritional supplementation, with fewer complications and side effects. NDs use diet, fasting and nutritional supplementation in their practices.

Homeopathic Medicine: Homeopathic medicine is the treatment of disease/symptoms using correctly prescribed, minimal doses of natural substances (plant, animal, mineral), which, if taken in larger doses, would cause disease/symptoms—the acting principle being "like cures like." It promotes the return to health on physical, mental and spiritual levels.



**Mind-Body Medicine:** Mental attitudes and emotional states may influence or even cause physical illness. Counseling, nutritional balancing, stress management, and other therapies are used to help patients heal psychologically.

**Minor Surgery:** Naturopathic physicians perform in-office minor surgery, including repair of superficial wounds and removal of foreign bodies, cysts and other superficial lesions.

Naturopathic Natural Childbirth/Midwifery: Trained and licensed naturopathic physicians facilitate natural childbirth in an out-of-hospital setting. They offer prenatal, intrapartum and postpartum care using modern diagnostic techniques combined with ancient midwifery wisdom. NUNM offers an elective course sequence resulting in a Natural Childbirth/Midwifery Certificate that allows students to apply for separate licensure in naturopathic natural childbirth.

Pharmaceutical Medicine: While naturally derived pharmaceutical drugs have been within the scope of naturopathic practice in Oregon for decades, legislation now allows naturopathic physicians to use most prescription pharmaceutical agents commonly employed in a primary care setting, effective January 2010. Consistent with our conventional counterparts, and depending on the individual licensing laws of each state, naturopathic physicians may utilize a wide formulary of pharmaceutical medications when deemed appropriate for patient care—and always in consideration of our naturopathic principles.

**Physical Medicine:** Naturopathic medicine utilizes therapeutic manipulation of soft tissue, muscles, bones and spine. NDs also use ultrasound, diathermy, exercise, massage, water, heat and cold, and other gentle electrical therapies in the treatment of musculoskeletal conditions and pain.

**Parenteral Therapy:** Intravenous and intramuscular injections of micronutrients and macronutrients are used for many purposes, from simple nutritional support to detoxification procedures in cases of exposure, and specific treatment of both chronic and acute diseases.

**Nature Cure:** The use of time-honored natural treatments including fresh air, exercise, whole foods and hydrotherapy are important in the naturopathic treatment and prevention of disease.



# Doctor of **Naturopathic Medicine**

The Doctor of Naturopathic Medicine degree program at NUNM is an intensive four-year doctoral program that prepares candidates for national (NPLEX) and state licensing examinations, and the general practice of naturopathic medicine. The core (or required) curriculum provides the foundation and skills necessary for naturopathic general practice.

First-year classroom studies include the normal structure and function of the body with a solid introduction to naturopathic theory, philosophy, therapeutics and medical systems. Students enter the clinic in an observational capacity and begin preceptorships in the first year.

The second- and third-year didactic curriculum focuses on organ system block courses that integrate all aspects of the normal and abnormally functioning system, including pathophysiology, prevention, evaluation and diagnosis of disease. Therapeutic modalities, including botanical medicine, clinical nutrition, physical medicine, homeopathy, hydrotherapy, and other natural and pharmacological methods are woven throughout all organ systems courses. All courses highlight cultural competency, ethics, evidence-informed decision-making, medical jurisprudence, naturopathic philosophy, communication skills and professionalism, while emphasizing a wholesystem approach to optimal health and wellness.

Second-year clinical experience continues with preceptorships and hydrotherapeutics. After the completion of second-year coursework, students are eligible to sit for the NPLEX Part 1 Biomedical Science exam.

The third-year clinical curriculum consists of practical training as a secondary intern in a variety of supervised settings, ranging from community-based clinics to the on-campus medical health center. To advance to secondary status, students must pass a clinical proficiency examination, or OSCE 1 (Objective Structured Clinical Examination).

The fourth year is focused on clinical training as a primary intern as well as elective coursework. To attain primary status, students must pass the OSCE 2 exam, with a final OSCE examination required for graduation.

Because the program is rigorous and the course load heavy, students may apply to complete the ND degree in five rather than four years. In some cases, students may be required to be in the five-year track. Students may take no more than seven years to complete the ND program.

While at NUNM, students may undertake any two programs concurrently (e.g., ND/MSOM, ND/MSiMR, MSOM/MScN, etc.). Contact the Office of Admissions for more information.

# **ND Course Descriptions**

Course codes ending in a "T" designate tutorial; course codes ending in an "L" designate lab. If a student fails a lecture portion of a block course, the student will need to retake all three sections—lecture, tutorial and lab. If a student fails a tutorial or lab portion of a block course, the student will only need to retake the tutorial or lab.

# **Basic and Biomedical Sciences**

#### **Structure and Function Series**

This yearlong sequence is an in-depth exploration of the microscopic and gross structure and function of the human body. Students examine the anatomy, physiology and embryology of each organ system, including the cardiovascular, gastrointestinal, endocrine, integumentary, nervous, lymphatic, respiratory, urinary and reproductive systems. Biochemical structures and pathways of metabolism, including the roles of vitamins and minerals, are also covered.

#### BAS 5110, 5110T, 5110L - Structure and Function I

(Lecture – 13 credits, tutorial – 3 credits, lab – 0.5 credit)
Course I covers basic biochemistry; cell and tissue pathology; and cardiac, circulatory, respiratory and renal structure and function. *Corequisites: BAS 5110, 5110T, 5110L* 

# BAS 5120, 5120T, 5120L - Structure and Function II

(Lecture – 8 credits, tutorial – 3 credits, lab – 0.25 credit)

Course II covers gastrointestinal and dermatologic structure and function, physiology and pathology.

Corequisites: BAS 5120, 5120T, 5120L; Prerequisite: BAS 5110

# BAS 5130, 5130T, 5130L – Structure and Function III

(Lecture – 8 credits, tutorial – 3 credits, lab – 0.25 credit)
Course III covers the central nervous system, behavior, pain, stress, and reproductive system structure and function, physiology and pathology.

Corequisites: BAS 5130, 5130T, 5130L; Prerequisite: BAS 5120

# **Clinical Anatomy Series**

This series covers the anatomy of the muscular, skeletal, vascular and neurological elements of the extremities, spinal column and skull. The lab component includes participation in palpation and biomechanics labs, and cadaver dissection as an aid to learning the interrelationships of the parts of the human body. Students study the microscopic anatomy of all major body tissues with an emphasis on histopathology.

# BAS 5111, 5111T, 5111L - Clinical Anatomy I

(Lecture – 3 credits, tutorial – 1 credit, lab – 1.5 credits)

Course I covers the anatomy of the upper extremity, joint types, muscle types, heart, great vessels, neuromuscular units, lungs, arthrokinematics, pelvis, hip, renal anatomy, gluteal region and thigh. *Corequisites: BAS 5111, 5111T, 5111T.* 

#### BAS 5121, 5121T, 5121L - Clinical Anatomy II

(Lecture – 3 credits, tutorial – 1 credit, lab – 1.5 credits)
Course II covers anatomy of the gastrointestinal system; lower extremity; liver; gall bladder; head, neck and face; skull; axial skeleton and core muscles; spinal mechanics; diaphragm; and male and female genitourinary systems.

Corequisites: BAS 5121, 5121T, 5121L; Prerequisite: BAS 5111

# **BAS 5131, 5131T – Microbiology, Public Health and Immunology** (Lecture – 3 credits, tutorial – 2 credits)

This course explores infectious diseases, microbial structure and function, and the normal flora and common pathogens of the human body. The etiology, epidemiology, prevention and control of communicable diseases from a public health perspective is also covered. Special emphasis is given to how practitioners effectively interact with public health agencies. The class also explores the basic functions of the immune system with emphasis on its role in the protection against microbial infections and tumors, immune deficiency states, autoimmunity and psychoneuroimmunology. *Corequisites: BAS 5131, 5131T* 

# **Practice Management**

# **Practice Management Series**

This series covers the required steps necessary to start and maintain a private naturopathic medical practice, including an in-depth review of clinic business operations and management, development, administration and marketing. Students will also have an opportunity to explore other professional paths as naturopathic physicians, such as starting a career in academics, research, consulting, sales, or joining existing integrative medicine practices. *Prerequisites: classes must be taken in sequence from I–V* 

# BUS 7320 – Practice Management I: Human Relations in Business (1 credit)

This course explores dynamics of change, cultural diversity, work stress, ethics/social responsibility, conflict management, and motivation as it pertains to working in practices or larger systems.

# BUS 7330 – Practice Management II: Project and Quality Management (1 credit)

This course provides students with a deep understanding of project management by introducing processes, methodologies and technical tools to effectively plan, manage and implement projects. Furthermore, continuous quality improvement, utilization management, and lean and risk management in health care are explored.

# BUS 8410, 8420 — Practice Management III & IV: Business Plan/ Portfolio Development (1 credit each)

These two courses are designed to prepare students to open a practice, seek employment as an independent contractor, and/or work inside a larger healthcare system.

Prerequisite: BUS 8410 for BUS 8420



# BUS 8430 - Practice Management V: Capstone (1.5 credits)

The practice management series culminates in a capstone project, for which students synthesize the knowledge they have learned.

# BUS 8400 - Jurisprudence (1 credit)

This course surveys medical healthcare law as it applies to naturopathic physicians. Topics include licensing and regulation, reporting requirements, informed consent, patient confidentiality, advanced directives, HIPAA, malpractice and provider service agreements.

# Clinical Sciences

All courses within the clinical sciences curriculum begin with a brief overview of structure, function, anatomy, physiology and whole-system wellness. The bulk of the courses are devoted to diagnosis, assessment and treatment of pathology. Within the context appropriate to that discipline, clinical science courses address criteria for referral to specialists and integration of naturopathic medicine with conventional medicine. Courses also integrate cultural competency, ethics, evidence-informed practice, interprofessional practice, jurisprudence and practitioner cultivation. These courses place a strong emphasis on case-based learning and practical clinical skills.

# CLS 6210, 6210T, 6210L - Musculoskeletal, Orthopedics, **Exercise Physiology and Rehabilitation**

(Lecture -9 credits, tutorial -6 credits, lab -3 credits) Students who successfully complete the CLS 6210 series will integrate information learned and applied in first-year courses to assess musculoskeletal complaints in diverse patient populations, develop and justify differential and

working diagnoses, build patient rapport, and develop and implement comprehensive management plans. The course includes the following topics: the musculoskeletal system, biomechanics, a review of clinical anatomy and musculoskeletal physiology, orthopedics, exercise physiology, physical rehabilitation, pain education and neurophysiology, neurodynamics and manual therapies. Corequisites: CLS 6210, 6210T, 6210L; Prerequisites: BAS 5130, 5121; THR 5120, 5131

# CLS 6211, 6211T, 6211L - Neurology

(Lecture - 5.5 credits, tutorial - 1.5 credits, lab - 0.25 credit) Students who successfully complete the CLS 6211 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic neurologic conditions. Corequisites: CLS 6211, 6211T, 6211L; Prerequisites: BAS 5130, 5121; THR 5120, 5131

# CLS 6220, 6220T, 6220L - Cardiology and Pulmonology

(Lecture – 9 credits, tutorial – 4 credits, lab – 5 credits) Students who successfully complete the CLS 6220 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic cardiovascular and pulmonary conditions.

Corequisites: CLS 6220, 6220T, 6220L; Prerequisites: BAS 5130, 5121; THR 5120, 5131

# CLS 6221, 6221L - Hematology and Oncology

(Lecture - 7 credits, tutorial - 1.5 credits, lab - 0.25 credit) Students who successfully complete the CLS 6221 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic hematologic and oncologic conditions.

Coreguisites: CLS 6221, 6221T, 6221L; Prerequisites: BAS 5130, 5121; THR 5120, 5131

# CLS 6230, 6230T, 6230L – Gastroenterology and Proctology

(Lecture - 8.5 credits, tutorial - 2 credits, lab - 0.25 credit) Students who successfully complete the CLS 6230 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic gastrointestinal conditions.

Corequisites: CLS 6230, 6230T, 6230L; Prerequisites: BAS 5130, 5121; THR 5120, 5131

# CLS 6231, 6231T - Urology and Nephrology

(Lecture – 5.5 credits, tutorial – 3 credits)

Students who successfully complete the CLS 6231 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic conditions related to urologic and nephrologic conditions.

Corequisites: CLS 6231, 6231T;

Prerequisites: BAS 5130, 5121; THR 5120, 5131

## CLS 6232, 6232T - Metabolism and Endocrinology

(Lecture – 7 credits, tutorial – 3 credits)

Students who successfully complete the CLS 6232 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic conditions related to metabolic and endocrine conditions. This course focuses on complex interactions of the body's hormonal systems and the causes and effects of metabolic and hormonal imbalances. *Corequisites: CLS 6232, 6232T; Prerequisites: BAS 5130, 5121; THR 5120, 5131* 

# CLS 7310, 7310T, 7310L – Reproductive Systems (Andrology, Gynecology and Natural Childbirth)

(Lecture – 11 credits, tutorial – 0.5 credit, lab – 3 credits)
Students who successfully complete the CLS 7310 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention and gender-specific preventive services, diagnosis, assessment, and management of both acute and chronic biological sexspecific conditions and LGBTQI health care. This course also provides students with foundational knowledge of natural childbirth, as well as prenatal and postpartum care. Corequisites: CLS 7310, 7310T, 7310L;

# CLS 7311, 7311T – Rheumatology and Clinical Immunology (Lecture – 4 credits, tutorial – 2 credits)

Prerequisites: BAS 5130, 5121; THR 5120, 5131

Students who successfully complete the CLS 7311 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic conditions related to rheumatologic and immunologic conditions. *Corequisites: CLS 7311, 7311T;*Prerequisites: BAS 5130, 5121; THR 5120, 5131

# CLS 7320, 7320T, 7320L – Eyes, Ears, Nose and Throat (EENT)

(Lecture – 5 credits, tutorial – 2 credits, lab – 0.25 credit)
Students who successfully complete the CLS 7320 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic ophthalmologic and otorhinolaryngeal conditions.

Corequisites: CLS 7320, 7320T, 7320L;

Prerequisites: BAS 5130, 5121; THR 5120, 5131

# CLS 7321, 7321T, 7321L – Dermatology and Minor Surgery

(Lecture – 7.5 credits, tutorial – 2 credits, lab – 1 credit)
Students who successfully complete the CLS 7321 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic dermatological conditions. Students will learn minor surgery techniques, such as nerve blocks, excision and biopsy, laceration repair, toenail removal, and a variety of suturing techniques. Corequisites: CLS 7321, 7321T, 7321L; Prerequisites: BAS 5130, 5121; THR 5120, 5131

#### CLS 7330, 7330T – Pediatrics and Geriatrics

(Lecture - 6 credits, tutorial – 2 credits)

Students who successfully complete the CLS 7330 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention and age-specific preventive services, diagnosis, assessment, and management of both acute and chronic conditions related to pediatric and geriatric populations.

Corequisites: CLS 7330, 7330T;

Prerequisites: BAS 5130, 5121; THR 5120, 5131

CLS 7331, 7331L – Parenteral Therapy and Environmental Medicine (Lecture – 3.5 credits, tutorial – 2 credits, lab – 0.5 credit) Environmental medicine is the diagnosis and treatment of

conditions related to the human exposure of both macroand microtoxins from the environment. Exposure routes regarding the macroenvironment, including air, water, soil and food sources, are discussed in addition to exposures based on activity, occupation or in-home sources. Exposure routes for the microenvironment are reviewed, including transdermal, inhalation, ingestion and ocular routes. Students learn the safe and appropriate intravenous and intramuscular injections of micro- and macronutrients for nutritional support and detoxification procedures in cases of poisonings, and specific treatment of both chronic and acute diseases. Students will also learn the clinical rationale for parenteral therapy; how to perform parenteral therapy techniques and develop therapy protocols; how to treat complications and handle common emergencies that can occur during parenteral therapy; and successful IV catheter insertion. Corequisites: CLS 7331, 7331T, 7331L; Prerequisites: BAS 5130, 5121; THR 5120, 5131

# CLS 7332, 7332T - Psychology and Mental Health

(Lecture – 4 credits, tutorial – 3 credits)

Students who successfully complete the CLS 7332 series will demonstrate knowledge and application of clinical sciences related to pathology, disease prevention, diagnosis, assessment, and management of both acute and chronic mental health conditions. *Corequisites: CLS 7332, 7332T; Prerequisites: BAS 5130, 5121; THR 5120, 5131* 





# Clinical Education

Students gain practical clinical skills as they work under the close supervision of licensed naturopathic physicians in NUNM's many healthcare facilities, on campus and throughout the city of Portland. Students begin learning through observation and gradually gain more responsibility for patient care. All patient care is under the direct supervision of licensed physicians.

Requirements for the completion of the clinical practicum include 1,264 clock hours of direct patient contact with a minimum of 500 patient contacts and 225 primary contacts. Under the guidance and assessment of the clinical faculty, students must demonstrate competence in specific areas, including medical knowledge, clinical skills, judgment, professional and ethical behavior, and communication skills.

Clinical experience begins during winter term of the first year. The first year and a half of clinical experience is chiefly observational and technical—with students observing various clinical rotations and performing hydrotherapy treatments (and massage if qualified) on clinic patients. Students enter the clinic as secondary interns after their second year is completed, and as primary interns after their third year. As interns, students become part of the treatment teams that deliver naturopathic care in the university health centers.

Each student has a required summer clinic rotation as a primary intern. Summer rotations prior to the summer before a student's last year are available at the request of the student and are not required.

## CLE 827 – Clinical Skills Enhancement Tutorial (no credit assignment)

This course is assigned to students who require extra support in meeting minimal levels of clinical competency. Students are referred for additional instruction by their clinical supervisors or dean. During this six-week course, students are tutored individually or in a small group in areas where they need skill development.

Corequisite: secondary or primary intern status

# CLE 828 – Objective Structured Clinical Examination (OSCE) Skills Tutorial (no credit assignment)

Students are referred to this course for a three-week period when they need to gain competency in the skills necessary to pass the OSCE exams. Prerequisite: this course is assigned after a second OSCE exam failure

# CLE 829 - Clinical Tutoring (no credit assignment)

This course provides one-on-one tutoring in the clinical setting, by a faculty member, for students who require extra support in meeting minimal levels of clinical competency. Corequisite: primary intern status

# CLE 931, 932, 933 – Objective Structured Clinical Examination 1, 2 and 3 (no credit assignment)

Prior to beginning secondary rotations, students must pass the secondary clinic entrance examination (OSCE 1, CLE 931). Prior to beginning primary rotations, students must successfully complete the primary entrance exam (OSCE 2, CLE 932) and third-year courses, as defined in the student handbook, to become a primary clinical student. Successful completion of the OSCE 3, administered in winter quarter of the final year, is required for graduation. Prerequisites for CLE 931: successful completion of CLE 5120, 5130; CLE 932: successful completion of one rotation of CLS 7300 or two rotations of CLE 709; CLE 933: successful completion of six rotations of CLE 8400 or CLE 811

# CLE 5120, 5130 - Clinical Observation I & II (1.25 credits and 1 credit) Clinical observations provide students with learning

experiences under the mentorship of licensed physicians in practice. During this first-year series, students are assigned to NUNM clinic shifts where they will observe routine clinic policies and procedures, doctor/student internpatient relationships, diagnosis and treatment, application of therapeutic modalities, and referral management. CLE 5120 has five hours of didactic training to prepare students for the observation role.

# **CLE 5131 – Introduction to Community Education** (0.25 credit)

This course covers the community education guidelines and required paperwork, and provides resources and support needed to complete CLE 7311.

#### CLE 6212 - Introduction to Clinic (0.25 credit)

This course gives students an overview of NUNM clinic procedures and includes required OSHA training. Prerequisites: CLE 5120, 5130

#### CLE 6222 - Hydrotherapy Rotation (2 credits)

Students administer hydrotherapeutic treatments to NUNM health center patients under the supervision of a licensed naturopathic physician. Students continue to develop their diagnostic assessment and patient communication skills, refine their hydrotherapeutic treatment skills, monitor patients during treatment, and recommend hydrotherapeutic home treatments. *Prerequisites: CLE 5120, 5130; THR 5120, 5120T, 5120L* 

**CLE 7300 – Secondary Rotation** (2.5 credits each; 3 required rotations) Students serve as secondary student interns at NUNM health centers under the supervision of a licensed naturopathic physician. As a secondary student intern, students are responsible for the initial patient interaction, including taking patient vital signs, and reviewing medications and allergies, etc. In addition, the secondary student will participate in patient care by assisting the primary intern, which may include interviewing patients, conducting physical exams, and ordering and assessing diagnostic lab work. *Prerequisites: CLE 5120, 5130, 6212, 6222; CLS 6210, 6220, 6230. Successful completion of OSCE 1.* 

# **CLE 7311 – Community Education** (2 credits)

Through promotion of naturopathic medicine to the greater community, students will enhance their public speaking, communication, presentation, organizational, networking and outreach skills. Examples of community education projects include developing educational materials, giving lectures, creating flyers or handouts, staffing a wellness table, and teaching a class. Students will complete 24 hours of community education during their time at NUNM. *Prerequisite: CLE 5131* 

**CLE 8400 – Primary Rotations** (2.5 credits each; 13 required rotations) The primary student intern rotation is the culmination of a student's naturopathic medical education with NUNM. Under the supervision of a licensed naturopathic physician, a primary student intern is responsible for interviewing patients, conducting physical exams, ordering and assessing diagnostic lab work, developing a diagnosis and treatment plan, and managing patients. Students are expected to synthesize knowledge and skills from all courses in the naturopathic program and demonstrate the ability to apply critical thinking skills, evidenceinformed practice, and diagnostic skills to the treatment and management of patients in a primary care setting. Prerequisites: CLE 7300; CLS 6210, 6211, 6220, 6221, 6230, 6231, 6232, 7310, 7311, 7320, 7321, 7330, 7331, 7332. Successful completion of OSCE 2.

# **CLE 8400T, 8410T, 8420T, 8430T – Case Integration Mentorship** (1.5 credits each)

These seminar-style courses consist of small groups of students who meet with faculty mentors. Under the guidance of an experienced clinician, students present and analyze cases, discuss and review the evidence behind therapeutic options, and support their peers



in determining diagnosis, treatment and management protocols for their patients. *Corequisite: CLE 8400* 

# **CLE 8411, 8421, 8431 – Grand Rounds** (1.5 credits each)

Grand Rounds lectures are given by physicians or subject matter experts, typically from outside the NUNM community. Topics may include the Health Insurance Portability and Accountability Act (HIPAA), OSHA and other regulating agencies, best practice charting principles, cultural sensitivity, clinical cases, and other areas that are important in a physician's practice. Students are exposed to a variety of clinical conditions and treatments designed to augment material delivered in the core curriculum.

# CLE 8401, 8432 – Community Experience (ComEx) Preceptorship (5 credits and 4 credits)

Students participate in external preceptorships throughout all four years under the mentorship of licensed physicians outside NUNM. Students observe and may participate in medical interviewing, physical examination, diagnostic techniques and analysis, and application of therapeutic modalities. Students will also observe routine clinic policies and procedures, doctor/patient communications, coding and billing practices, and referral management; and reflect on these experiences. *Prerequisite: CLE 5120* 

# CLS 999 - Case Portfolio (no credit assignment)

Each student is required to write six case papers, which will be selected from patients seen on different shifts during each quarter as a primary intern; generally, two papers per term are completed. These papers are used to assess the following:

- Demonstrate knowledge of patient assessment, diagnosis, treatment and management.
- Ability to write a clear, concise report on a patient's condition, analysis, treatment and therapeutic outcome in a professional manner, including the appropriate use of references.
- Ability to critically analyze a patient's diagnosis and management.

Corequisite: CLE 8400

# Philosophy

# PHL 5110, 5120 — Naturopathic History and Philosophy I & II

This series introduces the philosophical basis of naturopathic medicine and the role of the naturopathic physician in today's world. Students will survey the history of naturopathic medicine, historical figures that played key roles in the development of naturopathic medicine, and the formation of naturopathic philosophy. Emphasis is placed on the six guiding principles of naturopathic philosophy: first do no harm, the healing power of nature, identify and treat the cause, treat the whole person, physician as teacher, and prevention.

# PHL 5113 – Introduction to Medical Systems (2 credits)

Students study the history and philosophy of the major medical systems of the world. Characteristics of the U.S. medical system are explored, as well as the developing role of naturopathic medicine within the larger context of the healthcare system. Insurance practices, strategies for delivering quality care, and best practices in referral and management of patients are also covered.

# PHL 5130 - Naturopathic Medicine Retreat (0.75 credit)

This weekend experiential course is an extension of the naturopathic history and philosophy course. Naturopathic philosophy comes to life as students discuss and experience nature cure and related therapies in a natural setting.

# **Therapeutics**

#### THR 5120, 5120T, 5120L – Therapeutic Modalities I

(Lecture – 6 credits, tutorial – 2 credits, lab – 1 credit)
This course introduces three of six major naturopathic therapeutic modalities: clinical nutrition, hydrotherapy and physical medicine. History and philosophy, terminology, mechanism of action, and general therapeutic applications, indications, contraindications, safety and monitoring for each modality are covered. Students analyze evidence for effectiveness of each modality.
The role of each modality in the context of naturopathic care and in the greater medical system is also explored. *Corequisites: THR 5120, 5120T, 5120L* 

# THR 5131, 5131T, 5131L – Therapeutic Modalities II

(Lecture -6 credits, tutorial -2 credits, lab -0.5 credit)

This course introduces three of six major naturopathic therapeutic modalities: homeopathy, botanical medicine and pharmacology. History and philosophy, terminology, mechanism of action, and general therapeutic applications, indications, contraindications, safety and monitoring for each modality are covered. Students analyze evidence for effectiveness of each modality. The role of each modality in the context of naturopathic care and in the greater medical system is also explored.

Corequisites: THR 5131, 5131T, 5131L

# Electives

ND students are required to complete 16 elective credits. Elective courses (including those required for certificate programs) may not be offered every year. All scheduled elective courses are based on faculty availability and adequate student enrollment.

# CM 5100E, 5101E, 5102E — ND Qigong Retreat Series I-III (1 lecture credit each)

With this series of weekend qigong retreats, the College of Classical Chinese Medicine makes available a synthesis of the Eastern art of cultivation for the beginning ND student. In the serene surroundings of a retreat center in the Pacific Northwest, students experience energy-based phenomena, such as qi, and are introduced to a variety of ancient practices that cultivate body, mind and spirit. Specific exercises include Free Style Dragon Qigong (Longzi Linggan Gong) from the Emei School of Qigong; Yin Yang Raise and Descend Open and Close Qigong (Yin Yang Sheng Jiang Kai He Gong) from the Jinjing School of Qigong; Daoist quiet meditation and sacred chants from a variety of healing traditions.

# NDEB 5110E, 5130E - Northwest Herbs I & II (2 lecture credits each)

These courses cover local plant identification, ethical harvesting, drying techniques, and preparation of herb tinctures, oils, salves and many other therapeutic preparations. Traditional, historical and scientific uses of plants are explained. Students are encouraged to develop an appreciation for plants that is not limited to seeing them as medicinal agents. Each term includes outdoor field trips to enhance the study of plants.

# NDEB 5201E – Cascade Mountain Herbal Intensive (2 lecture credits)

This course delivers a direct experience of medicinal plants in their natural habitat under the guidance of an experienced herbalist and wild crafter, grower and botanist. The first day is spent in the lush plant life of the Columbia River Gorge. The second and third days are spent at a private sanctuary in rural Hood River, Oregon. At each stage the local plants and their botany, properties, ecology and lore are discussed. Students have the opportunity to gather wild herbs and prepare medicines from them. *Prerequisite: THR 5131* 

# NDEB 5210E – Herbal Garden Processing (0.5 lecture credit)

Held in Battle Ground, Washington, this outdoor course provides hands-on experience with items grown in the garden. Demonstrations will include sprouting; fermenting; making tinctures, salves, oils, creams and vinegars; canning; preserving flowers; harvesting seeds and more. Students will gain experience working with a variety of recipes and more than a dozen live plants.

#### NDEB 5230E - Ayurveda Herbs (2 lecture credits)

This class covers Ayurveda from a basic perspective, and focuses on the role of herbal medicines in the Ayurvedic

healthcare system. Students are taught to describe basic clinical uses for 60 select major Ayurvedic botanicals, describe basic Ayurvedic energetics as appropriate to a clinical setting, and describe basic Ayurvedic clinical approaches to therapy for 10 body systems.

#### NDEB 5231E - CASEE Center Herb Walk (0.5 lecture credit)

This field study course in intended to be part botanical and medical, part ecological, and part energetic and awareness building. Held at the CASEE Center in Brush Prairie, Washington, the course focuses on Pacific Northwest ecosystems, plant identification and basic taxonomy. The medicinal properties of both introduced and native plants will be presented. The class includes time to discuss and experience the different feel and energy of the various gardens, deep forest, and grassland regions of the center. The interconnectedness of the plants of these various ecosystems is examined, and from there the interconnectedness of the various insects and animals with the plants is examined. *Prerequisite: THR 5131* 

# NDEB 6200E - Ethnobotany Intensive (5 lecture credits)

This course is an intensive study of the ethnobotany of Peruvian Andes, cloud forests and the "eyebrows" of the jungle. The course involves botanical, ethnobotanical, biochemical, and ecological information and discussions; involves all the senses; and includes lecture, experiential, field investigations, and cultural immersion components. The course improves students' familiarity with botanical families and grounds their understanding of medicinal actions and the clinical application of herbs.

# NDEB 6230E, 6330E – Advanced Topics in Botanical Medicine I & II (3 lecture credits each)

These courses build on the required botanical materia medica classes. Studies expand training in plant medicines and the creation of botanical formulas for various disorders. Plant energetics, the most recent research on botanical medicines, and the spiritual and metaphysical aspects of herbs are explored in more depth. *Prerequisite: THR 5131* 

# NDEB 6310E – Effective Formulas for Top General Practice Conditions (1 lecture credit)

This course considers the conditions most common to general family practice (gynecologic conditions, common infections, common skin complaints, diabetes and most common complications, etc.) and focuses on sophisticated formulations for a variety of presentations. Students hone their formulation skills and include energetic and constitutional considerations and specific indications of niche herbs. A variety of formulation styles and practices are addressed using dietary herbs and approaches, teas versus tinctures versus pill, topical applications and cost, and practical considerations.

Prerequisites: CLS 7310, 7311, 7320, 7321



# NDEB 6330E – Botanical Cell Biology, Molecular Mechanisms and Research (1 lecture credit)

This physiology and research-based class focuses on chemical constituents in plants, published research on mechanisms of action, and clinical trial results. Plants affecting cell membrane receptors, glycoproteins, neurotransmitters, action potential, ion gates, liver enzymes, collagen regeneration, photosensitization, and many other molecular mechanisms of action are covered. The important and popular topics of drug herb interactions, cancer management tools, and herbs in pregnancy and lactation will also be addressed. *Prerequisite: THR 5131* 

# NDEC 5125E – Personal Development as a Physician

(1 lecture credit and 0.5 lab credit)

This class facilitates the transition from student to physician by focusing on personal development within the doctor/patient interaction. Emphasis is placed on difficult interactions, with guidance in taking responsibility and first steps in moving the relationship along.

# NDEC 6221E - OSCE | Preparation (0.5 lab credit)

Students review how to observe, assess and evaluate medical conditions structured in a case-based learning environment. This course emphasizes case review, physical exam skills, and developing a differential diagnosis.



# NDEC 6240E – Advanced Electrocardiogram and Spirometric **Interpretation** (0.5 lab credit)

This tutorial emphasizes the interpretation and analysis of electrocardiographs and spirograms, as well as the presentation of case studies to provide additional context. The course also provides the opportunity for further discussion of the material from the lecture course. Corequisite: CLS 6220

# NDEC 6349E – Advanced Medical Biochemistry (3 lecture credits)

As biochemical knowledge has advanced, fundamental changes have emerged that require exploration. Basic principles have broader application than previously thought. This course reviews and builds on the major themes of the first course in biochemistry, especially as they relate to and highlight a medical practice. Topics such as calorie restriction, ketogenic diets, and cancer metabolism are used to engage students and reveal key ideas. Selected case studies are presented for students to conduct structured evaluations.

# NDEC 6350E - Simulation Lab (1 lecture credit)

Students work with high-fidelity medical simulators at Legacy Emanuel Hospital, experiencing acute scenarios of conditions encountered in naturopathic primary care. Prerequisite: must be in last year of ND program

# NDEC 7221E - OSCE II Preparation (0.5 lab credit)

Students review how to observe, assess and evaluate medical conditions structured in a case-based learning environment. This course emphasizes case review, history assessment, physical exam skills, differential diagnosis, diagnostic methods and assessment development.

# NDEC 7310E – Pharmacology for Clinical Practice (2 lecture credits)

This course looks at the top most prescribed drugs in the U.S., the disease states they represent, standards of care, and a stepwise approach to drug therapy in those

disease states. Various patient cases/scenarios are used to determine how that might change drug therapy. Students practice writing the prescriptions, adding nutrients to offset any known depletions, then determine the best means of safely discontinuing the agents as the patient's health improves. Prerequisites: CLS 7310, 7311, 7320, 7321

# NDEC 7311E - Pain: Pathophysiology and Management Options (2 lecture credits)

This course is a comprehensive approach to pain management. Students learn assessment and diagnostic techniques; ways to communicate with patients about pain; treatment options; and new theories in the application of pain management strategy. Prerequisite: CLS 6210

# NDEC 7313E – Neuroendocrine Immunology (2 lecture credits)

This course is primarily intended to help concurrent (those working toward both their ND and CCM degrees) degree students integrate concepts they have learned from both models of healing into a more unified and comprehensive system that can be applied to their patients. Through class and case discussion, students explore concepts related to terrain, tissue states, diathesis, temperament, miasm, and the Chinese Five-Element organ networks. A unified model of Chinese and Western herbalism is also explored. Prerequisite: third-year status in the ND and CCM programs

# NDEC 7320E - Microbiome (1 lecture credit)

This course explores the history, use and effectiveness of colonic hydrotherapy. Students learn indications, contraindications, treatment protocols and supportive therapies. Prerequisite: THR 5120

# NDEC 7322E - Integrative Phytotherapy (2 lecture credits)

This course explores the pharmacology and constituents of commonly prescribed Chinese herbs. Prerequisite: third-year status in the ND and/or CCM programs

# NDEC 7330E – Transgender Health and Gender Transition (2 lecture credits)

This course provides an in-depth description of transgender identities and terminology, including firsthand accounts of the transgender experience. Students gain an extensive understanding of endocrinology and reproductive health in the context of cross-gender hormone transition; and naturopathic, herbal and acupuncture point support for patients in various stages of gender transition; surgical options are also discussed. Prerequisite: CLS 7310

# NDEC 7340E - The Liver in Health and Disease (2 lecture credits)

This course involves an in-depth study of hepatic pathophysiology and treatments of diseases, including: hepatitis C, steatohepatitis, alcoholic liver disease, liver cirrhosis, liver cancer and diabetes. Emphasis is put on interpreting laboratory results, understanding the psychophysiology of the liver, liver detoxification systems and their clinical applications, the basics of Chinese

medicine perspectives on the liver, and the critical role a healthy liver plays in overall health. *Prerequisite: CLS 6230* 

NDEC 7341E - Sleep Health and Disorders (2 lecture credits)

Healthy sleep is imperative for overall good health. This course begins with sleep and circadian physiology and normal sleep throughout the life span. Then the six primary categories of sleep disorders are covered. Cases are presented with time for discussion and work-up of the differential diagnosis. Women's sleep health and the interaction between sleep and other disorders is included. The course concludes with information on ways to promote healthy sleep, botanical and nutrition approaches, and common pharmaceuticals. *Prerequisite: BAS 5130* 

NDEC 7342E – Advanced Gastroenterology (2 lecture credits)

This course explores certain key disorders of the digestive tract with a focus on the small intestine (bacterial overgrowth), inflammatory bowel disease, and altered GI anatomy. Physical exam, lab and imaging studies, management of these disorders, as well as optimization of the digestive function are emphasized through lecture and case discussions. *Prerequisite: CLS 6230* 

# NDEC 7343E – Advanced Rheumatology

(2 credits)

The inflammatory conditions involving the connective tissue structures of the body, including muscles and joints,

are further explored. Emphasis is placed on autoimmune disorders and their treatment with both conventional and naturopathic therapeutics. *Prerequisite: CLS 7311* 

#### NDEC 7350E - Auriculomedicine (2 lecture credits)

This class is a solid introduction to ear microsystem acupressure therapies for primary care practitioners. The goal is to provide NDs with safe, natural, evidence-based tools and strategies to treat both pain and psychological conditions using appropriate touch.

NDEC 7351E – Point-of-Care Ultrasound (2.5 lecture credits) Students learn to use Point-of-Care Ultrasound (POCUS) to diagnose common clinical entities in the provider's office. Students are taught to rule out conditions including, but not limited to: DVT, cholecystitis, AAA, ovarian cysts, hydronephrosis, fractures and pneumonia; and to diagnose various musculoskeletal conditions.

# NDEC 8420E – Advanced Diabetes Management (2 lecture credits)

This course trains students in the naturopathic treatment of diabetes. It covers the pathophysiology and diagnosis of diabetes, and takes an integrative approach to its treatment, which includes diet, exercise, natural and pharmacologic agents, and behavioral strategies. *Prerequisite: CLS 6232* 



#### NDEC 8430E - Advanced Gastroenterology Lab (1 lab credit)

This lab covers techniques used in a functional gastroenterology practice: integrated abdominal exam, gastric pH testing, visceral release and energetic psychology techniques. It is a mixture of both scientifically based and clinically proven techniques.

Prerequisite: CLS 6230

### NDEH 7330E - Sensation in Homeopathy (2 lecture credits)

This course teaches students homeopathic case taking, case analysis, repertorization and prescribing using the Sensation Method as developed by Rajan Sankaran and colleagues. Sensation Method focuses on studying case taking, case analysis, miasms, materia medica (kingdoms and sub-groups), and follow-up management through the lens of this comprehensive and effective method of practicing homeopathy. This will be used in conjunction with classical repertorizing for best clinical outcomes. Prerequisite: THR 5131

# NDEH 7340E – Homeopathy V (3 lecture credits)

For the discussed disease states, students learn the most common symptoms and the related rubrics, the most common remedies indicated, and how to differentiate among them. Students will view and analyze cases being taken, observe patients of different "remedy types," match the symptoms of the patient with rubrics in Kent's Repertory, and study materia medica to find the most appropriate remedy. Students will understand the main indications and uses of discussed remedies. Prerequisite: THR 5131

# NDEH 8420E - Homeopathy VI (3 lecture credits)

Upon the completion of this course, students will know the most common symptoms and the related rubrics, as well as the most common remedies indicated, and how to differentiate among them for the discussed disease states. Cardiovascular, neurological, musculoskeletal and genitourinary (including sexual) problems are studied. Materia medica are presented in each area, along with differentials, important rubrics to consider, and the most prominent remedies for each condition. Cases are presented, taken and analyzed. Remedies are prescribed. Prerequisite: THR 5131

#### NDEH 8430E - Homeopathy VII (3 lecture credits)

Upon completing this course, students will be able to describe the characteristic general and keynote symptoms, and major therapeutic indications for at least eight additional homeopathic remedies. Students will be able to give the symptom indications with remedy comparisons for at least 10 remedies most often used for each of several common gastrointestinal and dermatological complaints. Students will be able to describe the uses, strengths and weaknesses of various repertories and methods of repertorization. In addition, they will be able to prepare potencies from crude substances. Prerequisite: THR 5131

#### NDEH 8440E - Homeopathy VIII (3 lecture credits)

Upon completion of this course, students will have learned the most important remedies in the treatment of the following conditions and be able to differentiate and prescribe from among the leading remedies: anxiety disorder, arthritis, cancer, diabetes, eczema, gangrene, herpes zoster, insomnia, lumbago, multiple sclerosis, neuralgias, psoriasis, sciatica, suicidal tendencies, thyroid dysfunction, tumors, ulcers and warts. Case analysis and patient management skills will be refined. Prerequisite: THR 5131

## NDER 7330E – Natural Childbirth II: Pregnancy (3 lecture credits)

This course initiates specialty training in naturopathic natural childbirth. The emphasis is on the role of prenatal care in assessing and assisting the maintenance of wellbeing for mother and fetus. Screening skills introduced in Reproductive Systems (CLS 7310) are refined and expanded. Complications of pregnancy are studied along with the continuum of appropriate treatment possibilities, ranging from naturopathic therapeutics to referral for high-risk cases. Prerequisite: CLS 7310

# NDER 7331E – Advanced Gynecology: Special Topics (2 lecture credits)

Students learn to assess/evaluate, treat and manage female sexual dysfunction and interstitial cystitis; and receive updated information on menopause regarding HT prescribing, non-HT prescribing and management. Half of the class is focused on breast cancer risk factors, diagnosis, conventional treatment options, and naturopathic treatment as an integrative approach, followed by a class devoted to breast cancer cases. The majority of the course is lecture based, with some interactive cases and a final paper due week 10. Prerequisite: CLS 7310

# NDER 7340E - Natural Childbirth III: Labor and Delivery

This course prepares students to provide support and safety to the birthing family through labor and the emergence of the new baby. Films of normal labor and birth are used to enhance lectures on the techniques of monitoring the fetal/maternal condition and the progress of the labor. Complications of labor and birth are examined, and the hands-on skills required for response to those situations are discussed and demonstrated. Prerequisite: CLS 7310

# NDER 7341E - Advanced Gynecology: Infertility and **Endocrinology** (2.5 lecture credits)

Students learn to assess/evaluate, treat and manage medical conditions related to endocrinology in women's health care. This includes: infertility, secondary amenorrhea, thyroid disease, hyperprolactinemia, adrenal dysfunction, premature ovarian failure, polycystic ovary syndrome, luteal phase defect, conditions that present with anovulation, hypothalamic dysfunction, age-related infertility, obesity and diabetes. Prerequisite: CLS 7310

# NDER 8420E — Natural Childbirth IV: Postpartum Management (3 lecture credits)

This course begins with the third stage of birth, delivery of the placenta, and concludes with the six weeks of postpartum. The effects of pregnancy resolution and the beginning of motherhood on a woman's body, mind and spirit are studied. Students are taught practical skills, such as perineal repair, bladder catheterization, IV insertion, blood loss estimation, management of postpartum hemorrhage, and breast-feeding support; as well as an appreciation for the dynamics of personal and familial transition during this period. *Prerequisite: CLS 7310* 



#### NDER 8421E – Advanced Pediatrics (2 lecture credits)

This course takes an in-depth look at the care and management of children. In-office management of common pediatric illnesses and complaints, how to deal with parents and other caregivers, understanding children's particular needs in medical situations, handling pediatric referrals and emergencies, and recognizing developmental milestones are discussed in detail. *Prerequisite: CLS 7330* 

#### NDER 8430E – Natural Childbirth V: Neonatology (3 lecture credits)

This course educates both the naturopathic physician and the ND obstetrical specialist on case management of the mature fetus, and newborn to 12 weeks of age. Lectures include a review of fetal development from 34 weeks gestation, transition anatomy-physiology in the neonate, normal newborn assessment, screening/treatment for newborn anomalies, and neonatal resuscitation. *Prerequisites: CLS 7310, 7330* 

# NDER 8440E – Natural Childbirth VI: Special Topics (2 lecture credits)

This seminar provides students with the opportunity to research topics of special interest and share information with colleagues. Topics presented by the course instructors include developing childbirth education classes, counseling and grief in pregnancy loss, and adoption. Additionally, this course covers water births, working with related social agencies, and intubation training. *Prerequisite: CLS 7310* 

# NDER 8441E – Natural Childbirth VII: Legal Aspects (1 lecture credit)

Medical, legal and malpractice issues are discussed with respect to different states, as well as requirements for licensure.

NDET 5120E – Bodywork I: Massage Foundations (1 lab credit)
Bodywork I teaches the basic language and strokes
of Swedish massage, and is the foundation course for
Bodywork II and III. Students learn by giving and receiving
treatments while being guided in hands-on classes.

# NDET 5121E, 5131E, 5141E, 6121E — Somatic Re-Education I-IV (1 lab credit each)

Somatic re-education is an interactive approach to human learning that uses touch and movement to bring about improved cognitive and physical abilities. This gentle, noninvasive approach to physical medicine provides an alternative for working with patients for whom traditional manipulation is not an optimal procedure. *Prerequisite: these courses are to be taken in the ordered sequence* 

# NDET 5130E - Bodywork II: Advanced Massage (1 lab credit)

Bodywork II covers advanced massage techniques—trigger point work and therapeutic touch. Students learn by giving and receiving treatments in supervised hands-on classes. *Prerequisite: NDET 5120E* 



# NDET 5140E - Bodywork III: Energy Work (1 lab credit)

Bodywork III teaches students to open, become sensitive to, and develop their energy work. This is taught in several ways, including subtle energy techniques and the vocabulary of energy. Respect for personal boundaries is emphasized. Prerequisite: NDET 5130E

# NDET 6140E - Aromatherapy (1.5 lecture credits)

With lectures, demonstrations and hands-on practice, this course covers the fundamentals of selected aromatic botanicals or essential oils—their history, quality, chemistry and composition; indications/contraindications; research on efficacy; and safe use in clinical applications. Energetics of essential oils from both a Western and Chinese perspective are introduced, and these concepts are used to guide topical application of essential oils to specific areas or points on the body.

# NDET 6230E - Mindful Self-Compassion (2 lecture credits)

This is an eight-week course with a half-day silent retreat designed to explicitly teach skills of self-compassion. This experiential course uses meditations, informal practice, group discussion and dyads, and homework exercises. A variety of guided meditations (lovingkindness, affectionate breathing, giving and receiving meditation [11 meditations total]), informal practices for use in daily life (soothing touch, self-compassionate letter writing, compassionate listening, self-compassion for care givers [18 total]) are taught and practiced. Self-compassion is evoked during the classes using experiential exercises, and home practices are taught to help develop the habit of self-compassion. Students will be asked to incorporate evidence-based literature into reflective journals.

#### NDET 6250E - Nature Cure (2 lecture credits)

This class emphasizes the essence of natural medicine as taught by the founding naturopathic doctors. Students practice water and herbal therapies, poultices, Cayce treatments and other therapies on themselves and each other. There are opportunities to experience an internal cleansing/detoxification, learn practical applications, and hear case experiences of natural, safe remedies.

# NDET 8423E - Advanced Minor Surgery (2.5 lecture credits)

Upon completion of this course, students will have a broader knowledge of surgical procedures, treatment and follow-up. Various new suturing techniques will enable students to handle a wider variety of cases.

Prerequisites: CLS 7321

# **Naturopathic Medicine Certificate Programs**

ND students in good academic standing are eligible to apply for admission into the Homeopathic Medicine and Natural Childbirth/Midwifery Certificate programs. Due to space constraints, admission is limited. These are not degree programs. Contact the Office of Admissions for further information.

# Homeopathic Medicine Certificate

The Homeopathy Certificate is open to current naturopathic medicine students, and begins to prepare the recipient to apply for the Homeopathic Academy of Naturopathic Physicians (HANP) credential after they graduate. The certificate requires a student to take all the required coursework in the naturopathic program, as well as three elective homeopathy courses. There are additional requirements for case analysis and written papers to complete this certificate. Students are required to apply to be included in the program, to ensure that they can be scheduled in the required courses while they are pursuing their naturopathic medicine degree. Contact the Registrar's Office for further information.

# Natural Childbirth/Midwifery Certificate

The natural childbirth/midwifery program at NUNM is a synthesis of the philosophies of natural medicine and traditional midwifery. Although NUNM's program is didactic only, and does not include the experiential aspects of training, it prepares students to seek further education through clinical preceptorships, should they so choose. With dual training as a naturopathic physician and midwife, naturopathic midwives are uniquely qualified to provide comprehensive health care for women and their families throughout their lives.

The Natural Childbirth/Midwifery Certificate program provides the didactic education necessary for a graduate

to complete requirements to sit for the American College of Naturopathic Obstetricians (ACNO) licensing examination. These courses are in addition to the required Reproductive Systems block course in the ND program, and are comprised of six elective courses. Students receive instruction in the natural process of pregnancy, labor and birth, while also being trained in detection and management of unusual and emergency situations. Students intending to include natural childbirth in their practices must complete the entire didactic sequence of coursework to familiarize themselves with the management of pregnancy, childbirth, postpartum and neonatal periods.

Program coursework meets Oregon licensure requirements for the certificate of natural childbirth, and is recognized by Washington state midwifery requirements. Both states also require practical clinical experience, which is not included in this certificate program. Individuals interested in practicing naturopathic midwifery in other areas should contact local governing agencies to inquire about requirements.

Students must be in good academic standing and may apply for the program in their third year of the naturopathic medicine program after completing CLS 7310 (Reproductive Systems). Although NUNM does not formally offer a clinical component, the College of Naturopathic Medicine can assist with connecting students with qualified preceptors in the community. Students who are interested in a clinical preceptorship

will be interviewed by the preceptor. Unfortunately, due to limited available positions, not all students will be offered a clinical rotation.

# ND Graduate Medical Education (Residency) Program

At the end of their accredited naturopathic medical program, NDs can become licensed for practice once they have successfully passed their NPLEX board exams and have completed state licensure requirements. However, postgraduate education and training is highly encouraged. There are increasing opportunities for further clinical education in the form of naturopathic residencies, and NUNM leads the profession—we developed and administer the first and largest graduate medical education program certified by the Council on Naturopathic Medical Education (CNME). Currently, residency placement is a highly competitive process. In addition to earning a Doctor of Naturopathic Medicine degree from an accredited institution, candidates must demonstrate professionalism, maturity, commitment to serve, excellent clinical abilities, and an aptitude for enhancing their clinical skills. NUNM is committed to assisting the profession in developing an adequate number of residency opportunities to allow the graduates of all accredited naturopathic degree programs to receive the benefits of graduate medical education.

For the most current information, please visit: nunm.edu/residency-program/.

# Residency Program Deadlines for 2017-2018 Academic Year

These dates are estimates based on the previous year's match deadline. Applicants should look for the confirmed deadlines when they are published in the fall of 2017.

Nov. 10, 2017	Residency applications available to all participating naturopathic students and all participating naturopathic colleges/universities via the NUNM website: nunm.edu
Dec. 9, 2017	Residency selection committee begins accepting applications
Jan. 12, 2018	Application deadline for first-year residency positions due by 5 p.m.
Feb. 6, 2018	Scheduling of interviews begins for NUNM Health Centers residencies
Feb. 27, 2018	Interview process begins for all first-year residency positions, for all sites
April 14, 2018	Deadline for completion of interviews for all residency sites
April 30, 2018	Match day and official offer letters to selected candidates for all participating sites
May 22, 2018	Deadline for candidates to submit signed Statement of Intent, accepting positions at NUNM Health Centers and all other participating sites

For more information regarding the residency program, please visit nunm.edu, or contact Dr. Dee Saunders at dsaunders@nunm.edu or 503.552.1946.

