



2020-21

Course CATALOG



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Accreditation

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 Avenue NE, Suite 100, Redmond, WA 98052
425.558.4224

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

The Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM)

The National University of Natural Medicine's following programs are accredited by the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM): (1) Master of Acupuncture (2) Master of Acupuncture with a Chinese herbal medicine specialization [currently

named Master of Science in Oriental Medicine] (3) Doctor of Acupuncture with a Chinese herbal medicine specialization [currently named Doctor of Science in Oriental Medicine]

Accreditation status and notes may be viewed on the ACAOM Directory. ACAOM is recognized by the United States Department of Education as the specialized accreditation agency for institutions/programs preparing acupuncture and Oriental medicine practitioners.

ACAOM is located at 8941 Aztec Drive, Eden Prairie, Minnesota 55347; phone 952/212-2434; fax 952/657-7068; www.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
49 South Porter Street, Portland, OR 97201
503.552.1660 | admissions@nunm.edu

Information regarding a consumer or civil complaint can be filed with:

Oregon Department of Justice
Consumer Protection Section
1162 Court Street 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 Avenue 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)
255 Capitol Street NE, Third Floor, Salem, OR 97310
503.947.5716

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 guides.

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

Rachael Allen, MS
National University of Natural Medicine
49 South Porter Street, Portland, OR 97201
503.552.1607

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.

Catalog Home

NUNM welcomes students regardless of age, sex, race, national or ethnic origin, religion, disability, veteran status, sexual orientation, gender, gender identity, marital status or family relationship.

NUNM Mission Statement

To educate and train physicians, practitioners and pre-professionals in the art, science and research of natural medicine

NUNM Values

Commitment to excellence, respect, integrity, equity, inclusion, creativity, innovation and environmental stewardship

Purpose

To promote and exemplify health, sustainable living and self-healing through education, research and service

Vision

NUNM is the known leader in natural medicine education, research and patient care.

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.

Letter from the President

Dear Students:

Welcome Home!

By studying at NUNM, you have chosen to be part of a diverse and vibrant community centered around natural healing.

At NUNM, each of us plays a critical role in advancing our mission—whether we are students, staff or faculty. In the months and years ahead, your program's faculty will challenge and support you. I invite you to stay curious and do the hard work not only related to your courses, but also that of personal exploration and growth. By doing so, you will empower yourself, find clarity of purpose, communicate authentically, and become your best self—all critical to your success. Pause at each milestone along the way to reflect and celebrate your growth in knowledge, skills and attributes.

Meaningful transformation begins here. I can attest to that.

As an alumna (ND, '97), I have come full circle by returning home after more than two decades of practice, teaching, research and leadership—and personal development. As your president, welcome to the community and your new home.

Best of luck on your journey. If you see me around campus or on a Zoom call, please say hello. I want to meet as many of you as possible. I am excited to see you here!

Warmest regards,

Dr. G

Christine L. Girard, ND, MPH
President/CEO

NUNM — The Home of Natural Medicine

NUNM is proud of its longstanding legacy of academic excellence. Founded in 1956, NUNM is the oldest accredited naturopathic medical school in North America and the home of natural medicine. NUNM's reputation for healthcare innovation and leadership grows with each new generation of practitioners and healthcare professionals who help change the course of health care in the U.S. through their research, exemplary patient care and publications. Our remarkable graduates are our legacy. We invite you to join us—discover the exciting opportunities that await you.

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 recognized as the international leader in the training of naturopathic primary care physicians and Chinese medicine practitioners. While many of our graduates go on to clinical practice, they're also researchers, professors, public health educators, and political activists bringing natural medicine to the forefront of the national healthcare system. Students from all corners of the world come to NUNM for the opportunity to work with our accomplished and renowned faculty. Our exceptional curricula offer medical students a rich combination of classroom study, hands-on research and patient care.

In addition to the campus Lair Hill Health Center—the largest natural medicine clinic in the region—the university has access to a dozen local community clinics offering unique and diverse clinical experiences to students. NUNM is also home to a collaborative and inspiring learning environment, as well as a vital and groundbreaking research community, respected the world over. Our tight-knit 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 exceptional curricula in a variety of other areas. From research to nutrition, to global health and social activism, we have it all. We have developed our programs knowing that your education will be reinforced through the application of hands-on, interactive

learning, from the classroom to the clinic, to fieldwork in a country thousands of miles from campus. Whether you're developing a research study and interviewing focus group participants, or developing whole-food recipes in NUNM's professional teaching kitchen, our students learn through their direct experiences.

Natural Medicine Today

Health awareness is making giant strides—and interest in healthy lifestyles and natural medicine is rising significantly. Studies have shown that Americans are seeking more natural health products and services than ever before. Natural medicine provides patients a wide variety of beneficial treatment options unavailable to them through conventional medicine. Recognizing this, Western medical doctors at hospitals, medical clinics and research centers are opening more doors to naturopathic and Chinese medical practitioners. It is truly an exciting period of change in health care as natural medicine becomes more integrated into the traditional health services delivery system. It is a rapidly growing and evolving field that is serving the escalating need for 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 herbal 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 the patient, leading to health diagnosis and treatment for 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 have been called "alternative" medicine. When a conventional physician and a naturopathic physician work together to create the best healing plan for the patient, it's increasingly referred to as "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