# ND FOUR-YEAR CURRICULUM

COURSE#	FIRST-YEAR FALL	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
BAS 5110	Structure and Function I				156	156	13.00
BAS 5110T	Structure and Function I Tutorial		36			36	3.00
BAS 5110L	Structure and Function I Lab			12		12	0.50
BAS 5111	Clinical Anatomy I				36	36	3.00
BAS 5111T	Clinical Anatomy I Tutorial		12			12	1.00
BAS 5111L	Clinical Anatomy I Lab			36		36	1.50
PHL 5110	Naturopathic History and Philosophy I				12	12	1.00
PHL 5113	Intro to Medical Systems				24	24	2.00
	Electives*				12	12	1.00
	First-Year Fall Totals	0	48	48	240	336	26.00

COURSE#	FIRST-YEAR WINTER	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
BAS 5120	Structure and Function II				96	96	8.00
BAS 5120T	Structure and Function II Tutorial		36			36	3.00
BAS 5120L	Structure and Function II Lab			6		6	0.25
BAS 5121	Clinical Anatomy II				36	36	3.00
BAS 5121T	Clinical Anatomy II Tutorial		12			12	1.00
BAS 5121L	Clinical Anatomy II Lab			36		36	1.50
PHL 5120	Naturopathic History and Philosophy II				12	12	1.00
THR 5120	Therapeutic Modalities I				72	72	6.00
THR 5120T	Therapeutic Modalities I Tutorial		24			24	2.00
THR 5120L	Therapeutic Modalities I Lab			24		24	1.00
CLE 5120	Clinical Observation I	20			5	25	1.25
	Electives*				12	12	1.00
	First-Year Winter Totals	20	72	66	233	391	29.00

COURSE#	FIRST-YEAR SPRING	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
BAS 5130	Structure and Function III				96	96	8.00
BAS 5130T	Structure and Function III Tutorial		36			36	3.00
BAS 5130L	Structure and Function III Lab			6		6	0.25
PHL 5130	Naturopathic Medicine Retreat			18		18	0.75
THR 5131	Therapeutic Modalities II				72	72	6.00
THR 5131T	Therapeutic Modalities II Tutorial		24			24	2.00
THR 5131L	Therapeutic Modalities II Lab			12		12	0.50
BAS 5131	Microbiology, Public Health and Immunology				36	36	3.00
BAS 5131T	Microbiology, Public Health and Immunology Tutorial		24			24	2.00
CLE 5130	Clinical Observation II	20			2	22	1.00
CLE 5131	Intro to Community Education				3	3	0.25
	Electives*				12	12	1.00
	First-Year Spring Totals	20	84	36	221	361	27.75

FIRST-YEAR TOTALS 1088 82.75

# second year

COURSE #	SECOND-YEAR FALL	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLS 6210	Musculoskeletal, Orthopedics, Exercise Physiology and Rehab				108	108	9.00
CLS 6210T	Musculoskeletal, Orthopedics, Exercise Physiology and Rehab Tutorial		72			72	6.00
CLS 6210L	Musculoskeletal, Orthopedics, Exercise Physiology and Rehab Lab			72		72	3.00
CLS 6211	Neurology				66	66	5.50
CLS 6211T	Neurology Tutorial		18			18	1.50
CLS 6211L	Neurology Lab			6		6	0.25
CLE 6212	Introduction to Clinic				3	3	0.25
	Second-Year Fall Totals	0	90	78	177	345	25.50
COURSE #	SECOND-YEAR WINTER	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLS 6220	Cardiology and Pulmonology				108	108	9.00
CLS 6220T	Cardiology and Pulmonology Tutorial		48			48	4.00
CLS 6220L	Cardiology and Pulmonology Lab			12		12	0.50
CLS 6221	Hematology and Oncology				84	84	7.00
CLS 6221T	Hematology and Oncology Tutorial		18			18	1.50
CLS 6221L	Hematology and Oncology Lab			6		6	0.25
CLE 6222	Hydrotherapy Rotation	48				48	2.00
	Second-Year Winter Totals	48	66	18	192	324	24.25
COURSE #	SECOND-YEAR SPRING	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLS 6230	Gastroenterology and Proctology				102	102	8.50
CLS 6230T	Gastroenterology and Proctology Tutorial		24			24	2.00
CLS 6230L	Gastroenterology and Proctology Lab			6		6	0.25
CLS 6231	Urology and Nephrology				66	66	5.50
CLS 6231T	Urology and Nephrology Tutorial		36			36	3.00
CLS 6232	Metabolism and Endocrinology				84	84	7.00
CLS 6232T	Metabolism and Endocrinology Tutorial		36			36	3.00
	Second-Year Spring Totals	0	96	6	252	354	29.25

48

252

102

621

1023

79.00

**SECOND-YEAR TOTALS** 

# third year

COURSE#	THIRD-YEAR FALL	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLS 7310	Reproductive Systems (Andrology, Gynecology and Natural Childbirth)				132	132	11.00
CLS 7310T	Reproductive Systems Tutorial			12		12	0.50
CLS 7310L	Reproductive Systems Lab		36			36	3.00
CLS 7311	Rheumatology and Clinical Immunology				48	48	4.00
CLS 7311T	Rheumatology and Clinical Immunology Tutorial		24			24	2.00
CLE 7300	Secondary Rotation	60				60	2.50
CLE 7311	Community Education		24			24	2.00
	Third-Year Fall Totals	60	84	12	180	336	25.00
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COURSE #	THIRD-YEAR WINTER	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLS 7320	Eyes, Ears, Nose and Throat (EENT)				60	60	5.00
CLS 7320T	EENT Tutorial		24			24	2.00
CLS 7320L	EENT Lab			6		6	0.25
CLS 7321	Dermatology and Minor Surgery				90	90	7.50
CLS 7321T	Dermatology and Minor Surgery Tutorial		24			24	2.00
CLS 7321L	Dermatology and Minor Surgery Lab			24		24	1.00
BUS 7320	Practice Management I				12	12	1.00
CLE 7300	Secondary Rotation	60				60	2.50
	Third-Year Winter Totals	60	48	30	162	300	21.25
COURSE #	THIRD-YEAR SPRING	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLS 7332	Psychology and Mental Health				48	48	4.00
CLS 7332T	Psychology and Mental Health Tutorial		36			36	3.00
CLS 7330	Pediatrics and Geriatrics				72	72	6.00
CLS 7330T	Pediatrics and Geriatrics Tutorial		24			24	2.00
CLS 7331	Parenteral Therapy and Environmental Medicine				42	42	3.50
CLS 7331T	Parenteral Therapy and Environmental Medicine Tutorial		24			24	2.00
CLS 7331L	Parenteral Therapy and Environmental Medicine Lab			12		12	0.50

THIRD-YEAR TOTALS 180 216 54 516 966 70.75

84

12

60

60

12

174

12

60

330

1.00

2.50

24.50

BUS 7330

CLE 7300

Practice Management II

**Third-Year Spring Totals** 

Secondary Rotation

COURSE#	FOURTH-YEAR SUMMER	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLE 8400	Primary Rotations (3)	180				180	7.50
BUS 8400	Jurisprudence				12	12	1.00
CLE 8400T	Case Integration Mentorship		18			18	1.50
CLE 8401	Preceptorship***	120				120	5.00
	Electives*				36	36	3.00
	Fourth-Year Summer Totals	300	18	0	48	366	18.00

COURSE#	FOURTH-YEAR FALL	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLE 8400	Primary Rotations (3)	180				180	7.50
CLE 8411	Grand Rounds				18	18	1.50
CLE 8410T	Case Integration Mentorship		18			18	1.50
BUS 8410	Practice Management III				12	12	1.00
	Electives*				36	36	3.00
	Fourth-Year Fall Totals	180	18	0	66	312	14.50

COURSE#	FOURTH-YEAR WINTER	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLE 8400	Primary Rotations (3)	180				180	7.50
CLE 8421	Grand Rounds				18	18	1.50
CLE 8420T	Case Integration Mentorship		18			18	1.50
BUS 8420	Practice Management IV				12	12	1.00
	Electives*				48	48	4.00
	Fourth-Year Winter Totals	180	18	0	78	276	15.50

COURSE#	FOURTH-YEAR SPRING	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
CLE 8400	Primary Rotations (4)**	240				240	10.00
CLE 8431	Grand Rounds				18	18	1.50
CLE 8430T	Case Integration Mentorship		18			18	1.50
BUS 8430	Practice Management V		18			18	1.50
CLE 8432	Preceptorship***	96				96	4.00
	Electives*				36	36	3.00
	Fourth-Year Spring Totals	336	36	0	54	426	21.50

# FOURTH-YEAR TOTALS 996 90 0 246 1380 69.50

<sup>\*\*\*</sup>These hours are cumulative and may be earned in a term other than term registered

	CLINIC	TUTORIAL	LAB	LECTURE	TOTAL HOURS	CREDITS
PROGRAM TOTALS	1264	762	306	2077	4457	302.00

<sup>\*</sup>May be taken in any year or quarter; 16 elective credits required

<sup>\*\*</sup>One rotation to be taken in priority term

# ND ELECTIVES 16 Credits Required

At least half (8) of the 16 required elective credits for the ND degree must be taken from courses designated as counting toward the program (listed below). The remainder may come from elective courses offered in other graduate programs at NUNM, as long as the prerequisites are met and the course has been approved by the program dean as counting toward the specific program. Approval from the program dean is required in order for a core course from one program to count as elective credit to the ND Program. NOTE: only on-campus (not online) classes will count toward ND elective credits. Elective courses (including those required for certificate programs) may not be offered every year. All elective courses are scheduled based on faculty availability and adequate student enrollment.

COURSE #	COURSE	TERM	LAB	LECTURE	TOTAL HOURS	CREDITS
NDEB 5110E	Northwest Herbs I	Fall		24	24	2
NDEB 5130E	Northwest Herbs II	Spring		24	24	2
NDEB 5201E	Cascade Mountain Herbal Intensive	Summer		24	24	2
NDEB 5210E	Herbal Garden Processing	Summer		6	6	0.5
NDEB 5230E	Ayurveda Herbs	Winter		24	24	2
NDEB 5231E	CASEE Center Herb Walk	Summer, Spring		6	6	0.5
NDEB 6200E	Ethnobotany Intensive	Summer		60	60	5
NDEB 6230E	Advanced Topics Botanical Medicine I	Fall		36	36	3
NDEB 6310E	Effective Formulas for Top General Practice Conditions	Fall		12	12	1
NDEB 6330E	Advanced Topics Botanical Medicine II	Spring		36	36	3
NDEB 6330E	Botanical Cell Biology, Molecular Mechanisms and Research	Spring		12	12	1
NDEC 5125E	Personal Development as a Physician	Fall	12	12	24	1.5
NDEC 6221E	OSCE I Preparation	Winter	12		12	0.5
NDEC 6240E	Advanced Electrocardiogram and Spirometric Interpretation	Spring	12		12	0.5
NDEC 6349E	Advanced Medical Biochemistry	Spring		36	36	3
NDEC 6350E	Simulation Lab	Fall, Winter, Spring		6	6	0.5
NDEC 7221E	OSCE II Preparation	Fall	12		12	0.5
NDEC 7310E	Pharmacology for Clinical Practice	Fall		12	12	2
NDEC 7311E	Pain: Pathophysiology and Management Options	Spring		24	24	2
NDEC 7313E	Neuroendocrine Immunology	Fall		24	24	2
NDEC 7320E	Microbiome	Spring		12	12	1
NDEC 7321E	Mentorship Tutorial for ND	Fall		24	24	2
NDEC 7322E	Integrative Phytotherapy	Winter		24	24	2
NDEC 7330E	Transgender Health and Gender Transition	Spring		24	24	2
NDEC 7340E	The Liver in Health and Disease	Spring		24	24	2
NDEC 7341E	Sleep Health and Disorders	Spring		24	24	2
NDEC 7342E	Advanced Gastroenterology	Spring		24	24	2
NDEC 7343E	Advanced Rheumatology	Spring		24	24	2
NDEC 7350E	Auriculomedicine	Summer, Spring		24	24	2
NDEC 7351E	Point-of-Care Ultrasound	Fall, Spring		30	30	2.5
NDEC 8420E	Advanced Diabetes Management	Fall		24	24	2
NDEC 8430E	Advanced Gastroenterology Lab	Winter, Spring	24		24	1
NDEH 7330E	Sensation in Homeopathy	Winter		24	24	2
NDEH 7340E	Homeopathy V	Spring		36	36	3
NDEH 8420E	Homeopathy VI	Fall		36	36	3
NDEH 8430E	Homeopathy VII	Winter		36	36	3
NDEH 8440E	Homeopathy VIII	Spring		36	36	3

COURSE#	COURSE	TERM	LAB	LECTURE	TOTAL HOURS	CREDITS
NDER 7330E	Natural Childbirth II: Pregnancy	Winter		36	36	3
NDER 7331E	Advanced Gynecology: Special Topics	Winter		24	24	2
NDER 7340E	Natural Childbirth III: Labor and Delivery	Spring		36	36	3
NDER 7341E	Advanced Gynecology: Infertility/Endocrinology	Spring		30	30	2
NDER 8420E	Natural Childbirth IV: Postpartum Mgmt.	Fall		36	36	3
NDER 8421E	Advanced Pediatrics	Spring		24	24	2
NDER 8430E	Natural Childbirth V: Neonatology	Winter		36	36	3
NDER 8440E	Natural Childbirth VI: Special Topics	Spring		24	24	2
NDER 8441E	Natural Childbirth VII: Legal Aspects	Spring		12	12	1
NDET 5120E	Bodywork I: Massage Foundations	Fall	24		24	1
NDET 5121E	Somatic Re-Education I	Fall	24		24	1
NDET 5130E	Bodywork II: Advanced Massage	Winter	24		24	1
NDET 5131E	Somatic Re-Education II	Winter	24		24	1
NDET 5140E	Bodywork III: Energy Work	Spring	24		24	1
NDET 5141E	Somatic Re-Education III	Spring	24		24	1
NDET 6121E	Somatic Re-Education IV	Fall	24		24	1
NDET 6140E	Aromatherapy	Spring		18	18	1.5
NDET 6230E	Mindful Self-Compassion	Winter		24	24	2
NDET 6250E	Nature Cure	Fall, Winter, Spring		24	24	2
NDET 8423E	Advanced Minor Surgery	Fall		36	36	3

# Graduate Study courses that count as ND electives

COURSE #	COURSE	LECTURE	TOTAL HOURS	CREDITS
GSA 525E	Ayurvedic Tongue and Pulse Evaluation I	24	24	2
GSA 541E	Tridosha	24	24	2
GSA 545E	Philosophy of Ayurveda	24	24	2
GSGH 703E	Maternal and Child Health	24	24	2
GSGH 714E	Wilderness First Aid (optional CPR)	24	24	2
GSGH 821E	Tanzania Global Health Experience	24	24	2
GSGH 833E	Nicaragua Global Health Experience	60	60	5
GSGH 835E	Ghana Global Health Experience: Summer	72	72	6
GSGH 836E	Ghana Global Health Experience: Winter	48	48	4
GSGH 841E	Intro to International Public Health	24	24	2
GSGH 842E	Intro to Tropical Disease	24	24	2
GSGH 844E	Taos Global Health Experience	24	24	2
GSMH 703E	Introduction to Working with Trauma	36	36	3
GSMH 707E	Working with Autism Spectrum Disorders	24	24	2
GSMH 708E	Body Image and Disordered Eating	24	24	2
GSMH 712E	Introduction to LGBTQ Counseling	36	36	3
GSMH 719E	Mindfulness-Based Bodywork	36	36	3
GSN 505	Healing Foods	24	24	2
GSN 551E	Therapeutic Diets	24	24	2
GSN 564E	Nutritional Genetics	24	24	2
RES 501	Journal Club	12	12	1
RES 502	Principles of Epidemiology	36	36	3
RES 530	Research Methodology	36	36	3
RES 538	Teaching Strategies and Course Development	24	24	2
RES 611E	Grant Writing	24	24	2

# electives

COURSE#	COURSE	LECTURE	TOTAL HOURS	CREDITS
RES 615E	How to Write and Publish Case Studies	24	24	2
RES 623E	Mind as Medicine: Mind-Body Therapies	24	24	2
RES 802E	Health Disparities Research	24	24	2
RES 806E	Essentials of Integrative Oncology	24	24	2
RES 809E	Women's Health: Fertility and Beyond	24	24	2
RES 832E	Vaccinations	24	24	2
RES 833E	Gut Immunology	24	24	2

# Chinese Medicine courses that count as ND electives

COURSE#	COURSE	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 511	Foundations of CCM I		24	24	2
CM 521	Foundations of CCM II		24	24	2
CM 531	Foundations of CCM III		24	24	2
CM 526	Herbs II		36	36	3
CM 536	Herbs III		36	36	3
CM 562	Chinese Diagnostic Techniques I	12	12	24	1.5
CM 572	Chinese Diagnostic Techniques II	12	12	24	1.5
CM 616	Herbs IV		24	24	2
CM 626	Herbs V		24	24	2
CM 636	Herbs VI		24	24	2
CM 817	Physiology of Acupuncture		12	12	1
CM 5100E	Qigong I Retreat for ND		12	12	1
CM 5101E	Qigong II Retreat for ND		12	12	1
CM 5102E	Qigong III Retreat for ND		12	12	1



# **College of Classical Chinese Medicine**

# Chinese Medicine as Rooted in the Classics

NUNM's classical Chinese medicine (CCM) community is devoted to tapping the source of this ancient medical system. Why? Because we find the classical approach to be exceptionally interesting and effective.

The roots of Chinese Medicine extend back thousands of years—to the wisdom and work of sages who understood that human beings are microcosms of the natural world (the macrocosm). They recognized that everything in the material world, including the human body, is a creation

and reflection of a higher dimension of reality. Health and harmony can be achieved by living in accordance with the laws of nature, and in alignment with one's own "Heavenly Nature."

Deeply attuned to the rhythms of nature, ancient *yangsheng* 

("nurturing life") practitioners learned to read the map of that higher reality (the *Dao*) as it imprinted in (literally "in-formed") the physical realm. The symptoms of disease were not seen as errors to be eradicated, but were instead read as signals of a disharmony that could be resolved to regain the experience of wholeness.

It is of immeasurable benefit to the profession that we still have access to the wisdom of the ancients through works referred to as the "classical texts" of Chinese medicine. While some consider these texts to be curious museumworthy artifacts, classically oriented practitioners recognize and honor them as key resources in the essential quest of unlocking the secrets of true health and happiness.

But the texts are not easy to decipher—the journey requires a steadfast seriousness of purpose. The combinations of classical Chinese characters comprising these works are rich, etymological word fields having many layers of symbolic meaning. Discerning the depth of meaning contained in even a short passage can require the rhythmic

interplay of scholarly inquiry, contemplative practice and ultimately, the illumination of one's direct clinical experience. Therefore, even excellent scholarly translations capture only a fraction of the richness contained in the original language. This is why it

is extremely valuable to study with faculty having expertise in the texts, and (if one has the passion for it) to develop one's own capacity to enter the texts directly through the original classical characters. The texts become a doorway to a vast trove of timeless wisdom and knowledge.

The College of Classical Chinese
Medicine is committed to transmitting
the art, science and spirit of Chinese
medicine to cultivate clinical
practitioners rooted in the ancient
tradition of the medical scholar.

# The Classical Approach at NUNM

Heiner Fruehauf, PhD, LAc, was pursuing scholarship in Sinology (the study of Chinese language, literature and history) when he entered the profession of Chinese medicine through the doorway of his own health challenges. An essential feature of his medical education was lineage-style apprenticeship with renowned experts in Daoist and classical Chinese medicine. When hired by NUNM in 1992, Dr. Fruehauf's mission of developing a unique offering in Chinese medicine was inspired and informed by discussions with his Chinese mentors. Their vision continues to attract a group of like-minded scholar-practitioners from across Asia and the West who are committed to training students excited to explore and embody the richness and power of the classical approach to Chinese medicine. Many have access to knowledge that is not typically taught in any Western language.

NUNM offers two CCM programs—the Master of Science in Oriental Medicine (MSOM) and Doctor of Science in Oriental Medicine (DSOM). The MSOM is fully nested within the DSOM, with the latter having an additional 48 credits and 582 hours. Students in both programs gain a strong classical orientation to the medicine. A primary goal of the DSOM program is to set graduates firmly on the path of the scholar-practitioner, capable of uncovering ancient knowledge and integrating it into modern-day clinical practice. In addition to learning to read and translate the classical texts, DSOM students gain a more complete understanding of the philosophical, historical and cultural context of the medical texts, and later developments in Chinese medicine based upon these texts. The doctoral curriculum also prepares graduates to more fully embody the knowledge, skills and behaviors required for classical Chinese medicine practitioners to integrate, communicate and collaborate within the biomedicine-based healthcare system.

# Overview of the CCM Programs

The following provides a year-by-year tour through the CCM programs. All information applies to both the MSOM and DSOM; content that is specific to the DSOM program is noted.

# **Year One:** Immersion in the Way of Classical Chinese Medicine

# Theory/Knowledge

Students learn the fundamental theory and principles of Chinese medicine, and become familiar with the historical, philosophical and cultural context in which the many streams of Chinese medicine arose in mainland China. Having gained a solid introduction to the classical roots of the medicine, students then examine the origins and potential strengths and limitations of the modern TCM approach.

DSOM: Students receive more extensive training in the historical, philosophical and cultural context of many of the major classical texts of Chinese medicine

#### **Skills**

Students become adept at point location and begin to practice freehand needle insertion. They practice musculoskeletal/myofascial palpation, and begin their training in Chinese medicine diagnostic techniques, including tongue and pulse diagnosis. Students also gain fluency in sensing the flavor, nature and movement of individual Chinese herbs and herb combinations, and develop critical thinking and research literacy skills.



#### Cultivation

Students begin a series of nine weekly qigong practicums and weekend retreats, held in ancient forest, mountain and hot springs settings. In these courses, students refine their awareness of qi flow by engaging in the "nourishing life" practices of the Jinjing Gong lineage, one of China's authentic alchemical life science traditions.

Recognizing that development into a thriving business person is an integral element of cultivation, the business series of courses starts in the first quarter of the program. The goal of this series is to equip students with the knowledge, skills and resources needed to conceptualize, start-up and successfully manage a profitable practice that is personally and professionally rewarding.

DSOM: A key component of cultivation training in the DSOM curriculum starts in the first year with the classical texts series of courses. Through the study and acquisition of the classical Chinese language, students develop a form of cognitive capacity that transcends Western rational, dualistic thought. The goal is to engage a way of knowing that will enrich each clinical encounter and enhance clinical outcomes.

Another key feature of the DSOM program is a series entitled "Imaginal and Experiential Inquiries" (IEI) that is threaded throughout every quarter of the curriculum. These courses have a small group format and emphasize reflective learning, appreciative inquiry, and self-awareness exercises to promote each student's personal engagement with the curriculum and to support their professional development. Through the process, students choose and hone their doctoral capstone topics. In year one of the IEI series, the resources, challenges and unique perspective of each student are explored. A first-year theme is the role of metaphor in medicine, in particular how it relates to Eastern versus Western perspectives on the body.

#### Biomedicine

The first-year curriculum has very little emphasis on biomedicine. The goal is to immerse students in the language of Chinese medicine without promoting the natural tendency to translate new learning into the more familiar framework of biomedicine.

### Clinic

In the spring quarter, students are introduced to the practical and philosophical fundamentals of working in the NUNM health centers.

# **Year Two:** Exploring How it All Comes Together—Embodiment and Integration

# Theory/Knowledge

Students study classical models of human pathology and expand their knowledge of acupuncture prescription and Chinese herbal formulation. They deepen their understanding of CCM as a macrocosm/microcosm

symbol science as they explore the cosmology and symbolism associated with the 12 Chinese organ networks.

#### **Skills**

Students continue to build their hand skills through the acquisition and practice of bodywork and acupuncture tonification and dispersion techniques. They are introduced to the art of medicinal food preparation, and to classical methods of herb processing.

#### Cultivation

The qigong and business series continue, and a practitioner cultivation course promotes self-reflection and increased awareness of personal resources and challenges.

DSOM: In the second year of the classical texts series, students translate the Shanghanlun and Jingui Yaolüe. The information gleaned from the texts supports the concurrent study of pathology and herbal formulation. The theme of the second-year IEI series is "awareness of awareness."

# Biomedicine

The biomedicine series starts in the second year. The foundation gained in the first year of the program provides students with the background needed to integrate biomedical knowledge into the more expansive framework of CCM. This approach is in conscious contrast to the modern trend of interpreting Chinese medicine from within the material confines of the biomedical perspective. The College of Classical Chinese Medicine believes that the brilliance of biomedicine is most powerfully applied within the context of whole-systems science, and that Chinese medicine can truly flourish only when understood and applied according to its own precepts and tenets.

#### Clinic

Students enter the clinic in the second year as they observe seasoned clinical faculty diagnose and treat patients using individual lineage styles of practice.

# **Year Three:** Refining Clinical Skills and Developing a Medical Mind

# Theory

The third year is devoted to the advancement of clinical reasoning. Incorporating modern and classical case analysis, students learn to compare and integrate biomedical, TCM and classical approaches to patient diagnosis and treatment.

DSOM: Third-year students gain a deeper functional understanding of the acupuncture channels by studying the symbolic meaning of the acupuncture point names. They also study the symbolic meaning of herb names.

#### **Skills**

Students hone their palpation, perception and clinical reasoning skills, with a focus on applying them to the diagnosis and treatment of disease. In addition to learning



advanced manual and needling techniques, students practice adjunctive acu-moxa modalities, including moxibustion, cupping, guasha, bleeding and teishin. The refinement of clinical skills includes the use of microsystems in diagnosis and treatment. It also includes standard physical examination and assessment methods from the biomedical approach.

#### Cultivation

The qigong series concludes with an emphasis on clinical application, and the business series continues with an emphasis on marketing and business systems.

A two-course series explores the classical understanding of what in the West is characterized as psychological dysfunction, including the role of the emotions in chronic disease. These courses encourage the exploration and understanding of one's own self-limiting patterns.

DSOM: In the third year of the classical texts series, students translate portions of the *Huangdi Neijing*, with an emphasis on clinical application of the knowledge gleaned from this seminal text of Chinese medicine. The theme of the third-year IEI series is "developing a medical mind."

# Biomedicine

As the biomedicine series continues, the Western approach to the diagnosis and treatment of disease is compared to, and integrated with, TCM and CCM approaches. The third year includes courses on the biomedical understanding of nutrition and public health.

#### Clinic

The third-year clinical rotations enhance the confidence and competence of students in preparation for the internship phase of training. In the clinical mentoring rotations, students engage directly in the intake and treatment of patients under the complete guidance of their clinical supervisor. In a spring quarter pre-internship rotation, students become familiar with the process and responsibilities of being an intern by shadowing and supporting the interns who are about to graduate.



# **Year Four:** Becoming a CCM Practitioner

# Theory/Skills

In the fourth year, students undertake one of the signature features of the program—a yearlong Traditional Mentorship Tutorial (TMT) series. The small-group, apprentice-style format of this unique offering affords students the opportunity to absorb the lineage system of their chosen mentor. Many students elect to do more than one TMT series.

Review courses help prepare students for the national board exams. The herbs review course is combined with training that prepares soon-to-be graduates with the knowledge and skills required to run a successful herbal medicinary.

#### Cultivation

Qi cultivation continues in the fourth year with three taiji practicums. The second of two practitioner cultivation courses focuses on relationship dynamics between the practitioner and patient. The final course in the business series prepares students to be successful, fulfilled and ethically/legally upright with regard to the business and practice management aspects of their professional life.

DSOM: Students receive additional training in systemsbased medicine, providing an understanding of the broader healthcare system necessary to coordinate care within this system, and to collaborate effectively within a multidisciplinary healthcare setting. The theme of the fourth-year IEI series is "the courage to be vulnerable." The IEI series, Doctoral Capstone Tutorial, and Doctoral Capstone Mentorship (run by the chair of the student's capstone committee) support students through the completion of the three parts of their doctoral capstone project: a written report, an oral presentation and a professional practice vision statement.

# **Biomedicine**

DSOM: To ensure that DSOM graduates are prepared to communicate effectively with providers in the broader biomedically based healthcare system, they complete cutting-edge coursework exploring the relationship between Chinese medicine and biomedicine models of understanding the pathological basis, diagnosis and treatment of disease.

# Clinic

During the final year of study, students step into the role of intern and assume an increasing level of responsibility

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for the diagnosis and treatment of patients under the expert supervision of clinical faculty. Through an application process, each intern is paired with a clinical faculty mentor, with whom they experience at least one internship rotation per quarter throughout the final year. This provides students continuity of training in their resonant style of practice and long-term management of patient cases.

DSOM: In addition to participating in one or more primary care teams with naturopathic physicians at NUNM's multidisciplinary campus health center, DSOM interns have the opportunity to complete one or more rotations at NUNM's multidisciplinary community clinic sites (e.g., the Richmond Clinic at Oregon Health & Science University and the Integrative Medicine Program at Providence Hospital Cancer Center).

# **Electives**

MSOM and DSOM students are required to complete 6 and 10 elective credits, respectively, for the purpose of rounding out their education. There are two major categories of electives—those offered by the College of Classical Chinese Medicine, which deepen the student's connection with the classical roots of their medicine, and those offered by either the Naturopathic Doctoral (ND) program, or by one of the programs within the School of Graduate Studies (SGS) at NUNM. Approved ND and SGS elective courses serve to promote the interprofessional development of CCM students.

The CCM-specific electives include coursework in such subjects as calligraphy, shiatsu, classical tea arts, bazi suanming, *Yijing*, weiqi (a form of Chinese chess), and Confucian Five-Element emotional healing (Shan Ren Dao Retreat). These courses provide valuable tools and opportunities for cultivation, and connect students with the milieu of the ancient sage-practitioner.

# Licensing and Certification of Acupuncturists and Oriental Medicine Practitioners

The MSOM degree is accredited by the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM) and qualifies graduates to apply for licensure in Oregon and other states, and to take all of the AOM exams administered by the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM), used in most states as the basis for licensure.

For additional information, contact:

ACAOM 8941 Aztec Dr. Eden Prairie, MN 55347 952.212.2434 | acaom.org NCCAOM 76 South Laura St., Suite 1290 Jacksonville, FL 32202 904.598.5001 | nccaom.org

The MSOM program is approved by the California Acupuncture Board, allowing all CCM graduates to sit for the California licensing exam; and is on the state of New Mexico education program approved list. For additional information concerning acupuncture licensure in the state of California, contact:

California Acupuncture Board 1747 N. Market Blvd. Sacramento, CA 95834 916.515.5200 | acupuncture.ca.gov

For additional information concerning licensure in the state of New Mexico, contact:

New Mexico Board of Acupuncture and Oriental Medicine 2550 Cerrillos Rd. Santa Fe, NM 87505 505.476.4630 | rld.state.nm.us/boards/acupuncture\_and\_ oriental\_medicine.aspx

Graduates of the DSOM program have completed all of the requirements of the MSOM program, and therefore also receive the MSOM degree.

The NUNM Doctor of Science in Oriental Medicine is not accredited or pre-accredited by the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM). Graduates of this program are not considered to have graduated from an ACAOM accredited or pre-accredited program and may not rely on ACAOM accreditation or pre-accreditation for professional licensure or other purposes.

The DSOM program is eligible for ACAOM accreditation and NUNM is currently in the process of seeking ACAOM pre-accreditation/accreditation for the program. However, NUNM can provide no assurance that pre-accreditation or accreditation will be granted by ACAOM.

The DSOM program is accredited by the Northwest Commission on Colleges and Universities, which is located at:

8060 165th Avenue NE, Suite 100 Redmond, WA 98052 425.558.4224 | nwccu.org

# **Master of Science in Oriental Medicine**

The Master of Science in Oriental Medicine is a fouryear program consisting of 3,372 hours and 219 credits. Students are immersed in the classical foundations of the medicine, receive a holistic education in Western medical sciences, and are trained in the clinical application of the major modalities of acupuncture, moxibustion, herbal formulation, bodywork, qigong and nutrition.

The curriculum emphasizes personal and professional cultivation in order to support the health of students as they progress through school, and to optimize their proficiency as practitioners. Many elective courses are available, including those providing advanced study in the areas of gigong and shiatsu.

# **MSOM Program Outcomes**

 Apply the fundamental principles of classical Chinese medicine to patient care

- Craft and perform individualized Chinese medicine treatments in which the component parts (e.g., acupuncture, herbal prescription, bodywork, lifestyle recommendations) are applied according to consistent treatment principles
- 3. Teach patients how to incorporate traditional Chinese "nourishing life" practices into a regular routine
- 4. Design a plan for establishing a sustainable career rooted in classical Chinese medicine education
- Integrate evidence-based biomedical analysis into the practice of Chinese medicine
- 6. Discuss the role of the AOM practitioner in patientcentered care within the healthcare system
- 7. Describe the theory and practices of Chinese medicine to patients and the public

# **Doctor of Science in Oriental Medicine**

The Doctor of Science in Oriental Medicine is a four-year program consisting of 3,954 hours and 267 credits. It fully contains the coursework and outcomes of the MSOM program. In addition, students undertake a more extensive exploration of ancient symbol science and macrocosm-microcosm relationships. They learn how to translate the classical texts of Chinese medicine and to apply their understanding to patient care. DSOM students also achieve competencies preparing them to integrate the principles and practice of classical Chinese medicine into the broader healthcare system.



# **DSOM Program Outcomes**

- Relate the ancient Chinese view of macrocosmmicrocosm correspondences to the contemporary practice of medicine
- Craft and perform individualized Chinese medicine treatments in which the component parts (e.g., acupuncture, herbal prescription, bodywork, lifestyle recommendations) are applied according to consistent treatment principles
- 3. Teach patients how to incorporate traditional Chinese "nourishing life" practices into a regular routine
- 4. Design a plan for establishing a sustainable career rooted in classical Chinese medicine education
- 5. Integrate evidence-based biomedical analysis into the practice of Chinese medicine
- Demonstrate the ability to work collaboratively within the healthcare system to provide patientcentered care
- 7. Describe the theory and practices of Chinese medicine to patients and the public
- 8. Apply principles and treatment strategies gained through translation of the classical texts of Chinese medicine to clinical scenarios

# MSOM and DSOM Course Descriptions

Courses required only in the DSOM program are marked by an \*

# **Acu-Moxa Points**

Students start this series of classes by learning the acupuncture points and point combining principles. As they advance, students learn the art of individualized point prescribing using appropriate classical and modern treatment principles.

# CM 513, 523 – Acu-Moxa Points I-II (Point Actions)

(2 lecture credits each)

These courses focus on the therapeutic actions of points. Location, name and category information are reviewed in the context of learning the traditional functions, as well as specific symptomatic indications for each point. Therapeutic functions correspond to treatment principles derived from Chinese pattern differentiation. Both Eastern and Western diseases are correlated to complete the therapeutic understanding of the points' potential range and repertoire for treatment. Corequisite for CM 513: concurrent enrollment in CM 514 (Tech I); Prerequisites for CM 523: CM 513 & 514 (Pts & Tech I); Corequisite for CM 523: concurrent enrollment in CM 524 (Tech II)

#### CM 533 - Acu-Moxa Points III (2 lecture credits)

Students apply their knowledge of point location and action to the creation of individualized treatment protocols that consider the use of acupressure and the full array of non-needle techniques, including moxibustion, cupping, guasha, magnets, beads and microneedles. In the second half of the term, students gain a thorough understanding of the complete Jing Luo system. Students learn about the physiological functions, pathogenic indications and clinical significance of the 12 regular channels, 12 divergent branches, 12 sinews, 12 cutaneous zones, 15 collaterals and 8 extraordinary vessels. Understanding the distribution of all of the sub-channels is intimately related to the clinical application of these theories. *Prerequisite: CM 523, Corequisite: concurrent enrollment in CM 534* 

# CM 613 – Acu-Moxa Points IV (2 lecture credits)

Building on the knowledge learned in Acu-Moxa Points III, students deepen their understanding of the principles of point combining, and learn classic two- and three-point combinations. Protocols based on classical treatment principles and therapeutic strategies are emphasized. Highlights of the class include a guided session on Shen Anchoring and Deqi; the consideration of how to support acupuncture point prescriptions with herbs; a class debate focused on understanding the dose of acupuncture associated with specific needling techniques; and the study of Dou Hanqing's *Biao You Fu*, a famous acupuncture classic from the Jin-Yuan dynasty. *Prerequisite: CM 533, Corequisite: concurrent enrollment in CM 614* 

#### CM 623 – Acu-Moxa Points V (2 lecture credits)

This course focuses on point prescriptions designed to

address diseases and symptoms that are commonly seen in a clinical setting. Class discussions focus on diagnostic differentiation, treatment principles, key points and basic prescriptions in order to develop a repertoire of treatment plans and model the creation of well-crafted prescriptions. *Prerequisite: CM 613, Corequisite: concurrent enrollment in CM 624* 

#### CM 633 – Acu-Moxa Points VI (2 lecture credits)

This course is specifically designed to integrate and put into practice all the elements that have been learned during previous courses in preparation for clinical internship. Each week, students are presented with three actual cases to analyze outside of class. Students analyze a patient's signs and symptoms, arrive at a diagnosis and treatment plan, and then devise a point prescription complete with the rationale for each point. This is presented and debated in class with fellow students and the instructor. *Prerequisite: CM 623, Corequisite: concurrent enrollment in CM 634* 

#### CM 663 – Auricular Points (1 lecture credit and 0.25 lab credit)

This course explores one of the primary subcategories of acupuncture therapeutics that exclusively utilizes points in the ear. This method, though modern, has developed into one of the most accepted and useful microsystem methodologies. It comprises a complete system of diagnosis and treatment known also as auricular medicine. Students are exposed to all aspects, from underlying theories through diagnosis and treatment, focusing on the placement of ear seeds/pellets for treatment.

# CM 813 - Acu-Moxa Board Review (1 lecture credit)

This course is offered during the fall quarter of the final year in preparation for national board exams. The course highlights all essential aspects of acupuncture and Asian medical theory through a series of mock exams, discussion and question/answer sessions. *Prerequisite: CM 724* 

# **Acu-Moxa Techniques**

The Acu-Moxa Techniques I-VI series focuses on developing diagnostic and treatment skills in preparation for the clinical practice of acupuncture. The format is typically a combination of lecture and demonstration, followed by a practice session in which students work on each other under the observation and guidance of experienced supervisors. Students learn appropriate positioning of the patient and proper alignment of their own body. In addition, they learn to attend to patient concerns and reactions while soliciting feedback. In the third-year series of classes, students learn advanced classical needling techniques and additional adjunctive therapies, including guasha, cupping, bleeding and teishin. A particular focus is placed on learning to assess which techniques and modalities to select for optimal clinical benefit in different clinical scenarios. Techniques classes include a gigong component in the belief that good acupuncture is dependent on the practitioner's awareness of, and sensitivity to, qi.

## CM 514, 524 – Acu-Moxa Techniques I & II (Point Location)

(1 lecture credit and 0.5 lab credit each)

These courses focus on learning to accurately locate all of the standard points on the 14 primary channels using the Chinese system of anatomical measurement, as well as a cultivated ability to directly perceive the points. Students contemplate and meditate on a specific channel, and then practice locating it on their classmates. The focus is on the development of skills that will bring clinical success and patient satisfaction. Classical approaches from source texts are integrated into the class. Corequisite for CM 514: concurrent enrollment in CM 513; Prerequisite for CM 524: CM 514, Corequisite: concurrent enrollment in CM 523

CM 534 – Acu-Moxa Techniques III (1 lecture credit and 0.5 lab credit) This course introduces students to the manual therapies of Chinese medicine. In the first half of the term, students are supported in the design and performance of individualized treatments using acupressure and an array of non-needle techniques, including devices, magnets and microneedles. In the second half of the term, students learn two-handed classical styles of needling, starting with tubes and progressing to classical free-hand techniques that emphasize painless, freehand needle insertion, careful needle advancement, and finding/obtaining the qi. Students learn to palpate and apply indication-specific acupressure and cupping techniques to the front mu and back shu points, and learn the location and functions of commonly used extra points. Prerequisite: CM 524, Corequisite: concurrent enrollment in CM 533. Note: The Clean Needle Technique course offered by the CCAOM is also required.

CM 614 – Acu-Moxa Techniques IV (1 lecture credit and 0.5 lab credit) Building on the skills learned in Acu-Moxa Techniques III, students apply different technical patterns, and simple and complex tonifying-reducing techniques as indicated for specific syndromes and constitutional types. Students are supported in the process of becoming flexible, effective and safe in their use of various classical needling techniques. The instructor emphasizes the anchoring of shen and sensitivity to deqi. Prerequisite: CM 534, Corequisite: concurrent enrollment in CM 613

CM 624 – Acu-Moxa Techniques V (1 lecture credit and 0.5 lab credit) Needling practice continues with a focus on more challenging points and learning to manipulate qi according to traditional methods of tonification and dispersion (bu & xie). Another 100 points are chosen from all parts of the body to familiarize the student with a wide range of points and needling experience. Prerequisite: CM 614, Corequisite: concurrent enrollment in CM 623

CM 634 - Acu-Moxa Techniques VI (1 lecture credit and 0.5 lab credit) This course focuses on perfecting acupuncture diagnostic skills, as well as treatment planning and implementation. In class, each student takes a fellow student's case. After discussing the diagnosis and treatment plan with



an instructor, the student proceeds to administer the treatment. Attention is given to the orchestration of the entire process and to the subtleties of working with real people. The techniques of scalp and electro-acupuncture are also introduced. Prerequisite: CM 624, Corequisite: concurrent enrollment in CM 633

# CM 714, 724 – Advanced Acu-Moxa Techniques I & II (1 lecture credit and 0.5 lab credit each)

In these two courses, students refine their hand-skill and acupuncture needling technique, and learn a variety of additional adjunct therapies, including different styles of moxibustion, cupping, guasha, bleeding and teishin. Referencing knowledge gained in the concurrent clinical medicine courses, students learn to assess which techniques and modalities to select for optimal clinical benefit in different clinical scenarios. The first course focuses on the application of holographic theory (microsystems) and channel theory in the diagnosis and treatment of pain, stroke and musculoskeletal disorders. Needling techniques and strategies are practiced primarily in relationship to the treatment of pain.

In the second course, students explore needling techniques using the Hua T'uo Jia Ji points. Soft tissue injuries are discussed and treatment strategies practiced. Scalp acupuncture protocols expand the use of microsystems, with a focus on Dr. Sheng'an Wu's daily needling protocols. The course concludes with a focus on Dr. Qin's needling techniques gleaned from years of practice. Prerequisite: CM 634

# **Biomedical Sciences**

# \*CM 537 - CCM View of Biomedicine (1 lecture credit)

The content of this course considers Eastern versus Western epistemology, and sets the stage for understanding how the information in the upcoming biomedicine series can be viewed from the perspective of CCM. It also includes a consideration of how insights gained from the classical texts of Chinese medicine can illuminate the understanding of modern scientific discoveries.

# CM 599 – Evidence-Informed Practice (2 lecture credits)

This course is designed to build students' research literacy skills. Upon completion, students will be able to quickly locate relevant medical literature, as well as evaluate the strengths and weaknesses of the studies they need to support their clinical practice.

# CM 617, 627, 637, 717, 727, 737 - Biomedicine I-VI

(4 lecture credits each; except for CCM 627, which is 2 lecture credits) This course series, which starts in the second year of the program, introduces students to the biomedical approach to health and illness. Following an overview of foundational concepts of organic chemistry, biochemistry and cell biology, students learn the anatomy, biochemistry and physiology of the major body structures, organs and systems, together with an overview of their known pathologies. Students learn the basic pathophysiological mechanisms of disease as understood through the biomedical perspective, and develop an understanding of important laboratory markers, diagnostic imaging, and clinical findings relevant to each system discussed. In addition, pertinent pharmacological and microbiological concepts are discussed. Through quizzes, class discussion and case studies, students will develop the ability to integrate biomedical and classical Chinese medical concepts regarding disease processes, and to view biomedical knowledge from the perspective of wholesystems science. The goal of this course series is to enable students to cultivate a broad understanding of conventional biomedical sciences, which will be useful in their future clinical training. Prerequisite: these courses are to be taken in the ordered sequence

# CM 657, 667 - Acu-Moxa Anatomy I & II

(1 lecture credit and 0.25 lab credit each)

In this innovative course series, which includes a cadaver laboratory component, students learn the anatomy associated with specific acupuncture points and gain an appreciation for the structure and organization of the tissues associated with the Chinese organ networks. Corequisite for CM 657: concurrent enrollment in CM 614; Prerequisite for CM 667: CM 657, Corequisite: concurrent enrollment in CM 624

#### CM 699 – Immunology (3 credits)

This course focuses on the basic functions of the immune system, with emphasis on its role in protecting against microbial infections and tumors; and immune deficiency states, autoimmunity and psychoneuroimmunology. Students learn the roles of cells, proteins and other chemicals involved in an immune response, and gain the skill of communicating immune principles to patients and the lay public.

# CM 777 – Clinical and Physical Diagnosis

(1 lecture credit and 0.5 lab credit)

Students learn to perform and interpret basic integrative physical examinations of the major body systems. A strong emphasis is placed on the recognition of "red flag" signs and symptoms indicating the need for urgent medical intervention and/or co-management.

#### CM 799 - Nutrition (2 lecture credits)

This course explores diet and its relationship to health and disease, with an emphasis on the health effects of different foods and specialized diets. The course covers the basics of recommended daily allowances, food labels and hidden ingredients, as well as topics like organic foods and genetically modified foods. Each week, students will experience cooking healthy whole-food meals.

# CM 817 - Physiology of Acupuncture (1 lecture credit)

This course reviews the current scientific literature on how acupuncture exerts its effects, and relates the physiological mechanisms of acupuncture action to both the classics and everyday clinical practice.

# \*CM 857 – Eastern and Western Correspondences

(2 lecture credits)

Through lecture and case examples, this course attempts to link concepts in Chinese medical physiology and pathology with Western biomedicine. Specifically, the zang-fu pattern differentiation approach of Chinese medicine is explored within the context of the neuro-endocrine-immune systems. In addition to providing a conceptual bridge between Chinese medicine and biomedicine, students are provided with tools to foster more effective communication with biomedical practitioners and researchers.

# CM 899 - Public Health Policy (2 lecture credits)

Students learn how policy plays an important role in public health and governmental responses to public health issues. Social justice and health access are discussed, as well as integrative medicine strategies to address these concerns. The course compares public health topics at local, national and international levels. Recent journal and news articles are utilized for a current range of topics. Students will discuss recent healthcare reform efforts (nationally and locally), learn how research informs policy, and learn how to interpret epidemiologic and health services research.



# Classical Chinese Medicine Foundations

# CM 501 – Classical Chinese Medicine Immersion Retreat

(0.5 lecture credit and 0.5 lab credit)

This weekend retreat introduces beginning students to traditional Chinese culture, to enhance sensitivity and appreciation for the cultural background of classical Chinese medicine. Students are actively immersed in traditional pursuits, such as calligraphy, morning exercises and tea drinking. They explore the Chinese language and examine preconceived ideas about traditional Chinese culture.

# CM 511, 521, 531 – Foundations of Classical Chinese Medicine I-III (2 lecture credits each)

This course series introduces students to the common principles that underlie all traditional nature sciences, as observed from the specific perspective of classical Chinese medicine. Core concepts considered in the first course include the holographic quality of nature (Dao; Heaven-Earth-Humanity), dynamism, complexity, the symbolic pattern language of the universe (yin-yang, wu xing, zangxiang), and the relationship between matter, energy and spirit (jing-qi-shen). The curriculum attempts to correlate the wisdom of these ancient concepts with contemporary insights gleaned from the quantum cosmology of modern physics and other contemporary sciences. Students learn how to critically read the introductory literature of the field.

In the second course, students are introduced to basic anatomy and physiology of the body as understood by classical Chinese medicine. Topics include zang-xiang (organ manifestation) theory and channel pathways, as well as the relationships between the organs, between the channels, and between the organs and the channels. References are made to the Huangdi Neijing and other classical Chinese medicine texts. The curriculum endeavors to weave the wisdom of these ancient concepts with contemporary insights.

The third course focuses on the mechanics of pattern differentiation and TCM syndromes. It covers patterns for each organ system and introduces the basic six conformation patterns found in the Shanghanlun. References to standard herbal formulas and acupuncture protocols are provided. The course begins the process of bridging the gap between learned knowledge and actual clinical practice. Prerequisite: CM 511 and 521 can be taken together or in sequence; both are prerequisites for CM 531.

# CM 512, \*522 - Chinese History and Culture I & II (1.5 lecture credits each)

These courses create a foundation for the program by presenting an overview of Chinese history and culture to help students understand the worldview and mindset that created this unique form of medicine. The first course introduces the basic characteristics of historical China from the dawn of civilization through the classical period;



the second covers the classical period through the 20th century. In addition to surveying the major historical developments, these courses focus in particular on those aspects of Chinese culture that have in any way affected and contributed to the development of Chinese medicine. Prerequisite: these courses are to be taken in the ordered sequence

\*CM 532 – Chinese History and Culture III (1.5 lecture credits)
Students learn about the major medical classics and their authors as keystones in the development of medical theory. At the same time, this course considers historical changes in clinical practice, as much as these can be reconstructed through archaeology and direct and indirect textual references. *Prerequisite: CM 522* 

# CM 562, 572 — Chinese Diagnostic Techniques I & II (1 lecture credit and 0.5 lab credit each)

This lecture and lab series is designed to teach, demonstrate and practice the basic diagnostic procedures of Chinese medicine, including visual observation (wang), olfactory perception (wen), questioning (wen) and palpation (qie), including Chinese medicine physical diagnosis and pulse diagnosis. The series begins with an introduction to the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. It then focuses on the theory and practice of pulse diagnosis and visual observation. The instruction of the pulses is rooted in key passages from the Pulse Classic (*Maijing*) and Li Shizhen's Pulse Studies (*Binhu maixue*). The basic pulse diagnosis practiced in

this class prepares students for the Acu-Moxa Techniques lab series. Visual and olfactory perception, along with the traditional Ten Questions (*shiwen*), is also practiced in class.

# CM 611, 621, 631 — Chinese Organ Systems: Cosmology and Symbolism I-III (2 lecture credits each)

This course series represents a gradually deepening introduction into the time-honored system of Chinese symbol science, which describes the physiology of the microcosm in terms of macrocosmic processes, involving such phenomena as stellar constellations, months of the year, earthly branches, hexagrams, and rivers in the sacred landscape of ancient China. Presenting the results of more than a decade of continuous inquiry by NUNM's ancient symbolism research group, the functional archetypes of the organ systems of Chinese medicine and their expression in the physical, mental, emotional and spiritual planes are described in exclusive detail. Specifically, the first course presents the "Earth Organs" (the lung, large intestine, stomach and spleen) and the functions of the animal body; the second presents the "Heaven Organs" (the heart, small intestine, bladder and kidney) and the functions of the sage body; and the third presents the "Humanity Organs" (the pericardium, triple warmer, gallbladder and liver) and the functions of the emotional body. Prerequisite: secondyear status

# CM 612, 622, 632 – Chinese Pathology I-III (2 lecture credits each) This series introduces the models employed throughout the classical medical literature for the study of human pathology. In each course, students read important lines and passages from the classical texts of Chinese medicine to develop an understanding of Chinese medical pathology. Specific models explored include the Three Causes (san yin), Six Qi (liu qi), Six Conformations (liujing bianzheng), Eight Parameters (bagang bianzheng), Nineteen Lines on Pathology (bingji shijiu tiao), systems of organ differentiation (zangfu bianzheng), and Four Layer (wei qi ying xue) differentiation. Emphasis is placed on synthesizing multiple approaches into a cohesive understanding of pathology that can be applied to more

advanced clinical material. Prerequisites: second-year status;

# \*CM 711, 721, 731 — Advanced Chinese Organ Systems: Cosmology and Symbolism I-III (2 lecture credits each)

these courses are to be taken in the ordered sequence

This series represents a gradually deepening introduction to specific applications of Chinese symbol science, which defines the body as a projection of macrocosmic themes. Specifically, the first course presents the symbolism behind the point names of the channels of the lung, large intestine, stomach, spleen, heart and small intestine; the second course presents those of the bladder, kidney, pericardium, triple warmer, gallbladder and liver. The third course introduces the functional symbolism of the most important herb names.



CM 712, 722, 732 — Clinical Medicine I-III (4 lecture credits each)

This series focuses on the development of clinical reasoning that integrates biomedical, TCM and classical approaches to patient diagnosis and treatment. The focus extends to a consideration of the prognosis, long-term case management, and referral and co-management of patient cases in a framework that is sensitive to issues of cultural literacy. Using modern case studies as well as the analysis of cases from the classical literature, students learn how to approach modern disorders, such as Lyme disease, multiple sclerosis, cancer, and other types of chronic and recalcitrant diseases from a classical perspective. Prerequisites: third-year status; these courses are to be taken in the ordered sequence

**Elective:** CM 01E — China Trip (1.5 lecture credits and 4 lab credits) During two weeks of lineage-style study in China, students are immersed in particular classical Chinese medical approaches to diagnosis, herbalism, acupuncture and self-cultivation. The course includes instruction by local masters, as well as the exploration of traditional culture. Prerequisite: second-year standing

# Elective: CM 11E, 21E - Bazi Suanming I & II

(1.5 lecture credits each)

These courses provide an introduction to "The Calculation of Life According to the Eight Signs"-a highly sophisticated model of Chinese constitutional and medical chronobiology and chronopsychology that has very practical implications for clinical practice. Students learn the fundamental relationships between the heavenly stems, hidden heavenly stems and earthly branches, providing the foundation for the composition and interpretation of individual "bazi" charts.

# **Elective: CM 36E – Embodied Cosmology** (1.5 lecture credits)

This interactive weekend retreat focuses on gaining a physically embodied experience of Chinese cosmology. Group exercises will investigate the nature of the movement from undifferentiated source (the Dao) to articulated symptom pictures (the 10,000 things), and explore the possibility of the reverse journey as a critical stage in the process of transformation. What might that look like in practice? Can we facilitate the movement back and forth between undifferentiated flow and fully articulated structures as a pathway toward evolution and vitality?

# Classical Texts of Chinese Medicine

The Classical Texts I-IX series forms a core component of the DSOM program (and are elective courses for students in the MSOM program). These courses deepen the student's understanding of the cultural and philosophical background of Chinese medicine through careful translation and analysis of selected classical texts. These texts are presented to students in their original written and grammatical form, so that students will gain a deeper understanding of both the vocabulary and the texture of Chinese philosophy, and hence the unique style of medicine that evolved from it.

# \*CM 911, 921, 931 – Classical Texts I-III: Introduction to Classical Chinese Language and the Chinese Classical Texts

(3 lecture credits each)

The first three courses in the classical text series introduce the basics of the spoken and written classical Chinese language, including the fundamentals of classical Chinese grammar. Students learn how to use a Chinese dictionary. Included in this series is an introduction to the major concepts in the seminal text of classical Chinese medicine, the Huangdi Neijing. Prerequisite: these courses are to be taken in the ordered sequence

# \*CM 941, 951, 961 - Classical Texts IV-VI: Shanghanlun, Jingui Yaolüe (2 lecture credits each)

The next three classical text courses focus on translation of the Shanghanlun and Jingui Yaolüe. Prerequisite: these courses are to be taken in the ordered sequence

# \*CM 971, 981, 991 – Classical Texts VII-IX: Neijing Seminar (2 lecture credits each)

The final three classical text courses focus on translation of portions of the Huangdi Neijing, with an emphasis on understanding the clinical insights revealed by this seminal text of Chinese medicine. Prerequisite: these courses are to be taken in the ordered sequence

# Elective: CM 17E – Yijing I (I Ching): An Introduction to the Yijing (2 lecture credits)

Everything you need to know about the *Yijing (I Ching)*, as well as many things you did not know you needed to know about the *Yi*, in order to embark upon and develop an enduring and productive relationship with this world-famous text from ancient China. *Open to all NUNM students*.

# **Elective: CM 27E – Yijing II: Hexagram Names** (2 lecture credits)

This course examines the characters that comprise the name for each of the 64 hexagrams. Together, the instructor and students systematically explore and explain those characters from both a language and a practitioner's perspective. Class time is devoted to understanding the many interpretations that have been put forth by a myriad of translators.

# **Elective:** CM 37E – Yijing III: Exploring One's Personal Hexagrams (2 lecture credits)

This course is an exploration of the personal hexagrams computed in the Yijing I course. Students present their individual explorations to the group for collective examination and discussion. In the process, an enormous amount is learned about those hexagrams and the actual interpretation of a hexagram as applied to a real person and their life circumstances. Class size is limited to 8 students. *Prerequisites: CM 17E, 27E* 

# Elective: CM 47E – Yijing IV: Daxiang Commentary (2 lecture credits)

This course explores a specific commentary on the Yijing, known as the Daxiang or Greater Images commentary. It forms the core of Wings III and IV of the collection of Yijing commentaries known as the Shiyi or 10 Wings. It is one of the most important commentaries in that it articulates the role of the component trigrams in each hexagram, and outlines behavior deemed appropriate for a junzi based on understanding them. Students translate and discuss the text, which is relatively brief and follows a clear pattern, making it ideal for novice translators. In the process, the meaning of the concept of a junzi is explored. Prerequisite: the student should know how to use a Chinese dictionary

# Elective: CM 57E, 67E, 77E, 87E — Yijing V-VIII: Translating the Zhouyi Series (2 lecture credits each)

In this series, the instructor guides students to translate the original text of the *Yijing* and provide commentary on each of the hexagrams and the meaning of the translated words. This course is a combined translation project and deep exploration of the *Zhouyi*, and thus deeply satisfying for students interested in either or both. After the first course is taken, the rest can be taken in any order. *Prerequisites: CM 57E for CM 67E*, 77E, 87E





# Herbal Studies

The first three quarters of the herbs series are devoted to learning individual herbs and primary two- and three-herb combinations, along with the theories pertinent to their classification and usage. The following three quarters focus on formulas, with an emphasis on classical prescription. Formula modifications and the principles involved are presented throughout the series in the context of their base prescriptions.

# CM 516, 526, 536 - Herbs I-III (2 lecture credits each)

The first three herbs classes provide students with the foundation of Chinese herbology needed to become competent practitioners of Chinese herbal medicine. After being introduced to the history and development of Chinese herbal medical knowledge, students learn approximately 150 key herbs including their properties, therapeutic actions, doses, preparation and application. The focus is on learning the core herbs used in Zhang Zhongjing's Shanghanlun, the foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Prerequisite: these courses are to be taken in the ordered sequence

CM 556, 566, 576 - Herbs I-III Practicum (1 lecture credit each) In this series, students develop a relationship with Chinese herbs that expands on and deepens the material learned in the Herbs I-III lecture courses. Through weekly "herbal immersions" involving sensory experience, students learn to trust in the basic senses of the human body as sources of valid information. Through the sensory work, combined with online and offline research, group work

and class discussions, students gain fluency with the qi, flavor, movement and direction of herbs; the preparation, purchase and storage of herbs; the application of botanical concepts to herb identification; and the science of combining herbs as a foundation for herbal formulation. Prerequisite: these courses are to be taken in the ordered sequence

#### CM 616, 626, 636 - Herbs IV-VI (2 lecture credits each)

In this series, students study classical Chinese herbal formulation, starting with the history and significance of formula studies (fangli xue) as the important bridge between the classroom and clinic. Following the consideration of formula composition and architecture, students explore the diagnostic parameters and therapeutic approaches into which the field of formula studies is organized. Approximately 140 classical formulas are covered in-depth. Using case studies, students learn the indicated disease patterns, hallmark symptoms, actions, indications and contraindications of specific prescriptions. Classical formula archetypes as well as formula family archetypes are studied, progressing to a focus on formula modification and clinical application. Prerequisites: CM 536 for CM 616; these courses are to be taken in the ordered sequence

# CM 656, 666, 676 - Herbs IV-VI Practicum (1 lecture credit each) This series largely involves the hands-on application of

the material learned in Herbs IV-VI lecture courses. Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, in a casebased, practicum setting. Instruction focuses on classical preparation and cooking methods, as well as the principles of the composition and basic architecture of key formulas.

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In Herbs V Practicum, instruction focuses on classical formula archetypes and formula family archetypes; in Herbs VI Practicum, the focus moves into formula modifications and clinical applications, using classical modifications from the *Shanghanlun* and *Jingui Yaolüe* as guides for this art. *Prerequisites: CM 576 for CM 656; these courses are to be taken in the ordered sequence* 

CM 826 – Herbs Review/Medicinary Practicum (1.5 lecture credits) This course supports the student in the synthesis of herbal knowledge by reviewing all categories of the science of Chinese herb prescribing incorporated into most national and state exams on the subject, including herbal theory, single herbs, herb combinations and herbal formulas, as well as the preparation and administration of herbs. In addition, this course prepares graduates for herbal practice and running an herbal dispensary by covering such topics as federal and state regulation, quality control, and ethical and environmental sustainability. Prerequisite: fourth-year status

Elective: CM 66E – Chinese Patent Medicines (3 lecture credits) This course introduces acupuncture students to general principles of Chinese herbal treatment, focusing specifically on Chinese patent formulas. It includes a historical overview, as well as a survey of the modern methods used to make patent medicines by the major companies in the U.S. and mainland China. Students learn how to supplement acupuncture treatments with Chinese patent formulas chosen according to the Five-Element and Six-Conformation diagnostic systems. They also learn how to prescribe patent medicines for specific Western disease diagnoses.

#### **Practice Management**

**CM 551, 671, 751, 861 – The Business of Chinese Medicine I-IV** (1.5 lecture credits each; except for CM 671, which is 1 lecture credit) This course series, which is spread out over all four years of the curriculum, is designed to equip each student with the understanding, skills and resources needed to conceptualize, start-up and successfully manage a profitable practice that resonates with their personality, ethical standards and the heart of the medicine. *Prerequisite: these courses are to be taken in the ordered sequence* 

#### CM 805 - Ethics and Jurisprudence (1 lecture credit^)

Students explore both ethical and legal issues most pertinent to the practice of Chinese medicine in the United States. The focus is on combining the theoretical and the practical, the personal and the universal, and the ancient and contemporary to arrive at a complex and functional understanding of the landscape of the profession. *^This course is required for ND/CCM students only.* 

#### \*CM 862 - Healthcare Landscape (1 lecture credit)

This course examines the current and projected state of health care in the United States. Topics include the

Affordable Care Act, systems-level considerations of insurance reimbursement, and complexities associated with the coordination of care within the variety of healthcare systems.

#### CM 871/\*CMD 871 - Community Education

(0.5 lab credit MSOM/1 lab credit DSOM)

Toward the attainment of this credit assignment, students are supported through the process of developing professional relationships and creating/delivering educational offerings to the public.

#### Mind-Body Medicine

\*CM 555, 565, 575, 655, 665, 675, 755, 765, 775, 845, 855, 865, 875 – Imaginal and Experiential Inquiries I-XIII (0.5 lecture credit each)

This series emphasizes reflective learning, appreciative inquiry, and self-awareness exercises to promote each student's personal engagement with the curriculum and support their professional development. In small groups facilitated by faculty advisors, students continuously define, achieve and refine their learning goals. Through the process, they choose and hone their doctoral capstone topic. Special attention is given to the cultivation of resilience, clarity of purpose, self-responsibility and professionalism. The courses in each year have a particular theme: year 1: The Role of Metaphor in Medicine, year 2: Awareness of Awareness, year 3: Developing a Medical Mind, and year 4: The Courage to be Vulnerable. *Prerequisite: these courses are to be taken in the ordered sequence* 

#### CM 635 – Practitioner Cultivation I

(1 lecture credit and 0.5 lab credit)

Students reflect on their personal goals and motivations for becoming CCM practitioners. Self-reflection exercises provide the opportunity for students to study their personal histories and identify their strengths, limitations, values and core challenges. Through increased self-awareness, students learn to identify personal challenges, as well as potential professional challenges. They are encouraged to explore the steps they can take while in school and beyond to strengthen their character and undertake the lifelong pursuit of becoming a mature medical practitioner. Discussion, reflection, individual and group awareness exercises, and writing projects are employed.

#### CM 815 – Practitioner Cultivation II

(1 lecture credit and 0.5 lab credit)

This course focuses on relationship dynamics between the practitioner and patient with a strong emphasis on listening, connection, communication, boundary definition, and understanding transference/counter transference. The primary tools of exploration are discussion, lecture, case-study, role-play, mind-body exercises, self-reflection and writing.

Prerequisites: CM 635 and intern status

#### CM 715, 725 – Chinese Medical Psychology I & II

(2 lecture credits each)

These courses offer an introduction to Chinese medical systems of five-phase element healing. From a general perspective, an in-depth analysis of the "spirits" and pathological emotions associated with each organ network is presented. Multiple models are employed, including Neijing perspectives on Dian-Kuang disease, the Dragon Rises, Red Bird Flies model of Dr. Leon Hammer, the Wang Fengyi system of Confucian therapeutics, and Eight Extraordinary Vessel approaches to psychological conditions. Emphasis is placed on the practical application of therapeutic techniques (including herbal prescriptions) that facilitate physical and emotional healing. Prerequisite: third-year status

#### Elective: CM 16E – Five-Element Wilderness Retreat (1.5 lecture credits)

This wilderness-based course facilitates the practitioner's journey toward a deeper connection to nature, including a deeper connection to each other, as well as the hidden layers of one's own healing potential. More specifically, this course presents an immersion in the natural manifestations of the five-phase elements. In a retreat format, participants cultivate their sensitivity toward the natural world and experience natural manifestations of the phase elements and selected acu-moxa points. Energetic practices, including art, poetry, group sharing and personal reflection are landmarks of this process.

#### Elective: CM 26E - Shan Ren Dao Retreat (4 lab credits)

In this two-week retreat, students are immersed in the theory and practice of the healing system created by the modern Confucian educator Wang Fengyi (1864-1937). This system remains the most complete emotional healing system of Chinese medicine still in practice today. The goal of the retreat is for participants to experience the abstract Confucian concept of humanity's "true nature" by achieving a heightened sense of health, happiness and well-being through the process of moderating negative emotions and restoring the inherently positive qualities of our human mandate.

#### **Physical Medicine**

# CM 515, 525, 535 - Palpation and Perception I-III Practicum

Through supervised hands-on experience, students develop the ability to sense and palpate the physical and energetic bodies. Students become familiar with internal and external anatomical landmarks, and practice palpating the mobility and motility of various body fluids and tissues, including bone, connective tissue and organs. The process of evaluating lesion patterns from a whole-body perspective is also explored. These courses cultivate hand-skill perception and prepare students for bodywork and acu-moxa techniques courses. Prerequisite: these courses are to be taken in the ordered sequence

#### CM 615 – Asian Bodywork (1 lecture credit and 0.5 lab credit)

Students learn key massage and bodywork strategies to treat a variety of conditions, with a focus on the resolution of pain. Topics include assessment, patient communication and strategic thinking. Students practice the techniques of rocking, stretching, palming and percussion. Also covered are gentle movement techniques to be done with patients. Prerequisite: second-year status

#### CM 735 - Applied Palpation and Perception

(1 lecture credit and 0.5 lab credit)

Students learn key assessment, bodywork, acupuncture, and adjunctive therapy techniques and strategies to treat a variety of conditions, primarily physical pain. The course also covers patient communication and strategic thinking. Gentle movement techniques learned in the Palpation and Perception series and Asian Bodywork are revisited with a focus on clinical application. Prerequisites: CM 535, 615

#### Shiatsu Acupressure Massage

The shiatsu series presents a thorough grounding in the principles and style of Asian bodywork, the energetic anatomy upon which it is based, and the fundamentals of touching with quality. Students learn a variety of techniques and maneuvers in the context of a complete, full-body massage. This style of shiatsu is highly effective and enjoyable to give as well as receive. Though shiatsu is a Japanese word and massage tradition, it derives from Chinese sources and is based on the same theories and principles that have influenced the entire pan-Asian approach to medicine. Shiatsu I-III can be taken early in the Chinese medicine program to more fully prepare students for what they learn in the Points and Techniques series. These courses present shiatsu as a holistic massage focusing on wellness, and do not require the ability to diagnose in order to be effective. Shiatsu is a complete modality on its own, but also trains the student in the art of palpation and general sensitivity, which is useful in all aspects of a medical practice.

#### **Elective: CM 15E – Shiatsu I, Back of the Body** (1.5 lab credits)

This introductory course presents two of the cornerstones of Asian/Japanese massage, shiatsu and Do-In [a selfmassage routine (Dao-Yin in Chinese)]. Neither massage uses oil nor requires disrobing. This course presents traditional Asian style massage on a table and teaches the back half of the body. It takes about 45 minutes to an hour to perform. An emphasis is placed on learning the proper alignment and body position for the practitioner, and on memorizing and internalizing the sequence (kata/form) of the massage. Students are exposed to the energetic, theoretical and technical aspects of shiatsu. Theory focuses on learning the channel pathways. Instruction emphasizes kinesthetic learning, alternating between demonstration and practice. Open to all NUNM students.



# Elective: CM 25E – Shiatsu II Short Form, Front of the Body (1.5 lab credits)

Shiatsu II teaches the second half of the short form. In terms of the kata, it covers the front of the body. The front of the body also takes about 45 minutes to do. This course continues the *Do-In* (*Dao-Yin*) training with an emphasis on being able to teach it to others. The last part of the course combines the back of the body from Shiatsu I with the front learned in this term to complete the 'short form.' The whole shiatsu short form takes about an hour and a half to perform and constitutes a very thorough and satisfying massage for both the giver and the receiver. *Prerequisite: CM 15E* 

# **Elective: CM 35E – Shiatsu III Short Form, Integration Practicum** (1.5 lab credits)

Shiatsu III, the short-form practicum, integrates the material learned in Shiatsu I and II. In a mock clinical approach to classroom learning, students bring a different volunteer client to class each week to give them a shiatsu massage. The instructor circulates and provides individualized feedback during each session. The short form constitutes the basic framework for the clinical practice of shiatsu, and by the end of the term the student should be capable of performing it professionally in about an hour and a quarter. *Prerequisite: CM 25E* 

# **Elective: CM 45E – Shiatsu IV Long Form, Back of the Body** (1.5 lab credits)

The long form builds on the short form learned in the first year and introduces new techniques. Specifically, stretching maneuvers for all the major joints of the body, along with more specific pressing of acu-points, are integrated into the massage. Pertaining to the self-cultivation aspect of the training, another *Dao-Yin* form is presented. Students learn a comprehensive series of

stretches (much like yoga) for the practitioner, both as preparation to give as well as receive the shiatsu stretches, but also to generally open and strengthen the practitioner's body. Intimate knowledge of these stretches also constitutes the basis for the use of stretches as a prescription for clients. *Prerequisite: CM 35E* 

# **Elective: CM 55E – Shiatsu V Long Form, Front of the Body** (1.5 lab credits)

Shiatsu V covers the long-form kata for the front half of the body. This course completes the very thorough whole-body treatment, which takes two to three hours to perform. Again, stretches and specific point work are integrated into the kata. Useful for both assessment and treatment, the long form is a comprehensive and satisfying massage. *Prerequisite: CM 45E* 

# **Elective: CM 65E – Shiatsu VI Long Form, Integration Practicum** (1.5 lab credits)

Shiatsu VI is the long-form practicum. Students bring a volunteer client into the classroom to perform a long-form treatment on them. The instructor circulates providing guidance and feedback. Students work on solving their technical difficulties, generally refine their massage technique, and hone their theoretical understanding, while developing their capacity to relate to their clients and discuss shiatsu in a professional manner. Some diagnostic palpation is practiced focusing on shu and mu points. Opportunities for improvisation from amongst the myriad of techniques become necessary to keep the treatment to a reasonable length of time. These processes train the student to tailor their treatments in real-world settings to their clients' individual needs and limits within the context of the shiatsu kata, while the kata provides the basis for a consistent product/service that ensures continuity between sessions and across providers. Prerequisite: CM 55E

#### Research

#### \*CM 992 — Doctoral Capstone Tutorial: Research and Writing in Chinese Medicine (1 lecture credit)

This course, taken in the summer of the final year of the DSOM program, provides training in CCM scholarship and prepares students to complete the required doctoral capstone project. It assures that students are well acquainted with the three components of the capstone project (written report, oral presentation and professional growth). Students refine the focus of their project, which may be on any approved topic pertinent to classical Chinese medicine. By the end of the course, students will have produced an abstract and a preliminary outline for their project report and chosen a capstone project committee, which will guide them in the completion of the project. Details of the process and requirements are described in the "Doctoral Capstone Project Handbook" provided in the course. Prerequisite: fourth-year standing

#### \*CM 993 - Doctoral Capstone Mentorship (2 lecture credits)

Over the course of their final year in the program, students are mentored by their committee chair to research, write and present their doctoral capstone project.

Prerequisite: CM 992



#### **Traditional Arts of Cultivation**

#### Chinese Cultural Arts: Chinese Calligraphy

Chinese calligraphy is an ancient and elegant art form that originated with the ancient Chinese shamans known as the Wu. Calligraphy is the traditional Wu's way of accessing the universal qi for healing and creating harmonizing feng shui energy. Shamans have used brushes to express their healing power for thousands of years in China. Calligraphy is still used as a tool for cultivating inner knowledge and to understand the roots of classical Chinese medicine.

#### Elective: CM 13E - Chinese Calligraphy I (1 lab credit)

Students first learn how to use the basic tools of calligraphy, namely brush, ink and paper. Progressing through the basic strokes of Chinese writing to the writing of specifically chosen characters, this process is designed to facilitate their understanding of the relationship between characters, philosophy and universal qi. In the process, students learn to harness and control their own internal qi. Open to all NUNM students.

#### Elective: CM 23E - Chinese Calligraphy II (1 lab credit)

Students learn new symbols and continue the inner cultivation begun in Chinese Calligraphy I. Prerequisite: CM 13E

#### Elective: CM 33E - Weiqi (1 lab credit)

Students learn the history, philosophy and principles of weiqi (Chinese chess, also known as "Go"). This course develops the critical thinking skills of students as they learn to apply the strategies and techniques of the game to the art of treating disease.

#### Elective: CM 43E - Introduction to Chinese Tea (0.5 lab credit)

In this two-day retreat, students are introduced to using Chinese tea in service of healing and self-cultivation, and understanding the energetics of tea. Students learn the six classes of teas in the world and how to brew each type.

#### **Qigong**

Qigong literally means "energy work" or "energy cultivation." Personal experience of, awareness of, and sensitivity to gi are considered imperative to the successful practice of classical Chinese medicine. In a series of nine weekend retreats and sets of weekly practice sessions, students are immersed in the fundamentals of the Jinjing (Tendon and Channel) School of Qigong, one of China's true alchemical life science traditions. By way of traditional lineage instruction, students experience the elements of a deeply nourishing qigong practice and learn to apply their skills and knowledge to the education and treatment of others. In particular, students learn to prescribe individualized gigong treatment plans for patients.

#### CM 518 – Qigong I Retreat | CM 519 – Qigong I Practicum

(0.5 lab credit and 1.5 lecture credits)

The first qigong module explores the alchemical and shamanic origins of qigong theory and practice. Students are introduced to the fundamentals of the Jinjing School of Qigong, including shaking (tou), walking (zou), and quiet meditation or "settling" (ding). A key element of this course is the practice of the Universe Stance (Yuzhou Zhuang) or Standing Meditation (Zhan Zhuang)—the position that occupies a central role in most qigong traditions. A sitting "internal alchemy" form (neidan) is also emphasized. Through these practices, students are guided to experience the phenomenon of qi in their bodies as well as in nature.

# CM 528 – Qigong II Retreat | CM 529 – Qigong II Practicum (0.5 lab credit and 1.5 lecture credits)

In addition to strengthening and deepening the practices learned in the first module, students learn the first eight-segment long form of the Jinjing School of Qigong, namely Yin Yang Harmonization Qigong (Yin Yang Sheng Jiang Kai He Gong). *Prerequisites: CM 518, 519* 

# CM 538 – Qigong III Retreat | CM 539 – Qigong III Practicum (0.5 lab credit and 1.5 lecture credits)

This qigong module integrates the medical concept of "strengthening the sinews" into the existing qigong practice through the introduction of a second eight-segment long form of the Jinjing School of Qigong, namely Strengthening the Sinews Qigong (Jinjian Gong). *Prerequisites: CM 528, 529* 

# CM 618 – Qigong IV Retreat | CM 619 – Qigong IV Practicum (0.5 lab credit and 1.5 lecture credits)

This qigong module teaches students the third eightsegment long form of the Jinjing School of Qigong, namely Esoteric Eight Pieces of Brocade (Jin Baduan). At the same time, progress in the first stage of the quiet meditation practice is discussed, and the second stage of the Microcosmic Orbit Meditation (Xiao Zhoutian) is introduced. *Prerequisites: CM 538*, *539* 

# CM 628 – Qigong V Retreat | CM 629 – Qigong V Practicum (0.5 lab credit and 1.5 lecture credits)

Students learn the fourth Jinjing Gong long form, the Five Sacred Peaks Qigong (Wuling Gong). This vigorous form strengthens the student's ability to integrate the scholarly (wen) and martial (wu) aspects of qigong practice. *Prerequisites: CM 618, 619* 

# CM 638 – Qigong VI Retreat | CM 639 – Qigong VI Practicum (0.5 lab credit and 1.5 lecture credits)

Students review and deepen their practice of the forms and walks learned in the Qigong I-V Retreats and Practica. *Prerequisites: CM 628, 629* 

CM 718, 728 – Qigong VII & VIII Retreat | CM 719, 729 – Qigong VII & VIII Practicum (0.5 lab credit and 1.5 lecture credits each)

During the seventh and eighth modules, students learn



the Fourteen Movements of Jinjing Gong (Jinjing Shisi Shi). This form is a 17th-century refinement of the more broadly known Yijin Jing (Change the Sinews System of Exercises) from the Shaolin tradition. In addition, students gain experience teaching the shaking, walking, quiet meditation and long forms learned in the previous modules, and develop expertise in the therapeutic prescription of qigong regimen for individual patients. *Prerequisites: CM 638, 639 for CM 718, 719; CM 718, 719 for CM 728, 729* 

# CM 738 – Qigong IX Retreat | CM 739 – Qigong IX Practicum (0.5 lab credit and 1.5 lecture credits)

This qigong module serves to deepen and assess each student's level of mastery of the performance and therapeutic application of the qigong practices covered in the previous eight modules. *Prerequisites: CM 728, 729* 

# **Elective:** CM 18E, 28E, 38E – Medical Applications of Qigong I-III (2 lecture credits each)

Students are mentored in the use of qigong prescriptions as a therapeutic modality. Working under close supervision by qualified practitioners of the Jinjing Gong lineage, each student develops and delivers individualized treatment protocols for patients referred to the class. *Prerequisite: completion of Qigong I-IX Retreats and Qigong I-IX Practica* 

#### **Qigong Teaching Series**

This series is designed for CCM students admitted into the Qigong Certificate program.

# Elective: CM 19E, 29E, 39E – Teaching Qigong I-III Practicum (1.5 lecture credits each)

This advanced elective series is designed for the serious qigong student who wishes to continue formal training in qigong, and integrate the teaching of qigong into their clinical practice. *Prerequisite: completion of Qigong I-IX Retreats and Qigong I-IX Practica* 



#### Taiji

Taiji Quan (T'ai Chi Ch'uan) literally means "the very pinnacle, highest, or greatest fist," i.e., martial art. A more useful translation might be "the ultimate exercise." Its precisely choreographed movements create a relaxing mind-body dance that stretches and strengthens the entire body. Its slow, deliberate moves develop balance and grace. Its meditative style facilitates harmonious breathing and a focused mind. It is, in short, meditation in motion. There are many variations within the world of taiji. Yang style taiji is the most commonly practiced style in both China and the U.S. Within styles there are various practice lengths, loosely divided into long and short forms. Here, the focus is on a long form. This form takes around 30-40 minutes to perform and thus also takes some time to learn. The three sections of the long form are divided neatly into the three terms of the academic year. Thus, the first year of study is devoted to learning the sequence of moves along with the principles of movement that accompany them, and an inward-looking focus that emphasizes the cultivation of qi within the student.

From a Chinese medical perspective, taiji harmonizes the "three treasures," jing, qi and shen (essence, energy and spirit). Each class includes specially designed warmup exercises, qigong, and detailed instruction in the form. The first year of study focuses on learning the sequence of movements and the correct way of doing each move. Taiji I is required in the fourth year of the CCM programs. However, students are encouraged to take it sooner if they wish to take full advantage of the taiji elective series. *The taiji courses are open to all NUNM students*.

#### CM 819, 829, 839 – Taiji I-III Practicum (1.5 lecture credits each)

The first section, which is the subject of Taiji I, teaches all the basic moves and principles and thus constitutes an effective short form that can be practiced on its own. Subsequent courses build on the foundation, emphasizing deepening awareness through the practice of the form. At NUNM, our instructors focus more on the health and spiritual cultivation attributes of taiji as opposed to its martial arts aspects. In this context, these courses are effective and enjoyable for anyone who enjoys movement arts or exercise. At the same time taiji is very meditative, one of the reasons people like to practice taiji, and indeed many find this moving meditation preferable to sitting meditation. *Prerequisite: these courses are to be taken in the ordered sequence* 

#### Elective: CM 14E, 24E, 34E – Taiji IV-VI Practicum

(1.5 lecture credits each)

The second year of taiji consists of elective classes that pick up at the completion of the long-form sequence and focus on practicing the taiji quan. Having learned the sequence of moves, the next steps have to do with refining and perfecting the form through practice over time. Each term, and indeed each class, focuses on a different aspect of practice until the form is thoroughly integrated and the student is confident in the ability to practice alone. Prerequisites: CM 839 for CM 14E; these courses are to be taken in the ordered sequence

#### Elective: CM 44E - Taiji Retreat (0.5 lab credit)

In this weekend retreat, students are introduced to the history, principles and practice of taiji. A classical approach is used to enable students to understand and experience that taiji is a healing tool capable of playing a critical role in the prevention of disease and the nourishment of life.

#### **Traditional Mentorship Tutorial**

#### CM 812, 822, 832 – Traditional Mentorship Tutorial I-III

(2 lecture credits each)

A hallmark of the CCM programs, the tutorial classes are designed to facilitate direct and personal contact between students and instructors, and thereby the culture and lineage system of a classical Chinese medicine education. Topics are discussed from the unique perspective of the mentor's own path of learning and knowledge integration. This series is required in the internship year of study. *Prerequisite: these courses are designed to be taken in sequence* 

# **Elective:** CM 12E, 22E, 32E – Traditional Mentorship Tutorial I-III (2 lecture credits each)

Students take the CM 812, 822 and 832 Traditional Mentorship Tutorial series in the final year of their program. They can take an extra year of this uniquely structured course offering by registering for this elective series that is taught in a manner appropriate for students in their pre-internship year. *Prerequisite: these courses are designed to be taken in sequence* 

#### **Elective Requirement**

MSOM and DSOM students are required to take 6 and 10 credits of elective courses as part of their core program, respectively.

### **Clinical Training Overview**

The clinical training objectives of the CCM programs are aligned with the overall mission of training competent practitioners in the art and science of classical Chinese medicine. The clinical aspect is expected to be a refinement of the knowledge base acquired in the academic portion of the program, with the implicit understanding that many important skills can only be attained in the applied context of a practical learning situation. These skills include, but

## **Clinical Training**

The components of the clinical portion of the program are Introduction to Clinic, Clinical Observation, Clinical Mentoring, Clinical Pre-Internship, Clinical Case Presentation, Clinical Internship, and Internship Case Presentation. These are organized as follows:

Year of St	udy	Clinical Component	Brief Description
MSOM/ DSOM	MSOM/ ND		
1st	1st	Introduction to Clinic	Students learn the fundamentals of working in the NUNM clinics
2nd	4th	Clinical Observation Rotation I-III	Students observe experienced practitioners treat patients
3rd	5th	Clinical Mentoring Rotation I-VI	Students become involved in patient diagnosis and treatment under direct clinical supervision
3rd	5th	Clinical Case Presentation I-III	Discussion of clinical case studies; clinical theater
4th	6th	Clinical Internship Rotation I-III	Students (under supervision) assume primary responsibility for diagnosis and treatment of patients; all needle insertions are observed
4th	6th	Clinical Internship Rotation IV-IX	Students (under supervision) assume primary responsibility for diagnosis and treatment of patients
4th	6th	Clinical Internship Holiday Requirement (24 hrs)	Students (under supervision) assume primary responsibility for diagnosis and treatment of patients
4th	6th	Internship Case Presentation I-III	Presentation and discussion of internship cases with peers and supervisors

#### are not limited to:

- Development of foundational knowledge and understanding of classical Chinese medical concepts and techniques
- Evolution of interpersonal communication abilities
- Refinement of problem-solving capacities and clinical judgment
- Proficiency in executing the technical skills required to effectively apply treatments in Chinese medicine

To begin the Observation component, students must complete the first year of study and pass Herbs I-III, Acu-Moxa Points and Techniques I-III, Palpation and Perception I-II, Chinese Diagnostic Techniques I-II, Evidence-Informed Practice, and Introduction to Clinic. To begin the Clinical Mentoring Rotations in the following year, students must complete the second year of study and pass Chinese Pathology I-III, Herbs I-VI, Acu-Moxa Points and Techniques I-VI, Biomedicine I-III, and Practitioner Cultivation I. Before undertaking the Clinical Pre-Internship Rotation, students must complete Biomedicine IV, Clinical Medicine I, Clinical Case Presentation I, and

a minimum of two Clinical Mentoring Rotations.

To advance into Clinical Internship, students must complete the third year of study and pass Biomedicine VI, Clinical Medicine III, Clinical Case Presentation III, Clinical and Physical Diagnosis, and six Clinical Mentoring Rotations. In addition, students must pass all components of the Clinic Entrance Examination. An Internship orientation is required before beginning the Internship rotations.

Students are gradually led through the clinical experience in a sequential fashion, from active observation to being able to conduct a comprehensive patient intake and treatment protocol. In the spirit of the classics, emphasis is placed on recognition of Chinese syndrome pattern differentiation (rather than symptomatic prescribing), with the goal of creating individual treatment plans designed to assist patients in returning to a more harmonious and balanced state.

Training in how to write a case report (using the CARE Guidelines) is woven through all four years of the clinical education. In order to complete the clinical portion of their program, students must pass the Clinic Exit Examination.



#### CM 530 - Introduction to Clinic (0.75 clinic credit)

This course introduces students to the fundamentals of working in the NUNM clinics. Topics include clinic policies and procedures, hygienic standards, charting, patient confidentiality, patient-practitioner relations, issues surrounding addiction and chemical dependency, and cultural humility. The course prepares students to begin observing treatments with a focus on the material and nonmaterial changes that take place throughout treatment, and to support the supervisor efficiently and effectively.

#### CM 600 - Clinical Observation I-III (2 clinic credits each)

Clinical observation is a forum in which five observers watch the clinical supervisor in session with a client. While observing, the objective is to absorb as much of the method and process of clinical practice as possible. Students practice creating patient timelines for case reports. Prerequisites: students must be CPR certified, have passed the CNT course, and have completed CM 530

CM 700 – Clinical Mentoring Rotation I-VI (2 clinic credits each) Clinical mentoring rotations have the same structure as the clinical observation rotations, with the addition that students become more directly involved in the patient intake, diagnosis and treatment, under the direct guidance of their clinical supervisor. Students learn to gather the information needed to create a meaningful case report.

#### CM 710, 720, 730 – Clinical Case Presentation I-III (1 clinic credit each)

The clinical case presentation series provides a forum for students to apply and integrate the concepts and information learned in their academic courses to clinical scenarios encountered during their clinical mentoring rotations. Prerequisite: third-year status

#### CM 770 – Pre-Internship Rotation (2 clinic credits)

In the pre-internship rotation, students pair with interns as they prepare to assume this role. Prerequisite: completion of at least two clinical mentoring rotations

CM 800 — Clinical Internship Rotation I-III (2 clinic credits each) During clinical internship, the student assumes primary responsibility for the diagnosis and treatment of clients under the supervision of experienced practitioners. In the first quarter of clinical internship, interns are paired and every needle insertion is directly supervised. Prerequisite: students must be CPR certified

CM 800 – Clinical Internship Rotation IV-IX (2 clinic credits each) During clinical internship, the student assumes primary responsibility for the diagnosis and treatment of clients under the supervision of experienced practitioners. By the end of the year, students have produced a case report based on their own patient encounters. Prerequisite: students must be CPR certified

Clinical Internship Holiday Requirement (no credit assignment) Students are required to do 24 hours (six individual shifts) of clinical internship during designated holiday periods.

#### CM 810, 820, 830 - Internship Case Presentation I-III (1 clinic credit each)

In this clinical course series, interns present case histories of chosen clients, and receive feedback and critique by fellow interns and a clinical faculty member. Prerequisite: intern status

## Classical Chinese Medicine Certificate **Programs**

Students in the CCM programs, who meet the prerequisites and are in good academic standing, are eligible to apply for admission into the Qigong and Shiatsu Certificate programs. Due to space constraints, admission is limited. These are not degree programs and do not lead to eligibility to sit for licensure exams. Contact the Office of Admissions for further information.

#### **Qigong Teaching Certificate Program**

The Qigong Teaching Certificate program is taught once the student has completed all of the required Qigong Practicum and Retreat courses in the core program. Over the subsequent year, the student completes the Qigong I-III Teaching Practica, during which they progress from observing qigong instruction of NUNM patients and students, to teaching her/his own qigong classes.

#### Shiatsu Certificate Program

The Shiatsu Certificate program consists of six courses (204 hours) taken over two years, and the completion of two terms of performing shiatsu treatments in one of the NUNM Health Centers. This certificate program is designed to be pursued concurrently with the DSOM or MSOM programs. At the end of the certificate program, students will be fully prepared to use shiatsu as an independent treatment modality.

# **MSOM Four-Year Curriculum**

**FIRST-YEAR TOTALS** 

# first year

COURSE#	FIRST-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 501	CCM Immersion Retreat		12	6	18	1.00
CM 511	Foundations of CCM I			24	24	2.00
CM 512	Chinese History and Culture I			18	18	1.50
CM 513	Acu-Moxa Points I			24	24	2.00
CM 514	Acu-Moxa Techniques I		12	12	24	1.50
CM 515	Palpation and Perception I		12	12	24	1.50
CM 518	Qigong I Retreat		12		12	0.50
CM 519	Qigong I Practicum			18	18	1.50
CM 551	Business of Chinese Medicine I			18	18	1.50
	First-Year Fall Totals	0	48	132	180	13.00
COURSE#	FIRST-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 521	Foundations of CCM II			24	24	2.00
CM 562	Chinese Diagnostic Techniques I		12	12	24	1.50
CM 523	Acu-Moxa Points II			24	24	2.00
CM 524	Acu-Moxa Techniques II		12	12	24	1.50
CM 525	Palpation and Perception II		12	12	24	1.50
CM 516	Herbs I			24	24	2.00
CM 556	Herbs I Practicum			12	12	1.00
CM 599	Evidence-Informed Practice			24	24	2.00
CM 528	Qigong II Retreat		12		12	0.50
CM 529	Qigong II Practicum			18	18	1.50
	First-Year Winter Totals	0	48	162	210	15.50
COURSE #	FIRST-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 531	Foundations of CCM III			24	24	2.00
CM 572	Chinese Diagnostic Techniques II		12	12	24	1.50
CM 533	Acu-Moxa Points III			24	24	2.00
CM 534	Acu-Moxa Techniques III		24	12	36	2.00
CM 535	Palpation and Perception III		12	12	24	1.50
CM 526	Herbs II			24	24	2.00
CM 566	Herbs II Practicum			12	12	1.00
CM 538	Qigong III Retreat		12		12	0.50
CM 539	Qigong III Practicum			18	18	1.50
CM 530	Internal continue to Clinia	18			18	0.75
CIVI 330	Introduction to Clinic	10				

18

156

432

606

43.25

# second year

COURSE#	SECOND-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 611	Cosmology and Symbolism I			24	24	2.00
CM 612	Chinese Pathology I			24	24	2.00
CM 613	Acu-Moxa Points IV			24	24	2.00
CM 614	Acu-Moxa Techniques IV		24	12	36	2.00
CM 615	Asian Bodywork		12	12	24	1.50
CM 536	Herbs III			24	24	2.00
CM 576	Herbs III Practicum			12	12	1.00
CM 617	Biomedicine I			24	24	2.00
CM 657	Acu-Moxa Anatomy I		6	12	18	1.25
CM 699	Immunology			36	36	3.00
CM 618	Qigong IV Retreat		12		12	0.50
CM 619	Qigong IV Practicum			18	18	1.50
CM 600	Clinical Observation Rotation	48			48	2.00
	Second-Year Fall Total	48	54	222	324	22.75
COURSE#	SECOND-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 621	Cosmology and Symbolism II			24	24	2.00
CM 622	Chinese Pathology II			24	24	2.00
CM 623	Acu-Moxa Points V			24	24	2.00
CM 624	Acu-Moxa Techniques V		24	12	36	2.00
CM 616	Herbs IV			24	24	2.00
CM 656	Herbs IV Practicum			12	12	1.00
CM 627	Biomedicine II			48	48	4.00
CM 663	Auricular Points		6	12	18	1.25
CM 667	Acu-Moxa Anatomy II		6	12	18	1.25
CM 628	Qigong V Retreat		12		12	0.50
CM 629	Qigong V Practicum			18	18	1.50
CM 600	Clinical Observation Rotation	48			48	2.00
	Second-Year Winter Total	48	48	210	306	21.50
COURSE #	SECOND-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 631	Cosmology and Symbolism III			24	24	2.00
CM 632	Chinese Pathology III			24	24	2.00
CM 633	Acu-Moxa Points VI			24	24	2.00
CM 634	Acu-Moxa Techniques VI		24	12	36	2.00
CM 635	Practitioner Cultivation I		12	12	24	1.50
CM 626	Herbs V			24	24	2.00
CM 666	Herbs V Practicum			12	12	1.00
CM 637	Biomedicine III			48	48	4.00
CM 638	Qigong VI Retreat		12		12	0.50
CM 639	Qigong VI Practicum			18	18	1.50
CM 600	Clinical Observation Rotation	48			48	2.00
CM 671	Business of Chinese Medicine II			12	12	1.00
	Second-Year Spring Total	48	48	210	306	21.50
	SECOND-YEAR TOTALS	144	150	642	936	65.75

# third year

COURSE#	THIRD-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 712	Clinical Medicine I			48	48	4.00
CM 714	Advanced Acu-Moxa Techniques I		12	12	24	1.50
CM 715	Chinese Medical Psychology I			24	24	2.00
CM 717	Biomedicine IV			48	48	4.00
CM 636	Herbs VI			24	24	2.00
CM 676	Herbs VI Practicum			12	12	1.00
CM 799	Nutrition			24	24	2.00
CM 718	Qigong VII Retreat		12		12	0.50
CM 719	Qigong VII Practicum			18	18	1.50
CM 710	Clinical Case Presentation I	24			24	1.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 751	Business of Chinese Medicine III			18	18	1.50
	Third-Year Fall Totals	120	24	228	372	25.00
COURSE #	THIRD-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 722	Clinical Medicine II			48	48	4.00
CM 724	Advanced Acu-Moxa Techniques II		12	12	24	1.50
CM 725	Chinese Medical Psychology II			24	24	2.00
CM 727	Biomedicine V			48	48	4.00
CM 728	Qigong VIII Retreat		12		12	0.50
CM 729	Qigong VIII Practicum			18	18	1.50
CM 720	Clinical Case Presentation II	24			24	1.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
	Third-Year Winter Totals	120	24	150	294	18.50
COURSE #	THIRD-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 732	Clinical Medicine III			48	48	4.00
CM 735	Applied Palpation and Perception		12	12	24	1.50
CM 737	Biomedicine VI			48	48	4.00
CM 777	Clinical Physical Diagnosis		12	12	24	1.50
CM 899	Public Health Policy			24	24	2.00
CM 738	Qigong IX Retreat		12		12	0.50
CM 739	Qigong IX Practicum			18	18	1.50
CM 730	Clinical Case Presentation III	24			24	1.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 770	Clinical Pre-Internship Rotation	48			48	2.00
	Third-Year Spring Totals	168	36	162	366	22.00
	THIRD-YEAR TOTALS	408	84	540	1032	65.50

COURSE#	FOURTH-YEAR SUMMER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
	Fourth-Year Summer Totals	144	0	0	144	6.00
COURSE #	FOURTH-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 812	Traditional Mentorship Tutorial I			24	24	2.00
CM 813	Acu-Moxa Board Review			12	12	1.00
CM 815	Practitioner Cultivation II		12	12	24	1.50
CM 817	Physiology of Acupuncture			12	12	1.00
CM 819	Taiji I Practicum			18	18	1.50
CM 810	Internship Case Presentation I	24			24	1.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
	Fourth-Year Fall Totals	120	12	78	210	12.00
COURSE #	FOURTH-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 822	Traditional Mentorship Tutorial II			24	24	2.00
CM 826	Herbs Review/Medicinary Practicum			18	18	1.50
CM 829	Taiji II Practicum			18	18	1.50
CM 820	Internship Case Presentation II	24			24	1.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 861	Business of Chinese Medicine IV	-		18	18	1.50
	Fourth-Year Winter Totals	120	0	78	198	11.50
COURSE #	FOURTH-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 832	Traditional Mentorship Tutorial III	CEMIC	LAD	24	24	2.00
CM 839	Taiji III Practicum			18	18	1.50
CM 830	Internship Case Presentation III	24		10	24	1.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 871	Community Education ^	10	12		12	0.50
	Fourth-Year Spring Totals	120	12	42	174	9.00
				440		
	FOURTH-YEAR TOTALS  AThese hours are cumulative and may be ear	504	24	198	<b>726</b>	38.50
	mese nours are cumulative and may be ear	med in a terril Ot	iner tilall	term registe	icu.	
	PROGRAM TOTALS BEFORE ELECTIVES	1074	414	1812	3300	213.00
	PROGRAM TOTALS WITH ELECTIVES				3372	219.00

# **DSOM Four-Year Curriculum**

# first year

COURSE#	FIRST-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 911	Classical Texts I			36	36	3.00
CM 501	CCM Immersion Retreat		12	6	18	1.00
CM 511	Foundations of CCM I			24	24	2.00
CM 512	Chinese History and Culture I			18	18	1.50
CM 513	Acu-Moxa Points I			24	24	2.00
CM 514	Acu-Moxa Techniques I		12	12	24	1.50
CM 515	Palpation and Perception I		12	12	24	1.50
CM 555	Imaginal and Experiential Inquiries I			6	6	0.50
CM 518	Qigong I Retreat		12		12	0.50
CM 519	Qigong I Practicum			18	18	1.50
CM 551	Business of Chinese Medicine I			18	18	1.50
	First-Year Fall Totals	0	48	174	222	16.50
COURSE#	FIRST-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 921	Classical Texts II			36	36	3.00
CM 521	Foundations of CCM II			24	24	2.00
CM 522	Chinese History and Culture II			18	18	1.50
CM 562	Chinese Diagnostic Techniques I		12	12	24	1.50
CM 523	Acu-Moxa Points II			24	24	2.00
CM 524	Acu-Moxa Techniques II		12	12	24	1.50
CM 525	Palpation and Perception II		12	12	24	1.50
CM 565	Imaginal and Experiential Inquiries II			6	6	0.50
CM 516	Herbs I			24	24	2.00
CM 556	Herbs I Practicum			12	12	1.00
CM 599	Evidence-Informed Practice			24	24	2.00
CM 528	Qigong II Retreat		12		12	0.50
CM 529	Qigong II Practicum			18	18	1.50
	First-Year Winter Totals	0	48	222	270	20.50
COURSE#	FIRST-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 931	Classical Texts III			36	36	3.00
CM 531	Foundations of CCM III			24	24	2.00
CM 532	Chinese History and Culture III			18	18	1.50
CM 572	Chinese Diagnostic Techniques II		12	12	24	1.50
CM 533	Acu-Moxa Points III			24	24	2.00
CM 534	Acu-Moxa Techniques III		24	12	36	2.00
CM 535	Palpation and Perception III		12	12	24	1.50
CM 575	Imaginal and Experiential Inquiries III			6	6	0.50
CM 526	Herbs II			24	24	2.00
CM 566	Herbs II Practicum			12	12	1.00
CM 538	Qigong III Retreat		12		12	0.50
CM 539	Qigong III Practicum			18	18	1.50
CM 530	Introduction to Clinic	18			18	0.75
	First-Year Spring Totals	18	60	198	276	19.75
	FIRST-YEAR TOTALS	18	156	594	768	56.75

# second year

COURSE#	SECOND-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 941	Text IV – Shanghanlun/Jingui Yaolüe I			24	24	2.00
CM 611	Cosmology and Symbolism I			24	24	2.00
CM 612	Chinese Pathology I			24	24	2.00
CM 613	Acu-Moxa Points IV			24	24	2.00
CM 614	Acu-Moxa Techniques IV		24	12	36	2.00
CM 615	Asian Bodywork		12	12	24	1.50
CM 655	Imaginal and Experiential Inquiries IV			6	6	0.50
CM 536	Herbs III			24	24	2.00
CM 576	Herbs III Practicum			12	12	1.00
CM 617	Biomedicine I			24	24	2.00
CM 657	Acu-Moxa Anatomy I		6	12	18	1.25
CM 699	Immunology			36	36	3.00
CM 618	Qigong IV Retreat		12		12	0.50
CM 619	Qigong IV Practicum			18	18	1.50
CM 600	Clinical Observation Rotation	48			48	2.00
CIVIOUU	Second-Year Fall Totals	48	54	252	354	25.25
COURSE#	SECOND-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 951	Text V – Shanghanlun/Jingui Yaolüe II	CEITIC	LAD	24	24	2.00
CM 621	Cosmology and Symbolism II			24	24	2.00
CM 622	Chinese Pathology II			24	24	2.00
CM 623	Acu-Moxa Points V			24	24	2.00
CM 624	Acu-Moxa Techniques V		24	12	36	2.00
	·					
CM 663	Auricular Points		6	12	18	1.25
CM 665	Imaginal and Experiential Inquiries V			6	6	0.50
CM 616	Herbs IV			24	24	2.00
CM 656	Herbs IV Practicum			12	12	1.00
CM 627	Biomedicine II			48	48	4.00
CM 667	Acu-Moxa Anatomy II		6	12	18	1.25
CM 628	Qigong V Retreat		12		12	0.50
CM 629	Qigong V Practicum			18	18	1.50
CM 600	Clinical Observation Rotation	48			48	2.00
	Second-Year Winter Totals	48	48	240	336	24.00
COURSE#	SECOND-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 961	Text VI – Shanghanlun/Jingui Yaolüe III			24	24	2.00
CM 631	Cosmology and Symbolism III			24	24	2.00
CM 632	Chinese Pathology III			24	24	2.00
CM 633	Acu-Moxa Points VI			24	24	2.00
CM 634	Acu-Moxa Techniques VI		24	12	36	2.00
CM 635	Practitioner Cultivation I		12	12	24	1.50
CM 675	Imaginal and Experiential Inquiries VI			6	6	0.50
CM 626	Herbs V			24	24	2.00
CM 666	Herbs V Practicum			12	12	1.00
CM 637	Biomedicine III			48	48	4.00
CM 638	Qigong VI Retreat		12		12	0.50
CM 639	Qigong VI Practicum			18	18	1.50
CM 600	Clinical Observation Rotation	48			48	2.00
	<del> </del>					1.00
CM 671	Business of Chinese Medicine II			12	12	1.00

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**SECOND-YEAR TOTALS** 

# third year

COURSE#	THIRD-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 971	Text VII – Neijing Seminar I			24	24	2.00
CM 711	Advanced Cosmology and Symbolism I			24	24	2.00
CM 712	Clinical Medicine I			48	48	4.00
CM 714	Advanced Acu-Moxa Techniques I		12	12	24	1.50
CM 715	Chinese Medical Psychology I			24	24	2.00
CM 755	Imaginal and Experiential Inquiries VII			6	6	0.50
CM 636	Herbs VI			24	24	2.00
CM 676	Herbs VI Practicum			12	12	1.00
CM 717	Biomedicine IV			48	48	4.00
CM 799	Nutrition			24	24	2.00
CM 718	Qigong VII Retreat		12		12	0.50
CM 719	Qigong VII Practicum			18	18	1.50
CM 710	Clinical Case Presentation I	24			24	1.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 751	Business of Chinese Medicine III			18	18	1.50
	Third-Year Fall Totals	120	24	282	426	29.50
COURSE#	THIRD-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 981	Text VIII – Neijing Seminar II			24	24	2.00
CM 721	Advanced Cosmology and Symbolism II			24	24	2.00
CM 722	Clinical Medicine II			48	48	4.00
CM 724	Advanced Acu-Moxa Techniques II		12	12	24	1.50
CM 725	Chinese Medical Psychology II			24	24	2.00
CM 765	Imaginal and Experiential Inquiries VIII			6	6	0.50
CM 727	Biomedicine V			48	48	4.00
CM 728	Qigong VIII Retreat		12		12	0.50
CM 729	Qigong VIII Practicum			18	18	1.50
CM 720	Clinical Case Presentation II	24			24	1.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
	Third-Year Winter Totals	120	24	204	348	23.00
COURSE#	THIRD-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 991	Text IX – Neijing Seminar III			24	24	2.00
CM 731	Advanced Cosmology and Symbolism III			24	24	2.00
CM 732	Clinical Medicine III			48	48	4.00
CM 735	Applied Palpation and Perception		12	12	24	1.50
CM 775	Imaginal and Experiential Inquiries IX			6	6	0.50
CM 737	Biomedicine VI			48	48	4.00
CM 777	Clinical Physical Diagnosis		12	12	24	1.50
CM 899	Public Health Policy			24	24	2.00
CM 738	Qigong IX Retreat		12		12	0.50
CM 739	Qigong IX Practicum			18	18	1.50
CM 730	Clinical Case Presentation III	24			24	1.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 700	Clinical Mentoring Rotation	48			48	2.00
CM 770	Clinical Pre-Internship Rotation	48			48	
	Third-Year Spring Totals	168	36	216	420	26.50
	THIRD-YEAR TOTALS	408	84	702	1194	79.00

# fourth year

COURSE#	FOURTH-YEAR SUMMER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 537	CCM View of Biomedicine			12	12	1.00
CM 992	Doctoral Capstone Tutorial			12	12	1.00
CM 845	Imaginal and Experiential Inquiries X			6	6	0.50
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
	Fourth-Year Summer Totals	144	0	30	174	8.50
COURSE#	FOURTH-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 812	Traditional Mentorship Tutorial I			24	24	2.00
CM 813	Acu-Moxa Board Review			12	12	1.00
CM 815	Practitioner Cultivation II		12	12	24	1.50
CM 855	Imaginal and Experiential Inquiries XI			6	6	0.50
CM 817	Physiology of Acupuncture			12	12	1.00
CM 819	Taiji I Practicum			18	18	1.50
CM 810	Internship Case Presentation I	24			24	1.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
	Fourth-Year Fall Totals	120	12	84	216	12.50
COURSE #	FOURTH-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 822	Traditional Mentorship Tutorial II			24	24	2.00
CM 865	Imaginal and Experiential Inquiries XII			6	6	0.50
CM 826	Herbs Review/Medicinary Practicum			18	18	1.50
CM 829	Taiji II Practicum			18	18	1.50
CM 820	Internship Case Presentation II	24			24	1.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 861	Business of Chinese Medicine IV			18	18	1.50
CM 862	Healthcare Landscape			12	12	1.00
	Fourth-Year Winter Totals	120	0	96	216	13.00
COURSE#	FOURTH-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 993	Doctoral Capstone Mentorship			24	24	2.00
CM 832	Traditional Mentorship Tutorial III			24	24	2.00
CM 875	Imaginal and Experiential Inquiries XIII			6	6	0.50
CM 857	Eastern-Western Correspondences			24	24	2.00
CM 839	Taiji III Practicum			18	18	1.00
CM 830	Internship Case Presentation III	24			24	1.00
CM 800	Clinical Internship Rotation	48			48	2.00
CM 800	Clinical Internship Rotation	48			48	2.00
CMD 871	Community Education ^		24		24	1.00
	Fourth-Year Spring Totals	120	24	96	240	14.00

**FOURTH-YEAR TOTALS** 504 48.00 36 306 846 ^These hours are cumulative and may be earned in a term other than term registered.

PROGRAM TOTALS BEFORE ELECTIVES 1074 426 2334 3834 257.00 **PROGRAM TOTALS WITH ELECTIVES** 3954 267.00

# **CCM ELECTIVES**

# electives

#### MSOM: 6 Credits Required

MSOM students are able to take any of the DSOM-specific courses as electives as long as they have met the prerequisites. At least half of the 6 required elective credits for the MSOM degree must be taken from CCM electives, whether DSOM courses, or from the electives listed below. In addition, students may take electives from the ND and SGS programs, provided that prerequisites are met and the course is approved by the dean of the College of Classical Chinese Medicine.

#### DSOM: 10 Credits Required

At least half of the 10 required elective credits for the DSOM degree must be taken from CCM electives listed below. In addition, students may take electives from the ND and SGS programs, provided that prerequisites are met and the course is approved by the dean of the College of Classical Chinese Medicine.

NOTE: Elective courses (including those required for certificate programs) may not be offered every year. All elective courses are scheduled based on faculty availability and adequate student enrollment.