Summer quarter begins (<i>clinic</i>)	June 29, 2020
July 4 holiday (<i>campus & clinics closed</i>)	July 3–4, 2020
Summer academic classes begin	July 6, 2020
Summer academic classes end	Aug. 28, 2020
Labor Day holiday (<i>campus & clinics closed</i>)	Sept. 7, 2020
New student institutional orientation	Sept. 8–9, 2020
New student academic orientation	Sept. 10, 2020
Summer quarter ends	Sept. 12, 2020
Fall quarter begins	Sept. 14, 2020
Last day to add or change sections	Sept. 25, 2020
Last day to pay tuition & fees	Sept. 25, 2020
Last day to drop classes	Oct. 9, 2020
Veterans Day (<i>campus & clinics closed</i>)	Nov. 11, 2020
Clinic holiday – Thanksgiving week session	Nov. 23–25, 2020
Thanksgiving break (<i>no academic classes</i>)	Nov. 23–28, 2020
Thanksgiving holiday (<i>campus & clinics closed</i>)	Nov. 26–28, 2020
Finals week	Dec. 7–11, 2020
Fall quarter ends	Dec. 12, 2020
Winter break (<i>no academic classes</i>)	Dec. 13, 2020 – Jan. 3, 2021
Clinic holiday – Post-fall session	Dec. 14–19, 2020
Clinic holiday – Extra winter session	Dec. 21–22, 2020
Winter break (<i>campus closed</i>)	Dec. 23–29, 2020
New Year's Day (<i>campus & clinics closed</i>)	Jan. 1, 2021
Winter quarter begins	Jan. 4, 2021

Last day to add or change sections	Jan. 15, 2021
Last day to pay tuition & fees	Jan. 15, 2021
Martin Luther King Day (<i>campus & clinics closed</i>)	Jan. 18, 2021
Last day to drop classes	Jan. 29, 2021
Finals week	March 22–26, 2021
Winter quarter ends	March 27, 2021
Spring break (<i>no academic classes</i>)	March 28 – April 4, 2021
Clinic holiday – Spring break session	March 29 – April 3, 2021

Spring quarter begins

April 5, 2021

Last day to add or change sections	April 16, 2021
Last day to pay tuition & fees	April 16, 2021
Last day to drop classes	April 30, 2021
Memorial Day (<i>campus & clinics closed</i>)	May 31, 2021
Finals week	June 21–25, 2021
Spring quarter ends	June 26, 2021
Commencement	June 26, 2021

Admissions

Undergraduate Programs

NUNM offers three Bachelor of Science degrees: Bachelor of Science in Integrative Health Sciences (BSiHS), Bachelor of Science in Nutrition (BScN), and an accelerated Bachelor of Science in Nutrition to Master of Science in Nutrition (BScN-MScN). These programs offer students the opportunity to complete the final two years of their degree, while building a solid scientific foundation in pre-health/pre-med education.

For admission consideration to undergraduate degree programs, students must have completed 60 semester or 90 quarter credits of transferable coursework with a minimum cumulative GPA of 2.0 prior to the program start date. Transferable coursework is defined as college-level courses from regionally accredited colleges and universities that meet lower division, general education

requirements for baccalaureate degree programs. Generally, professional/technical courses will not transfer. Only courses with a grade of "C" or higher will be considered for transfer credit. Grades of P/NP or S/U grading will not be accepted.

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 School of Undergraduate 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.
- **Recommendation:** The recommendation form should be completed by a person who knows you well and can evaluate your skills and abilities. Once the application is submitted, the recommendation form will be sent out to the recommender. Professors make great recommenders (assuming you have taken a class with them). If you have been out of school for a while, employers are also acceptable sources.

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 Deadline

NUNM begins to accept undergraduate applications Sept. 1, 2019, for fall 2020. **The preferred application deadline is May 1, 2020.**

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

Office of Admissions
National University of Natural Medicine
49 South 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.

Undergraduate Program Prerequisites

English Composition 2 courses

Math 1 course

Must be algebra, calculus or math-based statistics

General Biology Full sequence

One academic year of general or principles of biology, including lab. These courses must be designed for science majors or pre-med students. (2-3 courses)

General Chemistry Full sequence

One academic year of general or principles of chemistry, including lab. These courses must be designed for science majors or pre-med students. (2-3 courses)

Humanities/Arts & Letters 3 courses

Courses in the areas of art, religion, philosophy, literature, music and other related fields will satisfy this requirement.

Social Sciences 3 courses

One of these courses must be human psychology. In addition to human psychology, other courses in psychology, anthropology, social sciences, political science, economics, and other related fields will satisfy this requirement.

Total Transfer Credits

Completion of 60 semester or 90 quarter transferable credit hours from a regionally accredited college or university with a minimum 2.0 GPA. Coursework can be in progress at the time of application. A maximum of 3 quarter or 2 semester credits of physical education may be applied.

Requirements for Admission to the Accelerated Nutrition Program (BScN-MScN)

New students may apply to be admitted to the accelerated BScN to MScN program if they meet the following requirements that are over and above the regular admissions requirements for the BScN program:

1. A minimum cumulative GPA from a regionally accredited college or university of 3.3.
2. Submit an essay that specifically discusses why they believe they are a good candidate for the accelerated nutrition program.

Current NUNM students already enrolled in the BScN program may apply for entry into the accelerated BScN to MScN program no later than July 1 of the student's first year at NUNM in the BScN program. In order to qualify for the accelerated program, the student must meet the following requirements:

1. Have obtained a minimum cumulative GPA of 3.0 and successfully completed all courses in the first three terms of the BScN program at NUNM.
2. Submit an essay that specifically discusses why they believe they are a good candidate for the accelerated nutrition program.

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 Medicine Research (MSiMR), Master of Science in Global Health (MScGH), Master of Arts in International Development and Service (MA in IDS), and Master of Arts in Community Organizing and Social Activism (MA in COSA) programs must have a bachelor's degree (or its equivalent) from a regionally accredited college or university.

Applicants may apply to undertake two programs concurrently, with the exception of the ND/DSOM combination and combinations with MA in IDS or COSA. All application and prerequisite coursework requirements must be met for both programs. While at NUNM, students may add a concurrent program by applying for admission to the second program. For admission consideration, students must meet the criteria for Satisfactory Academic Progress (SAP) in their current program at the time of application.

A GPA of 3.0 or higher is strongly recommended. Credit will only be given for prerequisite coursework earning a "C" or better. Applicants may apply with prereq 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 have prerequisite coursework in progress or 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.
- **Recommendations:** Two recommendation forms should be completed by persons who know you well and can evaluate your skills and abilities. Once the application is submitted, recommendation forms will be sent out to the two listed recommenders. Professors make great recommenders (assuming you have taken a class with them). If you have 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. Videos 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.