COURSE#	COURSE	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 01E	China Trip	96	18	114	5.50
CM 11E	Bazi Suanming I		18	18	1.50
CM 21E	Bazi Suanming II		18	18	1.50
CM 12E	Traditional Mentorship Tutorial I		24	24	2.00
CM 22E	Traditional Mentorship Tutorial II		24	24	2.00
CM 32E	Traditional Mentorship Tutorial III		24	24	2.00
CM 13E	Chinese Calligraphy I	24		24	1.00
CM 23E	Chinese Calligraphy II	24		24	1.00
CM 33E	Weiqi	24		24	1.00
CM 43E	Introduction to Chinese Tea	12		12	0.50
CM 14E	Taiji IV		18	18	1.50
CM 24E	Taiji V		18	18	1.50
CM 34E	Taiji VI		18	18	1.50
CM 44E	Taiji Retreat	12		12	0.50
CM 15E	Shiatsu I	36		36	1.50
CM 25E	Shiatsu II	36		36	1.50
CM 35E	Shiatsu III	36		36	1.50
CM 45E	Shiatsu IV	36		36	1.50
CM 55E	Shiatsu V	36		36	1.50
CM 65E	Shiatsu VI	36		36	1.50
CM 16E	Five-Element Wilderness Retreat		18	18	1.50
CM 26E	Shan Ren Dao Retreat	96		96	4.00
CM 36E	Embodied Cosmology Retreat		18	18	1.50
CM 17E	Yijing I – Introduction		24	24	2.00
CM 27E	Yijing II – Hexagram Names		24	24	2.00
CM 37E	Yijing III – Exploring One's Personal Hexagrams		24	24	2.00
CM 47E	Yijing IV – Daxiang Commentary		24	24	2.00
CM 57E	Yijing V – Translating the Zhouyi Series		24	24	2.00
CM 67E	Yijing VI – Translating the Zhouyi Series		24	24	2.00
CM 77E	Yijing VII – Translating the Zhouyi Series		24	24	2.00
CM 87E	Yijing VIII – Translating the Zhouyi Series		24	24	2.00

# electives

COURSE#	COURSE	LAB	LECTURE	TOTAL HOURS	CREDITS
CM 18E	Medical Applications of Qigong I		24	24	2.00
CM 28E	Medical Applications of Qigong II		24	24	2.00
CM 38E	Medical Applications of Qigong III		24	24	2.00
CM 19E	Qigong Teaching Practicum I		18	18	1.50
CM 29E	Qigong Teaching Practicum II		18	18	1.50
CM 39E	Qigong Teaching Practicum III		18	18	1.50
CM 66E	Chinese Patent Medicines		36	36	3.00
CM 74E	Advanced Point Location and Technique I	12	12	24	1.50
CM 84E	Advanced Point Location and Technique II	12	12	24	1.50
NDEC 7313E	Neuroendocrine Immunology		24	24	2.00
NDEC 7322E	Integrative Phytotherapy		24	24	2.00



### **School of Graduate Studies**

#### **Graduate Studies at NUNM**

As people face significant health challenges worldwide, the need for additional approaches to health and health care is increasingly evident. Integrative health and medicine incorporates a variety of systems to create optimal health and wellness for individuals. At NUNM, our unique master's programs in the School of Graduate Studies prepare students for careers in nutrition, research, global health, integrative mental health and sports medicine. We emphasize active learning and ensure our students graduate with the tools to succeed in their profession. Our one-of-a-kind programs prepare our graduates to make significant contributions to the fields of integrative medicine, including public health, research and clinical care.

Students who graduate from the School of Graduate Studies will be able to:

- 1. Demonstrate professionalism through communication, presentation and interpersonal skill.
- 2. Abide by ethical and legal standards within the scope of their professional practice.
- Consciously apply a holistic philosophy to future collaborations and professional work.
- 4. Apply a social justice perspective to addressing key issues in public health and health care.
- 5. Develop systems to facilitate lifelong learning and continued professional growth.

The mission of the School of Graduate Studies is to provide an engaging learning environment through high-quality teaching and mentorship that support creativity, critical thinking and research.



## Master of Science in Global Health

The mission of the Master of Science in Global Health (MScGH) program is to prepare professionals to apply public health frameworks, systems approaches, traditional medicine philosophy and cultural humility to improve the health and well-being of diverse populations worldwide through practice, research and policy.

The MScGH degree program is designed for students who desire to understand the complexity of global health challenges and contribute to solutions in a meaningful way. The world has become smaller through the ease of international travel and technology, yet the disparity in health outcomes between countries has never been greater. Many low-resource settings lack the means to implement a biomedical approach to health and wellness, thus these

are places where public health and integrative, traditional medical strategies can thrive.

Students are required to travel as part of their global health training; first with a global health experience course on a guided trip to one of several destinations in the U.S. or abroad and, second, after finishing all foundational coursework, students plan and implement a supervised fieldwork project in a practice-based setting. This fieldwork course allows students to obtain real-world experience with current challenges and opportunities in global health. At least one of these courses must include travel outside of the U.S.

### Definitions Used in the MScGH Program

#### **Traditional Medicine**

"Traditional medicine is the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness."

(From: World Health Organization. General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine. Geneva, Switzerland. 2000.)

#### Complementary/Alternative Medicine (CAM)

"The terms 'complementary medicine' or 'alternative medicine' are used inter-changeably with traditional medicine in some countries. They refer to a broad set of health care practices that are not part of that country's own tradition and are not integrated into the dominant health care system."

(From: World Health Organization. General Guidelines for Methodologies on Research and Evaluation of Traditional Medicine. Geneva, Switzerland. 2000.)

#### Integrative Health

"Integrative health is a state of well-being in body, mind and spirit that reflects aspects of the individual, community and population. It is affected by: 1) Individual biological factors and behaviors, social values, and public policy, 2) The physical, social, and economic environments, and 3) An integrative healthcare system that involves the active participation of the individual and the healthcare team in applying a broad spectrum of preventive and therapeutic approaches. Integrative health encourages individuals, social groups, and communities to develop ways of living that promote meaning, resilience and wellbeing across the life course."

(From: Witt CM, Chiaramonte D, Berman S, et al. Defining health in a comprehensive context: a new definition of integrative health. Am J Prev Med. 2017;53(1):134-137.)

## **Program Outcomes and Competencies**

Upon graduation from the MScGH program, students are equipped with the knowledge and skills to work within diverse cultural and multidisciplinary environments in local, national and global health settings.

Students in the MScGH program will be prepared to meet the following program outcomes and competencies:

1. Traditional, Complementary/Alternative, and **Integrative Health and Medicine Philosophies:** Understand the use and role of traditional, complementary/alternative, and integrative health and medicine practices and philosophies in local, national

and global health systems.

- a. Outline the history of traditional, complementary/ alternative, and integrative health and medicine practices in local, national and global settings
- b. Recognize the culturally specific beliefs, behaviors and preferences that influence health care and health service utilization in local, national and global settings
- c. Incorporate traditional, complementary/alternative, and integrative health and medicine approaches into public health solutions, when appropriate, to address health-related problems in local, national and global settings
- 2. Systems Thinking: Analyze the role of multiple complex, changing systems in both causing and solving health problems in local, national and global settings.
  - a. Apply systems thinking tools to a public health issue of global importance
  - b. Identify and analyze the roles and relationships of the diverse entities influencing global health and health inequities
- 3. Evidence-Based Approaches to Public Health: Identify and apply evidence-based approaches to public health and medical research and practice in local, national and global settings.
  - a. Apply epidemiological methods and other, relevant scientific evidence to the breadth of settings and situations in public health and medical practice
  - b. Select quantitative and qualitative data collection methods appropriate for a given public health or clinical context
  - c. Analyze quantitative and qualitative data using biostatistics, informatics, and computer-based programming and software, as appropriate
  - d. Interpret results of data analysis for public health research, policy or practice
  - e. Critically appraise health-related literature
- 4. Public Health and Healthcare Systems: Evaluate the role of public health and healthcare systems in determining individual and population health outcomes in local, national and global settings.
  - a. Compare the organization, structure and function of health care, public health and regulatory systems across local, national and global settings

 Discuss the means by which structural bias, social and economic inequities, and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels

#### 5. Planning and Management to Promote Health:

Use scientific evidence and community input to design, implement, manage and evaluate culturally appropriate and sustainable public health and healthcare programs to address health-related issues in local, national and global settings.

- a. Assess population needs, assets, capacities and cultural values that affect communities' health
- b. Apply awareness of cultural values and practices, and social justice and human rights principles, to the design and/or implementation of public health policies, programs, projects and interventions
- c. Design a population-based policy, program, project or intervention that addresses a global health issue
- d. Explain basic principles and tools of budget and resource management
- e. Select methods to evaluate public health programs in local, national and global settings
- f. Describe methods for assuring sustainability in planning for health policy, programs, projects and/or interventions in local, national and global settings
- **6. Policy in Public Health:** Distinguish the impact of health and social policies on individual and population health in local, national and global settings.
  - a. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence, in local, national and global settings
  - Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health and medical outcomes in local, national and global settings
  - Advocate for political, social or economic policies and programs that will improve health in diverse populations
  - d. Evaluate policies for their impact on public health and health equity in local, national and global settings
  - e. Examine the basic principles of global health diplomacy
- 7. **Communication:** Demonstrate effective skills for communicating with culturally diverse stakeholders in local, national and global settings.
  - a. Select communication strategies for different audiences and sectors that demonstrate respect for diverse perspectives and cultures



- b. Communicate audience-appropriate health content, both in writing and through oral presentation
- c. Describe the importance of cultural sensitivity in communicating public health and/or traditional/complementary/alternative and integrative health content
- **8.** Leadership and Ethical Practice: Create and demonstrate the leadership knowledge and skills necessary to effectively and ethically address and manage health problems in diverse settings worldwide.
  - a. Apply principles of leadership, governance and management, which include cultural sensitivity, integrity, creating a vision, empowering others, fostering collaboration, and guiding decisionmaking
  - b. Apply negotiation and mediation skills to address organizational or community challenges
  - c. Apply the fundamental principles of international standards for the protection of human subjects in diverse cultural settings and situations
  - Identify ethical and professional issues that arise in public health and medical practice in local, national and global settings
- 9. Interprofessional Practice: Engage with professionals outside of traditional public health and medical disciplines, such as legislators and transportation officials, to collaboratively improve health outcomes in local, national and global settings.
  - a. Perform effectively on interprofessional teams/ partnerships
  - Integrate knowledge, approaches, methods, values and potential contributions from multiple professions and systems in addressing public health problems in local, national and global settings
  - c. Recognize the importance of including representatives of diverse constituencies in teams/ partnerships and in decision-making practices

### **Program Tracks**

#### **Two Year**

The two-year track is the standard program track for the MScGH program. This 62-credit curriculum allows many opportunities for students to learn essential global health skills through the core curriculum, take a broad range of elective courses, participate in one or more global health experience trips (one trip is required), and complete a 200-hour fieldwork project. Students are required to travel outside of the United States for either their required global health experience trip or fieldwork project, or both.

#### One Year

This accelerated program enables students to complete the required 62-credits (courses and travel as described above) within a 12-month period.

#### Concurrent Programs

Students can combine the MScGH degree program with any other graduate program offered at NUNM. Concurrent tracks will require additional time for completion (usually one to two years).

## **MScGH Course Descriptions**

#### Core Curriculum

GSGH 500 - Global Health Mentorship (1 credit each) GSGH 501 - Global Health Mentorship (0.5 credits each)

The MScGH mentoring program provides a faculty mentor to assist the students' transition into the graduate program, to facilitate professional growth, and to monitor the preparation and completion of students' fieldwork process. As part of a multiple-term series, students explore the tools needed to succeed while in school and post-graduation. Each student will work with faculty mentors to identify and achieve their academic and professional goals, including selecting and completing appropriate fieldwork placements. Mentors are responsible for monitoring progress throughout the student's degree program. Note: the MScGH program requires a total of 3 mentorship credits

#### GSGH 510 - Global Health Discussion Series

(1 credit each over 2 quarters)

The purpose of this course is to engage students in discussion on topics that integrate the concepts introduced in MScGH core courses. Each session in the series will have a thematic frame that guides facilitated discussion. Themes will be recommended by students and participating faculty. Formats might include: presentations, showing and discussion of a documentary, discussion of a news

report, discussion of a book chapter or article, or attending a special campus speaker's presentation or event. Students will present their proposed projects in this forum for feedback from other students and faculty.

#### GSGH 511 - Foundations of Global Health (3 credits)

This course introduces students to key global health topics and issues. Each week students are exposed to different social, economic, political and environmental factors that affect global health. Students explore global health organizations and major players in global health. Focus is on interventions that address health disparities, social justice and low-income settings; students learn to appraise global health problems and suggest innovative solutions. At the end of the course, students will be able to identify key global health questions and suggest projects to address these questions.

#### GSGH 513 - Comparative Global Health Systems (2 credits)

In this course, students examine diverse structural models of public health and healthcare systems currently in use around the globe. Topics include the historical development of international public health and healthcare systems; organization and financing of systems of care; access and utilization patterns across regions; resource allocation challenges; and relevant policy development and implementation processes.

#### GSGH 521 – Social and Behavioral Foundations of Health (2 credits)

This course provides students with an introduction to social and behavioral science issues that influence patterns of health and healthcare delivery. Students explore biomedical, social, psychological and behavioral factors that must be taken into consideration when global health initiatives are developed, implemented and evaluated. Course materials highlight the integration of research from the social and behavioral sciences with epidemiology and biomedical sciences. A community-based participatory approach to understanding community needs is emphasized, and upon completion of this course, students will be able to propose viable public health research questions and conduct a needs assessment informed by determinants of health relevant to a particular geographical region.

#### GSGH 522 - Global Health Seminar (2 credits)

This course examines global health issues through journal and news articles, and discusses challenges to practicing medicine and targeting research to different areas. Experts in global health from various medical backgrounds bring their perspectives to international health policy and medicine.

#### GSGH 524 - Population Research Approaches (2 credits)

This course examines different approaches used to systematically and carefully investigate health-related issues across and within populations in local, national and global settings. Students explore the processes of defining research topics and questions; collecting and analyzing

data; and interpreting and disseminating results as they are conducted using quantitative, qualitative and mixed methods. Additional focus is placed on research ethics, information sourcing, and the interpretation of health-related research findings.

#### GSGH 525 - Program Development (2 credits)

This course is designed to equip students with the knowledge and skills necessary to systematically develop and implement health-related programs, services and interventions for defined populations in local, national and global settings.

#### GSGH 526 - Program Evaluation (2 credits)

In this course, students develop the knowledge and skills necessary to design and implement an evaluation protocol for health-related programs, services, policies and interventions in local, national and global settings.

#### GSGH 530 - Environmental Global Health (2 credits)

This course covers the most pressing environmental concerns across the globe while examining the relational element involved with human interaction. Topics to be covered include climate change, air and water pollution, issues of solid and hazardous waste disposal, land degradation and desertification, population growth concerns, globalization and consumption patterns, and chemical and toxic exposures. Additional focus is given to global environmental policy and examples of solution-oriented programs.

#### GSGH 532 - Community Organizing (2 credits)

In this course, students examine the history, theory and best practice of community organizing to improve health outcomes. Modalities to be presented include advocacy, marketing and media campaigns, group dynamics and coalition building, community outreach and

empowerment, leadership development, and grass roots methods for social change. Local and global case studies are presented, and the practical application of learned skills is an integral part of this course.

#### GSGH 610 - Grant Writing - Foundation Grants (2 credits)

This course teaches skills in technical writing and in writing grant proposals to be submitted by nonprofit organizations to foundations that award funds for projects or programs. Students are introduced to the processes of identifying funding sources for needed projects or programs; establishing relationships with potential funding agencies; and planning, writing, revising, budgeting and submitting foundation grant proposals (FnGPs) that are responsive to the stated interests of funding agencies. Each student will write an FnGP for a nonprofit and will critique another student's FnGP.

#### GSGH 629 - Global Health Fieldwork Preparation (1 credit)

Students work with their faculty mentor to plan for their global health fieldwork experience. Students will create learning objectives for their fieldwork that align with their professional goals and the MScGH program competencies; design a project that meets these objectives; secure a site and qualified supervisor to host and assist them; prepare a learning contract; and make all travel-related arrangements.

#### GSGH 630 - Global Health Fieldwork (7 credits)

Fieldwork provides students with supervised, advanced practical experience in a population-focused, health-related local, national or international setting over an 8-10 week period. Students demonstrate achievement of professional and MScGH program outcomes and competencies through the design, implementation and evaluation of their fieldwork project; realization of their fieldwork learning objectives; and the dissemination of a final product that mutually benefits both the student and the host site.



#### GSGH 705 - Biostatistics - Secondary Data Analysis (3 credits)

Secondary Data Analysis builds off the foundation of Biostatistics I (RES 600), presenting an advanced understanding and the practical implementation of statistical methods in data analysis. This course uses the software package SPSS to calculate statistics from raw data, focusing on techniques that are particularly applicable to analysis of secondary data sets, as well as meta-analysis of published results. Prerequisite: RES 600. Note: GSGH 705 is the recommended second course in the biostatistics series for global health students; students may opt to take RES 601 in place of GSGH 705.

#### RES 502 - Principles of Epidemiology (3 credits)

Epidemiology is the study of how disease, disability, injury and death are distributed in populations, and the agents that influence or determine these distributions. Study findings are used to guide clinical practice and inform programs and policies created to prevent and control health problems within and between populations. This course exposes students to the basic concepts, principles and methods of epidemiology and their application to integrative medicine and/or public health issues. Students examine measures of disease occurrence, association and impact; observational and experimental study designs; confounding, bias and causation; and how to solve health-related problems using epidemiological methods. Finally, students will learn how to critically assess epidemiologic evidence presented in peer-reviewed literature and other sources.

#### **RES 505 – Bioethics** (2 credits)

In this course, students explore ethical issues and common problems encountered in human research and program/service protocols. Students review the roles and responsibilities of those involved in the conduct of health-related research and practice/service, with special attention to vulnerable populations in diverse settings.

#### RES 510 – Introduction to Integrative Health and Medicine (2 credits)

The fields of integrative health and medicine involve many complex disciplines. This course explains the basic philosophies and practices of Ayurveda, Chinese medicine, naturopathic medicine, homeopathy, shamanic healing, and other integrative health and medicine practices.

#### RES 600 - Biostatistics I (2 credits)

This course covers different statistical designs, concepts and procedures that are commonly used in clinical and integrative medicine research. This equips students to understand the statistical rationale and analysis presented in medical literature. They are introduced to basic concepts of probability, random variation, and common statistical probability distributions, and understand the roles of descriptive versus inferential statistics. Students will also understand the different statistical designs, concepts and analysis.



#### RES 601 – Biostatistics II (3 credits)

In this advanced course, students learn techniques appropriate for handling a single outcome variable and multiple predictors. They develop skills in the use of appropriate statistical procedures for estimation and inference, according to underlying assumptions and type of study design. The interpretation of statistical analysis and understanding the limitations of the data and its consequences will also be discussed. The other component of this course includes developing basic skills for analyzing data using statistical computing software packages. Prerequisite: RES 600. Note: GSGH 705 is the recommended second course in the biostatistics series for global health students; students may opt to take RES 601 in place of GSGH 705.

#### RES 610 - Technical Writing (2 credits)

This course provides students with practical experience in forms of technical communication, emphasizing academic products such as research protocols, theses and manuscripts. Students learn organization and presentation of technical information for both professional and lay audiences. The course focuses on students developing a technical writing style that is accurate, concise, clear and precise; and that promotes high readability.

#### RES 630 - Public Health Policy (2 credits)

Students explore the role of policy in public health and examine government responses to public health issues. Various topics related to healthcare access, environmental health and integrative medicine are discussed, with emphasis on current national and international issues.

#### **Elective Courses**

At least half of the 12 required elective credits for the MScGH degree must be taken from courses designated as counting toward the program. The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met. All MScGH students are required to enroll in a 2-6 credit Global Health Experience as one of their elective courses.

#### GSGH 703E - Maternal and Child Health (2 credits)

This class focuses on improving the health of mothers, children, youth and families, including socially vulnerable populations, and the environments and policies that affect their well-being. Students learn about nonprofit organizations, research organizations, public health agencies, and healthcare organizations that focus on maternal and child health.

#### GSGH 706E - Conferences in Global Health (2 credits)

To obtain credit for this course, students must attend an academic or professional conference or three local presentations/workshops that focus on global health issues. Several assignments relating to conference or local presentation/workshop content and networking opportunities are required. This course may be repeated once.

# GSGH 707E – Qualitative Data Analysis and Mixed-Methods Research (2 credits)

This course introduces students to the field of qualitative research and provides them with the skills, techniques and knowledge necessary to conduct mixed-methods research. Students learn to conduct interviews and focus groups, and gain additional experience with participant observation and archival research. A mixed-methods approach demonstrates how qualitative and quantitative data can be combined to more fully answer a research question or inform a study design. By the end of this class, students will be able to design and critically evaluate mixed-methods studies to answer a specific research question.

#### GSGH 710E - Medical Anthropology (2 credits)

Medical anthropology compares ideas about illness and curing in different cultures. Although disease is a concept referring to a pathological condition of the body in which functioning is disturbed, illness is a cultural concept: a condition marked by deviation from what is considered a normal, healthy state. Treatment of illness in Western industrial societies focuses on curing specific diseased organs or controlling a specific virus. In many so-called "traditional" societies, greater emphasis is placed on the social and psychological dimensions of illness. In this course students will learn that different cultures, even in the U.S., have different ways to talk about illness, and that the American medical community is at times as "culture bound" as anywhere. "Science" does not stand outside culture. This course explores traditional healers, shamans and witch doctors, as well as conventional biomedical physicians.

#### GSGH 714E - Wilderness First Aid (2 credits)

This course is an advanced wilderness first aid training. Topics include basic emergency medicine-related anatomy and physiology; response and assessment; musculoskeletal and soft tissue injury assessment; environmental emergencies and survival skills; medical emergencies and critical care; emergency pharmacology; and travel and tropical medicine, along with practical skills training. An optional CPR component is available.

#### **GSGH 716E – Community Health Assessment** (2 credits)

This course introduces students to community teams around the globe that develop health action plans. Through case studies, students learn how community team members can create sustainable, community-based improvements that address the root causes of chronic disease and related risk factors. Students will learn to assess and prioritize areas of improvement for existing community health programs, as well as how to assess policy and create strategies for future efforts.

#### GSGH 717E - Psychology of Connection (2 credits)

This course examines concepts, theories and research in the subject of human connection as related to global health and healing arts professions. Special attention is given to practices aimed at increasing student capacity for connection in the context of their intended work, and to cross-cultural dialogue and experience.

#### GSGH 718E - Spirituality and Health (2 credits)

This course introduces students to the world's major religions and belief systems, and increases their understanding of how spiritual beliefs and practices influence individual and community health outcomes. Readings, discussions, guest lectures and self-reflection are used to explore topics such as the influence of belief systems on individual lifestyle choices; treatment options and health outcomes; death and dying; and working as a health professional in diverse cultural arenas worldwide. Students review current research on the relationships between health outcomes and spiritual and religious beliefs and practices; participate in or observe spiritual/religious practices with which they are unfamiliar, and reflect upon the experience(s); learn how to speak with patients and community members about their religious or spiritual belief systems; and explore personal interests in this area through a final literature review and analysis.

#### GSGH 821E – Tanzania Global Health Experience (6 credits)

This course is a three-week experience trip with a focus on examining the healthcare system in Tanzania. Students will have the opportunity to visit and stay in remote villages to learn about life and medicine in rural areas, observe in various urban and rural clinical settings, learn about traditional medicine, and provide public health education. Itinerary-specific trip fee applies.



#### GSGH 832E - Thailand Global Health Experience (4 credits)

This course is a 10-day experience trip in Northern Thailand with coursework focusing on Thai-vedic medicine (traditional Thai medicine), including Thai cooking, herbal medicine, Thai massage and selfcare. There are options to receive certification in Thai massage and for additional study in Thai-vedic medicine, yoga, meditation and movement classes. Students also participate in activities such as visits to organic farms, hot springs, conservation camps, and other cultural and historic sites. Itinerary-specific trip fee applies.

#### GSGH 833E - Nicaragua Global Health Experience (5 credits)

This course is a 10-day experience trip in Nicaragua. The course covers topics in globalization, global health, cultural humility, clinical service in under-resourced settings, and working with local women's empowerment groups and campesino farmers. Students work with the nonprofit organization Natural Doctors International, shadowing a variety of CAM providers in an integrative naturopathic clinic. For students in clinical programs (ND, MSOM, DSOM), the 28 hours of clinical shadowing may be applied toward preceptor hours. Itinerary-specific trip fee applies.

#### GSGH 835E – Ghana Global Health Experience: Summer (6 credits) GSGH 836E - Ghana Global Health Experience: Winter (4 credits)

This course is an experience trip in Ghana, West Africa. The coursework covers topics in globalization, natural childbirth, maternal and child health, cultural humility, West African herbalism, clinical services in an international setting, and working with local NGOs to empower and educate rural Ghanaian women. For students in clinical programs (ND, MSOM, DSOM), clinical shadowing hours may be applied toward preceptor hours or community education with prior approval. Trip length and course credits vary by season. Itinerary-specific trip fee applies.

#### GSGH 837E – Collaborative Global Health Experience

(3-6 credits; variable based on total hours/weeks of experience) This course allows students to substitute an experiential learning course or trip offered by or through a non-NUNM organization, such as Child Family Health International (CFHI), for the required NUNM Global Health Experience course. Students select an opportunity that will provide insight into diverse public health and/ or healthcare systems; assist with health-related program development, implementation or evaluation; engage in health-related research or surveillance activities; or participate in other health-related activities. Students work with the global health program chair or their mentor to select an appropriate, structured global health opportunity that will consist of a minimum of 36 hours (three credits) of work or programming to satisfy this academic requirement.

#### GSGH 844E - Taos Global Health Experience (3 credits)

This course is an experience trip to Northern New Mexico, primarily Taos and Albuquerque. Students are introduced to the history, cultural traditions and modern practices of the region, including traditional approaches to health, botanical medicine and spirituality. An itinerary-specific trip fee applies.

# **MScGH TWO-YEAR CURRICULUM**

FIRST-YEAR TOTALS

# first year

COURSE #	FIRST-YEAR FALL	LAB	LECTURE	CREDITS
GSGH 001	Global Health Experience Travel			0
GSGH 501	Global Health Mentorship		6	0.5
GSGH 511	Foundations of Global Health		36	3
GSGH 521	Social and Behavioral Foundations of Health		24	2
RES 502	Principles of Epidemiology		36	3
RES 510	Introduction to Integrative Health and Medicine		24	2
	First-Year Fall Totals	0	126	10.5
COURSE#	FIRST-YEAR WINTER	LAB	LECTURE	CREDITS
GSGH 501	Global Health Mentorship		6	0.5
GSGH 524	Population Research Approaches		24	2
GSGH 525	Program Development		24	2
RES 505	Bioethics		24	2
RES 600	Biostatistics I		24	2
RES 610	Technical Writing		24	2
	Elective		24	2
	First-Year Winter Totals	0	150	12.5
COURSE#	FIRST-YEAR SPRING	LAB	LECTURE	CREDITS
GSGH 501	Global Health Mentorship		6	0.5
GSGH 526	Program Evaluation		24	2
GSGH 705 - OR -	Biostatistics – Secondary Data Analysis		36	3
RES 601	Biostatistics II			
RES 630	Public Health Policy		24	2
	Elective		24	2
	First-Year Spring Totals	0	114	9.5

390

32.5

# **MScGH TWO-YEAR CURRICULUM**

# second year

COURSE#	SECOND-YEAR SUMMER	LAB	LECTURE	CREDITS
GSGH 501	Global Health Mentorship		6	0.5
GSGH 510	Global Health Discussion Series		12	1
	Electives		48	4
	Second-Year Summer Totals	0	66	5.5
COURSE #	SECOND-YEAR FALL	LAB	LECTURE	CREDITS
GSGH 002	Pre-Global Health Fieldwork			0
GSGH 501	Global Health Mentorship		6	0.5
GSGH 513	Comparative Global Health Systems		24	2
GSGH 532	Community Organizing		24	2
GSGH 610	Grant Writing – Foundation Grants		24	2
GSGH 629	Global Health Fieldwork Preparation	24		1
	Second-Year Fall Totals	24	78	7.5
COURSE #	SECOND-YEAR WINTER	LAB	LECTURE	CREDITS
GSGH 630	Global Health Fieldwork	168		7
	Second-Year Winter Totals	168	0	7
COURSE #	SECOND-YEAR SPRING	LAB	LECTURE	CREDITS
GSGH 501	Global Health Mentorship		6	0.5
GSGH 510	Global Health Discussion Series		12	1
GSGH 522	Global Health Seminar		24	2
GSGH 530	Environmental Global Health		24	2
	Electives		48	4
	Second-Year Spring Totals	0	114	9.5
	SECOND-YEAR TOTALS	192	258	29.5
	TOTAL CORE CREDITS			50
	TOTAL ELECTIVE CREDITS^			12
	TOTAL REQUIRED CREDITS			62

<sup>^</sup>Electives must include one Global Health Experience Trip.

# **MScGH ONE-YEAR CURRICULUM**

COURSE #	FALL	LAB	LECTURE	CREDITS
GSGH 001	Global Health Experience Travel			0
GSGH 500	Global Health Mentorship		12	1
GSGH 511	Foundations of Global Health		36	3
GSGH 521	Social and Behavioral Foundations of Health		24	2
RES 502	Principles of Epidemiology		36	3
RES 510	Introduction to Integrative Health and Medicine		24	2
	Electives		48	4
	Fall Totals	0	180	15

 $<sup>{\</sup>it *Global\, Health\, Experience\, Trip\, to\, be\, completed\, over\, winter\, or\, spring\, break.}$ 

COURSE#	WINTER	LAB	LECTURE	CREDITS
GSGH 500	Global Health Mentorship		12	1
GSGH 510	Global Health Discussion Series		12	1
GSGH 524	Population Research Approaches		24	2
GSGH 525	Program Development		24	2
RES 505	Bioethics		24	2
RES 600	Biostatistics I		24	2
RES 610	Technical Writing		24	2
	*Electives (must include one Global Health Experience Trip)		48	4
	Winter Totals	0	192	16

# **MScGH ONE-YEAR CURRICULUM**

# global health

COURSE #	SPRING	LAB	LECTURE	CREDITS
GSGH 002	Pre-Global Health Fieldwork			0
GSGH 501	Global Health Mentorship		6	0.5
GSGH 513	Comparative Global Health Systems		24	2
GSGH 522	Global Health Seminar		24	2
GSGH 526	Program Evaluation		24	2
GSGH 530	Environmental Global Health		24	2
GSGH 532	Community Organizing		24	2
GSGH 610	Grant Writing – Foundation Grants		24	2
GSGH 629	Global Health Fieldwork Preparation	24		1
GSGH 705 - <i>OR</i> - RES 601	Biostatistics – Secondary Data Analysis Biostatistics II		36	3
RES 630	Public Health Policy		24	2
	Spring Totals	24	210	18.5

COURSE#	SUMMER	LAB	LECTURE	CREDITS
GSGH 501	Global Health Mentorship		6	0.5
GSGH 510	Global Health Discussion Series		12	1
GSGH 630	Global Health Fieldwork	168		7
	Electives		48	4
	Summer Totals	168	66	12.5

TOTAL CORE CREDITS	50
TOTAL ELECTIVE CREDITS^	12
TOTAL REQUIRED CREDITS	62

^Electives must include one Global Health Experience Trip.



# MScGH ELECTIVES 12 Credits Required

At least half of the 12 required elective credits for the MScGH degree must be taken from courses designated as counting toward the program (listed below). The remainder may come from any graduate-level elective course offered at NUNM, as long as course prerequisites are met. NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and adequate student enrollment.

COURSE#	COURSETITLE	LECTURE	CREDITS
GSGH 703E	Maternal and Child Health	24	2
GSGH 706E	Conferences in Global Health	12	1
GSGH 707E	Qualitative Data Analysis and Mixed-Methods Research	24	2
GSGH 710E	Medical Anthropology	24	2
GSGH 714E	Wilderness First Aid (optional CPR)	24	2
GSGH 716E	Community Health Assessment	24	2
GSGH 717E	Psychology of Connection	24	2
GSGH 718E	Spirituality and Health	24	2
GSGH 821E	Tanzania Global Health Experience	72	6
GSGH 832E	Thailand Global Health Experience	48	4
GSGH 833E	Nicaragua Global Health Experience	60	5
GSGH 835E	Ghana Global Health Experience: Summer	72	6
GSGH 836E	Ghana Global Health Experience: Winter	48	4
GSGH 837E	Collaborative Global Health Experience		varies
GSGH 844E	Taos Global Health Experience	36	3
GSN 509	Community Nutrition and Food Policy	36	3
GSN 525E	Cultural and Traditional Diets	24	2
GSN 534	Cultural Humility and Food Justice	24	2
GSN 544E	Global and Ecological Food Issues	24	2
GSN 545E	Global Cuisine: Foods of the World	24	2
GSN 565E	Food Anthropology	24	2
GSN 838E	Israel Culinary and Cultural Immersion Trip	36	3
NDEB 5230E	Ayurveda Herbs	24	2
NDEB 6200E	Ethnobotany Intensive	60	5
RES 530	Research Methodology	36	3
RES 538E	Teaching Strategies and Course Development	24	2
RES 624E	Psychology and Behavior Change	24	2
RES 702	Immunology	36	3
RES 802E	Health Disparities Research	24	2
RES 809E	Women's Health: Fertility and Beyond	24	2
RES 832E	Vaccinations	24	2

# Master of Science in Integrative Medicine Research

The Master of Science in Integrative Medicine Research (MSiMR) degree is rooted in natural medicine research literature and brings together expert faculty from various integrative medicine fields.

As the use of integrative medicine continues to increase, so does the need to develop the evidence base for its use. Clinical and observational research methods are emphasized in the MSiMR program, as both are essential to provide a solid foundation for natural

to train research professionals to advance the science of natural medicine.

The mission of the integrative medicine research program is

epidemiology, clinical research design, biostatistics and bioethics. Students may choose from a variety of elective courses based on their research interests. Students also

> gain practical experience by attending research conferences, completing a research project, writing papers, and defending a thesis. The program prepares students for master's level research and public health careers. Students who are preparing for PhD programs, MD programs, or

postdoctoral research positions at natural or conventional medical institutions also gain valuable foundational knowledge through this program. Medical students who concurrently pursue this degree go on to careers as physician-researchers or specialize in a clinical area.

#### research on specific integrative medicine modalities, such as herbal medicine, nutrition and mind-body therapies. Required courses provide a foundation in clinical

therapies. In close partnerships with skilled mentors,

students in this program conduct valuable medical

research and public health, and include courses in

## **Program Outcomes and Competencies**

Students in the MSiMR program will be prepared to meet the following program outcomes and competencies:

#### 1. Research Skills Expertise

- a. Efficiently search various types of databases to identify relevant literature
- b. Critically appraise various types of literature, including intervention, observation, systematic review and case studies
- c. Demonstrate appropriate application of the scientific process
- d. Describe and apply all aspects of study design, including articulating appropriate questions, generating hypotheses, choosing appropriate design and methods, selecting outcomes, designing data management and analytic strategies
- e. Compose rigorous research proposals, including succinct protocol and ancillary documents
- f. Effectively present data in written, oral and poster format for varied audiences
- g. Engage in scholarly publication and dissemination of research findings

#### 2. Integrative Medicine Research

a. Describe integrative medicine modalities and their appropriate clinical application in order to design clinically relevant research

- b. Practice the conscientious application of various research methods to the study of integrative medicine systems and modalities
- 3. Scientific Integrity: Be a steward of ethical research practice, including:
  - a. Accurately and transparently report ethical issues in human subjects research
  - b. Describe processes to ensure inclusion and diversity in human subjects research
  - c. Describe the purpose and the process of requesting IRB approval and oversight
  - d. Discuss the importance of community partnerships in clinical research
  - e. Demonstrate safe, HIPAA-compliant data management strategies

#### 4. Professional Growth

- a. Identify key integrative medicine researchers in the field as well as potential collaborators and mentors
- b. Articulate an area of research emphasis and communicate short- and long-term career goals
- c. Participate in and present at local/national/ international research meetings and conferences
- d. Stay abreast of current findings and develop processes to facilitate life-long learning

### **MSiMR Course Descriptions**

#### **Core Curriculum**

#### RES 501 - Journal Club (1 credit each)

In this course, students present and discuss recently published articles in natural medicine. MSiMR students are required to take two terms of Journal Club.

#### RES 502 - Principles of Epidemiology (3 credits)

Epidemiology is the study of how disease, disability, injury and death are distributed in populations, and the agents that influence or determine these distributions. Study findings are used to guide clinical practice and inform programs and policies created to prevent and control health problems within and between populations. This course exposes students to the basic concepts, principles and methods of epidemiology and their application to integrative medicine and/or public health issues. Students examine measures of disease occurrence, association and impact; observational and experimental study designs; confounding, bias and causation; and how to solve health-related problems using epidemiological methods. Finally, students will learn how to critically assess epidemiologic evidence presented in peer-reviewed literature and other sources.

#### RES 505 - Bioethics (2 credits)

In this course, students explore ethical issues and common problems encountered in human research and program/service protocols. Students review the roles and responsibilities of those involved in the conduct of health-related research and practice/service, with special attention to vulnerable populations in diverse settings.

# RES 510 – Introduction to Integrative Health and Medicine (2 credits)

The field of integrative medicine involves many complex disciplines. This course explains the basic philosophies and practices of Ayurveda, Chinese medicine, naturopathic medicine, homeopathy, shamanic healing, and other integrative medicine practices.

#### RES 520 - Integrative Research Fundamentals I (1 credit)

The Integrative Medicine Research Fundamentals series provides foundational knowledge to support students through the MSiMR program. All three courses emphasize professionalism, ethics, and critical appraisal of published research. Fundamentals I covers landmark studies in integrative medicine and integrative medicine research concepts. Students learn about researchers, mentors and projects at NUNM and locally; and develop their individual research interests and program goals.

#### RES 521 – Integrative Research Fundamentals II (1 credit)

This course focuses on development of each student's specific research question and career development plan. Students learn about assessment and evaluation of current

research publications, and begin literature searches to establish a gap in knowledge where they may focus their own research agenda. Students continue to explore the diversity of research happening locally and globally in integrative health.

#### RES 533 – Integrative Research Fundamentals III (1 credit)

This course emphasizes the practical application of knowledge to the design and conduct of a specific research project. Students identify experts currently involved in integrative medicine research, investigate funding mechanisms for researchers, and continue career planning specific to their field of interest.

#### RES 530 – Research Methodology (3 credits)

This core course provides an introduction to research design, including how to formulate a research question, identify primary and secondary hypotheses, distinguish between types of experimental designs, and methods to identify bias and flaws in study designs. Students develop a study proposal as they learn to develop inclusion and exclusion criteria, identify outcome measures, and provide rationale for choices. Participant recruitment, screening, retention and adherence will be addressed. Students will develop a preliminary research proposal for their own research in this course.

#### **RES 531 — Integrative Medicine Research Seminar** (2 credits each)

This course is meant to inspire and inform students about integrative medicine research ideas and the researchers in the field by attending a research conference. MSiMR students are required to take two terms of Integrative Medicine Research Seminar.

#### RESN 535 Research Practicum (3 credits each)

Students work on an integrative medicine research study with their mentors. This class is taken every quarter with mentor assignment. Students identify a specific research project, implement the study, analyze data, and synthesize the results for presentation and publication. *Note: Students concurrently enrolled in another degree program will substitute RES 537 Research Practicum (2 credits each).* 





#### RES 600 - Biostatistics I (2 credits)

This course covers different statistical designs, concepts and procedures that are commonly used in clinical and integrative medicine research. This equips students to understand the statistical rationale and analysis presented in medical literature. They are introduced to basic concepts of probability, random variation, and common statistical probability distributions, and understand the roles of descriptive versus inferential statistics. Students will also understand the different statistical designs, concepts and analysis.

#### RES 601 – Biostatistics II (3 credits)

In this advanced course, students learn techniques appropriate for handling a single outcome variable and multiple predictors. They develop skills in the use of appropriate statistical procedures for estimation and inference, according to underlying assumptions and type of study design. The interpretation of statistical analysis and understanding the limitations of the data and its consequences will also be discussed. The other component of this course includes developing basic skills for analyzing data using statistical computing software packages. Note: MSiMR students may take either RES 601 or GSGH 705 as the second required biostatistics course.

#### GSGH 705 – Biostatistics – Secondary Data Analysis (3 credits)

Secondary Data Analysis builds off the foundation of Biostatistics I (RES 600), presenting an advanced understanding and the practical implementation of statistical methods in data analysis. This course uses the software package SPSS to calculate statistics from raw data, focusing on techniques that are particularly applicable to analysis of secondary data sets, as well as meta-analysis of published results. Note: MSiMR students may take either RES 601 or GSGH 705 as the second required biostatistics course.

#### **RES 610 – Technical Writing** (2 credits)

This course provides students with practical experience in forms of technical communication, emphasizing academic products such as research protocols, theses and manuscripts. Students learn organization and presentation of technical information for both professional and lay audiences.

#### RES 620 – Introduction to Laboratory Methods (2 credits)

In this course, students learn about the methodology, data analysis, and critical literature evaluation of common laboratory techniques. Students have hands-on exposure to a variety of lab techniques, including ELISA, flow cytometry and cell culture; and learn how these techniques are applied to answer a scientific question. In addition, students read and critically evaluate primary articles in order to advance their understanding of appropriate experimental design.

#### RES 630 - Public Health Policy (2 credits)

Students explore the role of policy in public health and examine government responses to public health issues. Various topics related to healthcare access, environmental health and integrative medicine are discussed, with emphasis on current issues of the term. Guest lecturers (varied each term) from local agencies provide professional perspectives on the issues facing public health, including addiction, mental health, environmental health, vaccination, obesity and tobacco use, to name a few. Students exercise their oral and written communication skills to present evidence-based perspectives on relevant public health issues.

#### RES 636 / RESN 636 - Capstone (2 credits)

Students complete the capstone credit during the quarter that they finalize and defend their master's thesis. Students work closely with their mentors and thesis community members, as well as with their graduating peers, sharing and editing each other's theses and practicing their defense presentations.

#### RES 702 - Immunology (3 credits)

This course focuses on the basic functions of the immune system, with emphasis on its role in protecting against microbial infections and tumors; and immune deficiency states, autoimmunity and psychoneuroimmunology. Students learn the roles of cells, proteins and other chemicals involved in an immune response, and gain the skill of communicating immune principles to patients and the lay public.

#### GSN 507 - Fundamentals of Nutrition (4 credits)

An in-depth look at carbohydrates, proteins, lipids, vitamins, minerals and water, and their roles in health and disease. Areas of focus include molecular structure, function, digestion, absorption, metabolism and optimal food sources. Students learn specific dietary requirements and how dietary excess or deficiencies present clinically.

#### GSN 516 - Pathophysiology (3 credits)

This foundational course is an introduction to human physiological and pathological processes. Students develop an understanding of common health conditions and preventable diseases. Risk factors and causes of disease are also covered.

#### **Elective Courses**

At least half of the 8 required elective credits for the MSiMR degree must be taken from courses designated as counting toward the program. The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met.

#### **RES 538E – Teaching Strategies and Course Development** (2 credits)

Many physicians and researchers become faculty at colleges and universities. This course prepares students with practical skills and teaching strategies. Students learn how to develop course outcomes, competencies, syllabi and notes. Educational theory, teaching, and assessment strategies and techniques are discussed and practiced.

#### RES 611E - Grant Writing (2 credits)

This course teaches students to draw together their skills in communication, problem-solving and critical thinking in order to write high-quality grant proposals. Students are introduced to types of grants, as well as the process of submitting a grant to NIH and other potential funding sources. Students write an NIH-level grant and participate in a mock study section review.

#### RES 615E – How to Write and Publish Case Studies (2 credits)

This practical course teaches how to conduct case studies and case series. Students use real-world cases to learn to form hypotheses, collect clinical data, analyze data, and write a case report. While this course requires substantial work outside the class, students finish the course with a publishable case report in just 12 weeks.

#### RES 624E – Psychology and Behavior Change (2 credits)

Since every clinical trial involves some sort of behavioral modification, psychology and behavior change are critical components of research. This course reviews literature of some of the landmark papers in health behavior research, and teaches students how to do health behavior research. Students also learn how to employ behavior change strategies to help with participant compliance, and assist with patients making behavioral changes. Students experience a behavioral intervention, and become familiar with applied psychology outcome measures.

#### RES 802E – Health Disparities Research (2 credits)

All health professionals need to recognize and understand the factors that contribute to the health of our communities and global society. This course introduces students to key areas of research in health disparities, especially pertaining to health care in the United States. Students analyze recent research papers documenting health disparities and discuss how research informs policy. Students become familiar with national data sources used to assess progress in mitigating disparities. Health activism and the role that social movements have played in the global promotion of health equity are discussed.

#### RES 803E - Advanced Research Methods (2 credits)

This advanced course delves deeper into how to create feasible hypotheses and research aims. It exposes students to techniques and instrumentation through visits to local labs. Small research projects are completed to utilize the new skills gained through this class. This course is offered in independent study format. *Permission from the department chair is required for course registration.* 

#### **RES 806E – Essentials of Integrative Oncology** (2 credits)

Cancer patients who pursue integrative care often receive conventional chemotherapy and radiation with natural medicine modalities. This evidence-based course familiarizes students with the basics of cancer diagnosis, an overview of conventional therapies, and evidence that supports natural therapies for cancer. Students read landmark studies and cutting-edge oncology research. Students discuss scientific validity, clinical benefits, toxicities, and limitations of state-of-the-art integrative therapies when applied to oncology patients.

#### RES 809E - Women's Health: Fertility and Beyond (2 credits)

The diversity of health issues that affect women vary from pregnancy, menopause, aging, mental health, illness and more. As students learn to conduct research on women's health topics, they learn background in female anatomy, physiology and development. Students discuss current women's health news and research topics.

#### RES 832E - Vaccinations (2 credits)

This course is designed to bring students up-to-date with the most recent science and issues surrounding vaccinations. The course discusses new vaccine strategies, current vaccines, components and schedules, and vaccine safety. Students identify types of vaccines, ingredients of each vaccine, predicted immune responses to those vaccines, and potential side-effects of each vaccine. This course emphasizes critical evaluation of vaccines from current research, public health, and medical sources such that students can assess future vaccine studies and apply them directly to their medical practice.

#### RES 833E – Gut Immunology (2 credits)

This weekend elective course is designed to give a comprehensive overview of the immunology of the gut. It teaches students how to better assess how natural therapies and diet affect the gut, and how the immune response in the gut then has systemic effects on health. This course includes the study of the immunology of the gastrointestinal tract, food allergies and hypersensitivities, IBS, IBD, Crohn's disease, colon cancer, and nutritional influences on immunity.

# MSiMR TWO-YEAR CURRICULUM

COURSE#	FIRST-YEAR FALL	LECTURE	CREDITS
RES 510	Introduction to Integrative Health and Medicine	24	2
RES 520	Integrative Research Fundamentals I	12	1
RES 530	Research Methodology	36	3
GSN 516	Pathophysiology	36	3
RESN 535	Research Practicum	36	3
	First-Year Fall Totals	144	12
COURSE #	FIRST-YEAR WINTER	LECTURE	CREDITS
RES 505	Bioethics	24	2
RES 521	Integrative Research Fundamentals II	12	1
RES 600	Biostatistics I	24	2
RESN 535	Research Practicum	36	3
	First-Year Winter Totals	96	8
COURSE#	FIRST-YEAR SPRING	LECTURE	CREDITS
RES 531	Integrative Medicine Research Seminar*	24	2
RES 533	Integrative Research Fundamentals III	12	1
RES 601 - OR -	Biostatistics II	36	3
GSGH 705	Biostatistics – Secondary Data Analysis		
RESN 535	Research Practicum	36	3
	First-Year Spring Totals	108	9

348

29

106

**FIRST-YEAR TOTALS** 

## second year

COURSE #	SECOND-YEAR SUMMER	LECTURE	CREDITS
RES 501	Journal Club*	12	1
RES 502	Principles of Epidemiology	36	3
RES 620	Introduction to Laboratory Methods	24	2
RESN 535	Research Practicum	36	3
	Second-Year Summer Totals	108	9
COURSE #	SECOND-YEAR FALL	LECTURE	CREDITS
RES 702	Immunology	36	3
GSN 507	Fundamentals of Nutrition	48	4
RESN 535	Research Practicum	36	3
	Electives	24	2
	Second-Year Fall Totals	144	12
COURSE #	SECOND-YEAR WINTER	LECTURE	CREDITS
RES 531	Integrative Medicine Research Seminar*	24	2
RES 610	Technical Writing	24	2
RESN 535	Research Practicum	36	3
	Electives	24	2
	Second-Year Winter Totals	108	9
COURSE #	SECOND-YEAR SPRING	LECTURE	CREDITS
RES 501	Journal Club*	12	1
RES 630	Public Health Policy	24	2
RESN 636	Capstone	24	2
	Electives	48	4
	Second-Year Spring Totals	108	9
	SECOND-YEAR TOTALS	468	39
	TOTAL CORE CREDITS		60

**TOTAL ELECTIVE CREDITS** 

**TOTAL REQUIRED CREDITS** 

8

68

<sup>\*</sup>Required to take two terms; offered all terms

### MSIMR ELECTIVES 8 Credits Required

At least half of the 8 required elective credits for the MSiMR degree must be taken from courses designated as counting toward the program (listed below). The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met. NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and adequate student enrollment.

COURSE#	COURSE	LECTURE	CREDITS
RES 538E	Teaching Strategies and Course Development	24	2
RES 611E	Grant Writing	24	2
RES 615E	How to Write and Publish Case Studies	24	2
RES 624E	Psychology and Behavior Change	24	2
RES 802E	Health Disparities Research	24	2
RES 803E	Advanced Research Methods	24	2
RES 806E	Essentials of Integrative Oncology	24	2
RES 809E	Women's Health: Fertility and Beyond	24	2
RES 832E	Vaccinations	24	2
RES 833E	Gut Immunology	24	2
GSA 545E	Philosophy of Ayurveda	24	2
GSGH 703E	Maternal and Child Health	24	2
GSGH 705	Biostatistics – Secondary Data Analysis	36	3
GSGH 707E	Qualitative Data Analysis and Mixed-Methods Research	24	2
GSGH 821E	Tanzania Global Health Experience	72	6
GSGH 833E	Nicaragua Global Health Experience*	60	5
GSGH 835E	Ghana Global Health Experience: Summer	72	6
GSGH 836E	Ghana Global Health Experience: Winter	48	4
GSN 517	Psychology of Eating	24	2
GSN 546E	Food Allergies and Intolerances	24	2
GSN 551E	Therapeutic Diets	24	2
GSN 564E	Nutritional Genetics	24	2
GSN 578E	Food Chemistry	24	2

<sup>\*</sup>Approval from dean required

### Master of Science in Integrative Mental Health

Integrative mental health is a whole-person, whole-systems approach to mental and emotional well-being. This new and expanding model of care incorporates complementary therapies, such as nutrition, mind-body medicine and somatic therapies, with the best of conventional treatments.

The Master of Science in Integrative Mental Health (MSiMH) degree combines integrative medicine and mental healthcare training for a truly unique, multidisciplinary and collaborative learning experience. This holistic approach to mental health provides students with concrete skills in biopsychosocial assessment, evaluation, diagnosis, and integrative and conventional therapies. The experiential curriculum is designed to enhance self-awareness and facilitate self-exploration. Candidates should be prepared to explore their own personal psyche, to be vulnerable with their peers and instructors, and to use their own psychological material for learning how to work with clients. Several courses are delivered in a weekend format, allowing sufficient time and a safe space for deep exploration and processing. Students explore how their personal identity as a healthcare professional is shaped by what they learn about

themselves. Throughout this process, students have ample opportunity to practice new psychotherapeutic techniques as they support one another in self-exploration. Group supervision is built into the program, and students work closely with mentors to conceptualize and manage cases, practice skills, and continually reflect on their own experience and growth as a practitioner. Graduates will be equipped to address the diagnosis, treatment and prevention of mental health disorders from an integrative medicine perspective.

Because the MSiMH degree does not qualify students to sit for licensing exams as a professional counselor, candidates must be concurrently enrolled in a clinical degree program at NUNM that will provide them with a degree or license to work with patients in a medical context (ND, MSOM or DSOM). The MSiMH program is designed to provide students with additional training in mental health disorders and psychotherapeutic approaches to healing, and graduates will be prepared to more effectively address mental health care within the scope of their individual licenses.

The mission of the integrative mental health program is to train practitioners in the biological, psychological, social and cultural foundations of mental and emotional health. The program strongly emphasizes the use of applied mindfulness; the cultivation of interpersonal therapeutic presence; and the application of natural medicines and interventions for an innovative and holistic approach to prevention, personal growth and treatment.

### **Program Outcomes and Competencies**

Students in the MSiMH program will be prepared to meet the following program outcomes and competencies:

- Foundational Knowledge: Develop a core understanding of child development and core beliefs with an emphasis on applied mindfulness as an agent of change.
  - a. Describe the use of mindfulness as a tool for change, and demonstrate the capacity to invoke and sustain applied mindfulness in self and others
  - Discuss core themes in child development and how interruption to the developmental sequence can result in specific strategic adaptations that comprise the Character Map
  - c. Recognize how core beliefs operate at the mind-

- body interface and how to read somatic markers as indicators of psychological processes
- d. Compare and contrast a variety of psychotherapeutic theories and approaches to change
- 2. Clinical Care: Combine knowledge of biopsycho-social-cultural foundations of behavior with psychotherapeutic modalities and natural pharmacotherapy for a holistic mental health approach to prevention, personal growth and treatment.
  - Set therapeutic expectations, create and maintain professional boundaries, begin and end the therapeutic relationship
  - Incorporate theories of learning and personality development into clinical assessment therapeutic strategies

- c. Administer and interpret clinical assessments of cognitive, psychosocial, emotional and personality function
- d. Demonstrate effective use of counseling skills that facilitate client reflection and self-discovery
- e. Develop evidence-based psychopharmacologic and behavioral treatment plans
- f. Discuss the psychological and political underpinnings of culture, diversity and disparities while promoting equity and justice for underserved individuals and groups
- Interpret and critically appraise the primary psychology literature to inform clinical decision-
- h. Make appropriate interventions and referrals for acute mental health crises
- 3. Ethical Standards: Apply professional, ethical and legal standards within the scope of one's clinical practice.
  - a. Describe specific ethical and privacy concerns that differentiate the psychotherapeutic relationship and the doctor-practitioner/patient relationship
  - b. Demonstrate effectual risk-management strategies, competent decision-making, and consultation skills for managing ethical dilemmas in practice
  - c. Demonstrate appropriate record keeping and documentation
  - d. Understand when and how to report information to appropriate authorities as required by law
  - e. Describe the scope of one's clinical competency and limitations
- 4. Integrated Care: Understand one's professional role and clinical offerings as a member of an integrated healthcare team and within the context of the broader mental health community.
  - a. Describe the clinical offerings and responsibilities of a variety of cross-disciplinary mental health professionals
  - b. Establish and maintain cross-disciplinary relationships for resource building, referrals and collaborative care
  - c. Identify and describe one's specific role in the context of an integrated care team for a unique client
  - d. Communicate effectively and responsibly with other human-service providers
- 5. Personal and Professional Growth: Cultivate an ongoing practice of self-reflection that fosters personal growth and nurtures one's professional identity as a healthcare provider.

- a. Explore bodily expression, interpersonal dynamics, and moment-to-moment choices in order to better understand oneself and the human experience
- b. Use mindful awareness to monitor personal experience as a practitioner, attuning to specific client behaviors or therapeutic content that challenges or activates one's own psychological process
- c. Demonstrate mature and effective interpersonal skills to navigate difficult conversations with colleagues, clients and community members
- d. Develop confidence as a contributing practitioner within the broader healthcare community

### MSiMH Course Descriptions

### **Core Curriculum**

### GSMH 510 – Intro to Psychotherapeutics (weekend format) (1 credit)

An introduction to the fundamentals of psychotherapeutic work that sets the stage for the MSiMH program. As a cohort, students explore issues of group dynamics, safety and vulnerability in the context of the program, and their future work together.

### GSMH 511 - Psychological/Character Development (2 credits)

Learn the basic childhood patterns of psychological development. Emphasis is placed on how particular types of wounding can lead to habitual protective mechanisms that manifest as distinct personality characteristics. Specific treatment orientations and strategies for working with particular character types are presented. Students explore their own character strengths and challenges in an effort to develop their own therapeutic range.

### GSMH 512 - Integrative Psychopharmacology (4 credits)

This class provides a strong foundation for naturopathic and Chinese medicine practitioners who want to specialize in mental health care. The neurobiochemistry and pharmacology for conventional drugs most often seen in mental health practice are covered, and students learn dietary approaches and natural supplements used to treat common mental health concerns, as well as supplementdrug interactions. Emphasis is placed on developing psychopharmacologic treatment plans and medical case management for common mental health concerns, such as anxiety, depression and ADD/ADHD.

### GSMH 520 - Personal Growth (weekend format) (4 credits)

This class emphasizes personal growth and is specifically designed to enhance self-awareness and cultivate interpersonal skills. Students use mindful awareness to explore personal habits, biases, resources, bodily expression, interpersonal dynamics and moment-tomoment choices. This cultivation of self-awareness is



an essential skill for working effectively with others and will provide a strong foundation for students as they develop their personal identity as a healthcare professional. Interpersonal skills learned in this class will help students confidently navigate difficult conversations with colleagues and patients.

### GSMH 521 - Group Consultation I (2 credits)

Students meet with a clinical supervisor to discuss psychotherapeutic strategies and case management. This course integrates assessment, intervention, cultural competence, case conceptualization and documentation, self-evaluation, and other areas related to competence as a mental healthcare practitioner.

### GSMH 530 - Ethics of Psychotherapeutic Relationships (1 credit)

Students learn how to differentiate between the psychotherapeutic relationship and the doctor-patient relationship. Ethical issues unique to working in mental health are covered, and students will develop decision-making and consultation skills for managing dual relationships, power dynamics and ethical dilemmas in practice. Students learn sound risk management practices in tending to the clinical relationship and will know how to take action when ethical and legal dilemmas emerge.

### GSMH 531 – Counseling Skills (1 credit)

This course covers introductory counseling skills, including contact statements, listening, facilitating client reflection, and going deeper. Students will use mindful awareness to monitor their personal experience as a counselor, attuning to specific patient behaviors or therapeutic content that challenges or activates their own psychological process. The counseling relationship is defined and students learn how to set therapeutic expectations, create and maintain boundaries, and begin and end the therapeutic relationship.

### GSMH 532 Counseling Skills Practicum (2 credits)

This course is an experiential practice group for students to exercise skills learned in GSMH 531 Counseling Skills.

### GSMH 540 - Psychological Diagnosis (2 credits)

This course covers topics in mental health and psychiatric medicine, including the common diagnostic features in psychopathologic disorders. Emphasis is placed on recognizing mental health states and diagnoses commonly found in naturopathic and Chinese medical practices. Students gain a general knowledge of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-V) while also taking a more nuanced look at diagnosis from a characterological perspective.

### **GSMH 541 – Biopsychosocial Assessment and Evaluations** (3 credits)

This series prepares students to work effectively in a clinical setting. Courses cover a mix of material ranging from clinical skills building and managing the therapeutic relationship to creating treatment plans. Students learn additional clinical interventions to assist patients with symptom management, and apply a variety of clinical maps to guide assessment and decision-making. In addition, these courses orient students toward practical approaches to running a clinical practice, including necessary forms, reporting responsibilities, charting, insurance, describing one's work, and scope of practice.

### GSMH 600 - Cross-Cultural Psychology (2 credits)

This course examines how culture and diversity shape psychological processes. Psychological and political underpinnings of culture and diversity are explored, including cultural and social cognition, self- and group-identity formation, psychology of multiculturalism, stereotyping, prejudice and gender. Students dissect health issues in the light of disparities due to socioeconomics, education, gender identity, sexual orientation, race, culture and ability.

### GSMH 601 - Evidence-Informed Practice (3 credits)

Evidence-informed practice is the integration of clinical expertise, patient values, and research evidence into the decision-making process for patient care. It is used to identify the potential benefits, harms and costs of any intervention acknowledging that what works in one context may not be appropriate or feasible in another. This course offers an introduction to study designs used in mental health and integrative medicine research. Students learn to interpret the results of a study as well as basic approaches to evaluate the validity of the research methodology used. Students will have the opportunity to directly apply this knowledge by reading, presenting in class, and critically evaluating published scientific studies in integrative medicine and mental health.



**GSMH 611, 623, 632, 711 – Practice Tutorial I-IV** (0.5 credit each) Each tutorial provides six hours of supervised, skills-based practice for students to strengthen their counseling work. The format of the class relies heavily on the "fish-bowl" model: students practice therapist-client work in front of others so that peers can participate in the learning process. Instructional time is devoted to providing feedback regarding the choice and application of specific counseling skills, interpretation of client material and themes, and the overarching direction of therapeutic strategies. Students are expected to practice outside of the supervised time. This small-group class is limited to six people.

### GSMH 620, 630, 643 - Practice Strategies I-III (3 credits each)

This series prepares students to work effectively in a clinical setting. Courses cover a mix of material ranging from clinical skills building and managing the therapeutic relationship to creating short-term treatment plans and long-term treatment visions. Students refine their use of a variety of clinical maps, including character, sensitivity cycle, medical and attachment maps, to guide assessment and decision-making. In addition, these courses cover a practical approach to running a private practice, including necessary forms, reporting responsibilities, charting, insurance, marketing oneself and describing one's work.

GSMH 614, 622, 631 — Clinical Practicum I-III (4 credits each) Clinical shifts specialize in mental health concerns and provide students an opportunity to integrate and apply skills in assessment, counseling, psychotherapeutic processing, psychopharmacology, cultural competence, case conceptualization and documentation, and selfevaluation; honing their skills as integrative mental healthcare practitioners. Format: clinical rotation; students see clients as student practitioners and are overseen by an attending clinician. Note: Upon entering and exiting Clinical Practicum, students must demonstrate competence in specific areas, including content knowledge, clinical skill, judgment, professional and ethical behavior, and communication skills.

GSMH 533, 613, 621 - Group Consultation II-IV (2 credits each) Group consultation at this stage of the program provides more in-depth exploration and conceptualization for cases that students are working with in the clinic. This course provides a safe space for students to practice techniques with professional guidance, as well as process any challenges they might be experiencing as a developing practitioner.

### GSMH 716 - Psychotherapy: Theory and Application (2 credits)

This course is a survey of various counseling modalities that 1) represent significant developments in psychotherapeutic theory and techniques; and/or 2) have specific applicability to a holistic treatment perspective. Cognitive, behavioral, systems-based, body-based and selfbased theories are explored, and students will consider the efficacy of different methods for specific client populations. Various theories of change are discussed and students will learn how to set therapeutic expectations, refer patients for treatment, and collaborate with members of an integrated healthcare team in support of continuity of care. Format: lecture, demonstration, class discussion.

### **Elective Courses**

At least half of the 8 required elective credits for the MSiMH degree must be taken from courses designated as counting toward the program. The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met.

### GSMH 518E - Nature-Based Therapy (2 credits)

This course explores both theoretical and practical implications for therapeutic engagement with the natural world. Students learn and practice therapeutic interventions in an outdoor setting, engaging in topics such as connection with the natural world, mindfulness, restorative effects of natural settings and stimuli, and contemporary influences that affect the human-nature relationship. This is an experiential course that stretches beyond traditional counseling to focus on how to engage the human-nature relationship for the practitioner and the client.

### GSMH 700E - Introduction to Addictions (2 credits)

This course explores neurobiological, genetic, social, behavioral and cultural influences on individual vulnerabilities to addictive behavior. Topics include substance-based addictions (e.g., alcohol, drugs, tobacco, food) as well as addiction behaviors (e.g., gambling, internet gaming, sex). Controversies and advances in addiction theory and treatment modalities are discussed. Students will examine their own relationship to the spectrum of use, habit, dependency and addiction by engaging in 1) an abstinence project, and 2) a behavior acquisition project of their choice.

### GSMH 702E - Attachment Work (3 credits)

This course covers the neurobiology and implications of the attachment drive in childhood. Students learn to assess attachment states in adult clients, recognize the need for intervention, and learn to create the necessary conditions for secure attachment in the therapeutic relationship. Students will explore their own attachment states, identify how this impacts their therapeutic work, and develop skills for working with clients that complement their own clinical style.

### GSMH 703E - Introduction to Working with Trauma (3 credits)

This course presents an integrated framework for working with neurological trauma. Students develop skills in the following areas: assessment; recognizing trauma signs and patterns; safety concerns; distinguishing neurological from developmental trauma; pacing and titration of experience; the pursuit of self-regulation; somatic resourcing; PTSD considerations; interventions for the somatic release of trauma; vicarious and therapist self-care; and knowing when to refer.

### GSMH 712E - Introduction to LGBTQ Counseling (3 credits)

This course offers an overview of sexual orientation and gender identity with a focus on gaining professional competency for working with LGBTQ clients. Specific topics include LGBTQ history, heteronormativity, the experience of coming out, definitions of terminology used, and how to support LGBTQ clients and their relationships. Students will explore these topics through experiential exercises, psychological research, popular media depictions, and guest lecturers.

### GSMH 716E - Advanced Skills Tutorial (2 credits)

This course provides advanced training for individuals who are interested in deepening their understanding of specific MSiMH curriculum (e.g., character map, developmental arc, counseling skills) while developing group facilitation and teaching techniques. Part of the class includes small group training with the instructor; the other part involves practicing new skills in the classroom where students assist in facilitating targeted exercises.

### **GSMH 718E – Applied Psychophysiology I: Introduction to Self-Regulation** (2 credits; formerly PSY 690E Behavioral Medicine)

This three-course series teaches students how to assess, track and address the physiological manifestations of mental/emotional states. Psychophysiology is a field of study that explores how thoughts and beliefs affect our physiology, and how behavior patterns can affect the mind. Applied psychophysiology encompasses techniques and modalities that support the regulation of this psychophysiological connection. Students explore health and well-being through a psychophysiological lens and learn applied psychophysiologic techniques. A variety of tools that support self-regulation are introduced, including open focus, autogenics, peripheral temperature regulation, breath training, and mindfulness.

### GSMH 719E - Mindfulness-Based Bodywork (3 credits)

This hands-on, experiential course teaches students how to expand their bodywork technique of choice (massage, acupuncture, structural integration, craniosacral, etc.) to integrate an emotionally inclusive approach to care. Students learn basic communication and observational skills to bring a mindfulness-based, body/mind integrative approach to bodywork. Students learn to foster attunement, awareness and curiosity to further engage clients in their healing process. Students will explore some of the ethical considerations necessary to bringing an integrated body/mind approach to bodywork. Prerequisites: BAS 5111L Clinical Anatomy I Lab or CM 515 Palpation and Perception I; and experience in a bodywork technique, such as massage, acupuncture, structural integration or craniosacral.

### GSMH 724E – Applied Psychophysiology II: Introduction to Instrumentation (2 credits)

In preparation to work with clients, students learn how to assess and modulate their own nervous system activity through a variety of bio- and neuro-feedback techniques. Peripheral biofeedback equipment is used to assess and monitor heart rate variability, muscle tension, skin conductance and peripheral temperature. Neurofeedback equipment is used to monitor the central nervous system. Students learn how to use equipment by practicing on one another; in this way learners become more proficient in mastering their own self-regulation and managing stress. *Prerequisite: GSMH 718E* 

### **GSMH 725E, 726E, 727E – Shen-Hammer Pulse Diagnosis I-III** (2 credits each)

This three-course series introduces students to the theory and clinical application of Shen-Hammer pulse diagnosis. Students learn how to utilize these methods of palpating the pulse at the radial artery of the wrist in order to assess and track energetic, cognitive, behavioral, and organic disease processes. The courses cover a variety of aspects related to the practice of Shen-Hammer pulse diagnosis, including therapeutic relationship, acupuncture protocols, herbal medicine, treatment planning, and case management. All skills taught in this series can be used within the scope of practice of acupuncturists in Oregon. Prerequisites: enrollment in a CCM program at NUNM; these courses are to be taken in the ordered sequence

### GSMH 734E – Applied Psychophysiology III: Applications and Interventions (2 credits)

Students continue learning how to help clients assess and modulate their own nervous system activity through a variety of bio- and neuro-feedback techniques. Previous courses in this series introduced students to instrumentation and assessment, here emphasis is placed on developing treatment plans. The theory and rationale for deciding which instruments are most suited for specific clinical presentations is discussed. Students practice history taking, assessment, and intervention in preparation for using applied psyphy techniques in a clinical setting. *Prerequisite: GSMH 724E* 

# rst and second year

### MSiMH FOUR-YEAR CURRICULUM

COURSE #	FIRST-YEAR FALL	LECTURE	CREDITS
GSMH 510	Intro to Psychotherapeutics (weekend format)	12	1
GSMH 511	Psychological/Character Development	24	2
	First-Year Fall Totals	36	3
COURSE #	FIRST-YEAR WINTER	LECTURE	CREDITS
GSMH 520	Personal Growth (weekend format)	48	4
	First-Year Winter Totals	48	4
COURSE #	FIRST-YEAR SPRING	LECTURE	CREDITS
GSMH 531	Counseling Skills	12	1
GSMH 532	Counseling Skills Practicum	24	2
	First-Year Spring Totals	36	3
	FIRST-YEAR TOTALS	120	10
COURSE #	SECOND-YEAR SUMMER	LECTURE	CREDITS
GSMH 530	Ethics of the Psychotherapeutic Relationship	12	1
GSMH 716	Psychotherapy: Theory and Application	24	2
	Second-Year Summer Totals	36	3
COURSE #	SECOND-YEAR FALL	LECTURE	CREDITS
GSMH 540	Psychological Diagnosis	24	2
GSMH 611	Practice Tutorial I	6	0.5
	Second-Year Fall Totals	30	2.5
COURSE #	SECOND-YEAR WINTER	LECTURE	CREDITS
GSMH 541	Biopsychosocial Assessment and Evaluation	36	3
GSMH 623	Practice Tutorial II	6	0.5
	Second-Year Winter Totals	42	3.5
COURSE #	SECOND-YEAR SPRING	LECTURE	CREDITS
GSMH 632	Practice Tutorial III	6	0.5
	Second-Year Spring Totals	6	0.5
	SECOND-YEAR TOTALS	114	9.5

COURSE#	THIRD-YEAR SUMMER	LECTURE	CREDITS
GSMH 521	Group Consultation I	24	2
GSMH 600	Cross-Cultural Psychology	24	2
	Third-Year Summer Totals	48	4
COURSE#	THIRD-YEAR FALL	LECTURE	CDEDITE
			CREDITS
GSMH 512	Integrative Psychopharmacology	48	4
GSMH 711	Practice Tutorial IV	6	0.5
	Third-Year Fall Totals	54	4.5
COURSE #	THIRD-YEAR WINTER	LECTURE	CREDITS
GSMH 620	Practice Strategies I (weekend format)	36	3
	Third-Year Winter Totals	36	3
OURSE #	THIRD-YEAR SPRING	LECTURE	CREDITS
GSMH 601	Evidence-Informed Practice	36	3
GSMH 630	Practice Strategies II (weekend format)	36	3
3314111030	Third-Year Spring Totals	72	6
	Time Teal Spring Totals	/-	· ·
	THIRD-YEAR TOTALS	210	17.5
COURSE #	FOURTH-YEAR SUMMER	LECTURE	CREDITS
GSMH 643	Practice Strategies III (weekend format)	36	3
	Fourth-Year Summer Totals	36	3
COURSE#	FOURTH-YEAR FALL	LECTURE	CREDITS
GSMH 533	Group Consultation II	24	2
35IVIT 333 GSMH 614	Clinical Practicum I	48	4
3314111 014	Fourth-Year Fall Totals	72	6
	Fourth-rear Fall Totals	/2	0
COURSE #	FOURTH-YEAR WINTER	LECTURE	CREDITS
GSMH 613	Group Consultation III	24	2
GSMH 622	Clinical Practicum II	48	4
	Fourth-Year Winter Totals	72	6
COURSE#	FOURTH-YEAR SPRING	LECTURE	CREDITS
GSMH 621	Group Consultation IV	24	2
GSMH 631	Clinical Practicum III	48	4
	Fourth-Year Spring Totals	72	6
		1 1	
	FOURTH-YEAR TOTALS	252	21
	TOTAL CORE CREDITS		58
	TOTAL ELECTIVE CREDITS (TO BE TAKEN AT ANY TIME)		8
	TOTAL REQUIRED CREDITS		66

electives

### MSiMH ELECTIVES 8 Credits Required

At least half of the 8 required elective credits for the MSiMH degree must be taken from courses designated as counting toward the program (listed below). The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met. NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and adequate student enrollment.

COURSE#	COURSE	LECTURE	CREDITS
GSMH 518E	Nature-Based Therapy	24	2
GSMH 700E	Introduction to Addictions	24	2
GSMH 702E	Attachment Work	36	3
GSMH 703E	Introduction to Working with Trauma	36	3
GSMH 712E	Introduction to LGBTQ Counseling	36	3
GSMH 716E	Advanced Skills Tutorial	24	2
GSMH 718E	Applied Psychophysiology I: Introduction to Self-Regulation	24	2
GSMH 719E	Mindfulness-Based Bodywork	36	3
GSMH 724E	Applied Psychophysiology II: Introduction to Instrumentation	24	2
GSMH 725E	Shen-Hammer Pulse Diagnosis I	24	2
GSMH 726E	Shen-Hammer Pulse Diagnosis II	24	2
GSMH 727E	Shen-Hammer Pulse Diagnosis III	24	2
GSMH 734E	Applied Psychophysiology III: Applications and Interventions	24	2

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CM 26E

Shan Ren Dao Retreat

### **Master of Science in Nutrition**

It's becoming widely understood that nutrition plays a significant role in health and disease. The old adage "you are what you eat" has never been more true. The Master of Science in Nutrition (MScN) degree program focuses on diets that are based on whole, unprocessed foods and integrates nutritional biochemistry

and pathophysiology with advanced clinical nutrition knowledge. An active-learning curriculum provides a solid foundation in holistic nutrition and food systems, complemented by skill-training in cooking, teaching and nutritional counseling.

The mission of the Master of Science in Nutrition program is to advocate for healthy lifestyles by increasing awareness of how food and nutrients impact human health and disease, and to respect diverse nutritional needs, dietary patterns, and food preferences.

Nutrition is a dynamic science with new research findings constantly being published. As we continue to learn about the complex relationship between food and human metabolism, there is no argument that whole and minimally processed foods are better for reducing disease risk. Fruits, vegetables, nuts and seeds provide us with many beneficial nutrients beyond vitamins and minerals. However, each individual also has their own unique nutritional needs. No one diet is right for everyone. Focusing on each person as an individual allows for

variation of dietary needs that provide the best nutritional support possible.

Nutrition books are top-sellers, demonstrating that the public wants more information about nutrition. Simultaneously, obesity is at an all-time high and chronic disease continues to rise. This paradox demonstrates that

nutrition knowledge is not translating to individuals' ability to make dietary changes. People need help and support to make significant behavioral changes. In order to make nutrition accessible to every individual in every community,

we need a nutritional philosophy that embraces cultural preferences. We need to treat food as medicine.

The Master of Science in Nutrition program at NUNM prepares its graduates for a variety of settings, including health coaching and nutritional counseling, nutrition research, serving on integrative healthcare teams, being a personal chef and professional food service consultant, and involvement in community nutrition educational programs.



### **Program Tracks**

### One Year

This is the standard program track, beginning in the fall term and ending in the summer. This track allows students to take the Farm to Table course in the summer during peak harvest season. Students participate in commencement at the end of spring term and complete degree requirements in the summer term.

### Two Year

Developed for individuals with competing commitments, this track spreads the curriculum over two years, allowing students to attend to life's responsibilities while also meeting their personal educational goals.

### **Program Outcomes and Competencies**

The Master of Science in Nutrition program is a practice-based curriculum that facilitates advanced skills in scholarly learning and professional training in the field of nutrition. Students learn fundamental knowledge and application of integrative nutrition in the following focus areas.

- Clinical Nutrition: Students learn the complex interactions that nutrients and phytochemicals play within the human body and how deficiencies can result in subclinical and clinical conditions. Through careful analysis, nutritional interventions are designed and optimized to reduce disease and support quality of life at the individual level.
- Community Nutrition: Students are trained in population-based nutrition and determinants of health, such as food access, education and policy. Exploration of various components include economic, cultural and social influences.
- Culinary Nutrition: Students become proficient in the principles and application of food preparation as it pertains to healthy recipe and menu development. Emphasis is placed on the use of food as medicine to support health and minimize risk of chronic disease.
- Environmental Nutrition: Students examine the local and global food systems, paying specific attention to organic and sustainable practices. Following seed-totable, students explore the relationship between food production and utilization, considering environmental, social and economic facilitators and barriers of designing healthy communities.

Students in the MScN program will be prepared to meet the following program outcomes and competencies:

- 1. Biomedical Science: Discuss nutritional science and how it impacts human health and metabolism.
  - a. Describe the digestion, absorption, distribution and metabolism of carbohydrates, fats, proteins, vitamins, minerals and phytonutrients
  - b. Explain basic human physiological mechanisms and pathophysiology
  - c. Detail biochemical pathways influenced by macro- and micronutrients
  - d. Correlate nutrition's influence on disease prevention and risk
- 2. Skills Expertise: Develop necessary tools to effectively apply nutrition knowledge in a clinical, educational and culinary setting.
  - a. Perform nutritional assessments
  - b. Analyze nutrient content of dietary patterns and facilitate dietary changes associated with optimizing health
  - c. Perform effective nutrition counseling resulting in a client's successful implementation of lifestyle behavioral changes
  - d. Apply skills in cooking, recipe development and meal planning
  - e. Match nutritional therapies to medical diagnoses
  - f. Design individualized meal plans for clients
  - g. Develop and implement nutrition and cooking curriculum in one-on-one and group settings
  - h. Identify, assess and address the interactions among the many issues associated with nutrition and the community
  - i. Effectively communicate with healthcare practitioners, the scientific community and the general public in written documents and oral presentations
  - Demonstrate the ability to give and receive feedback effectively
  - k. Critically evaluate peer-reviewed research literature
- 3. Ethics: Apply professional, ethical and legal standards within the scope of one's professional practice.
  - a. Discuss the role social disparities play in nutrition
  - b. Describe disparities in food access and discuss ways to reduce injustice in the politics of food
  - c. Demonstrate how culture, tradition and individual perspectives inform nutritional interventions
  - d. Behave professionally in a manner that is empathic, ethical and culturally aware
  - e. Understand one's professional role within the context of the broader nutrition and healthcare community

- f. Identify the scope of one's practice within the laws of their state
- **4. Personal and Professional Growth:** Cultivate an ongoing practice of scholarly activity that promotes a career in a continually evolving profession.
  - a. Know how and where to locate peer-reviewed scientific literature in nutrition. Identify nutrition resources for varied environments and cultures
  - b. Recognize professional interests and communicate career goals

### **MScN Course Descriptions**

### Core Curriculum

**GSN 500 – Nutrition Mentorship** (1 credit each; 3 required terms) The MScN mentoring program is designed to improve academic success and enhance career preparedness for its students. As part of a three-term series, students explore the tools needed to succeed while in school and post-graduation. Each student will work with faculty mentors to identify and achieve their academic and professional goals.

### GSN 502 - Culinary Skills (2 credits)

This hands-on course exposes students to the basics of culinary skills, including proper knife and cooking preparation techniques. Students develop a solid foundation of kitchen essentials to promote culinary competence and confidence. These skills are honed through food preparation, reinforcing their nutritional and culinary applications.

### GSN 503 - Farm to Table (2 credits)

This course trains students in the process of local food systems, specifically increasing awareness of local agriculture and the food service industry. Students will appraise food production, distribution and accessibility. A variety of class experiences include visiting local farms, farm-to-table restaurants and farmers' markets.

### GSN 505 - Healing Foods I (2 credits)

In this course students discover how to use food as medicine. They examine how food and food choices impact health and disease. Students will discuss specific foods that can be utilized to support health and prevent disease. *Corequisite: GSN 506* 

### GSN 506 - Healing Foods I Practicum (2 credits)

This complementary course brings to life the content covered in the Healing Foods lecture (GSN 505). Students will have hands-on experience preparing foods and meals that showcase their healing properties in creative ways. *Corequisite: GSN 505* 

### GSN 507 - Fundamentals of Nutrition (4 credits)

An in-depth look at carbohydrates, proteins, lipids, vitamins, minerals and water, and their roles in health and disease. Areas of focus include molecular structure, function, digestion, absorption, metabolism and optimal food sources. Students learn specific dietary requirements and how dietary excess or deficiencies present clinically.

### GSN 508 – Fundamentals of Nutrition Workshop (1 credit)

This hands-on class emphasizes the objectives of macroand micronutrient nutrition and is taken concurrently with the Fundamentals of Nutrition course (GSN 507). Students will learn through a variety of culinary experiments and case-based activities.

### **GSN 509 – Community Nutrition and Food Policy (3 credits)**

An overview of factors influencing nutritional health within the population at large, with a brief examination of public and private agencies and their role in community assessment, policy development and public health assurance. Students will also investigate the public policy behind food production and distribution, and the factors that influence policy development. Topics include food systems, food needs and food safety, environmental sustainability, accessibility and food labeling.

### GSN 514 - Nutritional Biochemistry (2 credits)

An examination of the impact nutrition has on health at the cellular level. Students learn about metabolic pathways and how health is affected when those pathways are impaired. This class covers the breakdown and usage of carbohydrates, proteins and lipids, as well as cellular utilization of vitamins and minerals. Students are also introduced to basic inflammation pathways and microbiome health.

### GSN 515 - Nutritional Assessment (2 credits)

This course introduces clinical and dietary evaluations to determine an individual's nutritional status. This includes anthropometric measurements, nutritional physical, food frequency questionnaires, diet recall, diet records and nutrient intake analysis.





### GSN 516 - Pathophysiology (3 credits)

This foundational course is an introduction to human physiological and pathological processes. Students develop an understanding of common health conditions and preventable diseases. Risk factors and causes of disease are also covered.

### GSN 517 – Psychology of Eating (2 credits)

This course examines our relationship to food, including neurobiological and behavioral connections that influence food choices. Students explore related topics, such as food cravings, food addiction, mindfulness and intuitive eating.

### GSN 524 – Medical Nutrition Therapy (3 credits)

Students apply nutritional concepts for specific disease states, including gastrointestinal disorders, metabolic concerns, cardiovascular disease and hypertension, anemia, renal disease and bone health. Students will also synthesize medical literature and nutrition literature to determine which diets to implement for each patient type.

### GSN 526 - Lifecycle Nutrition I (2 credits)

The specific nutritional needs and nutrition-related issues during various stages of the lifecycle are identified. This course focuses on preconception, pregnancy, lactation and childhood nutrition.

### GSN 528 - Health Coaching (2 credits)

Students learn an integrative health coaching framework that includes models of behavior change, goal setting, identifying obstacles to success, and developing support systems. Skills in motivational interviewing, and oneon-one and group coaching are highlighted. Practical application of the material is woven throughout the course.

### GSN 529 - Applied Medical Nutrition Therapy (2 credits)

In this experiential course, students develop recipes and menus, as well as prepare meals for specific medical conditions. This course complements GSN 524.

### GSN 532 - Nutrition Internship (2-year program)

(2 credits each; three required terms)

This field experience provides opportunities to observe health practitioners, reinforcing counseling techniques and the practical implementation of nutrition education.

### GSN 533 - Lifecycle Nutrition II (2 credits)

The specific nutritional needs and nutrition-related issues during various stages of the lifecycle are identified. This course focuses on adolescent, adulthood and geriatric nutrition in health and disease.

### GSN 534 - Cultural Humility and Food Justice (2 credits)

This course is designed to explore the broad context of social justice issues within nutritional settings. Students will consider the complexities of working with individuals' specific needs. In addition, the course covers the impact of systems, institutions and policies that relate to food equity issues.

### GSN 535 – Nutrition Internship (1-year program)

(3 credits each; two required terms)

This field experience provides opportunities to observe health practitioners, reinforcing counseling techniques and the practical implementation of nutrition education.

### GSN 563 - Business of Nutrition (2 credits)

Nutritional counseling or being a personal chef requires the knowledge of running a small business. This course teaches students how to launch and operate a small business, from filing for a business license, to marketing and basic accounting. Students learn practical skills, such as how to bill insurance and when to file taxes. Local business experts will guest lecture to discuss their experiences and provide tricks of the trade. Students will have the opportunity to develop a business plan for their own business.

### GSN 614 – Advanced Nutritional Biochemistry (2 credits)

In this course, students expand on their previous biochemistry foundation to further elucidate the biochemical basis of health and disease. Students build upon their knowledge of metabolism to explore micronutrient, macronutrient and enzymatic functions in the body. By the end of this course students will be able to identify bioactive sites of vitamins; functions of minerals; antioxidant functions in enzymatic reactions; proteins and their functions; and how these biochemical processes relate to human metabolism and disease. Through a deeper understanding of human metabolism, students will gain understanding in the application of nutrients in disease prevention and treatment. *Note: This course may be taken by students (in advanced standing) in place of GSN 514.* 

### **Elective Courses**

At least half of the 15 required elective credits for the MScN degree must be taken from courses designated as counting toward the program. The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met.

### **GSN 501E, 510E, 520E, 530E – Seasonal Cooking** (2 credits each)

Fruits and vegetables are an integral part of a healthy diet. With increasing accessibility of local produce, seasonal fruits and vegetables are easily available. Within Portland city limits, there are a handful of year-round farmers markets. This hands-on course introduces students to the vast array of seasonal produce and seasonal cooking techniques so they may help their future clients integrate more fruits and vegetables into their diets, and have a working knowledge of the importance of eating with the seasons.

### GSN 525E - Cultural and Traditional Diets (2 credits)

This course provides a practical approach to various cultural and traditional diets, such as vegetarian, vegan, halal and kosher; and includes weekly preparation of specific foods to complement dietary concepts.

### GSN 538E - Cooking Pedagogy (2 credits)

This course teaches students how to teach others in a kitchen setting. In addition, students learn proper food preparation techniques, recipes and menu development, and food pairings.

### GSN 542E — Cooking and Considering Meat and Seafood (2 credits)

This course familiarizes students with various means of sourcing, handling and preparing meat and seafood. Students learn about the ecological considerations of meat consumption as well as specific culinary techniques and recipe patterns for preparing and serving a variety of proteins.

### GSN 543E - Personal Chef and Food Service (2 credits)

Students learn about individual catering for private service and how to successfully incorporate all aspects of food service and preparation. Emphasis is placed on food purchasing, menu development, food pairing, food safety and sanitation, and cooking techniques.

### GSN 544E - Global and Ecological Food Issues (2 credits)

This course explores global and federal organizations participating in the food system; global food policy and trade agreements; food production, processing and distribution; food security and access; and sustainability on a global perspective. Students choose a subject to study in-depth, such as: certifications and labeling; how healthy are organic, local and natural foods; marketing food to children; GMOs; food health claims; should you eat local products; cultural traditions and religious impacts of food choice; and linking food accessibility and the obesity epidemic.

### GSN 545E – Global Cuisine: Foods of the World (2 credits)

Students are exposed to delicious cuisine from around the world. The course demonstrates how food availability, local ecosystems, cooking traditions, and cultural differences vary from region to region. Preparation of regional cuisine each week supports these concepts.

### GSN 546E - Food Allergies and Intolerances (2 credits)

A detailed look at immunological effects of food allergies and intolerances, including potential symptoms, diagnoses and treatment options to reduce health implications.

### GSN 547E - Fad Diets (2 credits)

This course examines popular diets and how they are marketed and promoted for weight loss and metabolic issues.

### GSN 548E - Eating Disorders and Intuitive Eating (2 credits)

Abnormal eating patterns are discussed, including bulimia, anorexia nervosa and binge eating. The course includes detailed examination of the physiology, psychology, prevention and treatment of various eating disorders. Intuitive eating philosophy is explored to understand how the human body can signal the need for food and nutrition.

### GSN 549E – Detoxification and Cleanses (2 credits)

This course uses an evidence-based approach to examine the body's natural detoxification processes and how to optimize detoxification through the use of whole-food nutrition. It focuses on the physiological processes responsible for detoxification. Sources of toxicity are also discussed. Students research and develop whole-food-based interventions to support the detoxification process.

### **GSN 551E – Therapeutic Diets** (2 credits)

A comprehensive examination of commonly prescribed therapeutic diets, including the DASH, Mediterranean, Paleo, anti-inflammatory, gluten-free and casein-free diets. Nutrition fundamentals, current research, and popular media views are thoroughly explored. Hands-on preparation sessions provide practical experience with each diet.

### GSN 552E - Nutritional Supplements (2 credits)

Explore the use of nutritional supplements (including nutritive herbs) for health. Understand when to use certain nutrients, which forms are found in supplements, and how to select them. Students learn about food, drug and nutrient interactions, and how supplements influence human biochemistry. Regulation of the nutritional supplement industry is also covered, including laws, purity and quality control.

### GSN 553E - Gluten-Free Cooking (2 credits)

Investigate the impacts of gluten on human health and understand how gluten can affect physiology. Students learn how to shop and cook gluten-free with a comprehensive understanding of how to find hidden ingredients on food labels that may be derived from gluten or wheat.

### GSN 554E - Sports Nutrition (2 credits)

This course investigates the human demands for increased nutritional support from athletic performance, the timing of meals, and what types of balanced menus are appropriate to support individual exercise regimens. Research on sports nutrition supplements to support athletic training is also discussed.

### GSN 555E - Functional Nutrition (2 credits)

Examine functional nutrition and its philosophy of incorporating systems biology in supporting human health. This approach of how the environment impacts each individual on a physiological level is examined in depth. An emphasis on individualized care is revisited.

### GSN 556E – Cooking with Medicinal Herbs: A Chinese Medicine Perspective (2 credits)

Medicinal herbs do not always have to be taken in pill, powder or concentrated form. Learn how to incorporate herbs into everyday meals to support health, gain an understanding of the basics of botanical medicine, and discover which herbs are best suited to culinary use. This course focuses on the use of herbs in Chinese medicine.

### GSN 557E - Cooking with Medicinal Herbs (2 credits)

Medicinal herbs do not always have to be taken in pill, powder or concentrated form. Learn how to incorporate herbs into everyday meals to support health, gain an understanding of the basics of botanical medicine, and discover which herbs are best suited to culinary use.

### GSN 558E - Food as Medicine in the Community (2 credits)

Community cooking and nutrition programs have been identified as a key factor in reducing chronic diseases, such as diabetes and obesity. Learn how to build a successful, community-based, hands-on cooking and nutrition series from the ground up; including how to navigate project location development, cultural competency in diverse populations, sustainable program funding, and cooking workshop management and logistics.

### GSN 559E - Vegan Diets (2 credits)

Vegan diets are plant-based and include fruits, vegetables, whole grains, legumes, seeds and nuts. A vegan lifestyle choice is becoming more popular for people trying to lower cholesterol or control obesity. This hands-on course teaches students how to develop healthy and delicious vegan menu plans as they support their future clients' transition to veganism.

### GSN 562E - Nutrition in the News (1 credit)

In this course, students investigate current topics in nutrition. With the constant bombardment of varying nutrition information from popular media, it is important to examine the heart of each issue. Discussion topics may include food policy and regulation, ethics in nutrition, local food systems, current events, and new peer-reviewed nutrition research. Students will compare the story in the news to the original research, further teaching them how to read research studies.

### GSN 564E - Nutritional Genetics (2 credits)

Have you ever wondered if your diet affects your genes? Or whether your genes affect what you can eat? Students in this course examine the relationship between genetics, metabolism and diet. Topics include how diet can affect epigenetic patterns and gene expression, how our metabolic response to food has been shaped by genetic variation, and how our health is impacted by the interplay of genetics and diet. Students will also consider the utility of using genetic information to make dietary choices.

### GSN 565E - Food Anthropology (2 credits)

Explore the interconnections of cultural forces that influence what, when, where and how we eat. This course is organized around critical analysis and discussion of why and how these cultural forces are successful in developing and reinforcing personal food choices; and is based on historical, anthropological and literary sources, as well as contemporary writing and films on the politics and socioeconomics of food.

### GSN 567E – Healing Foods II (2 credits)

The course examines how bioactive compounds in foods can influence human metabolism and biochemistry. Foods with anti-inflammatory, healing and nourishing properties are covered. Following the course, students will be able to identify specific foods that can be utilized to support health and prevent disease. Corequisite: GSN 568E

### GSN 568E - Healing Foods II Practicum (2 credits)

Students discover how to make food as medicine in a kitchen setting. This course is a continuation of Healing Foods I (GSN 505). The course examines how bioactive compounds in foods can influence human metabolism and biochemistry. Foods with specific properties, including anti-inflammatory and detoxifying effects, are covered, and students practice food preparation in an active learning kitchen setting. Corequisite: GSN 567E

### GSN 569E - Lifestyle and Wellness (2 credits)

This course offers an in-depth look at modifiable behaviors that directly influence chronic disease, mortality and healthcare costs. The areas of focus include diet and nutrition, exercise, stress management and sleep behaviors, social support and environment impacts. Students learn comprehensive lifestyle interventions to prevent and potentially reverse the progression of chronic disease.

### GSN 571E - Introduction to Organic Agriculture (2 credits)

This course provides an introduction to the science and practice of organic agriculture. Students gain insight into the cultivation of various plant species through scientific literature, lectures, assignments and case-based projects. Fundamental concepts of biology and soil chemistry are presented as the basis for environmentally sustainable agricultural practices. Plant biology, physiology and ecology serve as the context for practical concepts, such as crop rotation, cover crops, integrative pest management and seasonality. Course topics are discussed within the framework of current agro-economic and political systems and their environmental implications.

### GSN 572E - Indian Cooking (2 credits)

Traditional Indian cooking is based on the foundations of Indian philosophy. This course explores the concepts of Indian cooking, the properties of food, and the seasonal selection of dishes to achieve optimum health for body, mind and spirit. This course covers classic and regional dishes, including vegetarian, non-vegetarian, vegan, gluten-free, low-calorie, low-sodium and Ayurvedic dishes. The Indian concepts of Tridosha (Vata, Pitta, Kapha), individual dietary requirements, and disease-specific diets are also covered.

### GSN 574E - Food Relationship Coaching (2 credits)

This course teaches an advanced approach to nutrition coaching by addressing the client's underlying relationship with food, rather than the micro or macro components of their diet. Students learn to focus on the psycho/spiritual/emotional roots of clients' day-to-day interactions with food and the influence of the larger social environment on those thoughts, feelings, beliefs and actions. Students learn the skills necessary to empower clients to make sustainable changes to their diet by helping them "rewrite" the story, or script, of their relationship with food.

### GSN 577E – Nutrition Career Strategies (weekend format) (2 credits)

Planning your career in nutrition involves a variety of steps, including identifying your skills and values, researching your options, setting goals, and developing a plan to achieve those goals. The nutrition retreat is a concentrated time for education and career planning. Students engage in self-reflection and investigate different career options. At the end of the retreat, students will have a map of their education at NUNM and goals for their



future employment. This weekend course is set off-campus and has a fee to cover the expenses of the retreat site. As with any nutrition retreat, discussion will take place over delicious and healthy food.

### **GSN 580E – Constitutional Medicine and Seasonal Dietetics** (2 credits)

This course introduces students to constitutional medicine and seasonal dietetics. Students explore theories from Ayurveda, Chinese and ancient Greek medicine, and synthesize their diet and lifestyle strategies to make them relevant in modern life. The course compares the similarities and differences of medical traditions that rely on symptomatic, body-type and personality patterns. Students also learn how the energetics of the environment influence and affect individual health and well-being throughout seasons and lifecycles.

### GSN 583E - Nutritional Counseling (2 credits)

This course is an interactive assessment of individual nutritional health and status, with determination of detailed nutrient needs to improve health and minimize risk of chronic disease. Effective strategies are explored to assure that patient goals are met and maintained to achieve success.

### **MScN ONE-YEAR CURRICULUM**

### nutrition

COURSE #	FALL	LECTURE	CREDITS
GSN 500	Nutrition Mentorship	12	1
GSN 502	Culinary Skills	24	2
GSN 507	Fundamentals of Nutrition	48	4
GSN 508	Fundamentals of Nutrition Workshop	12	1
GSN 514 - OR -	Nutritional Biochemistry	24	2
GSN 614	Advanced Nutritional Biochemistry		
GSN 516	Pathophysiology	36	3
GSN 534	Cultural Humility and Food Justice	24	2
	Elective	24	2
	Fall Totals	204	17
COURSE #	WINTER	LECTURE	CREDITS
GSN 500	Nutrition Mentorship	12	1
GSN 515	Nutritional Assessment	24	2
GSN 517	Psychology of Eating	24	2
GSN 524	Medical Nutrition Therapy	36	3
GSN 526	Lifecycle Nutrition I	24	2
GSN 528	Health Coaching	24	2
GSN 529	Applied Medical Nutrition Therapy	24	2
	Elective	24	2
	Winter Totals	192	16
COURSE#	SPRING	LECTURE	CREDITS
GSN 500	Nutrition Mentorship	12	1
GSN 505	Healing Foods I	24	2
GSN 506	Healing Foods I Practicum	24	2
GSN 533	Lifecycle Nutrition II	24	2
GSN 563	Business of Nutrition	24	2
GSN 535	Nutrition Internship	36	3
	Electives	48	4
	Spring Totals	192	16
COURSE #	SUMMER	LECTURE	CREDITS
GSN 503	Farm to Table	24	2
GSN 509	Community Nutrition and Food Policy	36	3
GSN 535	Nutrition Internship	36	3
	Electives	84	7
	Summer Totals	180	15
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**TOTAL ELECTIVE CREDITS** 

**TOTAL REQUIRED CREDITS** 

### **MScN TWO-YEAR CURRICULUM**

### first year

COURSE#	FIRST-YEAR FALL	LECTURE	CREDITS
GSN 502	Culinary Skills	24	2
GSN 507	Fundamentals of Nutrition	48	4
GSN 508	Fundamentals of Nutrition Workshop	12	1
GSN 514 - OR -	Nutritional Biochemistry	24	2
GSN 614	Advanced Nutritional Biochemistry		
GSN 516	Pathophysiology	36	3
	First-Year Fall Totals	144	12

COURSE #	FIRST-YEAR WINTER	LECTURE	CREDITS
GSN 515	Nutritional Assessment	24	2
GSN 524	Medical Nutrition Therapy	36	3
GSN 526	Lifecycle Nutrition I	24	2
GSN 529	Applied Medical Nutrition Therapy	24	2
	First-Year Winter Totals	108	9

COURSE #	FIRST-YEAR SPRING	LECTURE	CREDITS
GSN 505	Healing Foods I	24	2
GSN 506	Healing Foods I Practicum	24	2
GSN 528	Health Coaching	24	2
GSN 533	Lifecycle Nutrition II	24	2
	Elective	24	2
	First-Year Spring Totals	120	10

### **MScN TWO-YEAR CURRICULUM**

COURSE #	SECOND-YEAR SUMMER	LECTURE	CREDITS
GSN 503	Farm to Table	24	2
	Electives	60	5
	First-Year Summer Totals	84	7

COURSE#	SECOND-YEAR FALL	LECTURE	CREDITS
GSN 500	Nutrition Mentorship	12	1
GSN 517	Psychology of Eating	24	2
GSN 532	Nutrition Internship	24	2
GSN 534	Cultural Humility and Food Justice	24	2
	Elective	24	2
	Second-Year Fall Totals	108	9

COURSE#	SECOND-YEAR WINTER	LECTURE	CREDITS
GSN 500	Nutrition Mentorship	12	1
GSN 509	Community Nutrition and Food Policy	36	3
GSN 532	Nutrition Internship	24	2
GSN 563	Business of Nutrition	24	2
	Elective	24	2
	Second-Year Winter Totals	120	10

COURSE#	SECOND-YEAR SPRING	LECTURE	CREDITS
GSN 500	Nutrition Mentorship	12	1
GSN 532	Nutrition Internship	24	2
	Electives	48	4
	Second-Year Spring Totals	84	7

TOTAL CORE CREDITS	49
TOTAL ELECTIVE CREDITS	15
TOTAL REQUIRED CREDITS	64

### MScN ELECTIVES 15 Credits Required

At least half of the 15 required elective credits for the MScN degree must be taken from courses designated as counting toward the program (listed below). The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met. NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and adequate student enrollment.

COURSE#	COURSE	LECTURE	CREDITS
GSN 501E	Seasonal Cooking – Summer	24	2
GSN 510E	Seasonal Cooking – Fall	24	2
GSN 520E	Seasonal Cooking – Winter	24	2
GSN 525E	Cultural and Traditional Diets	24	2
GSN 530E	Seasonal Cooking – Spring	24	2
GSN 538E	Cooking Pedagogy	24	2
GSN 542E	Cooking and Considering Meat and Seafood	24	2
GSN 543E	Personal Chef and Food Service	24	2
GSN 544E	Global and Ecological Food Issues	24	2
GSN 545E	Global Cuisine: Foods of the World	24	2
GSN 546E	Food Allergies and Intolerances	24	2
GSN 547E	Fad Diets	24	2
GSN 548E	Eating Disorders and Intuitive Eating	24	2
GSN 549E	Detoxification and Cleanses	24	2
GSN 551E	Therapeutic Diets	24	2
GSN 552E	Nutritional Supplements	24	2
GSN 553E	Gluten-Free Cooking	24	2
GSN 554E	Sports Nutrition	24	2
GSN 555E	Functional Nutrition	24	2
GSN 556E	Cooking with Medicinal Herbs: A Chinese Medicine Perspective	24	2
GSN 557E	Cooking with Medicinal Herbs	24	2
GSN 558E	Food as Medicine in the Community	24	2
GSN 559E	Vegan Diets	24	2
GSN 562E	Nutrition in the News	12	1
GSN 564E	Nutritional Genetics	24	2
GSN 565E	Food Anthropology	24	2
GSN 567E	Healing Foods II	24	2
GSN 568E	Healing Foods II Practicum	24	2
GSN 569E	Lifestyle and Wellness	24	2
GSN 571E	Introduction to Organic Agriculture	24	2
GSN 572E	Indian Cooking	24	2
GSN 574E	Food Relationship Coaching	24	2
GSN 577E	Nutrition Career Strategies (weekend format)	24	2
GSN 580E	Constitutional Medicine and Seasonal Dietetics	24	2
GSN 583E	Nutritional Counseling	24	2
GSN 838E	Israel Culinary and Cultural Immersion Trip	36	3

## electives

COURSE#	COURSE	LECTURE	CREDITS
BOT 530	Botanical Medicine II	24	2
BOT 610	Botanical Medicine III	36	3
BOT 701E	Cascade Mountain Herbal Intensive	24	2
BOT 703E	Living Herbal Medicine of Southern Oregon	36	3
GSGH 832E	Thailand Global Health Experience	48	4
GSMH 700E	Intro to Addictions	24	2
NOS 734E	Diabetes Management	24	2
BUS 7320, 7330, 8410, 8420, 8430	Business Seminar I-V Series	48	4
RES 501	Journal Club	12	1
RES 502	Principles of Epidemiology	36	3
RES 510	Intro to Integrative Medicine	24	2
RES 530	Research Methodology	36	3
RES 531	Integrative Medicine Research Seminar	24	2
RES 538E	Teaching Strategies and Course Development	24	2
RES 610	Technical Writing	24	2
RES 611E	Grant Writing	24	2
RES 622E	Botanicals: Bench to Bedside	24	2
RES 623E	Mind as Medicine: Mind-Body Therapies	24	2
RES 624E	Psychology and Behavior Change	24	2
RES 702	Immunology	36	3
RES 802E	Health Disparities Research	24	2
RES 833E	Gut Immunology	24	2



### **Master of Science in Sports Medicine**

The Master of Science in Sports Medicine (MScSM) degree program is designed for students who want to apply integrative medicine principles to the care and support of athletes and active individuals. The curriculum is as focused on injury prevention, health promotion, lifestyle

change and nutrition as it is on acute care and rehabilitation. The MScSM degree program takes a whole-systems approach to sports medicine. Students are trained to make holistic recommendations that encourage

The mission of the sports medicine program is to prepare clinical fitness professionals to apply a whole-systems approach to injury prevention and rehabilitation, to support the achievement of personal goals, and promote overall health and wellness.

appropriate nutritional support, accommodate personal health challenges, and support the client's goals and values. Core courses provide concrete knowledge/skills in anatomy and physiology, pathophysiology, nutrition,

injury prevention and rehabilitation, program design, and client consultation. Practical experience in athletic training, athletic rehabilitation, and clinical sports medicine reinforce skills learned in didactic courses. Graduates of the program are equipped to design exercise

programs that prevent injury, promote overall health and wellness, and can be tailored to special populations. At its essence, this well-rounded program allows sports medicine professionals to acquire a more complete toolbox with which to address clients. In addition, the program's emphasis on

evidence-based medicine provides graduates the resource skills to seek and gain more knowledge after the degree is completed.



### **Program Tracks**

### One Year

Students looking for an accelerated standalone program may complete the degree in 12 months. Students take approximately 16 credits per quarter.

### Twenty-One Month

This is the standard program track, regularly paced standalone program. Students take approximately 10 credits per quarter.

### **Four Year**

Developed for students in the naturopathic or Chinese medicine programs. Students take an additional 2-4 credits per quarter in addition to their clinical degree courses.

### **Professional Track**

Evening and weekend program designed for working clinicians. Program length is variable—dependent on individual timing.

### **Program Outcomes and Competencies**

The Master of Science in Sports Medicine program trains students in master's level, evidence-based sports medicine by offering courses that cater to multiple career paths, and specific tracks that prepare students to sit for several external certification exams.

Students in the MScSM program will be prepared to meet the following program outcomes and competencies:

- Biomedical Science: Apply the science of sports medicine to the care and support of athletes and active individuals.
  - a. Explain human anatomy, physiological mechanisms and pathophysiology
  - b. Demonstrate orthopedic and rehabilitation diagnostic and treatment techniques, including examination, palpation and gait analysis
  - c. Detail nutrition needs for sports performance, including the role of macro- and micronutrients
- **2. Skills Expertise:** Develop the tools necessary to effectively apply sports medicine techniques in a clinical setting.
  - a. Illustrate mastery of the principles of athletic training theory and technique
  - b. Identify key components of a comprehensive plan for injury prevention and rehabilitation
  - c. Perform nutritional assessments and facilitate dietary changes associated with optimizing health



- d. Demonstrate appropriate techniques for emergency sports-related injuries
- e. Utilize sports psychology theory and technique
- **3. Ethics:** Apply professional, ethical and legal standards within the scope of one's professional practice.
  - a. Behave professionally in a manner that is empathic, ethical and culturally aware
  - b. Understand one's professional role within the context of the sports and medical communities
  - c. Identify the scope of one's practice within the laws of their state
- **4. Personal and Professional Growth:** Cultivate an ongoing practice of professional development that promotes a career in a continually evolving profession.
  - a. Locate and critically evaluate peer-reviewed research literature for lifelong learning
  - b. Identify resources for varied environments and cultures
  - c. Effectively communicate with healthcare practitioners, the scientific community and the general public

### **MScSM Course Descriptions**

### Core Curriculum

GSSM 511 – Introduction to Sports Medicine:
An Integrative and Natural Medicine Approach (2 credits)

Based on a foundation of integrative and natural medicine, this course focuses on the phenomenon of sports and the role of fitness personnel in injury prevention, health promotion and emotional well-being; rehabilitation in the care of physically active individuals; and includes principles of medical terminology, assessment and program planning, outcome evaluation, and documentation.



### GSSM 512 - Exercise Pathophysiology I (2 credits)

This course addresses fundamental concepts of exercise pathophysiology, including etiology, signs, symptoms, diagnosis, treatment and complications of major body system disorders based on the body structures and body function limitations involved.

### GSSM 513 - Athletic Training I and On-Field First Aid (3 credits)

This course focuses on the basics of athletic training theory and technique for the enhancement of physical fitness and sports performance. It also explores recreational and competitive sports environments and teaches basic level life-support techniques, including CPR, rescue breathing, and care of a choking victim in conjunction with first aid techniques. Students will learn how to use medical devices such as splints. They will also learn how to splint, control bleeding, and help clients with ambulation. This course satisfies the requirements for American Red Cross Professional Rescuer Certification (course fee will be assessed).

### GSSM 514 - Anatomy and Physiology (2 credits)

This course takes a systems approach to gross and microscopic anatomy, physiology, and internal organ, endocrine and central nervous systems. It provides basic descriptions and functions of the body, with emphasis on how biological outcomes are collected to measure function of different organs.

### GSSM 521 - Sports Nutrition I (2 credits)

This course involves the study of proper nutrition for exercise and training related to sports performance, the role of macro- and micronutrients on the physiological processes of the body, and the importance of nutrient

timing. Dehydration, classic carbohydrate loading, protein needs, ergogenic aids, and issues related to positive and negative caloric balance with respect to weight management and body composition are addressed.