ND, CCM and Graduate Studies: Fall 2020

Scholarship Deadline: Feb. 1, 2020

Application Deadline: May 1, 2020

CCM programs: Winter 2021

Application Deadline: Nov. 30, 2020

Online MScN program: Winter 2021

Application Deadline: Dec. 28, 2020

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
49 South 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. NUNM does not accept life experience in lieu of prerequisite credits.

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 online 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 Undergraduate and Graduate Studies does not require an interview.

ND Program Prerequisites

General Chemistry (science-major level) 2 courses

Lab work required

Organic Chemistry (science-major level) 2 courses

Biochemistry may serve as a substitute for one organic chemistry course

General Biology (science-major level) 2 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 1 course

Must include mechanics

Mathematics 1 course

College algebra, calculus or math-based statistics

English Composition 1 course

Psychology 1 course

Any general psychology course 100-level or higher

Social Sciences and Humanities 2 courses

Strongly Recommended Courses

- Anatomy and Physiology
- Biochemistry
- Statistics
- Business and/or Marketing

Other Suggested Courses

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

Global Health (MScGH) Program Prerequisites

General Biology 1 course

Any discipline

Mathematics 1 course

Algebra or statistics

Social Sciences 1 course

Any course from the following disciplines: psychology, public health, sociology, anthropology

Integrative Medicine Research (MSiMR) Program Prerequisites

General Chemistry 2 courses

General Biology with lab 1 course

Mathematics 2 courses

Precalculus, calculus 1 or math-based statistics

Social Sciences 1 course

Any course from the following disciplines: psychology, public health, sociology, anthropology

Humanities 1 course

English composition

Strongly Recommended Courses

- Statistics
- Cell Biology
- Ethics

Nutrition (MScN) Program Prerequisites

General Chemistry 1 course

General Biology 1 course

Human-related biology course required; anatomy and physiology strongly recommended

Mathematics 1 course

Algebra or statistics

Psychology 1 course

Any general psychology course 100-level or higher

MSOM/DSOM Program Prerequisites

General Chemistry 1 course

General Biology 1 course

Physics 1 course

Must include mechanics

Psychology 1 course

Any general psychology course 100-level or higher

Humanities 1 course

Courses in the areas of art, religion, philosophy, literature, music, and other related fields will satisfy this requirement

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

International Applications

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

- Complete an international student Certificate of Finance. In order to issue an I-20, the U.S. government requires NUNM to verify that applicants have sufficient funds to pay for all expenses while studying at NUNM.
- 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 80 on the internet-based test.
 - Also accepted is the International English Language Testing System (IELTS) with a score of 6.0 or higher **or** the Pearson Test of English (PTE) with a score of 53 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

World Education Services, Inc.
212.966.6311 | wes.org

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:

1. 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.
**Scroll down for program-specific 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 director 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 students transferring programs must include the "Verification of Student Conduct" form completed by an official from the applicant's previous institution 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 director 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

Programs within the School of Graduate Studies at NUNM may accept up to one third of the total credits required for graduation from the graduate program as transfer credits. Individual programs may have stricter limitations, so applicants should contact the program director and refer to the course catalog for more specific limitations.

In general, in order to qualify as transfer credits, the following requirements must be met:

- Courses being transferred are obtained at a regionally accredited institution.
- Courses being transferred are at the graduate level.
- They are determined by the program director to have met course competencies of similar courses required for graduation from NUNM's program.
- They must have been awarded a grade of B- or higher. A pass (P) grade or similar grading methods are not acceptable.
- They must be no older than seven years old at the time of admission into the program. (Exceptions, for a course to be transferred, may be granted in cases where the individual

has been working in the field related to the course content since the time they took the course. The program director will make this determination.)

- Students must complete a NUNM Transfer of Credit Agreement upon admission to the university. Transfer credits will not be considered after matriculation.
- Contact the Office of Admissions for information on transfer courses from international institutions, as these require additional documentation.

Specific transfer credits may be used to satisfy requirements for specific courses in multiple programs. In other words, if a person were to enroll in the Master of Science in Integrative Medicine Research program and the Master of Science in Global Health program, a statistical analysis course might be transferred in that would meet the requirement of Biostats in both programs. The basic principle is that we do not wish to force students to retake course material they have already mastered.

Transfer Credit Specific to the School of Undergraduate Studies

Applicants to the School of Undergraduate 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; 51 credits in the Bachelor of Science in Nutrition program; and 34 undergraduate credits in the accelerated Bachelor of Science in Nutrition to Master 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 director.

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 and Electives Between NUNM Programs

Graduate-Level Programs

Some core course credits may be eligible for transfer among NUNM programs to satisfy program requirements. All transfer credits are subject to approval by the program director. Master and doctoral students may take elective credit from any NUNM graduate-level degree program, as long as they meet the prerequisites.

Undergraduates Taking Cross-Listed Graduate-Level Courses

Undergraduate students who are pursuing a baccalaureate degree at NUNM may take any elective course in the undergraduate program and cross-listed courses in graduate programs, as long as they meet the prerequisites. In addition, core courses in other undergraduate programs can be taken for elective credit (maximum of 18 credits).

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 well-being 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 non-conflictual 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:

I. **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

Tuition

Beginning in summer 2020, tuition for credit courses is as follows:

Tuition	Rate
Undergraduate	\$247 per credit
Graduate	\$464 per credit

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. Students are financially responsible for paying tuition and fees for all classes for which they are registered. Tuition and fees for each quarter are due and payable in full at the beginning of each term. If a

class is added after the term has begun, payment for that class is due at the time of registration. Past due payment is subject to the following:

- **End of fourth 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.

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 Friday before finals week begins. 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.

The Business Office may block future registration/attendance until all debts have been paid in full or other payment arrangements have been made. 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 will have transcripts or diplomas issued to them two weeks after payment.

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.

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 will not be eligible for financial aid for those classes, in any term.

Student Responsibilities

1. 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.
2. 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 and must submit changes to their contact information to the Registrar's Office.
4. Any financial assessment or judgment against a student for damage to NUNM property, whether arising from a Student Conduct Code proceeding or a court action, will be charged to the student's account. 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/attendance.

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

Other Expenses

Students are directly responsible for paying for text books, supplies and equipment. These costs vary each term and year, and students are responsible for making payment directly to the vendor.

Tuition and Fee Refund Policies

Adding/Dropping Courses

Students are responsible for following all processes to formally add, withdraw, or drop classes. 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.

Week of Quarter	Tuition Refund Rate
First week	100% tuition
Second week	100% 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.

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.

Travel-Based (Trip) Courses

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

Students that sign and submit an agreement to be registered for a travel course 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 retreats) will be refunded at 100% up to eight (8) weeks prior to the departure date. If the course is dropped after the eight (8) period, 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.
- 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	Tuition Refund Rate
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 or enrollment status will 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 unearned aid must first be returned to the Title IV program before any determination can be made about 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 counseling is conducted online, through the Department of Education. Instructions will be issued by the Financial Aid Office. Exit counseling can also be arranged by contacting the Financial Aid Office. (See Financial Aid section for more information.)

* For more information about any of the courses referenced below, please see Course Descriptions.

ND Studies: Lab and Other Fees

*(All lab fees are nonrefundable. Retreats, trips and fieldwork are subject to tuition and deposit refund policies noted in the financial policies. *Trip fees vary depending on itinerary.)*

All Cooking and/or Teaching Kitchen Courses (each)	\$50
ND Makeup Exam (written and quizzes)	no charge
ND Makeup Lab Exam	\$100
ND OSCE 1 & 2 Initial Exam	\$220
ND OSCE 3 Initial Exam	\$364
ND Remediation (Makeup) Quiz Fee	\$25
ND Remediation Exam or Project (for FR/R grades) (fee each) <i>(payable before Remediation can be taken)</i>	\$100
BAS 5111L, 5121L Clinical Anatomy I-II Lab (each)	\$85
BAS 5120T Structure & Function II Tutorial	\$10
BAS 5130T Structure & Function III Tutorial	\$15
CLE 827 Clinical Skills Enhancement Tutorial	\$650
CLE 828 ND OSCE Skills Tutorial	\$350
CLE 5110, 5121, 5132 Clinical Education (each)	\$35
CLE 5120 Clinic Observation I	\$42
CLE 6212 Introduction to Clinic	\$25
CLS 6210T Musculoskeletal, Ortho, Exercise Physiology & Rehab Tutorial	\$25
CLS 6210L Musculoskeletal, Ortho, Exercise Physiology & Rehab Lab	\$125
CLS 6211L Neurology Lab	\$20
CLS 6220T Cardiology and Pulmonology Tutorial	\$215

CLS 6220L Cardiology and Pulmonology Lab	\$25
CLS 6221L Hematology and Oncology Lab	\$35
CLS 6230T Gastroenterology and Proctology Tutorial	\$350
CLS 6230L Gastroenterology and Proctology Lab	\$45
CLS 6231T Urology and Nephrology Tutorial	\$50
CLS 7310L Reproductive Lab	\$238
CLS 7311T Rheumatology and Clinical Immunology Tutorial	\$30
CLS 7320L EENT Lab	\$18
CLS 7321L Dermatology and Minor Surgery Lab	\$50
CLS 7330T Pediatrics and Geriatrics Tutorial	\$40
CLS 7331L Parenteral Therapy and Environmental Medicine Lab	\$100
CLS 7332T Psychology and Mental Health Tutorial	\$20
NDEB 5110E, 5130E Northwest Herbs I-II (each)	\$45
NDEB 5200E San Juan Island Herbal Experience*	\$175
NDEB 5201E Cascade Mountain Herb Intensive*	\$175
NDEB 5210E Herbal Garden Processing	\$45
NDEB 6200E Ethnobotany Intensive*	\$1,850
NDEC 7351E Point-of-Care Ultrasound	\$56
NDER 8430E Natural Childbirth V: Neonatology	\$220
NDET 5120E, 5130E, 5140E Bodywork I-III (each)	\$32
NDET 5121E, 5131E, 5141E, 6121E Somatic Re-Education I-IV (each)	\$25
NDET 6140E Aromatherapy	\$15
NDET 6250E Nature Cure Lab	\$45
PHL 5130 Naturopathic Medicine Retreat	\$85

THR 5120L, 5131L Therapeutics I-II Lab (each) \$50

CCM Studies: Lab and Other Fees

*(All lab fees are nonrefundable. Retreats, trips and fieldwork are subject to tuition and deposit refund policies noted in the financial policies. *Trip fees vary depending on itinerary.)*

CCM Initial Exit Exam (CM 996)	\$185
CCM Clinic Exit Exam Retake (fee each) <i>(payable before Retake can be taken)</i>	\$150
CCM Makeup Exam (written and quizzes)	no charge
CCM Makeup Lab Exam <i>(payable before Makeup can be taken)</i>	\$60
CCM Remediation Exam or Project (for FR/R grades) <i>(payable before Retake can be taken)</i>	\$100
CM 01E China Trip	Varies
CM 06E Chinese Dietetics	\$50
CM 15E, 25E, 35E, 45E, 55E, 65E Shiatsu I-VI (each)	\$15
CM 16E Five-Element Retreat*	\$150
CM 26E Shan Ren Dao Retreat*	\$1,250
CM 36E Embodied Cosmology Retreat*	\$260
CM 514, 524, 534, 614, 624, 634 Acu-Moxa Techniques I-VI (each)	\$35
CM 515, 525, 535 Palpation and Perception I-III (each)	\$25
CM 518, 528, 538, 618, 628, 638, 718, 728, 738 Qigong Retreats I-IX (each)*	\$260
CM 526 Herbs II	\$75
CM 530 Intro to Clinic	\$15
CM 556, 566, 576, 656, 666, 676 Herbs I-VI Practicum (each)	\$20
CM 615 Asian Bodywork	\$15