### GSSM 522 - Exercise Pathophysiology II (2 credits)

This course advances the knowledge and understanding of exercise pathophysiology concepts. State-of-the-art research in the field is identified, explored and applied.

### GSSM 523 - Injury Prevention (2 credits)

This course introduces techniques related to the prevention of athletic injuries as a component of physical fitness. This includes the appropriate use of equipment and protective devices, effective athletic taping prior to participation or competition, and strength and conditioning programs.

### GSSM 524 – Clinical Orthopedics I: Upper Extremities (4 credits)

Orthopedic and rehabilitation examination/palpation, and diagnostic and treatment techniques of the upper extremities is demonstrated and practiced in a hands-on wet lab. Actual clinical cases are used to illustrate conditions and treatment options for common sports medicine injuries. Where possible, evidence-based guidelines for use of advanced treatment options is provided.

### GSSM 531 - Clinical Orthopedics II: Lower Extremities (4 credits)

Orthopedic and rehabilitation examination/palpation, gait analysis, and diagnostic and treatment techniques of the lower extremities is demonstrated and practiced in a hands-on wet lab. Actual clinical cases are used to illustrate conditions and treatment options for common sports medicine injuries. Where possible, evidence-based guidelines for use of advanced treatment options is provided.

### GSSM 532 - Injury Rehabilitation and Treatment (5 credits)

This course focuses on the basic principles of rehabilitation and therapeutic exercise based on a theoretical foundation in the treatment of musculoskeletal injuries sustained by physically active individuals. Classroom and laboratory instruction guide the acquisition of skills in performing manual therapy techniques, nutritional counseling, and therapeutic exercises that benefit physical fitness and enhance emotional well-being.

### GSSM 601 – Evidence-Based Sports Medicine (1 credit)

This course is designed to build research literacy skills. In order to become successful holistic practitioners, students must learn to read and critically evaluate medical literature and to weigh this evidence with clinical experience and patient values when making clinical decisions. The volume and complexity of medical literature can feel overwhelming. However, with practice students will be able to quickly locate medical literature and evaluate the strengths and weaknesses of studies they need to support their clinical practice. This course introduces students to this process with an emphasis on sports medicine literature.

### GSSM 602 - Emergency Sports Medicine (2 credits)

Countless numbers of people engage is sports of all kinds, and in this class students learn to deal with traumatic injuries that result from sports-related accidents. Stabilizing acute injuries to the head and neck is a key component in this course, as is learning how to promote the emotional stability and well-being of the athlete during a crisis situation. A review of CPR and use of an automated external defibrillator (AED) are also included in the curriculum of this course.

### GSSM 603 - Business and Legal Issues (2 credits)

This course offers a comprehensive discussion of the pragmatic approach to conducting a sports medicine business or working within the recreational or competitive fitness industry, or any aspect of the landscape that makes up the phenomenon of sport. The course focuses on key elements within the business structure, including marketing, facility and personnel management, budgeting and finances, and accounting. Additionally, students will identify key partners in running a successful business. Further, critical knowledge related to legal topics is covered, e.g., litigation issues and circumstances, professional client-personal trainer relationships and confidentiality, necessary documentation, and insurance.

### GSSM 611 - Sports Medicine Clinical Observation (2 credits)

Observation is a valuable learning experience in clinical settings. Students in this course will observe practitioners who practice sports medicine. They will have the goal of identifying positive characteristics of the practitioner, identifying key components of successful practitioner/patient interactions, developing questions about diagnoses

and therapies, and mimicking appropriate behaviors in role-playing exercises.

### GSSM 621 - Sports Nutrition II (2 credits)

Building upon the content of Sports Nutrition I, this course is a more advanced and in-depth study of the nutritional concerns of today's recreational and competitive athlete, with an increased focus on the role and proper use of food supplements. State-of-the-art research in the field is identified, explored and applied.

### GSSM 622 - Client Consultation and Counseling (2 credits)

Within the umbrella of the phenomenon that is sports, this course includes a comprehensive overview and integration of the major theoretical perspectives on the counseling process, with an emphasis on emotional well-being, multiculturalism, disability, gender, language, and other diversity issues within a pluralistic society as it relates to sports medicine. An integration and application of major techniques employed in the counseling process will occur. Basic counseling skills are developed via *in vivo* role play, along with review and critique by the instructor. Basic models and strategies of consultation are explored from theoretical and pragmatic points of view, and applied to case material.

### GSSM 631 – Athletic Program Design: Prevention and Rehabilitation (2 credits)

This course takes a whole-systems approach to designing a sports medicine program. Students learn the skills necessary to effectively design a sports medicine program, including components of assessment, planning, implementation and evaluation, especially as it relates to physical fitness, nutrition and exercise, and emotional well-being. Analysis and understanding of the needs of potential and actual clients, design of a program that meets identified needs, and the evaluation of the effectiveness of one's program are taught.

### GSSM 632 - Sports Medicine Internship (4 credits)

Fieldwork allows students to observe and engage in the practical application of sports medicine skills. Students work onsite with a practitioner to observe how the practitioner evaluates an individual's needs and how therapeutic decisions are made. Students contribute to case discussions and may conduct therapeutic activities under the supervision of the practitioner, if appropriate.

### GSSM 633 - Sports Psychology (2 credits)

This course introduces the basic concepts and intervention techniques of sport psychology. Students learn how psychological factors impact participation, enjoyment, emotional well-being, and performance in sports and physical activity; along with increasing their understanding of how participation in sports and physical activity affects an individual's psychological characteristics.

### GSSM 699 - Capstone (1 credit)

Personal experience with implementing change is an invaluable learning tool for students who will go on to advise others. At the beginning of the program, students will identify a personal health goal (e.g., have no pain during a certain exercise, increase their running speed, etc.) and undergo an evaluation to identify paths to achieving it. Students will then set short- and long-term goals, and progress toward these goals will be reinforced throughout the program in appropriate classes through journaling or activity logs. The capstone course allows students to present their personal journey and the progress made toward achieving their goal.

### Elective Courses

At least half of the 16 required elective credits for the MScSM degree must be taken from courses designated as counting toward the program. The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met.

### SME 704E – Sports Performance: Endurance Sports (2 credits)

This course encompasses key principles and topics associated with sports performance, with a focus on the demands, needs and issues associated with endurance sports.

### SME 705E - Sports Performance: Skilled Sports (2 credits)

This course focuses on the key principles and topics associated with sports performance, with a focus on the demands, needs and issues associated with skilled sports.

### SME 706E – Sports Performance: Weight Training (2 credits)

This course encompasses key principles and topics associated with sports performance, with a focus on the demands, needs and issues associated with weight training.

### **SME 707E – Sports Performance: Ball Games** (2 credits)

This course explores the main principles and topics associated with sports performance as it relates to ball games and the unique needs, interests and issues of its participants.

### SME 708E – Sports Performance: Aesthetic Sports (2 credits)

This course encompasses key principles and topics associated with sports performance, with a focus on the demands, needs and issues associated with aesthetic sports.

### SME 712E – Special Populations: Aging Athletes (2 credits)

This course encompasses key principles and topics associated with aging athletes, focusing on their unique needs, interests and issues.

### SME 713E - Special Populations: Female Athletes (2 credits)

This course encompasses key principles and topics associated with female athletes, focusing on their unique needs, interests and issues.

### SME 714E – Special Populations: Pediatric and Adolescent Athletes (2 credits)

This course encompasses key principles and topics associated with child and adolescent athletes, focusing on their unique needs, interests and issues.

### SME 715E - Special Populations: Elite Athletes (2 credits)

This course covers key principles and topics associated with elite athletes, focusing on their unique needs, interests and issues.

### SME 716E – Special Populations: Athletes and Chronic Disease Management (2 credits)

This course encompasses key principles and topics associated with recreational and competitive athletes, wherein chronic disease may create unique needs, interests and issues. More specifically, students are trained to work with people who have a chronic physical, sensory or cognitive disability, and who may have been referred by, or is currently under the care of, a physician or healthcare professional. Skills pertaining to how to lead and demonstrate safe, effective and adapted methods of exercise are taught, as well as how to understand precautions and contraindications to exercise for people with disabilities. In addition, awareness of current ADA policies for recreation facilities and athlete training centers is taught.

### SME 717E – Special Populations: Athletes and Cancer (2 credits)

This course explores the experience and issues associated with athletes who have, or are experiencing, any facet of cancer diagnosis, treatment or recovery. More specifically, students are taught to utilize a basic understanding of cancer diagnoses, surgeries, treatments, symptoms and side effects. They also learn how to assess cancer patients for exercise readiness, develop individualized exercise programs, and train cancer survivors. Students learn to perform appropriate fitness assessments and make exercise recommendations for clients who have been cleared by their physician for independent physical activity.

### SME 720E – Psychology and Behavior Change (2 credits)

Since implementing a fitness plan or rehabilitation strategy involves behavioral modification, it is important to understand how psychology influences successful behavior modification. This course reviews literature of some of the landmark papers in health behavior research to introduce how we understand the psychology of behavioral modification. Students learn how to employ behavior change strategies to help with client compliance, and assist with clients making behavioral changes. Students will experience a behavioral intervention and become familiar with applied psychology outcome measures.

### SME 721E - Fieldwork or Internship (2 credits)

Fieldwork allows students to observe and engage in the practical application of sports medicine skills. Students work onsite with a practitioner to observe how the

practitioner evaluates an individual's needs and how therapeutic decisions are made. Students contribute to case discussions and may conduct therapeutic activities under the supervision of the practitioner, if appropriate.

### SME 722E - Acupuncture for Athletes (2 credits)

This course encompasses an integration of traditional Chinese medicine (acupuncture) with Western orthopedics and sports medicine. Fusing information from the East and West and utilizing ancient wisdom and modern science, treatment approaches include a combination of acupuncture, massage, stretching and exercise for both the elite athlete and weekend warriors of all sports. *Prerequisite: CM 634 Acu-Moxa Techniques VI* 

### SME 723E - Yoga: Science and Practice (2 credits)

This course is an interdisciplinary approach bringing together the science and practice of yoga. Concentrating on the biomechanical principles of alignment that support the body moving with strength, ease and freedom, asana is explored at a moderate pace with a goal of building strength and flexibility. Yogic philosophy and teachings are integrated through every class session to offer grounding and sense of purpose to the practice. Breath awareness and practices coupled with frequent meditation help reinforce necessary knowledge and a well-balanced practice as an important component within any sports medicine paradigm. There is also a focus on the art of the healing power of yoga based on psychological understanding of how to work toward emotional wellness (for those challenged by depression, anxiety, trauma, or chronic disease management issues).

### SME 724E - Global Sports Medicine (2 credits)

This course is an exploration of how sports medicine is conceptualized and practiced outside the United States and throughout the world.

### SME 725E – Introduction to Recreational Therapy (2 credits)

This class provides an overview of the foundations of practice and theory, along with the evolution of the recreational therapy (RT) profession as a discipline and practice dedicated to the therapeutic use of exercise, recreation, leisure and play. Students become familiar with RT service delivery models and practice settings, and how the significance of exercise, recreation, leisure and play as vehicles to health promotion and wellness co-exist naturally with complementary and integrative medicine.

### SME 726E – Personal Trainer and Exercise Therapeutics (2 credits)

This course introduces students to the role and responsibilities of being a personal trainer, and the theory and techniques behind exercise therapeutics. Students learn how to work with healthy individuals or those with medical clearance in the performance of basic fitness assessments and field tests, and give the recommendation of an appropriate exercise program.



### SME 727E – Athletic Training II (2 credits)

This course is an advanced exploration into the discipline of athletic training. More complex and detailed knowledge pertaining to the recognition and prevention of athletic injuries is taught. Students are expected to master components such as taping skills, use of training and injury prevention devices, familiarization with typical community and university agencies, and common policies and procedures used in the clinic/athletic training room.

### SME 728E – Personal Equipment (2 credits)

This course focuses entirely on the range and scope of personal equipment that is available to the recreational or competitive athlete when either preparing for, or engaging in, formal event participation.

### SME 729E - Banned Substances and Doping (2 credits)

This course covers the history of, and motivation behind, doping in professional sports; and the performance effects and adverse physiological effects of doping agents. Students learn about regulations surrounding the use of banned substances by professional athletes and the evolution of testing methods used to detect doping.

### MScSM ONE-YEAR CURRICULUM

# sports medicine

COURSE#	FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 511	Introduction to Sports Medicine: An Integrative and Natural Medicine Approach			24	24	2
GSSM 512	Exercise Pathophysiology I			24	24	2
GSSM 513	Athletic Training I and On-Field First Aid		48	12	60	3
GSSM 514	Anatomy and Physiology			24	24	2
GSSM 521	Sports Nutrition I			24	24	2
GSSM 524	Clinical Orthopedics I: Upper Extremities		48	24	72	4
	Elective				24	2
	Fall Totals	0	96	132	252	17

COURSE#	WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 521	Sports Nutrition II			24	24	2
GSSM 522	Exercise Pathophysiology II			24	24	2
GSSM 523	Injury Prevention		24	12	36	2
GSSM 531	Clinical Orthopedics II: Lower Extremities		48	24	72	4
GSSM 611	Sports Medicine Clinical Observation	48			48	2
GSSM 622	Client Consultation and Counseling			24	24	2
	Elective				24	2
	Winter Totals	48	72	108	252	16

COURSE#	SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 532	Injury Rehabilitation and Treatment		48	36	84	5
GSSM 631	Athletic Program Design: Prevention and Rehabilitation			24	24	2
GSSM 632	Sports Medicine Internship	96			96	4
GSSM 633	Sports Psychology			24	24	2
	Electives				48	4
	Spring Totals	96	48	84	276	17

COURSE#	SUMMER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 601	Evidence-Based Sports Medicine			12	12	1
GSSM 602	Emergency Sports Medicine		24	12	36	2
GSSM 603	Business and Legal Issues			24	24	2
GSSM 699	Capstone		24		24	1
	Electives				96	8
	Summer Totals	0	48	48	192	14

TOTAL CORE CREDITS	48
TOTAL ELECTIVE CREDITS	16
TOTAL REQUIRED CREDITS	64

### MScSM TWENTY-ONE MONTH CURRICULUM

**FIRST-YEAR TOTALS** 

### first year

COURSE#	FIRST-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 511	Introduction to Sports Medicine: An Integrative and Natural Medicine Approach			24	24	2
GSSM 512	Exercise Pathophysiology I			24	24	2
GSSM 513	Athletic Training I and On-Field First Aid		48	12	60	3
GSSM 514	Anatomy and Physiology			24	24	2
	First-Year Fall Totals	0	48	84	132	9
			,			
COURSE#	FIRST-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 521	Sports Nutrition I			24	24	2
GSSM 522	Exercise Pathophysiology II			24	24	2
GSSM 523	Injury Prevention		24	12	36	2
GSSM 524	Clinical Orthopedics I: Upper Extremities		48	24	72	4
	First-Year Winter Totals	0	72	84	156	10
COURSE#	FIRST-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 531	Clinical Orthopedics II: Lower Extremities		48	24	72	4
GSSM 532	Injury Rehabilitation and Treatment		48	36	84	5
	First-Year Spring Totals	0	96	60	156	9

216

228

28

### MScSM TWENTY-ONE MONTH CURRICULUM

## second year

COURSE#	SECOND-YEAR SUMMER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 601	Evidence-Based Sports Medicine			12	12	1
GSSM 602	Emergency Sports Medicine		24	12	36	2
GSSM 603	Business and Legal Issues			24	24	2
	Electives				48	4
	Second-Year Summer Totals	0	24	48	120	9
COURSE #	SECOND-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 611	Sports Medicine Clinical Observation	48			48	2
	Electives				72	6
	Second-Year Fall Totals	48	0	0	120	8
COURSE #	SECOND-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 621	Sports Nutrition II			24	24	2
GSSM 622	Client Consultation and Counseling			24	24	2
	Electives				72	6
	Second-Year Winter Totals	0	0	48	120	10
COURSE #	SECOND-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 631	Athletic Program Design: Prevention and Rehabilitation			24	24	2
GSSM 632	Sports Medicine Internship	96			96	4
GSSM 633	Sports Psychology			24	24	2
GSSM 699	Capstone		24		24	1
	Second-Year Spring Totals	96	24	48	168	9
	SECOND-YEAR TOTALS	144	48	144	528	36
	TOTAL CORE CREDITS					48
	TOTAL ELECTIVE CREDITS					16
	TOTAL REQUIRED CREDITS					64

# first and second year

### MScSM FOUR-YEAR CLINICAL CURRICULUM

COURSE#	FIRST-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 511	Introduction to Sports Medicine: An Integrative and Natural Medicine Approach			24	24	2
GSSM 521	Sports Nutrition I			24	24	2
COURSE#	FIRST-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 621	Sports Nutrition II			24	24	2
COURSE #	FIRST-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 633	Sports Psychology		24	12	36	2
COURSE #	FIRST-YEAR SUMMER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 513	Athletic Training I and On-Field First Aid		48	12	60	3
	Elective*				24	2
	FIRST-YEAR TOTALS	0	72	96	192	13
COURSE#	SECOND-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 512	Exercise Pathophysiology I			24	24	2
COURSE#	SECOND-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 522	Exercise Pathophysiology II			24	24	2
COURSE#	SECOND-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 532	Injury Rehabilitation and Treatment		48	36	84	5
COURSE #	SECOND-YEAR SUMMER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
	Optional elective*					
	SECOND-YEAR TOTALS	0	48	84	132	9

<sup>\*</sup> Elective in first-year summer can be taken in either first or second year

### MScSM FOUR-YEAR CLINICAL CURRICULUM

# third and fourth year

COURSE#	THIRD-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 524	Clinical Orthopedics I: Upper Extremities		48	24	72	4
COURSE #	THIRD-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 531	Clinical Orthopedics II: Lower Extremities		48	24	72	4
COURSE #	THIRD-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 631	Athletic Program Design: Prevention and Rehabilitation			24	24	2
COURSE #	THIRD-YEAR SUMMER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 601	Evidence-Based Sports Medicine			12	12	1
GSSM 602	Emergency Sports Medicine		24	12	36	2
GSSM 603	Business and Legal Issues			24	24	2
	THIRD-YEAR TOTALS	0	120	120	240	15
COURSE#	FOURTH-YEAR FALL	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 611	Sports Medicine Clinical Observation	48			48	2
COURSE#	FOURTH-YEAR WINTER	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 523	Injury Prevention		24	12	36	2
COURSE #	FOURTH-YEAR SPRING	CLINIC	LAB	LECTURE	TOTAL HOURS	CREDITS
GSSM 632	Sports Medicine Internship	96			96	4
GSSM 699	Capstone		24		24	1
	FOURTH-YEAR TOTALS	144	48	12	204	9
	TOTAL CORE CREDITS					48
	TOTAL ELECTIVE CREDITS					16
	TOTAL REQUIRED CREDITS					54*

<sup>\*</sup>Due to credits transfer. Classes that transfer: Anatomy and Physiology; Client Consultation and Counseling

### MScSM ELECTIVES 16 Credits Required

At least half of the 16 required elective credits for the MScSM degree must be taken from courses designated as counting toward the program (listed below). The remainder may come from any approved graduate-level elective course offered at NUNM, as long as course prerequisites are met. NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and adequate student enrollment.

COURSE#	COURSE	LECTURE	CREDITS
SME 704E	Sports Performance: Endurance Sports	24	2
SME 705E	Sports Performance: Skilled Sports	24	2
SME 706E	Sports Performance: Weight Training	24	2
SME 707E	Sports Performance: Ball Games	24	2
SME 708E	Sports Performance: Aesthetic Sports	24	2
SME 712E	Special Populations: Aging Athletes	24	2
SME 713E	Special Populations: Female Athletes	24	2
SME 714E	Special Populations: Pediatric and Adolescent Athletes	24	2
SME 715E	Special Populations: Elite Athletes	24	2
SME 716E	Special Populations: Athletes and Chronic Disease Management	24	2
SME 717E	Special Populations: Athletes and Cancer	24	2
SME 720E	Psychology and Behavior Change	24	2
SME 721E	Fieldwork or Internship	24	2
SME 722E	Acupuncture for Athletes	24	2
SME 723E	Yoga: Science and Practice	24	2
SME 724E	Global Sports Medicine	24	2
SME 725E	Introduction to Recreational Therapy	24	2
SME 726E	Personal Trainer and Exercise Therapeutics	24	2
SME 727E	Athletic Training II	24	2
SME 728E	Personal Equipment	24	2
SME 729E	Banned Substances and Doping	24	2

### **Ayurveda Courses**

Ayurveda is one of the oldest and most widely practiced medical systems in the world. Originating in India, Ayurveda offers a whole-systems approach to prevention and treatment of disease states, as well as health preservation. Students who take courses in Ayurveda are able to address health care from an integrative perspective, using a variety of modalities, including counseling, mind-body medicine (including yoga and Ayurvedic massage), botanical medicine, nutraceuticals, diet, lifestyle, and detoxification/rejuvenation therapies. Students are trained to make holistic recommendations that not only encompass disease prevention and treatments, but also enhance and preserve physical, psychological, intellectual and spiritual health. As applicable, students will understand their scope of practice and distinct role as a member of an integrated, multidisciplinary team, and all graduates will be prepared to offer the highest quality integrative care. Many Ayurveda courses count for elective credit for naturopathic medicine, Chinese medicine or graduate programs.

### GSA 504E – Ayurvedic Sanskrit: Vocabulary of Ayurveda (2 credits)

This course is an overview of basic grammar in the context of Ayurveda, covering Sanskrit alphabets from the Devanagari script. It covers the derivation, etymology, definition, meaning and similarity in pronunciation of frequently used selected Ayurvedic words, verses and passages. Note: This course does not include study of Sanskrit as a second or spoken language, or the study of Ayurvedic classical texts.

### GSA 525E – Ayurvedic Tongue and Pulse Evaluation I (2 credits)

Ayurveda emphasizes the importance of determining a root cause in order to appropriately address an individual's balance of doshas (Ayurvedic bio-energies). Evaluative methods are fundamental to making that determination. This course examines Ayurvedic physical evaluation with a focus on tongue and pulse examination. Instruction, demonstration and practice are included.

### GSA 541E - Tridosha (2 credits)

This course methodically explains Tridosha: Vata, Pitta and Kapha (also known as "bio-energies" in the Ayurvedic tradition). Tridosha is the fundamental concept of Ayurveda. The course provides a detailed explanation of the role of each of the Tridoshas in the context of health and management of health, and illustrates the relation of Tridosha with the formation, progression and treatment of disease. The relationship of Tridosha with food, digestion, formation of body type, age, time of day, seasons, emotions, and spiritual aspects is also emphasized.

### GSA 542E - Ayurvedic Dietetics (2 credits)

This course explains the fundamental principles of Ayurvedic nutrition, such as the Ayurvedic perspective of the digestive system, the relationship of Tridosha with digestion and food, and the importance, art and power of mindful eating. The Ayurvedic classification of foods, preventive nutrition, therapeutic diets, methods of cooking, and the effect of food on the mind, body and spirit is also explored. The course provides hands-on experience with Ayurvedic cooking and nutrition counseling.





#### GSA 544E - Ayurvedic Yoga I (2 credits)

This course examines the philosophy and significance of yoga within the context of Ayurveda. Ayurvedic yoga is a modality for promoting health, wellness and the prevention of disease. Yogic postures for specific body types and conditions is taught through instruction and practice. Selected practices are explored, including asanas, mantras, mudras, bandhas, breathing techniques and meditation.

#### GSA 545E - Philosophy of Ayurveda (2 credits)

This course provides an overview of the Ayurvedic medical system, including views on health and disease, Ayurvedic treatments, and the mission of Ayurvedic practice and practitioners. The holistic approach of Ayurveda considers the role of spirituality, the mind and emotions in health and disease. This course covers Ayurveda's central philosophical concepts, including Pancha-mahabhoota (five basic elements), the theory of Tridosha (three functional bio-energies), Manas prakriti (constitution based on the doshas of mind), seasonal lifestyle and nutrition, and the three pillars holding life and health. An introduction to Dhatu (body tissue), Malas (body wastes), Gunas (universal qualities of matter), Agni (transformation), tastes and the digestive process are also covered.

#### GSA 546E – Ayurvedic Aesthetics (2 credits)

This course explores the Ayurvedic philosophy and approach to aesthetics. Techniques and concepts for optimizing dermatological health, including the skin, hair and nails, are covered. Students learn about Tridosha (the three body types), dosha-specific personal care, Dincharya (Ayurvedic diurnal and nocturnal regimens), Dhatu (body tissues), the use of herbs and herbal preparations, and beauty products and the role of mind and spirit as it relates to Ayurvedic aesthetics.

#### GSA 547E - History of Ayurveda (2 credits)

This course studies the rich history and evolution of the ancient science of Ayurveda. The course examines Ayurveda as the part of Atharvaveda and its various traditional schools. The impact of the prevailing six philosophies ('shad darshana') on the cosmology of Ayurveda is examined. An overview will show how Ayurveda spread in the West, and the subsequent globalization of Ayurveda. Students learn the national and international popular journals, as well as various activities of the World Health Organization (WHO) and other organizations for promotion of Ayurveda. Finally, how Ayurveda fits into career opportunities with respect to research, scope of work, and opportunities is discussed.

#### GSA 548E - Ayurvedic Yoga II (2 credits)

This course examines the philosophy and significance of the eight limbs of yoga within the context of Ayurveda, as well as yogic postures for specific conditions and diseases. Students explore Ayurvedic logic in the integration of yogic concepts, practices of therapeutic asana, mudra, bandha, breathing techniques, instructions and practice. Meditation types for specific symptoms and conditions with the information of indications and contraindications is also covered.

#### GSA 560E - Clinical Observation I & II (1.5 credits each)

Clinical observations provide students with the opportunity to witness licensed practitioners with experience in Ayurveda as they engage in clinical practice. Students observe clinic policies and procedures, doctor/patient relationships, diagnosis and treatment, as well as referral management.

# **AYURVEDA COURSES**

# ayurveda

COURSE#	COURSE	LECTURE	CREDITS
GSA 504E	Ayurvedic Sanskrit: Vocabulary of Ayurveda	24	2
GSA 525E	Ayurvedic Tongue and Pulse Evaluation I	24	2
GSA 541E	Tridosha	24	2
GSA 542E	Ayurvedic Dietetics	24	2
GSA 544E	Ayurvedic Yoga I	24	2
GSA 545E	Philosophy of Ayurveda	24	2
GSA 546E	Ayurvedic Aesthetics	24	2
GSA 547E	History of Ayurveda	24	2
GSA 548E	Ayurvedic Yoga II	24	2
GSA 560E	Clinical Observation I & II	24	2

# **School of Undergraduate & Part-Time Studies**

# Undergraduate and Part-Time Studies at NUNM

NUNM offers two Bachelor of Science degrees—one in integrative health sciences and one in nutrition, in which students complete the final two years of their degree. We are one of very few universities in the country to offer undergraduate programs in the integrative health sciences fields.

Employers and graduate schools are seeking well-rounded candidates with interpersonal skills, such as teamwork,

communication and intercultural competency, as well as academic preparation in the natural sciences, such as organic chemistry, biochemistry, physics and more. Toward that end, we have designed an integrated curriculum featuring four core threads for each program: integrative health sciences or nutrition, natural sciences, social sciences and critical thinking. The capstone course gives students an opportunity to pursue an exciting research project or internship in an area that interests them the most. The capstone also serves as a steppingstone toward the next phase in a student's career—whether that's employment or advanced study.

# **Bachelor of Science in Integrative Health Sciences**

The Bachelor of Science in Integrative Health Sciences (BSiHS) program features four core threads: integrative health sciences, natural sciences, social sciences and critical thinking. The integrative health sciences thread focuses on topics such as prevention and wellness, exercise science, mind-body medicine, nutrition and botanical medicine.

Students take traditional pre-health/pre-med classes in the natural sciences thread, such as anatomy and physiology with dissection lab, organic chemistry, biochemistry and physics. These provide the scientific foundation for an understanding of the human body and the basic principles of health and disease. Throughout this sequence, students also learn the foundations of research, and scientific and professional communication.

The social sciences theme focuses on the interpersonal and professional growth of the student. There is a strong focus on the development of cultural competency skills, ethical decision-making, writing, self-reflection and self-management.

An important role in clinical and scientific decisionmaking is the ability to critically evaluate information. Woven throughout the BSiHS program is a critical thinking thread, in which students learn to interpret data and make an informed assessment using logic and evidence. Specific courses in evidence-based practice and critical thinking further the development of these essential skills.

Students can choose from a variety of electives to gain deeper knowledge in a topic of interest. Select classes from NUNM's graduate degree programs may also be available for elective credit.

#### **Program Outcomes**

#### 1. Integrative Health Sciences

Articulate concepts and demonstrate skills related to integrative health sciences. Develop an appreciation for traditional healing methods backed by scientific study and research evidence.

#### 2. Ethics, Responsibility and Social Maturity

Make reasoned decisions based on an ethical framework and a respect for diversity. Exhibit cultural humility and maturity. Display accountability for your choices, behaviors and actions. Demonstrate mature social skills required in the healing professions, such as compassion and understanding.

#### 3. Communication and Teamwork

Practice professional communication and work productively, both independently and as part of a team. Effectively communicate using verbal, nonverbal and written skills.

#### 4. Research and Information Literacy

Demonstrate comprehension and skill with research methods and scientific inquiry. Use appropriate information technologies to conduct and communicate about research topics and questions, and to access, evaluate and manage information to meet academic, personal and professional needs.

#### 5. Career Preparation

Develop a career plan based on personal and professional strengths. Demonstrate career readiness skills, such as the ability to apply classroom learning to real world scenarios. Implement critical thinking skills to make decisions in new situations.

#### **BSiHS Course Descriptions**

#### Core Curriculum

#### IM 311 – Introduction to Integrative Medicine (3 lecture credits)

This course introduces a variety of integrative medical modalities. Students explore the history, philosophy and major concepts of botanical medicine, clinical nutrition, mind-body medicine, health psychology and more. Major medical systems of the world are also covered, such as naturopathic medicine, Chinese medicine, osteopathy, Ayurvedic medicine and energy healing systems.

#### IM 321 – Critical Thinking for Pre-Health Professionals (3 lecture credits)

Critical thinking is the use of reasoning in determining what's true and what's false. Health professionals must employ critical thinking when learning, integrating, evaluating and applying new thoughts, ideas or principles to clinical practice. This course focuses on: productive reasoning skills, evaluating and assessing logical and illogical reasoning skills, and understanding logical fallacies and what role they play in constructing and destructing arguments. One of the main goals of this class is to help students recognize, and have self-awareness of, their own biases and when they may be more prone to employing logically fallacious thought processes.

#### IM 331 – Exercise Science (3 lecture credits)

This course covers the research behind the value of exercise in the promotion of wellness and prevention of disease. Topics include the physiological, mechanical and psychological mechanisms of movement; strength and conditioning; sports psychology; and methods of rehabilitation. Students commit to a form of exercise for the duration of this course and journal about their experience.

#### IM 411 — Health Psychology and Mind-Body Medicine (3 lecture credits)

This course explores the link between mind and body from social, clinical and psychobiological perspectives. The role of stress, emotion, self-regulation, and individual differences as predictors of health and illness are addressed.

#### IM 421 – Careers in Integrative Medicine: Who Are You and What Do You Want to Do? (2 lecture credits)

Experts suggest that many students completing their education today will find themselves in careers that did not exist 10 years ago. Identifying a career in integrative health sciences that fits talents and skills, as well as interests, is not always straightforward. This interactive course equips students with career planning skills that they can use immediately or in the future. Prerequisite: completion of 50 credits in the BSiHS program

#### IM 422 – Introduction to Botanical Medicine

(3 lecture credits and 1 lab credit)

Many plant substances are powerful medicines. This course explains the traditional, historical and scientific uses of plants. Traditional herbal medicine is contrasted with modern pharmacological uses. Plant identification, ethical harvesting, drying techniques, and medicinal plant chemistry are thoroughly explored. Students also learn how to prepare herbal tinctures, salves, oils and other therapeutic preparations.

#### IM 431 – Integrative Health Sciences Capstone (3 lecture credits)

One of the definitions of the word "capstone" is a crowning achievement. This course is meant to provide students an opportunity to perform a final research or community/service project that they consider the crowning achievement of their integrative health sciences program. Students are expected to draw from their BSiHS coursework, personal experience, and research or community/service work conducted outside the classroom. Students receive mentorship and peer support throughout the term. At the end of the term, students will complete a paper and/or compile their program portfolio, and/or some other, equivalent project (to be approved by the dean), and present a 10-minute oral presentation to their peers. If students choose a paper or approved equivalent project, they can be collaborative with up to four other students (five total), but each student must contribute an individual section of the paper and each section must adhere to the capstone rubric. The same is true for the presentations. Prerequisite: completion of a minimum of 75 credits in the BSiHS program, including IM 421

#### MT 411 – Analytical Business Development (2 lecture credits)

An activity-based approach to solving practical math problems that develops measurement skills and mathematical literacy. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; and financial literacy.

#### NS 311 - Anatomy and Physiology (4 lecture credits and 1 lab credit)

An introduction to the structure and function of the human body from a whole-systems perspective. The integumentary, musculoskeletal, nervous, cardiovascular, lymphatic, respiratory, digestive, urogenital, immune and endocrine systems are covered. The concepts of development, metabolism, fluid and electrolyte balance, and acid-base balance are also explored. The lab component includes participation in cadaver dissection as an aid to learning the interrelationships of the parts of the human body.



#### NS 321 - Genetics (4 lecture credits)

An introduction to the application of basic genetic principles to the study of human health and disease. Topics include Mendelian genetics, cytogenetics, population genetics, molecular cytogenetics, oncocytogenetics and clinical applications of principles. The importance and implication of genetic disease is also discussed.

#### NS 322 – Immunology (4 lecture credits)

An introduction to the principles of immunology, including: development of the immune system; cells and organs of the immune system; the immune system in health and disease; and infectious organisms, allergies and more.

#### NS 331 – Organic Chemistry with Lab

(4 lecture credits and 2 lab credits)

An introduction to the molecular basis of living processes in bacteria, plants and humans. This course provides a foundation in the chemistry of carbon-containing compounds, including three-dimensional structures; chemical properties; and methods of structural identification, reactions and syntheses. Students also learn about the organic chemistry of specific pharmaceuticals and detoxification pathways.

#### NS 401 – Biochemistry for Life Sciences (4 lecture credits)

This course covers the structure, function and metabolism of biomolecules—especially proteins, carbohydrates, lipids and steroids. Nucleic acids and important accessory molecules (cofactors and metal ions) are covered, as well as enzyme kinetics and mechanisms, thermodynamics and metabolism.

#### NS 411 – Biostatistics for Pre-Health Majors (3 lecture credits)

Topics include the collection, classification and presentation of descriptive data; the rationale of estimation and hypothesis testing; analysis of variance; analysis of contingency tables; correlation and regression analysis; multiple regression, logistic regression, and the statistical control of confounding; sample size and power considerations; and survival analysis.

# NS 412 – Scientific and Professional Communication (3 lecture credits)

Learn the essential knowledge and skills for effective scientific and professional communication in scientific writing, poster design and oral presentations. The fundamentals of business communication are covered, including letter writing, email etiquette and social media ethics.

# NS 421 – Evidence-Based Practice for Pre-Health Professionals (3 lecture credits)

Medical literature plays an important role in clinical decision-making as well as scientific careers. However, locating the correct evidence and critically evaluating the results requires training and practice. This course equips students with the basics of evidence-based medicine. *Prerequisites: NS 411, 412* 

**NS 432 – Physics with Lab** (4 lecture credits and 1 lab credit) This course is a non-calculus-based conceptual study of the laws of motion, forces, energy, matter, heat and thermodynamics, wave motion, sound and light. Applications to the life sciences are emphasized, including sight, hearing, joint range of motion, nerve conduction, etc.



#### NU 311 - Introduction to Nutrition (4 lecture credits)

This course covers the basic principles of nutrition science, such as macro- and micronutrients, digestion, absorption, transport and metabolism. Dietary guidelines for prevention of chronic disease are stressed. Students will conduct an analysis of personal dietary habits.

#### NU 431 – Whole Food: Rethinking the Science of Nutrition (3 lecture credits and 1 lab credit)

This course critically examines current paradigms of nutritional science. Whole foods provide a vast array of nutritional benefits and evidence suggests that a whole-food, plant-based diet is the healthiest way to eat. Each week, students gain practical experience with whole food through hands-on cooking instruction. Prerequisites: NS 401, NU 311

#### SS 311 – Self-Care and Self-Management (3 lecture credits) Self-care and self-management strategies support health and well-being, prevent disease, and reduce stress. Students learn how to cultivate and develop life skills through individual and group activities. Topics include gigong, yoga, meditation, stress management, and the

#### SS 321 – Culture, Identity and Emotion (3 lecture credits)

This course explores the interrelation of culture, thought, emotion and social realities. Students examine the role of language and culture in shaping emotional experience and self-understanding, including the formation of social identities such as gender, ethnicity and nationality.

#### SS 331 – Advanced Writing and Self-Reflective Skills (3 lecture credits)

This course provides intensive practice in the process of producing thoughtful and polished essays that start with the writer's experiences and move on to explore the relationship of the self to the external world. Emphasis is placed on finding a personal voice, exploring and developing one's ideas, and effectively revising one's work.

#### SS 332 — Intercultural Communication Skills (3 lecture credits)

Cultural humility requires that people give careful consideration to their assumptions and beliefs that affect how they communicate. This course teaches students to identify characteristics of their own worldview as they learn to navigate professional interpersonal relationships.

#### SS 421 - Ethics and Philosophical Dilemmas (3 lecture credits)

This course is an introduction to moral philosophy and the different ethical guidelines people use to make decisions of right and wrong actions, both personally and in societies. The course explores how individuals develop personal values that guide decision-making, and provides familiarity with the most influential writings of well-known ethicists. The application of ethical theory will lead to an exploration of medical and bioethical dilemmas, such as: euthanasia and the right to die, allocation of scarce medical resources, in vitro fertilization, genetic testing and engineering, human subject research, and more.

#### Flective Courses

#### NS 323 — Introduction to Public Health (3 lecture credits)

The history of public health and an overview of five core disciplines: epidemiology, biostatistics, environmental health, social and behavioral health, and health policy and management. Students analyze contemporary public health issues, such as health promoting behaviors for disease prevention, public health's role in disaster preparedness, and challenges to food supplies.

#### NS 341E - Environment and Health (3 lecture credits)

The role of the environment on health issues is often underplayed. This course surveys current environmental health issues, such as hazardous waste and waterborne diseases, as well as emerging global health threats including global warming, ozone depletion and sustainability. Positive influences of the environment on health are also discussed.

#### NS 342E - Plants of the Northwest (3 lecture credits)

This course introduces students to important flowering and food plant species of the Pacific Northwest. Specific

impact of food choices.

topics include the use of taxonomic keys; plant anatomy; plant ecology; preservation and preparation of plant specimens; and species identification through lectures, lab activities and field trips to study native species in their habitats. Students explore the reciprocal relationship between food plants and people in the Northwest from the perspectives of foraging for wild foods, domestication of food plants, and the therapeutic approaches toward healing through plant awareness and horticulture.

#### NS 423E - Behavioral Neuroscience (3 lecture credits)

This course begins with the description of a nerve cell, and continues through an introduction to neurochemistry and the brain. With this foundation, students learn how the brain influences perception, sensation, cognition and emotion. The course uses primary research articles and case studies to examine the neurological underpinnings of behaviors, such as eating, drinking, sleeping, sex, aggression and reward seeking. *Prerequisite: NS 311* 

#### NU 312 - American Food Systems (3 lecture credits)

The complexities of the food system are immense, and the tools for understanding the system and its dynamic historical shifts are interdisciplinary. This course addresses the historical development of the modern food system and the relationship between the economy, food supply policies, and the Green revolution. It then examines the creation of marginalization and inequality for different communities and populations. Finally, it identifies the emerging alternatives to the dominant food paradigm and the future roles of alternative systems based on equity, diversity and sustainability.

#### NU 321 - Advanced Nutrition (4 lecture credits)

A detailed analysis of the role of vitamins and minerals in human metabolism and health, with an emphasis on the integration of cellular physiology, biochemistry and nutrition. Students examine the biochemical and medical background of a variety of clinical conditions, including the role of diet in malnutrition, heart disease, cancer, diabetes and weight management. Students will analyze nutrition research, classify basic types of studies, and outline database search strategies. *Prerequisite: NU 311* 

#### NU 331 - Foundations of Community Nutrition (3 lecture credits)

Nutritional problems in communities include obesity and food insecurity in groups ranging from families to governments. The causes of poor nutrition are multiple and complex, involving biological, economic, social, cultural and policy issues. This course addresses the promotion of health and prevention of disease using nutrition in communities and populations. *Prerequisite: NU 311* 

#### NU 412 - Nutrition in the News (2 lecture credits)

Contradictory nutrition articles can be perplexing—for example, one article says to eat low fat, while another says eat high fat—which article is right? This course teaches students how to critically evaluate news articles by locating

the original research and assessing the original medical literature. In addition, students learn how to apply the medical literature to a nutrition plan for themselves or others

#### NU 422 - Diet and Disease (3 lecture credits)

Increasingly, more diseases have been shown to have nutritional components. This course introduces students to the nutritional causes of modern diseases, and basic diet therapies and how they apply to different disease pathologies. Evidence that supports dietary prevention of disease is also addressed. *Prerequisite: NU 311* 

#### NU 432 - Nutritional Epidemiology (4 lecture credits)

Students learn to conduct or better interpret epidemiological studies relating diet and nutritional status to disease and health. This course examines methodologies used in nutritional epidemiological studies, and reviews the current state of knowledge regarding diet and other nutritional indicators as etiologic factors in disease. *Prerequisite: NU 321* 

#### SS 401E – Medical Anthropology (3 lecture credits)

This introductory course in medical anthropology includes the study of health, illness and healing from a cross-cultural perspective. Medical anthropology is a multi-faceted subject, offering a critical and applicable lens to better understand health for all health-related disciplines and circumstances. The course examines aspects of health and illness, drawing from theoretical, evidence-based, and ethnographic perspectives to develop a more critical understanding; and highlights how health, illness and healing practices are culturally constructed, mediated, and inextricably linked.

#### **SS 402E – Human Sexuality** (3 lecture credits)

This course is designed to ground students in the foundational basics of human sexuality. Sexuality is the way our gender and sexual orientation influence how we act in the world and the way the world reacts to us. Healthy sexuality means having an accurate and positive view of ourselves, and using that as a basis for our relationships and life choices. This course examines sexuality not just as a physical act, but also as a philosophical concept. Students are introduced to concepts and issues related to topics of: consent, sexual identity, sexual orientation, gender, relationships, reproductive politics, sexual violence, love, and cross-cultural human sexuality. By the end of this course, students will have a more critical and dynamic understanding of sexuality and how these topics directly impact their lives.

# **BSiHS TWO-YEAR CURRICULUM**

COURSE#	FIRST-YEAR FALL	LAB	LECTURE	TOTAL HOURS	CREDITS
IM 311	Introduction to Integrative Medicine		36	36	3
NU 311	Introduction to Nutrition		48	48	4
NS 311	Anatomy and Physiology	24	48	72	5
SS 311	Self-Care and Self-Management		36	36	3
	First-Year Fall Totals	24	168	196	15
COURSE #	FIRST-YEAR WINTER	LAB	LECTURE	TOTAL HOURS	CREDITS
IM 321	Critical Thinking for Pre-Health Professionals		36	36	3
NS 322	Immunology		48	48	4
NS 321	Genetics		48	48	4
SS 321	Culture, Identity and Emotion		36	36	3
	First-Year Winter Totals	0	168	168	14
COURSE #	FIRST-YEAR SPRING	LAB	LECTURE	TOTAL HOURS	CREDITS
IM 331	Exercise Science		36	36	3
NS 331	Organic Chemistry with Lab	48	48	96	6
SS 331	Advanced Writing and Self-Reflective Skills		36	36	3
SS 332	Intercultural Communication Skills		36	36	3
	First-Year Spring Totals	48	156	204	15

492

564

150

**FIRST-YEAR TOTALS** 

COURSE #	SECOND-YEAR SUMMER	LAB	LECTURE	TOTAL HOURS	CREDITS
NS 401	Biochemistry for Life Sciences		48	48	4
	Second-Year Summer Totals	0	48	48	4
COURSE #	SECOND-YEAR FALL	LAB	LECTURE	TOTAL HOURS	CREDITS
IM 411	Health Psychology and Mind-Body Medicine		36	36	3
NS 411	Biostatistics for Pre-Health Majors		36	36	3
NS 412	Scientific and Professional Communication		36	36	3
MT 411	Analytical Business Development		24	24	2
	Elective		36	36	3
	Second-Year Fall Totals	0	168	168	14
COURSE#	SECOND-YEAR WINTER	LAB	LECTURE	TOTAL HOURS	CREDITS
IM 421	Careers in Integrative Medicine: Who Are You and What Do You Want to Do?		24	24	2
IM 422	Introduction to Botanical Medicine	24	36	60	4
NS 421	Evidence-Based Practice for Pre-Health Professionals		36	36	3
SS 421	Ethics and Philosophical Dilemmas		36	36	3
	Elective		36	36	3
	Second-Year Winter Totals	24	168	192	15
COURSE#	SECOND-YEAR SPRING	LAB	LECTURE	TOTAL HOURS	CREDITS
NU 431	Whole Food: Rethinking the Science of Nutrition	24	36	60	4
IM 431	Integrative Health Sciences Capstone		36	36	3
NS 432	Physics with Lab	24	48	72	5
	Elective		36	36	3
	Second-Year Spring Totals	48	156	204	15
	SECOND-YEAR TOTALS	72	540	612	48
	TOTAL CORE CREDITS				83
	TOTAL ELECTIVE CREDITS (9 required, students may take up	to 18)			9
	TOTAL REQUIRED CREDITS				92

# BSiHS ELECTIVES 9 Credits Required (minimum of 9, maximum of 18)

Courses listed with an "E" as part of the course number are electives for all undergraduate degree programs. Courses listed without an "E" are core classes for another undergraduate degree program that may count toward elective credit in the BSiHS program.

Students may also choose elective courses from the preapproved list of graduate-level classes (when offered); this list is available through the registrar's office. Please see the NUNM student handbook for the policy on undergraduate students taking graduate-level classes. *NOTE: Elective courses may not be offered every year.* All elective courses are scheduled based on faculty availability and adequate student enrollment.

COURSE#	COURSE	LECTURE	CREDITS
NS 323	Introduction to Public Health	36	3
NS 341E	Environment and Health	36	3
NS 342E	Plants of the Northwest	36	3
NS 423E	Behavioral Neuroscience	36	3
NU 312	American Food Systems	36	3
NU 321	Advanced Nutrition	48	4
NU 331	Foundations of Community Nutrition	36	3
NU 412	Nutrition in the News	24	2
NU 422	Diet and Disease	36	3
NU 432	Nutritional Epidemiology	36	3
SS 401E	Medical Anthropology	36	3
SS 402E	Human Sexuality	36	3

### **Bachelor of Science in Nutrition**

The Bachelor of Science in Nutrition (BScN) program features four core threads: nutrition, natural sciences, social sciences and critical thinking. The nutrition thread focuses on individual and community nutrition; human nutritional requirements; the link between diet and disease; food systems that impact the nutrition of individuals and communities; and food security and nutritional epidemiology.

Students take traditional pre-health/pre-med classes in the natural sciences thread, such as anatomy and physiology with dissection lab, organic chemistry, biochemistry and genetics. These provide the scientific foundation for an understanding of the human body and the basic principles of health and disease. Throughout this sequence, students also learn the foundations of research, and scientific and professional communication.

The social sciences theme focuses on the interpersonal and professional growth of the student. There is a strong focus on the development of cultural competency skills, ethical decision-making, writing, self-reflection and self-management.

An important role in clinical and scientific decision-making is the ability to critically evaluate information. Woven throughout the BScN program is a critical thinking thread, in which students learn to interpret data and make an informed assessment using logic and evidence. Specific courses in evidence-based practice and critical thinking further the development of these essential skills.

Students can choose from a variety of electives to gain deeper knowledge in a topic of interest. Select classes from NUNM's graduate degree programs may also be available for elective credit.

#### **Program Outcomes**

#### 1. Nutrition

Articulate concepts and demonstrate skills related to human nutrition. Appraise the relationship between nutrition, human biochemistry, and health and wellness. Apply these concepts to the improvement of nutritional status for individuals, families and communities.

#### 2. Ethics, Responsibility and Social Maturity

Make reasoned decisions based on an ethical framework and a respect for diversity. Exhibit cultural humility and maturity. Display accountability for your choices, behaviors and actions. Demonstrate mature social skills required in the healing professions, such as compassion and understanding.

#### 3. Communication and Teamwork

Practice professional communication and work productively, both independently and as part of a team. Effectively communicate using verbal, nonverbal and written skills.

#### 4. Research and Information Literacy

Demonstrate comprehension and skill with research methods and scientific inquiry. Use appropriate information technologies to conduct and communicate about research topics and questions, and to access, evaluate and manage information to meet academic, personal and professional needs.

#### 5. Career Preparation

Develop a career plan based on personal and professional strengths. Demonstrate career readiness skills, such as the ability to apply classroom learning to real world scenarios. Implement critical thinking skills to make decisions in new situations.



#### **BScN Course Descriptions**

#### Core Curriculum

#### MT 411 – Analytical Business Development (2 lecture credits)

An activity-based approach to solving practical math problems that develops measurement skills and mathematical literacy. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; and financial literacy.

#### NS 311 - Anatomy and Physiology (4 lecture credits and 1 lab credit)

An introduction to the structure and function of the human body from a whole-systems perspective. The integumentary, musculoskeletal, nervous, cardiovascular, lymphatic, respiratory, digestive, urogenital, immune and endocrine systems are covered. The concepts of development, metabolism, fluid and electrolyte balance, and acid-base balance are also explored. The lab component includes participation in cadaver dissection as an aid to learning the interrelationships of the parts of the human body.

#### NS 321 - Genetics (4 lecture credits)

An introduction to the application of basic genetic principles to the study of human health and disease. Topics include Mendelian genetics, cytogenetics, population genetics, molecular cytogenetics, oncocytogenetics and clinical applications of principles. The importance and implication of genetic disease is also discussed.

#### NS 323 - Introduction to Public Health (3 lecture credits)

The history of public health and an overview of five core disciplines: epidemiology, biostatistics, environmental health, social and behavioral health, and health policy and management. Students analyze contemporary public health issues, such as health promoting behaviors for disease prevention, public health's role in disaster preparedness, and challenges to food supplies.



#### NS 331 – Organic Chemistry with Lab

(4 lecture credits and 2 lab credits)

An introduction to the molecular basis of living processes in bacteria, plants and humans. This course provides a foundation in the chemistry of carbon-containing compounds, including three-dimensional structures; chemical properties; and methods of structural identification, reactions and syntheses. Students also learn about the organic chemistry of specific pharmaceuticals and detoxification pathways.

#### NS 401 Biochemistry for Life Sciences (4 lecture credits)

This course covers the structure, function and metabolism of biomolecules—especially proteins, carbohydrates, lipids and steroids. Nucleic acids and important accessory molecules (cofactors and metal ions) are covered, as well as enzyme kinetics and mechanisms, thermodynamics and metabolism. Prerequisite: NS 331

#### NS 411 - Biostatistics for Pre-Health Majors (3 lecture credits)

Topics include the collection, classification and presentation of descriptive data; the rationale of estimation and hypothesis testing; analysis of variance; analysis of contingency tables; correlation and regression analysis; multiple regression, logistic regression, and the statistical control of confounding; sample size and power considerations; and survival analysis.

#### NS 412 – Scientific and Professional Communication (3 lecture credits)

Learn the essential knowledge and skills for effective scientific and professional communication in scientific writing, poster design and oral presentations. The fundamentals of business communication are covered, including letter writing, email etiquette and social media ethics.

#### NS 421 - Evidence-Based Practice for Pre-Health Professionals (3 lecture credits)

Medical literature plays an important role in clinical decision-making as well as scientific careers. However, locating the correct evidence and critically evaluating the results requires training and practice. This course equips students with the basics of evidence-based medicine. Prerequisites: NS 401, 412

#### NU 311 - Introduction to Nutrition (4 lecture credits)

This course covers the basic principles of nutrition science, such as macro- and micronutrients, digestion, absorption, transport and metabolism. Dietary guidelines for prevention of chronic disease are stressed. Students will conduct an analysis of personal dietary habits.

#### NU 312 - American Food Systems (3 lecture credits)

The complexities of the food system are immense, and the tools for understanding the system and its dynamic historical shifts are interdisciplinary. This course addresses the historical development of the modern food system

and the relationship between the economy, food supply policies, and the Green revolution. It then examines the creation of marginalization and inequality for different communities and populations. Finally, it identifies the emerging alternatives to the dominant food paradigm and the future roles of alternative systems based on equity, diversity and sustainability.

#### NU 321 - Advanced Nutrition (4 lecture credits)

A detailed analysis of the role of vitamins and minerals in human metabolism and health, with an emphasis on the integration of cellular physiology, biochemistry and nutrition. Students examine the biochemical and medical background of a variety of clinical conditions, including the role of diet in malnutrition, heart disease, cancer, diabetes and weight management. Students will analyze nutrition research, classify basic types of studies, and outline database search strategies. *Prerequisite: NU 311* 

#### **NU 331 – Foundations of Community Nutrition** (3 lecture credits)

Nutritional problems in communities include obesity and food insecurity in groups ranging from families to governments. The causes of poor nutrition are multiple and complex, involving biological, economic, social, cultural and policy issues. This course addresses the promotion of health and prevention of disease using nutrition in communities and populations.

#### NU 411 - Food Security (3 lecture credits)

This survey of local, regional and national strategies to address food insecurity provides students with a basic understanding of the social, political and economic foundations. Students learn how to analyze individual elements of the strategies and their interrelationships, and how to begin assessing the individual and community impacts, as well as the sustainability of those strategies at different scales and in different bioregions.