CM 657 Acu-Moxa Anatomy I	\$10
CM 663 Auricular Points	\$35
CM 667 Acu-Moxa Anatomy II	\$10
CM 714, 724 Advanced Acu-Moxa Techniques I-II (each)	\$35
CM 735 Applied Palpation and Perception	\$35
CM 5100E, 5101E, 5102E Non-CCM Qigong Retreat Series I-III (each)	\$230

Graduate Studies: Lab and Other Fees

*(All lab fees are nonrefundable. Retreats, trips and fieldwork are subject to tuition and deposit refund policies noted in the financial policies. *Trip fees vary depending on itinerary.)*

All Cooking and/or Teaching Kitchen Courses (each)

CAM xxx All courses with this prefix

COL xxx All courses with this prefix

GRE xxx All courses with this prefix

GSA 530E Panchakarma

GSA 541E Tridosha

GSA 542E Ayurvedic Nutrition

GSA 543E Ayurvedic Herbs

GSA 622E Ayurvedic Dietetics Practicum

GSGH 691 Capstone I: Fieldwork Experience

GSGH 706E Conference in Global Health

GSGH 714E Wilderness First Aid

GSGH 821E Tanzania Global Health Experience

GSGH 832E Thailand Global Health Experience

GSGH 836E Ghana Global Health Experience

GSGH 837E Collaborative Global Health Experience

GSGH 838E India Global Health Experience

GSMH 638 OSCE 1 Exam

GSMH 639 OSCE 2 Exit Exam

GSN 501E, 510E, 520E, 530E Seasonal Cooking (each)

GSN 502 Culinary Skills

GSN 503 Farm to Table

GSN 506 Healing Foods I Practicum

GSN 508 Fundamentals of Nutrition Workshop

GSN 529 Applied Medical Nutrition Therapy

GSN 538E Cooking Pedagogy

GSN 542E Cooking and Considering Meat and Seafood

GSN 543E Personal Chef and Food Service

GSN 545E Global Cuisine: Foods of the World

GSN 549E Detoxification and Cleanses

GSN 551E Therapeutic Diets

GSN 557E Cooking with Medicinal Herbs

GSN 558E Food as Medicine Everyday (FAME) Educator Training

GSN 559E Vegan Diets

GSN 561E Recipe and Menu Development

GSN 568E Healing Foods II Practicum

GSN 571E Introduction to Organic Agriculture

GSN 572E Indian Cooking

GSN 576E Mediterranean Diet Immersion in Croatia

GSN 577E Nutrition Career Strategies Retreat

GSN 578E Food Chemistry

GSN 579E Preparation for Clinic Nutrition Rotation

GSN 582E Constitutional Medicine and Seasonal Dietetics

GSN 838E Israel Culinary and Cultural Immersion Trip

GSN 839E Croatia Culinary and Cultural Immersion Trip

GUA xxx All courses with this prefix

IPSL fee each term

IRE xxx All courses with this prefix

PER xxx All courses with this prefix

RES 531 Integrative Medicine Research Seminar

RES 620 Intro to Laboratory Methods

RES 622E Botanicals: Bench to Bedside

SAF xxx All courses with this prefix

TAN xxx All courses with this prefix

VIE xxx All courses with this prefix

Undergraduate Studies: Lab and Other Fees

(All lab fees are nonrefundable)

All Cooking and/or Teaching Kitchen Courses (each)	\$50
Undergraduate Makeup Exam (quizzes)	\$25
IM 311 Introduction to Integrative Medicine	\$10
IM 422 Introduction to Botanical Medicine	\$50

NS 312 Anatomy and Physiology Lab	\$85
NS 324, 334 Organic Chemistry Lab I and II (one-time fee)	\$135
NS 342E Plants of the Northwest	\$35
NS 343E Introduction to Permaculture	\$35
NS 432 Physics with Lab	\$35
NU 423E Foundations of Cooking Techniques	\$50
NU 431 Whole Food: Rethinking Science and Nutrition	\$50
NU 437E DIY Kitchen Staples	\$50
SS 499 Undergraduate Capstone	\$50

Miscellaneous Fees

Advanced-Standing Transcript Evaluation Fee (<i>one-time application fee</i>)	\$75
Audit Fee	80% of the per credit rate
Bike Room Fee	\$25 per quarter
Bus Pass Fee — Fall, Winter and Spring Quarters	\$25 per quarter
Bus Pass Fee — Summer Quarter	\$180
Bus Pass Replacement Fee	Prorated – TBD
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, CPR 100) (<i>recertification required every two years</i>)	\$58
CPR Recertification Fee (CPR 200)	\$52

CPR for Wilderness First Aid Fee (CPR 101)	\$40
Credit Card Fee	3.0% of the total charged
Diploma (<i>replacement</i>)	\$50
Graduation Fee (<i>fall quarter billing</i>)	\$160
HIPAA Training (<i>annual fee</i>)	\$30
Independent Study Fee	equal to one credit hour of tuition rate
Late Payment Fee	\$50 per quarter
NMSA Fee (<i>winter quarter billing, cannot be waived</i>)	\$60
NSF Check Returned	\$30 per check
NSF Payclix Online Fee	\$30
Orientation Fee (<i>one-time fee for all new students</i>)	\$100
Parking Fee	\$107 per quarter
Repeat Courses (<i>educational enhancement</i>)	30% of the per credit rate
Stop Payment Fee Online	\$25 per check
Student Activity Fee	\$30 per quarter
Technology Fee	\$75 per quarter
Transcript Fee	\$10 per transcript
Tuberculosis Testing Fee (<i>can be waived to new students who have documentation of testing</i>)	\$60
Tuberculosis Retesting Fee (<i>for students who return from trips in foreign countries during the academic year</i>)	\$60
Tuition Deferment Fee (<i>per deferral</i>)	\$20

Application Fees

Graduate/Professional (<i>nonrefundable</i>)	\$75 all programs
Undergraduate (<i>nonrefundable</i>)	\$50 all programs
Non-Degree (<i>nonrefundable</i>)	\$25
Transfer/Advanced Standing Evaluation Fee	\$75 graduate programs

Acceptance Tuition Deposits

(All tuition deposits are nonrefundable; applied toward first quarter tuition)

Colleges of Naturopathic and Classical Chinese Medicine	\$500
School of Graduate Studies	\$300
School of Undergraduate Studies	\$200

Financial Aid

Choosing to pursue your educational goals may be one of the most important decisions you will ever make. 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.

Eligibility

To be considered an "eligible student for federal and state financial aid," you must meet the following criteria:

- Be a U.S. citizen or eligible resident
- Have a valid Social Security number
- Be admitted into an eligible NUNM degree program
- Be enrolled at least half-time each term
 - School of Undergraduate Studies is defined as 6 credits half time, 12 credits full time
 - School of Graduate Studies is defined as 4 credits half time, 8 credits full time
 - Colleges are defined as 5.5 credits half time, 11 credits full time
- Maintain satisfactory academic progress

- Not be in default on any federal student loan, or owe a refund on any federal grant
- Have a high school diploma, GED, be home schooled, or have completed 6 college credits toward an eligible degree or certificate
- Be registered with Selective Service if you're a male (you must register between the ages of 18 and 25)
- Not have a conviction for the possession or sale of illegal drugs for an offense that occurred while you were receiving federal student aid (such as grants, work-study or loans)

In addition, funding is available only for courses and the number of credits required for the degree. Most programs allow for a specified number of elective credits and funding is restricted to the number of elective credits allowed.

Students enrolled in concurrent programs are required to complete the number of elective credit hours of the program that has the greater number of electives between the two programs. In addition, students can elect to take up to the total number of elective credits of both programs and still qualify for financial aid.

Financial Aid Timeline for the 2020–2021 Academic Year

To determine eligibility, you must:

- Complete NUNM's Application for Admission. Students must be admitted before a financial aid package can be awarded.
- Complete the 2020–2021 Free Application for Federal Student Aid (FAFSA), available on Oct. 1, at fafsa.ed.gov. The federal Title IV school code for NUNM is B07624. Depending on when you intend to take classes, you may need to apply for financial aid for both the current academic year as well as the upcoming academic year. If you're not sure, please check in with the Financial Aid Office.

Because many aid programs have limited funds, NUNM recommends submitting your completed FAFSA form by the Feb. 15 priority application deadline.

Financial Aid Census Date

In accordance with federal regulations, the Financial Aid Office will verify each student's enrollment status on 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 term. If the enrollment status has changed, the Financial Aid Office, as required by federal regulations, will recalculate federal, state and institutional student aid awards.

If the change in enrollment status, prior to completing 60% of the term, causes a student to become ineligible for all or a portion of the financial aid award, the student will immediately be responsible for repaying those funds that have been disbursed to them.

Eligibility for these federal programs may also be affected for those who have had FAFSA information or corrections submitted after the census date.

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.

Students should consult with the Financial Aid Office prior to making changes to their enrollment to ensure there is an understanding of any financial implications that may occur.

Scholarships

NUNM awards scholarships to both new and returning students enrolled during the academic year. Scholarships are limited and the amount and availability varies 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. Money received from scholarship sources does not have to be repaid.

Admissions Scholarships

New students entering NUNM will automatically be considered for a limited number of available scholarships. Applicants do not need to complete a separate application for these scholarships. In order to be considered, students must complete their application for admission by Feb. 1, the preferred application date.

Decisions on scholarship awards are based on a holistic evaluation of the entire application file and are made at the same time admissions decisions are made. Students will be notified of any scholarships along with their admission notification.

For more information about these scholarships, please contact the Office of Admissions 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 each term over the students' following academic year. Additional criteria, such as need, may apply.

More information about scholarship availability can be obtained by contacting the director of the Center for Career Development and Alumni Services at 503.552.1625.

Federal and State Aid Programs

Pell Grant

The federal Pell Grant program provides funds to students demonstrating significant financial need as determined by the estimated family contribution and cost of attendance, and are awarded only to undergraduate students who have not earned a bachelor's or professional degree. A federal Pell Grant, unlike a loan, does not have to be repaid.

Federal Supplemental Educational Opportunity Grant (FSEOG)

Students who will receive federal Pell Grants, and have the most financial need, will be considered for FSEOG. Unlike the federal Pell Grant program, FSEOG funds are often exhausted early in the financial aid application cycle. Interested students should be sure to submit their FAFSA application as early as possible. The FSEOG does not need to be repaid.

Oregon Opportunity Grant

The Oregon Opportunity Grant program was created by the Oregon State Legislature to help needy Oregon undergraduate 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

The majority of students find it necessary to borrow loans to fund their educational expenses. 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 FAFSA. You can apply for loans at any time throughout the academic year.

Types of Federal Loans

Federal Direct Subsidized Stafford Loan

Subsidized Stafford Loans are available for students enrolled in undergraduate programs. 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, and annual and cumulative limits. Students who borrow Subsidized Stafford Loans must complete entrance counseling and a Master Promissory Note (MPN). For more information, go to studentaid.gov.

Federal Direct Unsubsidized Stafford Loan

Unsubsidized Stafford Loans are available to undergraduate students and graduate or professional students. 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 loan 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 studentaid.gov.

Federal Direct Parent Loan for Undergraduate Students (PLUS)

The parent PLUS loan 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

The Graduate Plus Loan program is available to graduate students that need to fill the gap between other forms of financial aid and 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.

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 Financial Aid Office for further information.

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. For additional information, contact the Financial Aid Office.