#### NU 412 - Nutrition in the News (2 lecture credits)

Contradictory nutrition articles can be perplexing—for example, one article says to eat low fat, while another says eat high fat—which article is right? This course teaches students how to critically evaluate news articles by locating the original research and assessing the original medical literature. In addition, students learn how to apply the medical literature to a nutrition plan for themselves or others.

# NU 421 – Careers in Nutrition: Who Are You and What Do You Want to Do? (2 lecture credits)

Experts suggest that many students completing their education today will find themselves in careers that did not exist 10 years ago. Identifying a career in nutrition that fits talents and skills, as well as interests, is not always straightforward. This interactive course equips students with career planning skills that they can use immediately or in the future. *Prerequisite: completion of 50 credits in the BScN program* 

#### NU 422 - Diet and Disease (3 lecture credits)

Increasingly, more diseases have been shown to have nutritional components. This course introduces students to the nutritional causes of modern diseases, and basic diet therapies and how they apply to different disease pathologies. Evidence that supports dietary prevention of disease is also addressed. *Prerequisite: NU 311* 

# NU 431 – Whole Food: Rethinking the Science of Nutrition (3 lecture credits and 1 lab credit)

This course critically examines current paradigms of nutritional science. Whole foods provide a vast array of nutritional benefits and evidence suggests that a whole-food, plant-based diet is the healthiest way to eat. Each week, students gain practical experience with whole food through hands-on cooking instruction.

#### NU 432 - Nutritional Epidemiology (4 lecture credits)

Students learn to conduct or better interpret epidemiological studies relating diet and nutritional status to disease and health. This course examines methodologies used in nutritional epidemiological studies, and reviews the current state of knowledge regarding diet and other nutritional indicators as etiologic factors in disease. *Prerequisite: NU 321* 

#### NU 433 - Nutrition Capstone (3 lecture credits)

One of the definitions of the word "capstone" is a crowning achievement. This course is meant to provide students an opportunity to perform a final research or community/service project that they consider the crowning achievement of their nutrition program. Students are expected to draw from their BScN coursework, personal experience, and research or community/service work conducted outside the classroom. Students receive mentorship and peer support throughout the term. At the end of the term, students will complete a paper and/or put together their program portfolio, and/or some other, equivalent project (to be approved by the dean), and present a 10-minute oral presentation to their peers. If students choose a paper or approved equivalent project, they can be collaborative with up to four other students (five total), but each student must contribute an individual section of the paper and each section must adhere to the capstone rubric. The same is true for the presentations. Prerequisite: completion of a minimum of 75 credits in the BScN program, including NU 421

#### SS 311 - Self-Care and Self-Management (3 lecture credits)

Self-care and self-management strategies support health and well-being, prevent disease, and reduce stress. Students learn how to cultivate and develop life skills through individual and group activities. Topics include qigong, yoga, meditation, stress management, and the impact of food choices.



#### SS 321 – Culture, Identity and Emotion (3 lecture credits)

This course explores the interrelation of culture, thought, emotion and social realities. Students examine the role of language and culture in shaping emotional experience and self-understanding, including the formation of social identities, such as gender, ethnicity and nationality.

#### SS 331 – Advanced Writing and Self-Reflective Skills (3 lecture credits)

This course provides intensive practice in the process of producing thoughtful and polished essays that start with the writer's experiences and move on to explore the relationship of the self to the external world. Emphasis is placed on finding a personal voice, exploring and developing one's ideas, and effectively revising one's work.

#### SS 332 – Intercultural Communication Skills (3 lecture credits) Cultural humility requires that people give careful consideration to their assumptions and beliefs that affect how they communicate. This course teaches students to identify characteristics of their own worldview as they learn to navigate professional interpersonal relationships.

SS 421 – Ethics and Philosophical Dilemmas (3 lecture credits) This course is an introduction to moral philosophy and the different ethical guidelines people use to make decisions of right and wrong actions, both personally and in societies. The course explores how individuals develop personal values that guide decision-making, and provides familiarity with the most influential writings of well-known ethicists. The application of ethical theory will lead to an exploration of medical and bioethical dilemmas, such as: euthanasia and the right to die, allocation of scarce medical resources, in vitro fertilization, genetic testing and engineering, human subject research, and more.

#### **Elective Courses**

#### IM 311 – Introduction to Integrative Medicine (3 lecture credits)

This course introduces a variety of integrative medical modalities. Students explore the history, philosophy and major concepts of botanical medicine, clinical nutrition, mind-body medicine, health psychology and more. Major medical systems of the world are also covered, such as naturopathic medicine, Chinese medicine, osteopathy, Ayurvedic medicine and energy healing systems.

#### IM 321 – Critical Thinking for Pre-Health Professionals (3 lecture credits)

Critical thinking is the use of reasoning in determining what's true and what's false. Health professionals must employ critical thinking when learning, integrating, evaluating and applying new thoughts, ideas or principles to clinical practice. This course focuses on: productive reasoning skills, evaluating and assessing logical and illogical reasoning skills, and understanding logical fallacies and what role they play in constructing and destructing arguments. One of the main goals of this class is to help students recognize, and have self-awareness of, their own biases and when they may be more prone to employing logically fallacious thought processes.

#### IM 331 – Exercise Science (3 lecture credits)

This course covers the research behind the value of exercise in the promotion of wellness and prevention of disease. Topics include the physiological, mechanical and psychological mechanisms of movement; strength and conditioning; sports psychology; and methods of rehabilitation. Students commit to a form of exercise for the duration of this course and journal about their experience.

#### NS 322 - Immunology (4 lecture credits)

An introduction to the principles of immunology, including: development of the immune system; cells and organs of the immune system; the immune system in health and disease; and infectious organisms, allergies and more.

#### NS 341E - Environment and Health (3 lecture credits)

The role of the environment on health issues is often underplayed. This course surveys current environmental health issues, such as hazardous waste and water-borne diseases, as well as emerging global health threats including global warming, ozone depletion and sustainability. Positive influences of the environment on health are also discussed.

#### NS 342E - Plants of the Northwest (3 lecture credits)

This course introduces students to important flowering and food plant species of the Pacific Northwest. Specific topics include the use of taxonomic keys; plant anatomy; plant ecology; preservation and preparation of plant specimens; and species identification through lectures, lab activities and field trips to study native species in their habitats. Students explore the reciprocal relationship between food plants and people in the Northwest from the perspectives of foraging for wild foods, domestication of food plants, and the therapeutic approaches toward healing through plant awareness and horticulture.

# **NS 432 – Physics with Lab** (4 lecture credits and 1 lab credit) This course is a non-calculus-based conceptual study of the laws of motion, forces, energy, matter, heat and thermodynamics, wave motion, sound and light. Applications to the life sciences are emphasized, including sight, hearing, joint range of motion, nerve conduction, etc.

#### NU 423E – Foundations of Cooking Techniques

(2 lecture credits, 1 lab credit)

In order to practically apply nutrition theory to real meals, cooking skills are required. This course teaches students how to prepare and cook nutritious food for individuals or groups. Additional 'art of cooking' components are introduced, and students begin experimenting with flavors.

#### **NU 436E – Nutrition for Exercise and Sports** (3 lecture credits)

This course investigates the basic, scientific and applied concepts of nutrition and substrate utilization as they apply to energy production for exercise, body composition, weight control and thermoregulation. Emphasis is given to analyzing nutritional requirements for enhanced exercise and sport performance. *Prerequisite: NU 321* 

#### SS 401E – Medical Anthropology (3 lecture credits)

This introductory course in medical anthropology includes the study of health, illness and healing from a cross-cultural perspective. Medical anthropology is a multi-faceted subject, offering a critical and applicable lens to better understand health for all health-related disciplines and circumstances. The course examines aspects of health and illness, drawing from theoretical, evidence-based, and ethnographic perspectives to develop a more critical understanding; and highlights how health, illness and healing practices are culturally constructed, mediated, and inextricably linked.

#### SS 402E – Human Sexuality (3 lecture credits)

This course is designed to ground students in the foundational basics of human sexuality. Sexuality is the way our gender and sexual orientation influence how we act in the world and the way the world reacts to us. Healthy sexuality means having an accurate and positive view of ourselves, and using that as a basis for our relationships and life choices. This course examines sexuality not just as a physical act, but also as a philosophical concept. Students are introduced to concepts and issues related to topics of: consent, sexual identity, sexual orientation, gender, relationships, reproductive politics, sexual violence, love, and crosscultural human sexuality. By the end of this course, students will have a more critical and dynamic understanding of sexuality and how these topics directly impact their lives.



# **BScN TWO-YEAR CURRICULUM**

COURSE#	FIRST-YEAR FALL	LAB	LECTURE	TOTAL HOURS	CREDITS
NU 311	Introduction to Nutrition		48	48	4
NU 312	American Food Systems		36	36	3
NS 311	Anatomy and Physiology	24	48	72	5
SS 311	Self-Care and Self-Management		36	36	3
	First-Year Fall Totals	24	164	192	15
COURSE #	FIRST-YEAR WINTER	LAB	LECTURE	TOTAL HOURS	CREDITS
NU 321	Advanced Nutrition		48	48	4
NS 323	Introduction to Public Health		36	36	3
NS 321	Genetics		48	48	4
SS 321	Culture, Identity and Emotion		36	36	3
	First-Year Winter Totals	0	168	168	14
COURSE #	FIRST-YEAR SPRING	LAB	LECTURE	TOTAL HOURS	CREDITS
NU 331	Foundations of Community Nutrition		36	36	3
NS 331	Organic Chemistry with Lab	48	48	96	6
SS 331	Advanced Writing and Self-Reflective Skills		36	36	3
SS 332	Intercultural Communication Skills		36	36	3
	First-Year Spring Totals	48	156	204	15

492

564

**FIRST-YEAR TOTALS** 

COURSE #	SECOND-YEAR SUMMER	LAB	LECTURE	TOTAL HOURS	CREDITS
NS 401	Biochemistry for Life Sciences		48	48	4
	Second-Year Summer Totals	0	48	48	4
COURSE #	SECOND-YEAR FALL	LAB	LECTURE	TOTAL HOURS	CREDITS
NU 411	Food Security		36	36	3
NU 412	Nutrition in the News		24	24	2
NS 411	Biostatistics for Pre-Health Majors		36	36	3
NS 412	Scientific and Professional Communication		36	36	3
MT 411	Analytical Business Development		24	24	2
	Elective		36	36	3
	Second-Year Fall Totals	0	132	192	16
COURSE #	SECOND-YEAR WINTER	LAB	LECTURE	TOTAL HOURS	CREDITS
NU 421	Careers in Nutrition: Who Are You and What Do You Want to Do?		24	24	2
NU 422	Diet and Disease		36	36	3
NS 421	Evidenced-Based Practice for Pre-Health Professionals		36	36	3
SS 421	Ethics and Philosophical Dilemmas		36	36	3
	Elective		36	36	3
	Second-Year Winter Totals	0	144	168	14
COURSE #	SECOND-YEAR SPRING	LAB	LECTURE	TOTAL HOURS	CREDITS
NU 431	Whole Food: Rethinking the Science of Nutrition	24	36	60	4
NU 432	Nutritional Epidemiology		48	48	4
NU 433	Nutrition Capstone		36	36	3
	Elective		36	36	3
	Second-Year Spring Totals	24	120	180	14
	SECOND-YEAR TOTALS	24	444	588	48
	TOTAL CORE CREDITS				83
	TOTAL CORE CREDITS  TOTAL ELECTIVE CREDITS (9 required, students may take up t	o 18)			83

# BScN ELECTIVES 9 Credits Required (minimum of 9, maximum of 18)

Courses listed with an "E" as part of the course number are electives for all undergraduate degree programs. Courses listed without an "E" are core classes for another undergraduate degree program that may count toward elective credit in the BScN program.

Students may also choose elective courses from the preapproved list of graduate-level classes (when offered); this list is available through the registrar's office. Please see the NUNM student handbook for the policy on undergraduate students taking graduate-level classes. *NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and adequate student enrollment.* 

COURSE#	COURSE	LAB	LECTURE	TOTAL HOURS	CREDITS
IM 311	Introduction to Integrative Medicine		36	36	3
IM 321	Critical Thinking for Pre-Health Professionals		36	36	3
IM 331	Exercise Science		36	36	3
NS 322	Immunology		48	48	4
NS 341E	Environment and Health		36	36	3
NS 342E	Plants of the Northwest		36	36	3
NS 432	Physics with Lab	24	48	72	5
NU 423E	Foundations of Cooking Techniques	24	24	48	3
NU 436E	Nutrition for Exercise and Sports		36	36	3
SS 401E	Medical Anthropology		36	36	3
SS 402E	Human Sexuality		36	36	3

#### **Academic Policies**

#### Registration

The Office of the Registrar will notify students regarding registration details. All continuing students register for the upcoming academic year's fall classes by the end of spring quarter.

Students may attend only the specific course sections for which they are registered. Non-adherence to this policy will result in no credit for the course. Students will not be registered for courses, labs or clinic shifts that occur at overlapping times. Credit will be earned for only one course during any given segment of time. All changes in courses and sections must be made through the Office of the Registrar.

Students cannot register for elective courses that overlap with core classes, including travel courses, unless preapproved by their program dean. Students must submit a "Petition to Overlap Classes" form for the dean's approval prior to registration.

Students who wish to register for less than the full-time curriculum must complete a "Petition to Deviate" form and receive written approval from the Center for Academic Success and/or program dean. No student may add or begin classes after the end of the second week of any quarter.

#### **Eligibility to Register**

Matriculated degree-seeking students are eligible to register for NUNM courses. A non-degree seeking student is someone who has not matriculated into a degree program at NUNM. Students who have matriculated into a degree program and have taken a leave from their primary program may not take courses as a non-degree student.

Non-degree seeking students must complete a "Non-Degree Seeking" application, which is available through the Office of Admissions. Approval is based upon space availability and meeting prerequisite requirements. Practitioners seeking continuing education units (CEUs) should contact the Office of Advancement.

#### **Credit Hour Policy**

Credits are awarded based upon hours of instruction. NUNM is on a quarter system. A quarter is defined as 12 weeks (summer quarter is 11 weeks). Credits for coursework are awarded according to the following:

- 1 lecture credit = 12 hours instruction per quarter
- + 24 hours per quarter outside of class time
- **1 laboratory credit** = 24 hours instruction per quarter
- + 12 hours per quarter outside of class time
- 1 clinical credit = 24 hours instruction per quarter
- + 12 hours per quarter outside of class time

1 tutorial credit = 12 hours of instruction per quarter + 24 hours per quarter outside of class time

Credit hours will not be adjusted if individual students utilize more or less study time as listed above, and will be held responsible for knowing all material. Students who feel they require additional study time should seek resources from the Center for Academic Success.

#### Challenge Examinations — Graduate Level Only

NUNM policy allows an individual to challenge by examination the content of a required course. Applicants who have been accepted may request to challenge a course prior to matriculation. This option is only available to students who have appropriately documented prior graduate coursework and there is a question as to whether or not the information covered sufficiently meets NUNM requirements. Transfer credit policies and course descriptions are outlined in the university catalog and are available from the Office of Admissions. There must be a difference in hours between a transfer course and the university's course and/or a question of equivalency of material covered in order for a challenge exam to be given. After the challenge exam has been administered, the grade is recorded and the student is notified of the results. If the student fails the exam, they must register for the course and pay the appropriate tuition.

To be considered for a challenge exam, the student must:

- Complete transfer credit review during the admissions process to identify which courses may be eligible for challenge. Students who are applying for transfer credit reviews must sign the "NUNM Transfer of Credit Agreement" form upon admission to the university. Transfer credits will not be considered after matriculation.
- Submit a "Transfer/Challenge Exam" form (obtained from the registrar) to the program dean and the instructor (to which the challenge exam is related) for approval. Once permission is obtained, the program dean (or designee) will facilitate arrangements for the student to take the challenge exam.
- Pay the appropriate fees and submit an "Exam" form, located in the Faculty Support Office, to the instructor before taking the exam. See the Financial Policies section for information on fees.
- Take the challenge exam prior to the offering of the course that is being challenged; the exam must be taken, graded, and the grade submitted to the registrar no fewer than two weeks prior to the start of the quarter in which the course is offered.



The following statement is for veteran students inquiring about prior credit: Any veteran receiving GI Bill® benefits while attending NUNM is required to obtain transcripts from all previously attended schools and submit them to the VA school official (located in the Registrar's Office) for review of prior credit.

#### **Auditing**

Students may audit a lecture course, space allowing, if they have met the prerequisites, have obtained the instructor's signature, and have registered for the course. The course will appear on the student's official transcript as an audit. Classes taken as an audit must be declared by the end of the quarter's second week. Audited courses are not eligible for challenge exams. See the Financial Policies section for information on fees.

#### Attendance and Tardiness

In order to maintain educational standards, NUNM expects one hundred percent (100%) attendance at classes and clinical rotations; with a minimum attendance of 80% of all courses. Faculty members may exercise discretion on attendance, as well as require students to attend up to one hundred percent (100%) of scheduled classes in order to pass a course. Students should consult course syllabi for additional details on individual faculty attendance

expectations. Students who wish to petition for an excused absence for clinical rotations must follow policies outlined in the Clinic Absences section of the student handbook. Instructors may take into account habitual tardiness when calculating a course or clinic grade. Students are responsible for being aware of and meeting faculty attendance expectations.

#### **Grading and Promotion**

NUNM maintains high standards of scholarship, and recognizes its responsibility to provide each student the best opportunity to complete their program(s) successfully. At the beginning of each course, the instructor is required to define clearly for class members the objectives of the course and the standards and methods by which student achievement will be measured. Students are responsible for checking their grades online in SONIS. Courses that are graded using the "P/F" grading system are not included in a student's GPA.

For students enrolled in any program (fall 2015 or later), at the end of each quarter, each student's course performance is reported to the registrar using the following letter grading system. A student's grade-point average will be calculated using the following chart:

Grade	Percentage	Points
A	90-100	4.0
В	80-89	3.0
С	70-79	2.0
D	60-69	1.0
F	59 or less	0.0
W/WF	N/A	Not calculated

- A (SUPERIOR PERFORMANCE): passing
- B (SATISFACTORY PERFORMANCE): passing
- C (MARGINAL PERFORMANCE): passing
- D (UNSATISFACTORY PERFORMANCE): not passing for graduate-level courses, passing for undergraduate
- F (FAILURE): not passing, permanent grade
- P (PASS): satisfactory performance
- W (WITHDRAWAL): student withdrew from course
- WF (WITHDRAWAL, FAILING): student withdrew from course while failing
- I (INCOMPLETE): course requirements not yet completed, due only to serious illness or bereavement (temporary grade)
- T (TRANSFER): course received approved transfer credit. Transfer credit does not apply toward overall GPA calculation
- AU (AUDIT)
- IP (IN PROGRESS)
- R (REMEDIATION REQUIRED): marginal performance (temporary grade) graduate level only
- RP (REMEDIATED PASS): grade given for a passed medical clinic rotation, but with required skills remediation – graduate level only
- RC (REMEDIATED C): pass remediation exam graduate level only

For students enrolled in the ND or CCM programs prior to fall 2015, at the end of each course, each student's performance is reported to the registrar using the following pass/fail grading system:

- H (HONORS): superior performance; equivalent to "A," not available for all courses
- P (PASS): satisfactory performance; equivalent to "B" or "C"
- FR (FAIL REMEDIATE): marginal performance (temporary grade)
- RP (REMEDIATED PASS): equivalent to "C-"

- F (FAILURE): unsatisfactory performance (permanent grade); equivalent to "F"
- I (INCOMPLETE): course requirements not yet completed, due only to serious illness or bereavement (temporary grade)
- W (WITHDRAWAL): student withdrew from course
- WF (WITHDRAWAL, FAILING): student withdrew from course while failing
- AU (AUDIT)
- CMP (COMPLETE): used for courses that are not graded, but attendance is required and a specified number of hours need to be completed, such as preceptor hours
- T (TRANSFER): course received approved transfer credit. Transfer credit does not apply toward overall GPA calculation
- NC (NOT COMPLETED): hour requirement or attendance not met
- IP (IN PROGRESS)





#### Grade of "R/FR" - Graduate level

"R" (remediation required) or "FR" (fail remediate) is a temporary grade. Students who fail a course may receive an "R/FR" grade rather than an "F" (fail) if they meet the criteria and have the opportunity to take a remediation exam to pass the course.

"R" grades are converted to either an "RC" (remediated "C") if the remediation exam is passed or a "D/F" if the remediation exam is failed. "FR" grades are converted to either an "RP" (remediated pass) or "F"—not to a "P" or an "H." A grade of "R" or "FR" cannot be converted to a "P" or "H" grade. Grades of "R/FR" are not eligible for grade appeals.

Students who receive two or more "R/FR" grades (regardless of whether they have been changed to "RC/RP") will be placed on academic probation and must sign an academic contract. Students earning three or more "R/FR" grades (regardless of whether they have been changed to "RC/RP") will be required to appear before the Academic Review and Appeals Committee (ARAC), and may be suspended.

An "R/FR" grade that has not been remediated by the end of the second week of the following term (e.g., a spring term course should be remediated by the end of the second week of summer term) will automatically be converted to an "F."

#### Grade of "RC/RP" - Graduate level

Students who pass the remediation exam will earn a permanent grade of "RC (remediated "C")/RP (remediated pass)."

#### Clinical Rotations and "RP" Grades

ND: A permanent grade of "RP" will be given when an ND student passes a clinical rotation, but is required to

attend a clinical skills enhancement course to attain an adequate level of clinical proficiency. An "RP" grade will also be given if a student receives a passing grade on a clinic rotation, but was recommended for remediation more than once.

CCM: Grades of "RP" are given when a supervisor believes a clinical weakness exists and has not been adequately improved upon by the end of the rotation. The CCM student will be required to remediate with either the associate dean of clinical education or the supervisor in order to attain an adequate level of clinical proficiency.

#### Grade of "D/F" - Graduate Level

For graduate-level students, a letter grade of "D" or "F" is considered a failing grade. A failing grade in a required course (including clinical rotations) requires the student to repeat the course/clinic rotation the next time it is offered, usually the next year. If it is an elective course that is failed, the student is not required to retake it—however, the student is strongly encouraged to do so as they will remain on probation and/or can trigger an ARAC meeting if further courses are failed. The student is prohibited from continuing in any courses for which the failed course is a prerequisite. The student will repeat the course at the current per-credit rate. Any naturopathic student failing a clinical rotation will be required to register for and attend skills-building.

#### Grade of "F" - Undergraduate Level

When an undergraduate-level student receives a failing grade, the course must be repeated the next time it is offered, usually the next year. The student is prohibited from continuing in any courses for which the failed course is a prerequisite. The student will repeat the course at the current per-credit rate.

#### Grade of "I"

When a student cannot complete a course in the term in which it begins, an incomplete ("I") grade may be considered. The granting of an "I" grade is at the discretion of the faculty member and used in exceptional circumstances; and may be based upon approved excused absences provided by the Center for Academic Success. Faculty may consider the grade of "I" petition when the following criteria have been met:

- The student has satisfactorily completed a minimum of 80% of the course requirements; and
- The student is passing the course; and
- The student is unable to complete the course during the term the course is offered.

While these criteria must be met to consider an "I" grade, their fulfillment does not entitle students to receive an incomplete grade. The instructor of a course has the final decision regarding appropriate awarding of an "I" grade.

To request an incomplete grade, the student is responsible for submitting to the Registrar's Office an approved "Grade of Incomplete Petition" form, which can be obtained from the Registrar's Office or the Center for Academic Success. To complete the form, a student must:

- Meet with the faculty member to complete the form and discuss the remaining course assignments to be submitted to change the incomplete grade; and
- Use the supplemental worksheet attached to the "Grade of Incomplete Petition" form to create a timeline for completion of course requirements; and
- Return the completed petition form to the Registrar's Office.

When the student completes the work required to change the "I" grade, the faculty member will submit the "Grade Change" form to the Registrar's Office. A grade of incomplete should be completed within the first two (2) weeks of the next term, with an extension of no more than two (2) quarters. Failure to complete the required course work by the timeline on the contract will result in a failing grade.

If a grade of "I" extends beyond two (2) quarters due to ongoing circumstances, the student may be required to take a leave of absence and will be allowed to complete the course material upon return from leave. Students who apply for a leave of absence and have not completed 80% of the coursework will receive a grade of "W" for the class, and will need to repeat it upon return from leave. A withdrawal will affect the student's ability to continue in certain course sequences in subsequent quarters. Multiple "I" grades in one quarter may result in the inability to petition for incomplete grades the subsequent quarter.

A student requesting a grade of "I" in a course that is a prerequisite for a subsequent course may not enroll in the subsequent course until the grade of "I" is resolved or complete a petition to deviate, with faculty and dean approval. The program dean can deny registration for a student's final professional field experience (e.g., fieldwork, internship, capstone, etc.) if an "I" grade has not been resolved.

Incomplete grades are not included when calculating GPA or total credits completed; however, "I" grades may affect a student's satisfactory academic progress. Students requesting "I" grades should meet with the Office of Financial Aid to examine the effects on their financial aid award.

An incomplete will not be awarded when a student is failing a course for the purpose of giving additional time to complete late assignments. Any student who is failing a course after week eight (8) is not eligible to request an "I."

#### Grade of "I" - Graduate-Level Clinical Rotations

A grade of "I" will be given to students who are passing a clinical rotation but have missed up to two (2) shifts (8 hours) during an 11- or 12-week term. Students must make up any missed shifts by the end of the following term in order to convert an "I" grade to a "P." If missed shifts are not made up by the deadline, an "I" grade will convert to an "F." See Sections 6 and 7 of the student handbook for more detail.

#### Grade of "CMP"

This grade (complete) is used for courses that the student is required to attend, but no evaluation is given. Examples of such courses include, but may not be limited to, ComEx, community education or new student orientation, for which the student is required to complete a certain number of hours.

#### Grade of "IP"

This grade designates a course is in progress; temporary grade. Once the faculty member submits the grades, the "IP" grade will be changed to the appropriate rating.

#### Grade of "W"

"W" (withdrawal) is a grade used to indicate that a student has withdrawn from a course. A "W" is recorded on a student's transcript but not included in GPA calculation. A "W" grade is, however, considered part of the courses attempted calculation as per the satisfactory academic progress policy.

#### Remediation – Graduate Level Only

Students who receive an "R/FR" are eligible to sit for remediation exams and/or projects. All remediation exams and/or projects must be completed and grade changes submitted to the Registrar's Office by the end of week two (2) of the following term (spring term grades have until week three of summer term). For students who receive an "R/FR" grade in spring quarter and have already made verifiable travel plans that interfere with this remediation schedule, they may, with the approval of the programmatic dean, be allowed to complete the remediation by the last week of the summer term.

#### ND PROGRAM

ND students who earn a 67-69% ("D" range or "FR" grade) in lecture courses are eligible to remediate a final exam. Labs and tutorial courses may offer remediation exams at instructor discretion, based on the course material and the feasibility of offering a remediation exam. If a remediation exam is available, an "R" grade will be listed on their transcript until a remediation exam has been taken and a permanent grade is entered into SONIS. In order to have the "R" grade as an option, faculty must include it in their syllabus.

#### **CCM PROGRAMS**

CCM students who earn a 60-69% ("D" range) for their final grade may be eligible to remediate a final exam if, in the judgment of the instructor, it is likely that the student could pass the course by successfully taking a remediation exam. An "R" or "FR" grade will be listed on their transcript until a remediation exam has been taken and a permanent grade is entered into SONIS. In order to have the "R" or "FR" grade as an option, faculty must include it in their syllabus.

#### SCHOOL OF GRADUATE STUDIES PROGRAMS

School of Graduate Studies students who earn a 60-69% ("D" range) for their final grade may be eligible to remediate a final exam if, in the judgment of the instructor, it is likely that the student could pass the course by successfully taking a remediation exam. An "R" grade will be listed on their transcript until a remediation exam has been taken and a permanent grade is entered into SONIS. In order to have the "R" grade as an option, faculty must include it in their svllabus.

#### **Clinical Remediation**

Students who require extra support in meeting minimal levels of clinical competency are counseled and referred for additional instruction by their clinical supervisors or the program dean.

#### ND CLINICAL SKILLS ENHANCEMENT **TUTORIAL**

Clinical skills enhancement courses are generally scheduled over a six-week period of time; students may be referred to this course at any point during the term. The clinical skills enhancement instructor carefully assesses each student's abilities and works with them directly throughout the duration of the course. At the end of the course, the instructor reassesses the student's abilities and determines if the student should continue with the course. A faculty member may require or recommend a clinical skills enhancement course, even if a student receives a passing grade, if the faculty member feels the student needs additional help to remain on track in their clinical education.

When an ND student receives two or more grades of "Pass with Clinical Skills Enhancement Recommended" during their academic career, the clinical skills enhancement course becomes a requirement and the student will be registered for it the next term.

#### ND OBJECTIVE STRUCTURED CLINICAL **EXAMINATION (OSCE) TUTORIAL**

An ND student who fails an OSCE exam twice will be referred to an OSCE skills tutorial for three sessions, and a failing grade will be recorded on their transcript. Upon successful completion of the OSCE tutorial, the student must then register to retake the OSCE exam.

Any student who fails an OSCE exam three times is referred to the Academic Review and Appeals Committee (ARAC). Students who fail the OSCE exam three times may be suspended.

#### CCM CLINICAL SKILLS REMEDIATION

Clinical evaluations of CCM student performance are done during week six (6) of the term to provide feedback and identify areas of weakness, including those that must be remediated before the end of term in order for the student to pass the clinic rotation. The clinical supervisor, in collaboration with the CCM associate dean of clinical education and the CCM dean, can assign remediation work, which can include attendance at weekly clinical skills tutorial labs run by a CCM resident.

#### CCM CLINIC ENTRANCE EXAMINATION

All CCM students take a practical point location examination at the beginning of the winter quarter prior to starting their internship year. Students failing this examination are given the opportunity to remediate this exam later in the same term. If the student fails the remediation exam, they must enroll in the Advanced Point Location course in the spring quarter.

CCM students also take a written clinic entrance examination during the first half of the spring term prior to becoming an intern. The written examination covers the foundational course material needed to assume responsibility for direct patient care. Students who fail this examination are given the opportunity to remediate the exam later in the same term. A remediation fee is applied. Should a student fail the written examination for a second time, their entrance into the clinic is delayed for a term, during which the student will have time to address weak areas. Another written exam will be given toward the end of this term.

#### **Grade Appeals**

Students have the right to appeal a failing grade if they perceive that there has been an error in the grading procedure, or if there is a perceived lack of clarity about the faculty member's expectation for passing a course. The appeal must be made within two weeks of receipt of the grade. Grades of "B" or better cannot be appealed to receive a higher grade or a grade of "honors."

A student may request a review of a grade given in an exam or a final grade for a course only in the following manner:

- A written request by the student, for a review of the grade, must be submitted to the faculty member. This appeal must be within two weeks of the posted grade.
- The faculty member will advise the student in writing of the decision within seven days of receipt of the request.

The student may appeal the faculty member's decision in writing via a "Grade Appeal" form. The completed

appeal form will be submitted to the registrar. This appeal must be made within seven days of the faculty member's written notice to the student regarding the decision. The written appeal to the registrar must be accompanied by appropriate written documentation as to why the student feels the grade is in error, and what the outcome was of the discussion and appeal with the faculty member. The registrar will forward the appeal to the Academic Appeal and Review Committee (ARAC). ARAC will review the documentation, may have a discussion with the faculty member, and issue a recommendation to the program dean. The recommendations from ARAC may include upholding the grade as submitted or requiring the student to remediate an exam. ARAC may not recommend a passing grade to be substituted in place of a failing grade. The program dean will review the recommendations and make a final decision. The student and faculty member will be notified in writing of the final decision. The decision is final and may not be appealed to higher authority.

#### **ND OSCE Exam Appeals**

ND students who have a non-passing first OSCE exam result may not appeal, since a failing grade is not given until the second exam attempt is unsuccessful.

A failed OSCE exam grade appeal must be submitted to the associate dean of clinical education within two (2) weeks of the posted grade, and will be referred to the Program and Student Assessment Committee for review. The committee will notify the student in writing of the decision within 14 days of receipt of the request.





#### **Academic Advising**

The Center for Academic Success (CAS) administers academic advising for all students. Students who are pursuing any track other than the standard published tracks must confer with CAS to ensure all requirements are met. Students who are not making satisfactory academic progress are required to meet with a CAS academic advisor.

The Center for Academic Success and academic advisors are responsible for advising students on the following:

- Academic probation (meeting with students on academic probation)
- Changing tracks (four- to five-year, etc.)
- Academic aspects of leaves of absence (regular or
- Questions regarding concurrent track options
- Requests for permission to take exams early or late (in extraordinary circumstances only)
- Assistance with the grade appeals process
- Petitions for excused absences
- General questions regarding academic progress and success

#### Satisfactory Academic Progress — Graduate Level

Students must maintain satisfactory academic progress toward a degree in order to continue in the program and to continue to receive federal, state and institutional financial aid. Students must enroll in courses per published and/ or approved curriculum layouts (unless on an approved deviated track).

"Satisfactory Academic Progress" is defined as:

- Passing grades in all academic courses and clinical rotations (for clinical students); and
- Passing all program requirements within one and one-half (1.5) times the length of the longest published enrolled program, generally between 5-7 years; and
- Maintaining a minimum of 11 credits each term (excluding summer, unless applicable), unless on an approved deviated track.

Clinical students who receive two (2) or more failing grades of "D" or "F" in courses, clinic rotations, or OSCE exams are considered not making satisfactory academic progress in a 12-month period.

School of Graduate Studies students who receive three (3) or more grades of "C" or lower in their academic career, or two or more failing grades of "D" or "F," or falling below full-time status for more than one term (unless on an approved deviated track), are considered not making satisfactory academic progress.

The Academic Progress Committee meets twice per academic term to determine students' academic progress. Students making unsatisfactory academic progress will be referred to the Academic Review and Appeals Committee (ARAC).

If a student is not making satisfactory academic progress in a course prior to the end of the term, the faculty member may request the student to access tutoring; and may share concerns with the program dean and/or director of academic access and success about classroom attendance, performance on examinations, and any other factors that may impact the student's success in the course.

Financial aid recipients who fail to make satisfactory academic progress in any term will be subject to the terms and conditions outlined in the Financial Aid Satisfactory Academic Progress Policies in place for that office (see Section 10.8 Criteria for Continued Student Eligibility in the student handbook). These policies are separate from NUNM's satisfactory academic progress policies.

Students who have "reached maximum timeframe status," depending on the enrolled program, are considered not to be making satisfactory academic progress and will no longer be eligible for federal financial aid.

#### Maintaining Active Enrollment for Satisfactory **Academic Progress**

To maintain an active enrolled student status, a minimum enrollment of one (1) credit is required. Any student who does not enroll in a minimum of one (1) credit each quarter will be considered withdrawn and must reapply, and will be subject to the graduation requirements in the catalog specific to the year of reapplication (this does not apply to standard summer breaks).

Students who have met all course requirements but have outstanding graduation requirements, such as a DSOM capstone, MSiMR thesis, clinical hours, clinical proficiency objectives (CPOs), preceptor hours, or other graduation requirements, must register for either one (1) credit of "Thesis/Capstone Completion" or one (1) credit of "Graduation Completion" each term until all graduation requirements are met. DSOM and MSiMR student have a maximum of one (1) academic year to complete their thesis/capstone. ND students have a maximum of two academic terms to finish all outstanding requirements. Students are not eligible for financial aid while registered for thesis/capstone or graduation completion. Students also must adhere to the maximum length of program requirement. Failure to register each term for thesis/ capstone/graduation completion credit will constitute a withdrawal.

If a student wants to continue beyond the maximum length of program timeline, they will be required to meet with the director of academic access and success and their program dean to determine if they may continue at NUNM. The director of academic access and success and program deans will assess if the student can demonstrate knowledge retention and skills of their program. If it is determined that the student has gaps of knowledge and/or skills, the student will be required to complete additional academic and/or clinical work. Students who are granted an extension to continue their program beyond the maximum length of program deadline will then be matriculated under the university catalog of the year of their extended program, and are subject to the graduation requirements of their program listed in that catalog. Students will be required to sign an academic contract.

#### Academic Probation — Graduate Level

Students failing any course ("F" or "D" grade) or clinic rotation, failing an OSCE exam twice, or receiving two or more "FR" grades (regardless of whether remediated) will be placed on academic probation. When placed on probation, all students must meet with an academic advisor within one week to sign an academic contract. This agreement will delineate a timetable for repeating failed courses, identify needed resources, and require that the student not fail any other required courses during the probationary period. Students may not register or receive financial aid until a current academic contract is on file in the Registrar's Office. Students who fail to complete an academic contract will be withdrawn from any courses in which they are currently enrolled. Students are advised to meet with their university advisor(s) to discuss strategies for successful completion of their program.

Students are removed from academic probation once any courses or clinic shifts are repeated and passed, and the terms of the academic contract are met.



#### Satisfactory Academic Progress — Undergraduate Level

Undergraduate students must maintain satisfactory academic progress toward a degree in order to continue in the program and to continue to receive federal, state and institutional financial aid.

"Satisfactory Academic Progress" is defined as follows:

- Meeting and maintaining the minimum grade-point average requirements (2.00); and
- Having a completion rate of 67% of courses attempted per term; and
- Having less than the maximum of 1.5 times the number of credits required to graduate, i.e., students cannot enroll in more than a cumulative of 136 attempted credits; and
  - Multiple withdrawals from courses will impact a student's eligibility to make satisfactory academic progress.
- Degree completion within the maximum length of study (defined as 1.5 times the length of the longest undergraduate program); and
- Taking a minimum of 12 credits each term (excluding summer, unless applicable), unless on an approved deviated track.

Students who earn a term GPA of less than 2.00 and have a cumulative GPA below 2.00, or earn a term GPA of less than 1.50 and have a cumulative GPA of 2.00-4.00, are considered not making satisfactory academic progress.

The Academic Progress Committee meets twice per academic term to determine students' academic progress, and students may be referred to the Center for Academic Success or to the Academic Review and Appeals Committee (ARAC). Students must enroll in courses per published and/or approved curriculum layouts.

A minimum enrollment of one (1) credit is required to maintain student status. Any student who does not enroll in a minimum of one (1) credit each quarter will be considered withdrawn, must reapply, and will be subject to the graduation requirements in the catalog specific to the year of reapplication (this does not apply to standard summer breaks).

Students who have met all graduation requirements, except for the capstone/internship, must register each term for one (1) credit of "Graduation Completion" until they have completed their requirements (students will not be aideligible at this point); with a maximum of two academic terms. Failure to register each term for the graduation completion credit will constitute a withdrawal.

If a student is not making satisfactory academic progress during a course prior to the end of the term, the faculty member may request the student to access tutoring and may share concerns with the program dean and/or the Center for Academic Success about classroom attendance, performance on examinations, as well as any other factors that may impact the student's success in the course.

Financial aid recipients who fail to make satisfactory academic progress in any term will be subject to the terms and conditions outlined in the Financial Aid Satisfactory Academic Progress Policies. These policies are separate from the institution's satisfactory academic progress policies.

Students who have "reached maximum timeframe status" are considered not to be making satisfactory academic progress and will no longer be eligible for federal financial aid.

If a student wants to continue their program beyond the deadlines, they will be required to meet with the Center for Academic Success and program dean to determine if they may continue at NUNM. The academic advisor and program dean will assess if the student can demonstrate knowledge retention and skills of their program. If it is determined that the student has gaps of knowledge and/or skills, the student will be required to complete additional academic work. Students who are permitted to continue their program beyond the one and one-half (1.5) times the length of the longest published enrolled program will be required to follow the university catalog of the year of their extended program. These students are subject to the graduation requirements of their program listed in that catalog and are required to sign an academic contract.

#### **Undergraduate Academic Standing**

Academic standing and credit completion are monitored for all students at the end of each term (including summer) by the Registrar's Office, which will notify the student and the Center for Academic Success when the student is not making satisfactory academic progress. Students receiving financial aid need should review the financial aid



satisfactory academic progress requirements for continued eligibility.

The Registrar's Office monitors student GPAs (both term and cumulative) for academic standing and credit completion to determine sufficient progress toward degree completion. Incomplete grades are not calculated as part of a student's GPA. Academic standing and insufficient credit completion are evaluated separately as described below.

#### **Academic Standing**

The Registrar's Office and the Center for Academic Success use the following categories to describe a student's academic standing when unsatisfactory. These categories are as follows:

#### **Academic Warning**

Academic warning status occurs when a student earns a letter grade of "D" or less in an individual course. A student may still be considered to be in good academic standing if their cumulative GPA is at or above a 2.00. A letter grade of "D" is identified as a concern of potential academic problems if not rectified. While on warning status, a student is expected to meet with an academic advisor to develop a plan to address the concern.

#### Academic Probation

Academic probation occurs when a student earns a term GPA of below 2.00 and has a cumulative GPA below 2.00; or earns a term GPA of less than 1.50 and has a cumulative GPA of 2.00-4.00.

When placed on academic probation, a student must meet with an academic advisor in the Center for Academic Success to sign an academic contract within one week of notification. The academic contract will identify needed resources, including but not limited to, remedial work, additional coursework, tutoring or repeating course(s), and requires that the student improve their GPA.

Students are removed from academic probation once they have earned a minimum term GPA of 2.25, have a cumulative GPA of 2.00, and the terms of the academic contract are met.

Students may not register or receive financial aid until a current academic contract is on file in the Registrar's Office. Students who fail to complete an academic contract within one week may be withdrawn from any courses in which they are currently enrolled and/or placed on registration hold.

A student who does not meet the criteria to be removed from academic probation, and who does not escalate to academic suspension, will continue on in probation and be subject to the same requirements.

While on academic probation, if a student receives an additional term GPA of less than 2.00, they will be referred to the Academic Review and Appeals Committee (ARAC).

#### **Academic Suspension**

Academic suspension occurs when a student is ineligible to enroll at the university for a specified period of time. Suspended status is noted on the student's official transcript. Suspension is determined through the ARAC process. A student has the right to appeal an academic suspension if they believe that their suspension resulted from:

- Failure of the program dean or the Academic Review and Appeals Committee to follow the procedures set forth in the policy on unsatisfactory academic progress.
- The sanction is grossly out of proportion/alignment with the offense.
- Information relevant to the decision was not available to the committee for consideration at the time of the hearing. Failure to appear at an ARAC meeting is not grounds for an appeal without an approved excused absence.

#### Academic Review and Appeals Committee

The Academic Review and Appeals Committee (ARAC) is an institutional process with a degree program-specific outcome. The committee is composed of four faculty members and chaired by the registrar, who convenes the meetings. Program dean(s) appoint faculty members. Meetings of ARAC are not legal proceedings. No attorneys may be present at any meeting of the committee. Students should submit any supporting paperwork for early review to the registrar, prior to the meeting with ARAC.

#### **Graduate Programs**

ARAC reviews student progress in required courses and in the clinic. A student required to attend an ARAC meeting is not permitted to withdraw or take a leave of absence from NUNM until they have resolved the referral to the committee.

Essential elements reviewed by ARAC during graduate student hearings include, but are not limited to:

- Failure of a course, clinic shift or OSCE
- Failure to complete an academic contract in a timely manner
- Failure to comply with the terms of an academic contract
- Remediated courses
- Failure of two or more required courses in different degree programs
- Failure to follow approved and/or published curriculum layout
- Failure to make satisfactory progress in a required research project (MSiMR students)

The committee will review the situation, meet with the student, and make a recommendation to the program dean(s). Recommendations may be, but are not limited to, any of the following regarding the student's change of status:

- Probationary status requiring counseling or support for the conduct in question
- Development of a revised academic contract outlining a timeline for converting the failing grades to passing grades, which may include restrictions on new coursework undertaken by the student until the failing grades are changed. (This will allow financial aid eligibility to be maintained.)
- Suspension from NUNM or from a specific program

Suspension from a single program or from all programs may occur in the following cases:

- Failure to satisfy an academic contract
- Failure of two clinic shifts throughout a student's academic career
- Failure of two required classes in a given quarter, including electives
- Failure of two sequential classes
- Failure of the same class twice
- Failure to meet technical standards
- Receiving three or more RCs, RPs, or grades of "D" or less in an academic career
- Failure of any OSCE three (3) times for ND students
- Failure to maintain satisfactory academic progress

#### **Undergraduate Programs**

ARAC reviews student progress in courses. A student required to attend an ARAC meeting is not permitted to withdraw or take a leave of absence from NUNM until they have resolved the referral to the committee.

Essential elements reviewed by ARAC during undergraduate student hearings include, but are not limited to:

- Failure of courses
- Failure to complete an academic contract in a timely manner
- Failure to comply with the terms of an academic contract
- Failure to follow approved and/or published curriculum layout
- Failure to make satisfactory progress in the capstone project

The committee will review the situation, meet with the student, and make a recommendation to the program dean(s). Recommendations may be, but are not limited to, any of the following regarding the student's change of status:

- The ability to continue in the program under academic probation status
- Requirement of personal counseling or support for the conduct in question
- Develop and sign a revised academic contract with the Center for Academic Success that outlines a timeline for resolving GPA concerns. This may include additional restrictions on new coursework undertaken by the student until the probation status is lifted.
- Suspension from NUNM

Suspension from NUNM may occur in the following cases:

- Failure to satisfy an academic contract
- A term GPA of less than 2.25 and a cumulative GPA below 2.00 while on academic probation
- Failure to maintain satisfactory academic progress

A student who is academically suspended a second time will be expelled from NUNM and forfeit the opportunity to re-enroll at NUNM.

#### Appeal of Academic Suspension

A student suspended will have three (3) business days from the date of the sanction notification to submit an intention to appeal to the provost, or the provost's designee, in writing. The student then has seven (7) calendar days to submit the written appeal and supporting documentation to the provost or designee. The written appeal does not provide an opportunity for ARAC to rehear the case. The provost, or the provost's designee, will respond to the written appeal with a final decision within ten (10) calendar days, not including weekends or published holidays that the university is closed; based on assessment of the information presented by the dean and ARAC, the student, and a review of the investigation process and procedure. An appeal must contain the basis for the appeal limited to one or more of the following issues:

- Failure of the program dean, or the Academic Review and Appeals Committee, to follow the procedures set forth in the policy on unsatisfactory academic progress
- The sanction is grossly out of proportion/alignment with the offense
- Information relevant to the decision that was not available to the committee for consideration at the time of the hearing

The provost may elect to uphold the decision of the dean; reverse the decision; request a different resolution; or refer the case back to the Academic Review and Appeals Committee if there is new information that was previously not available to ARAC for consideration.

# Reapplication and Readmissions Policy — Graduate Level

Students who have been suspended cannot submit an application for readmission to NUNM for a minimum of one (1) calendar year from time of suspension, unless noted differently in the suspension letter. A suspended student who wishes to apply for readmission to NUNM must meet one of the following criteria at the time of suspension.

- The student had a serious illness or medical issue
- An event, or series of events, occurred that prohibited the student's academic performance due to high levels of stress. Examples include: a death in the family, divorce or separation from a long-term partner, or assault
- Documentation of a disability that can be, but has not been previously or reasonably, accommodated
- The student experienced any other serious problem that significantly affected academic performance

Documentation may be required to prove that the situation leading to suspension has been remedied. NUNM may impose the following requirements upon readmission for a student who was academically suspended:

- Complete remedial work prior to readmission, repeating some courses and/or clinic shifts
- Meet with the Center for Academic Success to sign and comply with all conditions of an academic contract



 Return on academic probation for a minimum of one
 (1) academic year, and until all previously failed courses have been resolved

Students who have withdrawn, either administratively or voluntarily, from NUNM must wait one application cycle to apply for readmission. Withdrawn students are required to follow the application process as outlined by the Office of Admissions. NUNM may impose one or more of the following requirements for a student who applies for readmission, and has been separated from NUNM for more than one year:

- Take an entrance exam prior to entering the clinic to assess skill level
- Complete remedial work, which may include repeating some courses and/or clinic shifts
- Meet with the Center for Academic Success to sign and comply with all conditions of an academic contract if on academic probation when withdrawn. The student will remain on academic probation until all previously failed courses have been resolved
- Submit and pass an additional drug screening and/or background check

Expelled students are ineligible for reapplication or readmission to NUNM.

Completing these steps does not guarantee readmission to NUNM. These are the criteria for consideration for reapplication. Questions regarding this policy may be directed to the director of admissions, the program dean or dean of students.

# Reapplication and Readmission to NUNM — Undergraduate Policy

Undergraduate students who have been academically suspended cannot submit an application for readmission to NUNM until the following criteria have been met:

- Demonstrated success of a minimum of 12 credits from an accredited college or university with a GPA of 2.50 or higher. (Submit transcript to the Office of Admissions); and
- Submission of a reapplication to the Office of Admissions. The student should include a personal assessment of their poor performance, and a plan of action for successful completion of their NUNM degree.

NUNM may impose the following requirements upon readmission for a student who was academically suspended:

- Student must meet with the Center for Academic Success to sign and comply with all conditions of an academic contract; and
- Return on academic probation until the student earns a minimum term GPA of 2.50 and has a minimum cumulative GPA of 2.00.

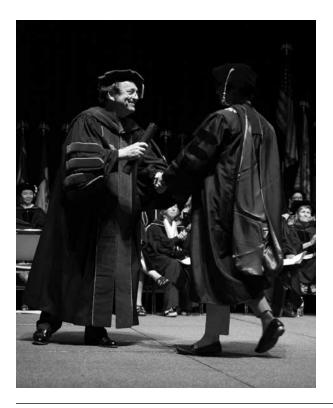
Expelled students are ineligible for reapplication or readmission to NUNM.

Completing these steps does not guarantee readmission to NUNM. These are the criteria for consideration for reapplication. Questions regarding this policy may be directed to the director of admissions, the program dean or dean of students.

#### **Honor Council**

The Honor Council is a standing committee composed of faculty, resident, student and staff representation. The committee meets monthly to review written complaints and performance reports referred from the dean of students that reflect failure of a student to maintain behavioral standards according to the Honor Code and Code of Conduct. Behavioral standards include, but are not limited to, honesty, respect, interpersonal skills, deportment and demeanor, learning skills, professional behavior and communication skills. The committee reviews reports that may be submitted by faculty, staff or students. The Honor Council, depending on the nature and severity of the report, may request a formal code of conduct investigation. The committee does not accept anonymous reports.

After reviewing all information, students will meet with the committee to discuss reported problems. The committee makes recommendations to the dean of students, who then makes the final determination and notifies the student, in writing, of the outcome. The dean of students reviews all reports submitted for Honor Council review, and on occasion, may choose to expedite the process and make a determination without submitting the information to the Honor Council for review. If the Honor Council determines that the frequency of reports, an accumulation of non-academic violations, or the seriousness of a report demonstrates a problem, they may recommend a more severe sanction such as probation, suspension or expulsion, which may interfere with a student's ability to complete their academic program.



Thereafter, any reports forwarded to the Honor Council may serve as a basis for the committee to recommend suspension. Meetings of the Honor Council are not legal proceedings. No attorneys may be present at any meeting of the committee. A student may bring a faculty member or a member of the Office of Student Life as an advisor or advocate. Advisors' sole purpose during the investigative process is supportive in nature. Advisors are not allowed to speak or otherwise participate in the proceeding or participate in the investigation.

After reviewing a student file, the committee may recommend disciplinary sanctions that include, but are not limited to, any of the following sanctions to the dean of students:

- The student is found not in violation. No further action is required.
- A letter of reprimand or warning outlining policy, with a reminder to adhere to the policy or procedure.
- Referral for required areas of deficiency and remedial work may be required. This may include, but is not limited to, counseling, tutoring, meeting with an advisor or mentor, repeated course work, or restricted enrollment in certain courses.
- Restitution
- Community service or educational programming
- Disciplinary probation for behavioral reasons. The student does not currently demonstrate the appropriate behaviors, attitudes, skills or knowledge required for the program. A student placed on disciplinary probation for behavioral reasons may be required to perform remedial work, which may alter their course of study. In this case, any additional reports forwarded to the committee showing concern may result in suspension from the program.
- A recommendation for suspension or expulsion from NUNM.
- The committee may provide any additional recommendation it believes is suitable to address the issue at hand.

Reports and letters outlining decisions made by the Honor Council and/or dean of students are maintained in the student's file in the program dean's office, and the Office of Student Life. Honor Code reports do not affect a student's academic record unless the outcome is suspension or expulsion from NUNM. Copies of reports and letters are maintained in compliance with NUNM's Record Retention Policy.

#### Patient Safety Monitoring Board

The purpose of the Patient Safety Monitoring Board (PSMB) is to apply a systematic, objective review process to adverse clinical events, and to provide



formative feedback about clinical policies, procedures and educational practices with the goal of improving patient care and clinical quality. The PSMB serves as a subcommittee of the Honor Council. Once a student has been referred to the Honor Council for a clinical violation, the PSMB conducts a root cause analysis using the fishbone/cause and effect method to audit NUNM systems. The information is presented to the Honor Council, which deliberates as to whether there was a patient safety issue, as well as makes recommendations for prevention of future similar problems.

#### Appeal of Honor Council Suspension or Expulsion

Students have the right to appeal a suspension or expulsion from NUNM for Honor Code or Code of Conduct violations. Violations of a lesser nature may not be appealed. No adverse action will be taken against a student for registering an appeal in accordance with these policies. Within three (3) business days from the date disciplinary action was levied against the student by the dean of students, the student must notify the provost (or designee) of intention to appeal. The student will then have seven (7) calendar days to complete and submit to the provost (or designee) a written request for review. The provost (or designee) will respond with a final decision within ten (10) business days, not including weekends or published holidays, based on assessment of the information provided by the dean of students and the investigation of procedure, or refer the appeal to the Student Appeals Committee. In the unforeseen event the provost (or designee) needs

additional time in reviewing the evidence, the provost (or designee) will notify the student in writing of the deadline extension. An appeal must contain the basis for the appeal limited to one or more of the following issues:

- Failure of the dean of students, or the Honor Council, to follow the procedures set forth in the policy in the student handbook.
- The sanction is grossly out of proportion/alignment with the offense.
- Information relevant to the decision that was not available to the committee for consideration at the time of the hearing.

The provost (or designee) may elect to uphold the decision of the dean, reverse the decision, or request a different resolution.