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 or hardship
- Tragedy – serious illness, financial ruin or family fatality
- Theft – having property stolen, vehicle damage, etc.

Student Loan Fund Disbursement Procedures

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 are disbursed by the Business Office staff the third week of the term. Direct deposit is available and highly encouraged, otherwise, checks will be placed in student mailboxes or mailed to the address on file.

If students are eligible for a refund of aid in excess of charges, NUNM can provide an advance for Title IV aid recipients to obtain their books and supplies by the seventh day of a payment period. These funds are paid in advance of the student's total financial aid disbursement. If students do not wish to receive the advance, students will have the option of opting out of the stipend the school provides.

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 or sent by direct deposit.

Credit balances resulting from any other financial activity, such as dropped classes, will be refunded within 10 business days.

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 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 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.

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. 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
 4. Pell Grant
 5. 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 apply to changes in enrollment status and withdrawals from all classes. 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 to assess 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 loan exit counseling. Loan exit counseling is conducted online at studentaid.gov.

Federal Work-Study Program

The federal work-study program (FWSP) is a federally subsidized program and is available to students as an additional resource to earn money to help cover educational expenses. Due to the demands of the academic programs, students generally find their schedules limit the amount of time they can work to 20 hours per week or less.

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. Students are encouraged to complete the FAFSA form by Feb. 15.

The Financial Aid Office administers the federal work-study program and maintains an online timesheet database. Student employees earn an hourly wage and are paid monthly.

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.

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) operates independently from the federal work-study program. The STEP program is open to international students only. 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.

See mandated conditions and limitations regarding student employment under Federal Work-Study Conditions and Limitations.

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 Financial Aid Office 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 state-licensed insurance company; or administered or recognized by a state-licensed hospital, health clinic or medical doctor.

Academic Programs of Study

College of Naturopathic Medicine

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

Naturopathic Medicine

Naturopathic medicine is a primary care approach to health and wellness 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. This art of natural healing has deep roots in ancient history and developed during the eighteenth and nineteenth centuries from the German hydrotherapy movement. This new art was nurtured by medical as well as non-medical practitioners into rigorous hospital- and spa-based practices that were ultimately practiced worldwide. Natural healing developed incrementally and has been shaped and refined in the United States since the beginning of the 20th century.

Traditional naturopaths embrace the belief that health is influenced by each individual's inherent healing ability. In this paradigm of vitalism, disease is viewed empirically as a direct result of

ignoring or violating the general principles of health. Practitioners aim to correct and stabilize these environments as their primary interventions to ward off disease. Modern naturopathy can be viewed as an evolving system of practices that bridge elements of conventional, alternative and traditional medical practices to enhance an individual's self-healing processes and support wellness. Naturopathic physicians are clinically trained, licensed primary care physicians who have graduated from an accredited postgraduate four-year naturopathic medical school. They work with patients in all aspects of family health to identify the underlying causes of disease and provide evidence-informed therapies to help facilitate the body's ability to restore and maintain optimal health.

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

Drs. Benedict and Louisa Lust brought "nature cure" medicine from Europe to the United States in 1896 and helped develop the term naturopathy. Benedict Lust is widely credited for establishing naturopathic medicine in North America. However, the important contributions of Louisa Lust in establishing naturopathy are less well-known. Born Aloesa Strobele, Louisa was a financially successful business woman and the physician in charge of the Bellevue Sanitarium, a prominent nature cure spa in Butler, New Jersey, before she met and then hired Benedict as chief medical director—and financed the first naturopathic college. Together they renamed the Bellevue as Yungborn, where they advanced nature cure. 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 at that time attracted more than 10,000 naturopathic physicians.

At the same time, there was strong support emerging for what is now known as conventional or allopathic medicine. 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. It ultimately led to radical reforms in medical education and training.

Abraham Flexner, who graduated from John's Hopkins University with a Bachelor of Arts degree, was the founder of an experimental high school and was known to be critical of the American education system. He eschewed all medical approaches that he deemed lacking in scientific research and validity. Naturopaths, in particular, came under greater scrutiny as the allopathic 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 in North America.

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 educating and training future physicians.

Since 1998, the profession has experienced resurgence and tremendous growth as an increasingly health-conscious public sought alternatives for conditions that conventional medicine does not adequately address. 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 own health and healing process; naturopathic doctors want a practice that is more patient-centered and holistic. This convergence of needs, and the beneficial healthcare outcomes that patients experience from naturopathic treatment, has led to the increasing popularity of naturopathic medicine. At the same time, more state legislatures are approving licensure for naturopathic medicine.

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 forged new pathways that fundamentally improve the health of our communities on a national scale, and in doing so they are advancing 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. Currently, 22 states, five Canadian provinces, the District of Columbia, and the U.S. territories of Puerto Rico and the U.S. Virgin Islands have laws regulating naturopathic doctors (NDs). Scope varies between states, including differences in pharmaceutical prescribing, minor surgery, IV & IM administration, diagnostic imaging/labs, and childbirth attending or midwifery. The jurisdictions that regard NDs

as primary care physicians provide them with a diagnostic and therapeutic scope of practice. These include general and preventive health care, as well as diagnosis and treatment of acute and chronic conditions.

In jurisdictions where NDs are not regulated, the scope of practice flourishes as adjunctive care since the practices of diagnosis and treatment of disease tend to be excluded.

Licensing and Credentialing 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 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. The best sources of current information about the legal status of naturopathic medicine in a particular area are the American Association of Naturopathic Physicians (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 accredited 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 qualifies candidates to sit for the national licensing examination—the Naturopathic Physicians Licensing Exam (NPLEX), which is a key requirement for licensure. Some jurisdictions have additional examinations, for example in Oregon, there are additional examinations in jurisprudence and prescribing formulary pharmaceuticals due to Oregon's wider scope of practice. It is also routine for regulators to require a fingerprint-based national criminal history search.