#### **Examinations and Completion of Assignments**

Students are required to complete all examinations and assignments on schedule. Extensions of assignment deadlines are offered at faculty members' discretion. In cases of severe illness, bereavement or family emergency, refer to the Petitioning for Excused Absences policy in the student handbook. Please also see the Financial Policies section regarding fees. Students who may have a temporary disability that inhibits their attendance and participation in class or clinic should contact the Center for Academic Success for an accommodation.

#### **Graduation Policy**

Candidates for graduation must complete the following within the same calendar year as the commencement ceremony they participate in:

- Satisfy all courses in the degree program curriculum
- Satisfy clinic requirements for all medical students, if applicable to the student's degree program
- Demonstrate competence in all technical standards
- For medical students, demonstrate satisfactory professionalism for a health professional
- Transfer students enrolled in a clinical program must complete at least three (3) years of professional training at NUNM
- Second professional degree students must complete at least two (2) years of professional training at NUNM
- Satisfy thesis or capstone project requirements, if applicable to the student's degree program
- Satisfy all financial obligations to NUNM

**MSiMR:** Students are required to complete a master's thesis by the middle of the final term of their last year. A master's thesis instruction document is provided to all MSiMR students.

**DSOM:** Students are required to complete a three-part doctoral capstone project by the end of the final term of the DSOM program. A project handbook is provided in the Doctoral Capstone Tutorial course scheduled in the summer quarter of the final (internship) year.

**Undergraduate Capstone:** Undergraduate students are required to complete a capstone project by the middle of the final term of their last year. Information about the capstone project is available on the Capstone Moodle course page.

A diploma will not be issued to students until all clinical, academic and financial requirements have been met. The official graduation date is the last day of the term in which all requirements are completed. An ND student is ineligible to take licensing examinations until all required work is completed.

#### **Voluntary Leave of Absence**

Students considering a leave of absence must schedule an appointment with the Center for Academic Success. A student in good academic standing may apply for a leave of absence of up to, and no more than, one academic year (four academic quarters, regardless of enrollment of summer term), which entitles the student to re-enter NUNM during a predetermined quarter the following academic year, provided there is space in the class. Students who are on a leave of absence cannot participate in any academic activities, including clinical rotation shifts or preceptor rotations. Students taking less than



a full academic year off may not be allowed to continue with a full class load due to the sequencing of courses and missing prerequisites. In such instances, the student may be required to enter a new educational track, which must be approved by the Center for Academic Success or program dean. The program dean and/or academic advisor can guide students through a new schedule. The registrar must be advised of a student's intention to return to NUNM within 30 days of intended return, and before the beginning of the quarter in which the student plans to register. The registrar will instruct students to complete and submit a "Returning Student Notification" form to be approved by the following offices: Registrar, Financial Aid, Business Administration, Center for Academic Success, and Student Life, with the form being returned to the Office of the Registrar when completed.

Concurrently enrolled students may take a leave from their secondary program without taking a leave from their primary program. However, concurrently enrolled students who take a leave of absence or withdraw from their primary degree program must also take a leave of absence or withdraw from their secondary program.

If a student does not return within one year, the student will be considered administratively withdrawn from the program and will be required to submit a new application for admission.

The student will need to satisfy admission requirements in effect at the time of reapplication, but may request that the application fee be waived. A leave of absence normally will be granted to any student who is in good standing (i.e., has no outstanding grades of incomplete, fail remediate or failure for required courses, and is not on academic or disciplinary probation), and who has satisfied all financial obligations to NUNM.

Students are not allowed to take more than one year (four quarters) of absence from NUNM during their academic career.

#### Medical Leave of Absence

Students considering a medical leave of absence must schedule an appointment with the Center for Academic Success. In the case of a medical leave of absence, which may be granted to a student on academic probation, appropriate documentation is required from the attending physician. The physician must indicate the necessity of granting the leave.

A student who is not in good academic standing (i.e., has outstanding grades of incomplete, fail remediate or failure for required courses; or is on academic or disciplinary probation) and is serving in the military will be granted a medical leave of absence without medical documentation. The student must submit documentation from the military branch of their time serving.

Students who are on a medical leave of absence cannot participate in any academic activities, including remediating incomplete grades or exams; and/or participating in clinical rotation shifts, including preceptor rotations. A student who wishes to return from a medical leave of absence must provide to the Center for Academic Success adequate documentation from the attending physician demonstrating the student's fitness for returning to the program. After documentation has been reviewed and approved, the registrar will be advised of the student's intention to return to NUNM. The advisement of a student's intention to return must be given within 30 days of intended return, and before the beginning of the quarter in which the student plans to register. The registrar will instruct the student to complete and submit a "Returning Student Notification" form to be approved by the following offices: Registrar, Financial Aid, Business Administration, Center for Academic Success, and Student Life. The form should be returned to the Office of the Registrar when completed.

Students taking less than a full academic year off may not be allowed to continue with a full class load due to sequential courses and missing prerequisites. In such instances, the student may be required to enter a new educational track, which must be approved by the Center for Academic Success or program dean. The program dean and/or academic advisor can guide students through a new schedule.

Concurrently enrolled students may take a leave from their secondary program without taking a leave from their primary program. However, concurrently enrolled students who take a leave of absence or withdraw from their primary degree program must also take a leave of absence or withdraw from their secondary program.

If a student on a medical leave of absence does not return within one year, the student will be considered administratively withdrawn from NUNM and will be required to submit a new application for admission. Any incomplete grades will be converted to a failing grade.

The student will need to satisfy admission requirements in effect at the time of reapplication, but may request that the application fee be waived.

Students are not allowed to take more than one year (four quarters) of absence from NUNM during their academic career.

#### Concurrent Student Leave of Absence

Students are only allowed to be enrolled in two (2) programs concurrently. Concurrently enrolled students are not required to take a leave from both programs at the same time, allowing them to remain in one program while on leave from the other program. However, concurrent students who take a leave of absence or withdraw from their primary degree program must also take a leave of absence or withdraw from their second program. In the case of a leave of absence, students are assured a seat in both programs upon return to NUNM. Any exception to this policy must be petitioned to the dean of students (or designee) and is subject to the conditions outlined below.

For concurrent students who choose to take a leave of absence or withdraw from their primary program, and wish to continue the series of courses in their secondary program for the remainder of the academic year, the following conditions apply:

- There is not an option of continuing in their secondary degree program at a full-time status, nor returning early from the leave of absence to the primary program.
- Concurrent students who elect to continue in their secondary degree program while on a leave of absence from their primary program are not eligible for Title IV financial aid. Students may be reviewed for aid eligibility in the next academic year.
- Concurrent students cannot add core courses in their secondary program until the next matriculation start date.

This policy may not apply to students with an MSiMR secondary-degree program.

#### **Involuntary Leave of Absence**

This policy is designed to maintain the health and safety of all campus community members. A student may be restricted from campus or subject to an involuntary leave of absence, when, due to a mental, emotional, physical or psychological health disorder, their continued presence at the university poses a significant risk of substantial harm to themselves or others, or is creating a substantial disruption to the educational environment. A significant risk is based upon an individualized assessment and constitutes a high probability of substantial harm that cannot be mitigated by reasonable means.



In most situations where a student's medical, psychiatric or psychological condition poses a threat to themselves or to others, the student will be highly encouraged by the dean of students to voluntarily accept a leave of absence (LOA) or medical leave of absence (MLOA). However, if the student does not take such a voluntary leave, the involuntary leave of absence (ILOA) process may commence.

If a student has taken actions that are identified as being a significant risk to the health or safety of oneself or other(s), or is creating a substantial disruption to the educational environment, the dean of students or designee, acting on behalf of NUNM and in consultation with the Crisis Assessment and REsponse Team (CARE Team), may initiate the ILOA process as set forth below. The significant risks may include, but are not limited to, acute danger/loss of life, inability to independently manage daily tasks, or inability to cooperate with necessary support services, etc.

If the decision is made to place the student on an ILOA, the student is prohibited from participating in any academic or non-academic NUNM activities, including remediating incomplete grades or exams, and/or participating in clinical and preceptor rotations. The student may be subjected to actions including, but not limited to:

- A temporary ban from campus
- Withdrawal from class attendance or experiential learning (i.e., preceptor rotations, community education, university-sponsored travel, etc.)
- An interim suspension of participation in any campus or off-campus NUNM activities
- Completion of a mental health, substance abuse, or other necessary evaluation conducted by an appropriate off-campus licensed health provider

Students will receive a written description of the details of the ILOA pertaining to them, including the appeal procedures as outlined in Section 14 of the student handbook.

The letter regarding the ILOA will be placed in the student's file with a copy sent to the program dean(s), director of academic success and access, registrar, director of financial aid, and the provost. The Registrar's Office will notify course instructors of the student's leave status.

A student who wishes to return from an ILOA must provide to the dean of students (or designee) adequate documentation, as outlined in the initial letter, from the attending physician or mental health professional demonstrating the student's fitness for returning to NUNM. Students taking less than a full academic year off may find, upon their return, that the appropriate course load required to stay on track will not qualify them for full-time financial aid. In such instances, the student may be required to enter a new educational track, which must be approved by the academic advisor/program dean and the registrar.

Students who take an ILOA will earn a grade of "W" for all enrolled courses at the time the leave is instated. If the student has completed at least 80% of the course at the time of the withdrawal, they may be eligible to petition the faculty member for a grade of "incomplete."

#### Withdrawal from School

Students may initiate formal withdrawal by meeting with the dean of students. Students withdrawing from school at any time during the school year must complete an exit interview with the Financial Aid Office and submit a completed "Leave Withdrawal" form available from the dean of students. Failure to register for any quarter is considered a withdrawal, and the student will need to submit a new application and application fee for readmission.

A student facing an alleged violation of the Code of Conduct or Honor Code is not permitted to withdraw from NUNM until all allegations are resolved. A student required to attend an ARAC meeting is not permitted to withdraw or take a leave of absence from NUNM until they have resolved the referral to the committee.

### Withdrawals — Federal Title IV Aid Recipients

If a student ceases attendance (drops or withdraws) from all Title IV eligible courses in a payment period or a period of enrollment, the student is considered withdrawn for Federal Title IV aid purposes.

### Federal Loan Exit Interviews

Federal regulations require that any student who has received a federal loan while attending NUNM and who leaves for any reason, including official leaves of absence, must participate in a loan exit interview. Exit interviews are conducted online at studentloans.gov. Additional information may be obtained by calling the Financial Aid Office.

## **Independent Study**

Independent study is offered only when specific, approved circumstances require the student to achieve the course competencies outside of the normal classroom venue. This could happen, for example, when there is an unavoidable scheduling conflict for a student on an approved non-standard track.

Independent study is not allowed for elective courses when the student has completed the elective requirement for their program.

### Conduct and Professional Standards

NUNM expects all students to maintain professional standards of conduct and appearance. These standards are found in the academic and nonacademic policies and procedures section of the student handbook, and in the clinic section and honor code. The naturopathic oath, classical Chinese medicine oath, state laws and regulations, and documents of professional organizations such as the American Association of Naturopathic Physicians (AANP) and American Association of Acupuncture and Oriental Medicine (AAAOM) provide further insight concerning professional standards of conduct. The student conduct code in the student handbook specifies procedures for investigating violations of university policies and the sanctions that may be imposed.

### Academic Freedom

NUNM faculty and students are free to question, discover and test all knowledge appropriate to their discipline as judged by the academic community in general.

### **Student Records**

The Registrar's Office maintains permanent academic records of each student enrolled at NUNM. Unless otherwise required by law or special circumstances, the university will follow the policies set forth in this section and the record retention policy found in the student handbook. Typically, a student's academic record contains an application file, personal information necessary for NUNM business, grade reports, and records of any official action by NUNM concerning the student. Students are notified annually via email of their rights under the Family Educational Rights and Privacy Act of 1974 (FERPA) – commonly referred to as the "Buckley Amendment." The Business Office, Financial Aid Office, Office of Student Life, and Academic Affairs Office may also maintain student files as required by their respective functions. NUNM will maintain information on students in a secure, confidential manner in accordance with FERPA, and to that end will observe the following

- University officers and faculty may review student records on an as-needed basis.
- NUNM holds the following information as directory information, which may be disclosed in response to legitimate requests: name, address, telephone number, university email address, dates of attendance, enrollment status (full time, part time and leave of absence), academic program, graduation date, photograph and awards received. NUNM will only print the following information in directories: name, year in school, university email and telephone number.
- Personal information about students will not be shared with third parties on- or off-campus, except as directed in writing by the student, the courts or governmental agencies.
- A student who wishes to review their records may do so by submitting a request in writing 48 hours prior to the time they wish to view their records.
- A student may not make copies of documents in their files.
- A student who believes information contained in their academic record is inaccurate, misleading, or a violation of privacy may request that the records be amended.
- In the event of a disagreement between a student and the administration as to the disposition of an issue, the student has the right to place a personal position statement in their academic file.
- A student has the right to file complaints with the appropriate agencies concerning alleged failures by NUNM to comply with applicable laws and rules, and/or their implementing regulations.

- Students may request information to be withheld by completing a "Directory Hold Request" form available from the Registrar's Office.
- NUNM may, in accordance with FERPA, disclose personally identifiable information from a student's education record without consent if the disclosure is in connection with a health or safety emergency.

Each student is responsible for furnishing, completely and accurately, all information required by NUNM so that it may perform its proper function as an educational institution. If a student's circumstances change (e.g., name, address, financial situation, etc.), the student is responsible to ensure that appropriate university officials are informed of the changed circumstance as soon as possible.

No part of a student's file, except directory information as noted above, will be released to any person outside of NUNM without written consent of the student, except as required by law.

Records for students attending NUNM under the provisions of the Veterans Administration will be accessible to certain authorized state and federal personnel without prior consent in accordance with 45 CFR, part 99.31 and part 99.35.

FERPA does not apply to employment situations, nor does it apply to candidates for matriculation to NUNM. However, Human Resources and the Office of Admissions adhere strictly to guidelines of professional conduct. All student admission applicant and employee applicant records are the property of NUNM and will not be released or returned except as outlined above.

# Change of Track

Students are admitted to a specific educational program and required to follow their educational track. Within a track, students are not allowed to drop required courses or take required courses ahead of schedule.

After matriculation, students may request to change tracks to any of the standard educational tracks by submitting a "Student Status Change" form, approved by an academic advisor, to the Registrar's Office. Once processed by the Registrar's Office, students must follow their new educational track. Students may deviate from the standard educational tracks for the following reasons: documented chronic illness, bereavement, or approved academic accommodations and considerations. Deviation requests must be accompanied by the appropriate documentation before approval can be given. A \$50 fee is applied to every approved petition to deviate.

A track change also requires a signature from the Office of Financial Aid, since there is likelihood of award modification to the student. All track requests must be completed by week eight (8) of the quarter prior to the quarter in which the change takes effect.

Students may require an individual track layout due to approved deviations, a leave of absence, transfer credit, adding a second program, failure of a required course, etc. Due to the timing of some deviations, a student's course schedule may not meet full-time enrollment status. Adjustments to individual tracks may be required due to course conflicts, and will be made at the discretion of the registrar at no additional cost beyond the change fee. Students who deviate from their approved educational track may be required to take a leave of absence.

Students who are admitted into a degree program that does not have a lockstep track are exempt from this policy.

# Change/Addition of Degree(s)

Students who wish to withdraw from one degree program and enroll into another must formally apply through the Office of Admissions. Once admitted, an academic advisor will work with the program dean to approve and inform the student regarding potential transfer credit, challenge exam options, and establish a new track. Students must meet with the Office of Financial Aid, since there is likelihood of award modification to the student.

Students who wish to add an additional degree (i.e., become a concurrently enrolled student in two degree programs) must formally apply through the Office of Admissions. Once admitted, the student will work with the Center for Academic Success to establish a new track. Students must meet with the Office of Financial Aid, since there is likelihood of award modification. Students may pursue no more than two degrees concurrently. See the Financial Policies section for information on fees.

Students who matriculate into a second degree program will do so under the catalog corresponding to the year in which the student begins the new degree.

## Adding/Dropping Academic Courses

Students self-register for all core courses and may not deviate from the established curriculum unless they have submitted and received approval via a "Petition to Deviate from Current Policy or Requirements" form.

During week one (1) of each quarter, students may change sections in courses for which this is applicable. During this same period, they may also register for elective courses, and must submit an "Add/Drop" form with proper signatures to the Registrar's Office. For ND students, Objective Structured Clinical Examinations (OSCEs) may not be added once the quarter has begun (they must be registered for prior to week 1).

Courses may be officially dropped only by submitting an "Add/Drop" form with proper signatures to the Registrar's Office. (See below for the grading criteria and reimbursement schedule for dropped courses.) No core course can be officially dropped without the program dean's signature. Students who are **withdrawing from the institution** will receive a grade of "W" regardless of the week they withdraw. See Section 6.7 of the student handbook for more information. Non-attendance in any course will earn a grade of "F."

Students who request to withdraw from a course after week one (1) must receive program dean and faculty approval. Courses dropped after week four (4) are ineligible for a refund and will be assigned a "W" or "WF" based on the grade they were receiving at the time of withdrawal. All grades are included on student transcripts.

Weekend courses may be added or dropped up to the day before they begin based on the same criteria as above. Weekend courses that are dropped before they begin will receive a one hundred percent (100%) tuition refund. Lab and retreat fees are non-refundable once the term begins, even when the course occurs later in the term.

In addition, students who are on federal financial aid and reduce course loads that result in a change in enrollment status from full time to part time must meet with the director of financial aid.

- Week 1 Students may add/drop/change sections/ change to audit and receive a 100 percent (100%) refund with a grade of "W" (withdrawal) on the transcript.
- Week 2 Students may add/drop/change sections/ change to audit with instructor signature required. Students may drop/change sections and instructor must indicate the grade of "W" (withdrawal). A refund will be administered at 75 percent (75%).
- Week 3 Students may drop with instructor and program dean signature required, and instructor must indicate the grade of "W" (withdrawal). A refund will be administered at 50 percent (50%).
- Week 4 Students may drop with instructor and program dean signature required, and instructor must indicate the grade of "W" (withdrawal) or "WF" (withdrawal failing). A refund will be administered at 25 percent (25%).
- Weeks 5-12 Course can't be dropped. Failure to attend a registered course will result in the grade of "F." No refund given.

# All courses starting after week one (1) of the term will follow the same add/drop policy as outlined above.

Weekend courses – Students may use the "Add/Drop" form with appropriate signatures to add or drop a weekend course up to one week before the course begins. One hundred percent (100%) of the tuition will be refunded for courses officially dropped by the deadline. Lab and retreat fees are non-refundable once the term begins, even when the course occurs later in the term.

### Adding/Dropping Clinic Rotations

To add or drop a clinical rotation, students must contact the associate registrar. Students have a three- to five-day period after the clinic assignment schedule has been posted to make any changes to their clinic schedule (add or drop rotations) without being charged. This period is known as the "clinic adjustment period." The final deadline date to make changes is indicated on the clinic schedules. A \$50 add/drop/switch fee will be charged for any rotation changes after the final deadline, which is approximately one week after the "clinic adjustment period" has ended. Students who request any changes in their clinic rotations after the deadline must fill out a "Petition to Deviate from Current Policy or Requirements" form and submit it for approval to the program dean. The student will be notified of the decision by the associate registrar. Students are responsible for attending their current clinic shifts until decisions are finalized. All fees concerning clinic rotations will apply.

### Full-Time/Part-Time Student Status

ND and CCM full-time student status requires enrollment of no fewer than 11 credits per quarter. ND and CCM half-time student status requires enrollment of at least 5.5 credits per quarter.

School of Graduate Studies full-time student status requires enrollment of no fewer than eight (8) credits per quarter. Half-time student status requires enrollment of at least four (4) credits per quarter.

Undergraduate full-time student status requires enrollment of no fewer than 12 credits per quarter. Undergraduate half-time student status requires enrollment of at least six (6) credits per quarter.

Students on financial aid, who reduce their course loads from full-time to part-time status, must meet with the director of financial aid.



# **Student Life**

#### Student Handbook

Students are responsible for reading, understanding and abiding by all policies, rules, regulations, standards of conduct and information listed in the student handbook. Policy, rules, regulations, and standards of conduct changes to the student handbook are made without prior notice, including during the course of any academic year, to any course offering, requirements, policies, regulations, dates, and financial information or other information contained within the handbook. A current student handbook can be found online at nunm.edu. Paper copies are available in the Office of Student Life.

### Student Government Association

The NUNM Student Government Association (SGA) is an elected government of the student body. According to the NUNM student body constitution, the mission of SGA is "to serve as a forum in which the common needs of the diverse NUNM student body are identified, and to use SGA resources to address those needs and to enhance the student experience at NUNM."

SGA also oversees the management and distribution of the student activity fees collected each quarter with registration. Students elect an executive council—president, vice president, secretary, treasurer and judicial liaison, as well as class officers and student representatives to university committees. Elections for SGA positions occur every spring quarter, except for the incoming first-year class whose class-wide elections are conducted in the fall quarter. All members of the student body are invited to attend and participate in all SGA meetings. For more information, consult any of the class representatives or any member of SGA.

# Student Disability Support Services

The Center for Academic Success coordinates student accommodations based on Section 504 of the Americans with Disabilities Act. Students with questions should contact the director of student access and success.

### **Health Insurance**

NUNM does not require students to carry medical health insurance coverage as a part of their enrollment at the university. However, students who travel as a part of their program requirements are required to have a personal medical insurance policy that is in effect prior to the date of departure of their trip.

### Housing

Although on-campus housing is not available, NUNM is located near residential areas. Students may contact the Office of Admissions for additional information.

### **Student Identification Cards**

All students receive a photo identification card during new student orientation. Wearing a photo ID is recommended at all university facilities, and required at all NUNM health centers and for entrance to the main campus after hours. This card also allows students to check out books at the NUNM library and at several other Portland college libraries with which NUNM has borrowing agreements.

### **Emergency Contact Information**

Students are required to provide an updated emergency contact in SONIS. This information can be updated by using the "Change of Address" form found on the Registrar's page of the NUNM website.

## **Substance Abuse Policy and Program**

NUNM is in compliance with U.S. Public Law 100-297 and the Improving America's Schools Act of 1994 (U.S. Public Law 103-382), and the Oregon Health Authority and Oregon Administrative Rules 409-030-0100. NUNM policy prohibits unlawful possession, use or distribution of illicit drugs by students or employees on or off the university premises. A copy of the Substance Abuse Policy and Program is contained in the student and employee handbooks.

# **Drug Testing Policy**

NUNM is in compliance with Oregon Health Authority and Oregon Administrative Rules 409-030-0100. All students are required to undergo a drug screen prior to matriculation at NUNM. Students enrolled prior to July 1, 2015, are required to undergo a drug screen prior to any clinical rotations or fieldwork experience. Refusal to take the required substance test may result in a revocation of the offer of admission to NUNM. New students will forfeit their enrollment deposit and current students will receive an interim suspension from NUNM. Any current student who refuses to take the substance test will be prohibited from participating in clinical rotations or fieldwork at NUNM or any of its affiliates. A copy of the Drug Testing Policy is contained in the student handbook.

### **Campus Crime Statistics**

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, codified at 20 USC 1092 (f) as a part of the Higher Education Act of 1965, is a federal law that requires colleges and universities to disclose certain timely and annual information about campus crime and security policies. In accordance with U.S. Public Law 101-542, the Crime Awareness and Campus Security Act of 1990, the university annually publishes and distributes statistics concerning the occurrence on campus of reportable criminal offenses that are reported to campus security authorities. These statistics are available to all students and employees of NUNM. Statistics are also posted online at ope.ed.gov/ security. Students and employees are advised of campus security procedures and practices, incident reporting and crime prevention during training; and are encouraged to be responsible for their own security and the security of others.

### **Arrest Policy**

Violations of local, state and/or federal law are subject to university action. A student who has pleaded guilty to, or otherwise accepted responsibility for, a violation should be aware that the university may also sanction the student. Regardless of a plea, the dean of students must be notified within 72 hours if a student is arrested for, charged with, or convicted of any offense other than a minor traffic violation. If a student is unable to meet the 72-hour deadline, the student may be placed on an involuntary leave of absence pending a conversation with the dean of students.

A student may be suspended immediately, pending a conduct hearing, when an arrest involves an act of violence; the illegal sale, manufacture or delivery of drugs; or when the continued presence of the student on campus poses a threat to the safety or the rights, welfare, or property of another. If found in violation, a student will be subjected to disciplinary sanctions as outlined in Section 14 of the student handbook, up to and including expulsion.

If a matriculating student has been charged with a criminal offense between the time they submitted an application and the time they arrive at school, the student must inform the Office of Admissions and dean of students prior to arrival. If the university later discovers that a student has withheld disclosure of a criminal charge, they may be subject to immediate suspension.

If a student is convicted of an offense and allowed to remain enrolled at NUNM, the student will be required to meet with the dean of students and program dean(s) to discuss possible ramifications for clinical rotation and licensure requirements. The intent of this policy is to ensure the safety of patients and other members of the university.

### Remote Classroom and Children on Campus

A remote classroom with audio/video live feeds is available for nursing mothers. Others may petition the Office of Student Life for permission to use the remote classroom. Please note that not all classes are available for remote viewing due to the nature of some classes and specific instructor requirements. Babies in arms are permitted in the remote room, but parents must find off-site childcare once babies become mobile or are over 12 months of age. Due to academic concerns regarding class participation and video education, students are permitted to use the remote classroom for a maximum of two quarters per infant during their program at NUNM. Babysitting is not available on campus, nor is it possible to make private arrangements for on-campus babysitting. Parents are required to make suitable arrangements for off-site childcare so that they can attend class. Children are not permitted to attend class with parents. The remote room policy and privileges do not include exams and quizzes. Students are expected to find alternative childcare during exams.

Children are not allowed to attend clinic shifts with parents unless they are being seen as a patient and accompanied by a guardian.

#### New Student Orientation

New student orientation is a required course that provides students with the opportunity to become oriented and familiar with the campus and their peers; meet with essential faculty, staff and administrators; and learn the rights, responsibilities and expectations of being a student at NUNM.

Any student who is enrolling at NUNM part time or greater is required to attend new student orientation prior to the first term of enrollment. At that time, students will be assessed the new student orientation fee, which is charged to their student account. Attending new student orientation is a requirement for graduation from NUNM. A student who matriculates into an additional program during their academic career is exempt from participating in a second student orientation.

Students who complete new student orientation will receive a grade of "CMP" for completion. Failure to attend all of new student orientation will result in a grade of "NC," and the student will be required to retake the course the next time it is offered. Students who miss new student orientation will not be refunded the fee.

Students readmitted to NUNM must make an appointment with the Office of Student Life to determine if re-orientation is required.

# Organization and Governance

NUNM is a nonprofit 501(c) (3) corporation organized under Oregon law. The university is governed by a board of directors whose members serve three-year terms and represent the general community. The board oversees the organization and exercises management through the president. NUNM's day-to-day operations are performed by the president, administration, faculty and staff.

# **Board of Directors**

#### **Executive Committee Members**

Chair, Willow Moore, DC, ND

Vice Chair, Mohan Nair, MS

Secretary, Lori Blankinship, ND

Treasurer, B. Winston Cardwell, ND, MSOM

President, Ex-Officio, David J. Schleich, PhD

#### **Directors**

Sonia de Quateli Doi, MD, MA, PhD

Don Drake

Jodi Delahunt Hubbell

Christoph Kind, ND

Patricia "Patti" Kramer, PhD

Anupam Narayan, MBA

Judith A. Ramaley, PhD

Andrea P. Wolcott, MSHRM

#### Campus Representation (Non-voting)

Faculty Representative, Gaia Mather, ND

Staff Representative, Sara Monaghan

Senior Student Representative, vacant

Junior Student Representative, Andrea Bustamante,

NMS3, AOMS3

# Administration

#### Office of the President

Chief Executive Officer and President, David J. Schleich, PhD

Executive Assistant to the President, Trish Duncan

#### **Emeritus Administrators**

Emeritus President, William J. Keppler, PhD (2003–2007)

Emerita Staff, Andrea Smith, EdD (1991–2017)

#### Office of the Provost

Interim Provost and Vice President of Academics, Sandra Snyder, PhD

#### Office of Institutional Effectiveness

Associate Vice President of Institutional Effectiveness.

Cheryl Miller, MA

Senior Institutional Research Analyst, Georgia Portuondo, MSI

#### **Finance and Administration**

Executive Vice President of Finance and Administration, and Chief

Financial Officer, Gerald Bores, MBA

Vice President of Human Resources, Kathy Stanford, MS

Human Resources Generalist, Fox McGregor

Intercultural Engagement and Support Manager,

Ayasha Shamsud-Din, MS

Payroll and Benefits Manager, Sandra Brydson

Faculty Contracts/HR Coordinator, vacant

Business Office Manager, Sally Barrett

Senior Accountant, Bob Jackson

Accounts Payable Specialist, Susan Wilkes

Health Centers Billing Manager, Gina Gossage

Health Centers Billing Lead, Annie Jaouak

Health Centers Billing Assistant, Jesse Dance-Taylor

Director of Security, Spencer Brazes

Lead Campus Security Officer, Michael Hale

Campus Security Officers, Seth Brown, Aaron Lamb,

Matthew Ward

Facilities Manager, David McAllister

Facilities Lead, Thomas Coward

Information Technology Manager, Steven Fong

Information Technology Coordinators, Dexter Asis, Frank Zhang

#### **Health Centers Operations**

Dean of Health Centers/Chief Medical Officer, Regina Dehen, ND,

MAcOM

Executive Administrator of Health Centers, Nora Sande

Director of Operations—Lair Hill and Beaverton Health Centers,

Renee "Rae" Wright

Operations Assistant Manager—Lair Hill and Beaverton Health Centers,

Sara Monaghan

Operations Coordinators—Lair Hill Health Center, Kara

Christiansen, Mary VanZant

Data Coordinator/Assistant to the CMO, Kara Christiansen

Medicinary Quality Assurance Supervisor, Jennifer Brusewitz, ND

Medicinary Quality Assurance Assistant, Erin Moreland, MSOM

Medicinaries Manager, Jennifer Baier

Medicinaries Associate Manager, Dana Herms, ND

Lead Medicinary Service Representatives, **Stephen Jacobsen**, **MSOM**; **Kristy Viaches** 

Medicinary Service Representatives, Elisa Finos;

Teresa Gryder, ND; Polly Hatfield; Margaret Havlik, ND; Jennifer Kemnitz

Retail Operations Coordinator, Vanessa Reeves, MA

Referral Coordinator, Gloria Gaxiola

Patient Services Representatives, Michael Burge (Lead), Anna Antich, Amelia DeSteno, Miranda Hansen, Julie Marks, Charlee McGuire, Shantelly "Telly" Miles, Rosa Ortiz de Boque, Evan Reinhold, Anthony Sweeting

Medical Records Assistant, Wilderness Cowan

Medical Records Coordinator, Amber Nail

Laboratory Director, Sonia Kapur, PhD, HCLD

Laboratory Technicians, William Smith MLT; Tammy Vogel, MLT

Laboratory Customer Service Specialist, Damarcus Hunt

SIBO Center Laboratory Technicians, Crystal MacPherson, CMA

(Lead); Damarcus Hunt; Kristy Regan, MScN

Community Health Centers Manager, Brooke Linn, MA

Community Health Centers Assistant Manager,  ${f Ada\ Grey}$ 

Catanzarite

Community Health Centers Operations Coordinator, Erika Sanchez

Information Center Supervisor, Carolee Barrus

Information Center Coordinators, Brian Miller, Belle-Suzanne

Raymond

Senior Epic Site and Report Specialist, Ann Wagoner

Epic Site Specialist, Esmeralda Castillo

#### Office of Admissions and Enrollment Management

Associate Vice President of Enrollment Management,

Brandon Hamilton, MA

Associate Director of Admissions, Danielle Law, MPA

Associate Director of Admissions Operations, Ryan Hollister, MA

Assistant Director of Graduate Admissions, Amber Agosta

Admissions Counselors, Brenda Morrison, MA;

Andrea Tomoe, MA

Coordinator of Communications, Events and Visits, Marisa Canahl

Recruitment and Admissions Coordinator, Sonia S. Ji

Career Services Manager, Tafflyn Williams-Thomas

Director of Financial Aid, Laurie Radford

Assistant Director of Financial Aid, Sally Kalstrom

Undergraduate Financial Aid Counselor and Federal Work-Study

Coordinator, Nila Markheim

# Office of Advancement, Continuing Education and Alumni Affairs

Vice President of Advancement, Susan Hunter, MBA

Advancement Officer, Elysia Nelson, MPA

Advancement Event Specialist, Ashley Hardt

Continuing Education Coordinator, vacant

Rare Book Room Curator, Sussanna Czeranko, ND

Alumni Officer, vacant

Lead Gerontologist, Age Wise Institute, Amy Henderson, MA

Lead Physician, Traditional Roots Institute, **Orna Izakson**, **ND**,

RH (AHG)

Lead Physician, Women in Balance Institute, vacant

Lead Physician, Food as Medicine Institute, Julie Briley, ND

Physician, Food as Medicine Institute, Cory Szybala, ND

Food as Medicine Institute Coordinator, Manda Draper, MScN

### Office of Instructional Design and Technology

Director of Instructional Design and Technology, Justin Fowler, MEd

Web and LMS Administrator, Ellen Yarnell

Web Developer, Michael Fields

Audio Visual and Instructional Technology Coordinators,

Mark Daniels, Keegan Murphy

### Office of Marketing and Communications

Director of Marketing and Communications, Sherrie L. Martel

Director of Public Relations and Communications, Marilynn Considine

Graphic Designer, Vanessa Morrow

Production Graphic Designer, Kelley Stangl

Marketing Coordinator, Kate Schoknecht

#### Office of Student Life

Associate Vice President of Student Affairs, Dean of Students,

Glenn Smith, EdD

Director of Academic Success and Access, Morgan Chicarelli

Director of Counseling Services, Adrienne Wolmark, MSS, PhD

Assistant Director of Counseling Services, Heather Sutch, MSW

Student Activities and Events Coordinator, Kristoffer Vo

Student Life Administrative Coordinator, vacant

Academic Advisor, Chris Ballard

Registrar, Kelly Garey

Associate Registrar, Lindsey Johnson, MM

Assistant Registrar, Nicole Myoraku

Registrar's Office Assistant, Colin Anderson

#### Library

University Librarian, Noelle Stello, MSLIS Associate Librarian, Christina King, MSOM, MLS Circulation Coordinator, Leah Burch, MLIS Evening/Weekend Library Supervisor, Asako Chihaya, MLIS

# **Academic Affairs**

### **College of Naturopathic Medicine**

Dean, Shehab El-Hashemy, MBChB, ND

Associate Dean of Academics, Leslie Fuller, ND

Associate Dean of Clinical Education, Carrie Baldwin-Sayre, ND

Associate Dean of Residency, Dee Saunders, ND, MSiMR

Assistant to the Dean, Alison Pillette

Graduate Medical Education Coordinator, Dana Johnson, MS

Clinical Education Coordinator, vacant

Academic Coordinators, Molly Bailen, Robin Nelson

#### College of Classical Chinese Medicine

Dean, Laurie Regan, PhD, ND

Founding Professor, Heiner Fruehauf, PhD

Associate Dean of Academics, Alexandra "Zally" Adams, MEd Associate Dean of Clinical Education, Andrew "Andy" McIntyre,

**MSA** 

AOM Residency Director, Lauri Elizabeth, MAc Assistant to the Dean, Jeaneth Villegas, MA Administrative Coordinator, Jennifer Peterson, PhD

#### School of Graduate Studies

Dean, Director of Helfgott Research Institute, Heather Zwickey, PhD Associate Dean of Administration, **Heather Schiffke**, **MATCM** Associate Dean of Academics, Elizabeth McGlasson, MAT, MPH Assistant Director of Research, Ryan Bradley, ND, MPH Program Chair—Master of Science in Global Health, Siobhan Maty, MPH, PhD

Program Chair—Master of Science in Integrative Medicine Research, Douglas Hanes, PhD

Program Chair—Master of Science in Integrative Mental Health,

Angela Senders, ND, MCR

Program Chair—Master of Science in Nutrition, Andrew Erlandsen, ND

Academic Coordinator, Emily Stack

Nutrition Internship and Kitchen Coordinator, Marne Bishop, MScN

#### School of Undergraduate & Part-Time Studies

Dean, Tim Irving DC, MS

# Faculty

# College of Naturopathic Medicine

### **Full-Time Faculty**

**Joel Agresta**, Associate Professor; DC, Western States Chiropractic College, 1983

**Tammy Ashney,** Assistant Professor; ND, National College of Natural Medicine, 2009

Carrie Baldwin-Sayre, Associate Dean of Clinical Education; ND, National College of Naturopathic Medicine, 2004

Kelly Baltazar, Assistant Professor; ND, Bastyr, 2005; DC, National University of Health Sciences, 2006

Richard Barrett, Professor; ND, National College of Naturopathic Medicine, 1986

John Brons, Professor; PhD, UCLA, 1978; MAcOM, Oregon College of Oriental Medicine, 1993

Ryan Chamberlin, Assistant Professor; DO, Western University of Health Sciences, 1995

Lai Chim Chan, Assistant Professor; ND, National College of Natural Medicine, 2014

Bracey Dangerfield, Assistant Professor; PhD, Maharishi International University, 1992

**Shehab El-Hashemy**, Dean—College of Naturopathic Medicine; ND, Canadian College of Naturopathic Medicine, 2004; MBChB, Faculty of Medicine at Cairo University, 1994

Maleah Ermac, Assistant Professor; ND, National College of Natural Medicine, 2010

Megan Golani, Assistant Professor; ND, National College of Natural Medicine, 2012

Paul Kalnins, Assistant Professor; ND, MSOM, National College of Naturopathic Medicine, 1998

Richard Lok, Assistant Professor; ND, National College of Natural Medicine, 2009

Gaia Mather, Assistant Professor; ND, National College of Naturopathic Medicine, 1990

Jessica Nagelkirk, Assistant Professor; ND, National College of Natural Medicine, 2012

**Katherine Patterson**, Assistant Professor; ND, National College of Natural Medicine, 2010

Steven Sandberg-Lewis, Professor; ND, National College of Naturopathic Medicine, 1978

Nancy Scarlett, Professor; ND, National College of Naturopathic Medicine, 1997

**Tom Walton,** Assistant Professor; DC, Western States Chiropractic College, 2010

Anna Wieman, Assistant Professor; ND, National College of Natural Medicine, 2011

**Kimberly Windstar,** Professor; MEd, California State College, 1982; ND, National College of Naturopathic Medicine, 1991

#### **Adjunct Faculty**

**Amy Bader,** ND, National College of Naturopathic Medicine, 2000

**Laura Baffes,** DC, National University of Health Sciences, 1992

Karima Bassalé, ND, National College of Natural Medicine, 2011

Roger Batchelor, DAOM, Oregon College of Oriental Medicine, 2007

Alicia Bigelow, ND, National College of Naturopathic Medicine, 2004

Nathaniel Bingham, ND, National College of Natural Medicine, 2013

Ryan Bradley, ND, Bastyr, 2003; MPH, University of Washington, 2009

**Jennifer Brusewitz,** ND, National College of Naturopathic Medicine, 2000

Laurent Chaix, ND, National College of Naturopathic Medicine, 1995

**Loch Chandler,** ND, MSOM, National College of Naturopathic Medicine. 2001

Cole Chatterton, MBA, George Fox University, 2003

Cesilie Cocks, ND, National College of Natural Medicine, 2014

Elizabeth Collins, ND, National College of Naturopathic Medicine, 1996

Stephanie Culver, ND, National College of Natural Medicine, 2014

Catherine Darley, ND, Bastyr University, 2002

Elizabeth "Liz" Davidson, ND, National College of Natural Medicine. 2012

**Regina Dehen,** MAcOM, Oregon College of Oriental Medicine, 1995; ND, National College of Naturopathic Medicine, 1997

**Daniel DeLapp,** DC, Los Angeles College of Chiropractic, 1986; MAcOM, Oregon College of Oriental Medicine, 1996; ND, National College of Naturopathic Medicine, 1997

Lysanji Edson, ND, National College of Naturopathic Medicine, 1996

**Durr Elmore,** DC, Western States Chiropractic College, 1982; ND, MSOM, National College of Naturopathic Medicine, 1984, 2004

Andrew Erlandsen, ND, National College of Natural Medicine, 2011

Sheryl Estlund, ND, National College of Naturopathic Medicine, 2003

Christie Fleetwood, ND, Bastyr University, 2004

Leslie Fuller, Assistant Professor, Associate Dean of Academics; ND, National College of Natural Medicine, 2009

**Steve Gardner,** DC, Western States Chiropractic College, 1977; ND, National College of Naturopathic Medicine, 1994

**Jennifer Gibbons**, ND, National College of Naturopathic Medicine, 1998

Mary Grabowska, ND, National College of Naturopathic Medicine, 1993; MAcOM, Oregon College of Oriental Medicine, 1994

**Timothy Irving,** DC, Western States Chiropractic College, 2005; MS, University of Bridgeport, 2009

Clyde Jensen, PhD, University of North Dakota, 1974

**Keivan Jinnah,** ND, MSOM, National College of Naturopathic Medicine, 1998

**Sonia Kapur,** PhD, Postgraduate Institute of Medical Education & Research, 1994; MSc, Panjab University, 1986

#### Karta Purkh Singh Khalsa

Rosetta Koach, ND, National College of Naturopathic Medicine, 1998

**Dohn Kruschwitz,** MD, University of Iowa College of Medicine, 1966; ND, National College of Naturopathic Medicine, 1997

Molly Marcum, JD, Lewis & Clark Law School, 1983; BS Nursing, University of Oregon School of Nursing, 1978

Glen Nagel, ND, National College of Naturopathic Medicine, 1993

Heidi Peterson, ND, National College of Naturopathic Medicine, 1999

#### Phyllecia Rommel

Kayle Sandberg-Lewis, MA, Goddard College, 2000

**Dee Saunders,** Associate Dean of Residency; ND, MSiMR, National College of Natural Medicine, 2015

**Allison Siebecker,** ND, MSOM, National College of Naturopathic Medicine. 2005

Meghan Sperandeo, ND, National College of Naturopathic Medicine, 2013

Jillian Stansbury, ND, National College of Naturopathic Medicine, 1988

Lisa Taulbee, ND, National College of Natural Medicine 2010

Jared Zeff, ND, National College of Naturopathic Medicine, 1979

Katherine Zieman, ND, National College of Naturopathic Medicine, 1993

Matthew Zorn, ND, National College of Naturopathic Medicine, 2002

**Heather Zwickey**, PhD, University of Colorado Health Sciences Center, 1998

## College of Classical Chinese Medicine

#### **Emeritus Faculty**

**Rihui Long**, Emeritus Professor; Master of Medicine (China), Chengdu University of TCM, 1984

#### **Full-Time Faculty**

**Roger Batchelor,** Associate Professor; DAOM, Oregon College of Oriental Medicine, 2005

**David Berkshire**, Assistant Professor; MAcOM, Oregon College of Oriental Medicine. 2001

**Xiaoli Chen,** Associate Professor; Master of Medicine, Doctor of Medicine (China), Chengdu University of TCM, 1987, 1994

Heiner Fruehauf, Founding Professor; PhD, University of Chicago, 1990

**Kenneth Glowacki**, Assistant Professor; MSTOM, Pacific College of Oriental Medicine, 2002

**Brenda Hood,** Assistant Professor; PhD, Chinese Academy of Social Science, Beijing, 2006

**Joon Hee Lee,** Assistant Professor; DAOM, Oregon College of Oriental Medicine, 2011; MSOM, Samra University, Los Angeles, 2004

Robert Quinn, Assistant Professor; MAcOM, DAOM, Oregon College of Oriental Medicine, 1998, 2008

Laurie Regan, Dean—College of Classical Chinese Medicine, Assistant Professor; PhD, Harvard University, 1991; ND, National College of Naturopathic Medicine, 1997 Daniel Silver, Assistant Professor; MTCM, Five Branches Institute, 2006

Brandt Stickley, Assistant Professor; MSTCM, American College of Traditional Chinese Medicine, 2001

#### Adjunct Faculty

Alexandra "Zally" Adams, Associate Dean of Academics; MEd, DePaul University, 2011

Luke Adler, MATCM, Emperor's College of Traditional Oriental Medicine, 2007

Paul Bellis, MATCM, Yo San University, 2000

John Brons, PhD, UCLA, 1978; MAcOM, Oregon College of Oriental Medicine, 1993

Loch Chandler, ND, MSOM, National College of Naturopathic Medicine, 2001

Turtle Farahat, MSOM, National College of Natural Medicine, 2014

William Frazier, MA, Academy for Five Element Acupuncture, 2001

David Frierman, Certificate of Completion, San Francisco College of Acupuncture, 1989

Michael Givens, MA, St. John's College, 2003; MSOM, National College of Natural Medicine, 2009

**Ellen Goldsmith**, MSOM, National College of Naturopathic Medicine, 1999

Eric Grey, MSOM, National College of Natural Medicine, 2009

Paul Kalnins, ND, MSOM, National College of Naturopathic Medicine, 1998

Harry King, MSOM, Acupuncture & Integrative Medicine College, Berkeley, 2010

Pikshan Ko

Manfred Kubny, PhD, Ludwig-Maximilians University, 1994

Charles Rothschild Lev, MAcOM, Oregon College of Oriental Medicine, 1998

Gwen LoVetere, MAcOM, Oregon College of Oriental Medicine, 1994

Andrew "Andy" McIntyre, Associate Dean of Clinical Education; MSA, Bastyr University, 1994

Bryan McMahon, DOM, Beijing University of Chinese Medicine, 2010

Michael McMahon, MAc, National College of Natural Medicine, 2011

Karin Parramore, MSOM, National College of Natural Medicine, 2012

Youping Qin, Master of Medicine, Doctor of Medicine (China), Chengdu University of TCM, 1999, 2002

Nancy Scarlett, ND, National College of Naturopathic Medicine, 1997

Tamara Staudt, ND, MSOM, National College of Naturopathic Medicine, 1998

Edythe Vickers, Diploma, Oregon College of Oriental Medicine, 1986; ND, National College of Naturopathic Medicine, 1987

Sabine Wilms, PhD, University of Arizona, 2002

Guangying Zhou, Master of Medicine, Doctor of Medicine (China), Chengdu University of TCM, 1999, 2002

Heather Zwickey, PhD, University of Colorado Health Sciences Center, 1998

### School of Graduate Studies

#### **Faculty**

David Allderdice, ND, National College of Natural Medicine, 2008

Deah Baird, ND, Bastyr University, 1994; MS, Portland State University, 2008

Adam Baratta, MS, National College of Natural Medicine, 2015

Krista Barlow, MS, National College of Natural Medicine, 2015

Adam Benjamin, PhD, University of Iowa, 2007; MSW, Portland State University, 2011

Anne-Marie Benjamin, MA, Naropa University, 1997

Ryan Bradley, ND, Bastyr University, 2003; MPH, University of Washington, 2009

Stephanie Brell, MSW, San Jose State University, 1999

**Jennifer Brusewitz**, ND, National College of Naturopathic Medicine, 2000

Laura Carim-Todd, PhD, Universitat de Barcelona, 2004

Lauren Chandler, MSW, Portland State University, 2007

Dulcie Childs, MS, University of Alabama, 2015

Andrea Del-Olmo, ND, National College of Natural Medicine, 2013

Corina Dunlap, ND, National College of Natural Medicine, 2014

**Andrew Erlandsen**, Program Chair—Master of Science in Nutrition: Assistant Professor; ND, National College of Natural Medicine, 2011

Chelsie Falk, ND, National College of Natural Medicine, 2013

Leslie Fuller, ND, National College of Natural Medicine, 2009

Melissa Gard, PhD, University of Kansas, 2012

**Jennifer Gibbons,** ND, National College of Naturopathic Medicine, 1998

Megan Golani, Assistant Professor; ND, National College of Natural Medicine, 2012

Ellen Goldsmith, MSOM, National College of Naturopathic Medicine, 1999

Lowell Greib, MSc, University of Waterloo, 1999; ND, Canadian College of Naturopathic Medicine, 2003

**Douglas Hanes**, Associate Professor; PhD, University of Michigan, 1999

Anna Hawkins, MA, Goddard College, 2006; MA, California Institute of Integral Studies, 2011

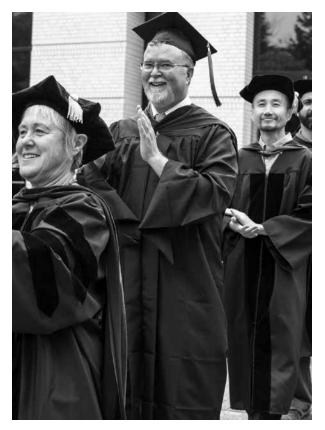
Wendy Hodsdon, ND, National College of Natural Medicine, 2007

Andrew Litchy, ND, National College of Natural Medicine, 2011

Shea Lott, PhD, Howard University, 2013

**Siobhan Maty, Program Chair—Master of Science in Global Health;** Associate Professor; MPH, Johns Hopkins University, 1996; PhD, University of Michigan, Ann Arbor, 2002

Meredith McClanen, ND, National College of Naturopathic Medicine, 2006



**Elizabeth McGlasson,** Associate Dean of Academics; MAT, Western Oregon University, 2006; MPH, Portland State University, 2009

**Jacqueline McGrath,** ND, National College of Naturopathic Medicine, 2004

Elissa Mendenhall, ND, National College of Naturopathic Medicine, 2005

Margaret Mills, MS, National College of Natural Medicine, 2015

**Jessica Montgomery,** MSW, Portland State University, 1993

Carolyn Nygaard, ND, National College of Natural Medicine, 2009

Tabatha Parker, ND, National College of Naturopathic Medicine, 2004

Zoe Presley, MA, Pacifica Graduate Institute, 2010

**Savita Rajurkar**, MDAM, Graduate Diploma in Naturopathy (India), College Of Naturopathy, 1996; ND, Indian Board of Alternative Medicines, 2000; PhD, Tilak Maharashtra University, 2007

Lisa Regan-Vienop, MPH, Tulane University, 1993

David Riley, MD, University of Utah, 1983

Ian Rubin, MA, Goddard College, 2006

**Jennifer Ryan**, ND, MSiMR, National College of Natural Medicine, 2012, 2013

Kayle Sandberg-Lewis, MA, Goddard College, 2000

Nancy Scarlett, ND, National College of Naturopathic Medicine, 1997

Laura Scher, EdM, Harvard Graduate School of Education, 2012

Heather Schiffke, MATCM, Yo San University, 2001

**Angela Senders,** Program Chair—Master of Science in Integrative Mental Health; ND, National College of Naturopathic Medicine, 2005; MCR, Oregon Health & Science University, 2014

Lisa Silverman, PhD, Rutgers University, 1993; MCMHC, Portland State University, 2013

**Julie Smircic**, MSW, Portland State University, 1997

Cory Szybala, ND, National College of Natural Medicine, 2014

Deanne C. Tibbitts, PhD, Oregon Health & Science University, 2011

Kimberly Tippens, ND, MSAOM, Bastyr University, 2003; MPH, Oregon Health & Science University, 2012

Krista Tricarico, ND, National College of Naturopathic Medicine, 2005

Madeleine Tuson-Turner, ND, MSiMR, MScGH, National College of Natural Medicine, 2011, 2015, 2016

Nicole Vasilevsky, PhD, Oregon Health & Science University, 2009

Johnna Voght, PhD, Pacific University, 2008

Shannon Weeks, ND, National College of Natural Medicine, 2009

Wendy Leigh H. White, ND, University of Bridgeport, 2008

Jenna Wilson Crain, ND, National College of Natural Medicine, 2013

**Heather Zwickey,** Dean—School of Graduate Studies, Director— Helfgott Research Institute, Professor; PhD, University of Colorado Health Sciences Center, 1998

# School of Undergraduate & Part-Time Studies

#### Faculty

Todd Basil, MS, California State University, 2016

Dulcie Childs, MS, University of Alabama, 2015

Erin Currie, PhD, University of Utah, 2010

Bracey Dangerfield, PhD, Maharishi International University, 1992

Andrea Del-Olmo, ND, National College of Natural Medicine, 2013

Corie Edwards, ND, National College of Natural Medicine, 2009

**Heather Franklin,** MPH, Oregon Health & Science University, 2010

**Megan Golani**, ND, National College of Natural Medicine, 2012

**Douglas Hanes, PhD, University of Michigan, 1999** 

Dana Johnson, MS, Durham University, 2012

Zeenia Junkeer, ND, Southwest College of Naturopathic Medicine, 2010

Amanda Margolin, MS, Oregon Health & Science University, 2016

Alyssa Ogi, MFA, University of Oregon, 2015

Coty Richardson, MS, A.T. Still University of Health Sciences, 2010

Nhu To-Haynes, MPH, Portland State University, 2010

Nicole Toussaint, PhD, Portland State University, 2013

Rebecca Tuttle, MD, Baylor College of Medicine, 2012

Nicole Vasilevsky, PhD, Oregon Health & Science University, 2009

Wendy Leigh H. White, ND, University of Bridgeport, 2008

### Library

**Christina King,** Instructor; MSOM, National College of Natural Medicine, 2009; MLS, Emporia State University, 2014

Noelle Stello, Assistant Professor; MSLIS, University of Illinois, 2005



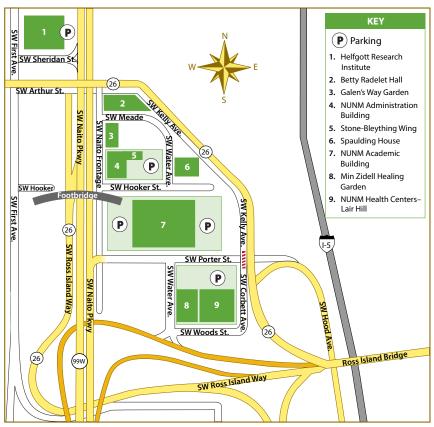
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# Follow your passion; it will lead you to your purpose.

**OPRAH WINFREY** 



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