Similar to other healthcare providers, recently graduated NDs are encouraged to seek additional clinical experience under the supervision of a licensed physician in the form of residencies and mentorships. It should be noted that the state of Utah requires a one-year residency before licensing NDs. In some states, insurers are showing credentialing preference to those with postgraduate residencies.

Residencies

NUNM is proud to lead the profession in developing and administering the first and largest accredited graduate medical education program. We now offer more than 60 accredited residencies. Our residency program is rigorous and competitive; it provides invaluable clinical experience to assist our graduates in completing the transition toward becoming practicing

physicians. With established residency programs both locally and throughout the United States, we work with specialty providers and renowned hospitals—including an integrative rotations partnership with Oregon Health & Science University here in Portland, Oregon.

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 primarily addresses the underlying causes of disease, rather than 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

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, in 2009 state legislation expanded the formulary and licensed naturopathic physicians may use most prescription pharmaceutical agents commonly employed in a primary care setting. The law became 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, ND

The Doctor of Naturopathic Medicine (ND) degree is an intensive four-year program that fosters the development of a uniquely skilled type of physician, one who is capable of delivering comprehensive health care with a heart. Our approach is personalized care with the intent to change lives. We teach our students to think, critique and develop their individual strengths as healers; to customize evidence-informed therapeutic options to each patient's situation and preferences; and to motivate and educate patients on how to live with less pain, burden and suffering.

Once the immediate needs of a patient are addressed, our physicians move on to wellness coaching and motivating their patients to live, eat, sleep and exercise better; manage stress; and reduce risk factors for chronic disease. Ultimately, we train our physicians to provide positive *transformation*, improve quality of life, and reduce burden where possible. *This is primary care of the future, where terrible burdens of current chronic disease epidemics are delayed or altogether curbed by fundamental changes in lifestyle.*

Our entire program is focused on how to succeed in practice, how to curb the current epidemic of chronic disease, and how to make a meaningful and positive impact on the communities we serve.

NUNM Health Centers

The strong support of our state and county health authorities sets NUNM apart from other naturopathic medical schools. Our students intern in our state-credentialed Tier 4 Patient-Centered Primary Care Home (PCPCH), which has become an exemplary model for how primary care should be organized and delivered. Our interns are trained to use electronic medical records (EMR) equipped with evidence-informed therapeutics, evaluation and clinical decision guidance tools, and referrals to investigations and medical specialists—all in real time. Our EMR system allows for collaboration with major hospitals in the Portland area—and links to health providers all across the nation. At NUNM's primary care home, students learn how to anticipate, guide and coordinate the care of even the most complex of cases with specialists, behavioral and mental health providers, and community partners.

Program Overview

Our ND program combines primary care with the foundation of evidence-informed traditional nature cure. We focus on experiential education and our students benefit from a preceptorship program, simulation labs, diverse clinical experiences, internships and research.

Our curriculum is delivered in an innovative, clinically integrated system where students encounter real patients and clinical scenarios as early as their first quarter—followed by progressive and challenging clinical rotations during the first three years of the program. This design prepares students to smoothly transition into the role of physician in their fourth year, under the watchful mentorship of more than 65 accomplished academic and clinical teachers.

Students in the ND program experience a rigorous biomedical education, an inspiring journey into healing philosophy and practice delivered through the core themes of cultural literacy, ethics and professionalism, evidence-informed practice, naturopathic philosophy, and practitioner cultivation. Each theme is led by one or more of our dedicated faculty to ensure that every block of the curriculum prepares the physicians of tomorrow to thrive in the current and challenging environments of healthcare provision in the U.S.

Stepping Stones

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 whole-system 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. Our graduates complete **1,254 clinic hours**, which include **more than 500 supervised patient contacts**.

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.

Electives

ND students are required to complete 16 elective credits for the purpose of enhancing the breadth of their education. Students may take graduate-level electives through the College of Naturopathic Medicine, College of Classical Chinese Medicine, and School of Undergraduate and Graduate Studies (as long as course prerequisites are met).

Students enrolled in concurrent programs are required to complete the number of elective credit hours of the program that has the greater number of electives between the two programs.

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 elective homeopathy courses in addition to the homeopathy hours integrated in the ND block curriculum. 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. 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 preceptorship.

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 information about applying to an NUNM residency position, other opportunities, and application requirements and deadlines; please visit nunm.edu/residency-nd and aanmc.org/naturopathic-residencies/residency-timeline.

ND Four-Year Curriculum

First Year

Fall

BAS 5110 - Structure and Function I

Credit(s): 12.00

Course I covers basic biochemistry; cell and tissue pathology; and cardiac, circulatory, respiratory and renal structure and function. *Corequisite(s): BAS 5110T, BAS 5110L*

Lecture: 144 | Total Hours: 144

BAS 5110T - Structure and Function I Tutorial

Credit(s): 1.83

Corequisite(s): BAS 5110, BAS 5110L

Tutorial: 22 | Total Hours: 22

BAS 5110L - Structure and Function I Lab

Credit(s): 0.33

Corequisite(s): BAS 5110, BAS 5110T

Lab: 8 | Total Hours: 8

BAS 5111 - Clinical Anatomy I

Credit(s): 3.00

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. *Corequisite(s): BAS 5111T, BAS 5111L*

Lecture: 36 | Total Hours: 36

BAS 5111T - Clinical Anatomy I Tutorial

Credit(s): 1.00

Corequisite(s): BAS 5111, BAS 5111L

Tutorial: 12 | Total Hours: 12

BAS 5111L - Clinical Anatomy I Lab

Credit(s): 1.50

Corequisite(s): BAS 5111, BAS 5111T. Note: Additional fee required

Lab: 36 | Total Hours: 36

CLE 5110 - Clinical Education I

Credit(s): 3.08

This course series focuses on early development of knowledge, skills and judgement essential for clinical practice. This includes a focus on cultivation of the practitioner, professionalism, evidence-informed practice, foundational clinical skills, charting and physical clinical diagnosis, observation of praxis, and reflection. Throughout the series, year-one students are assigned to NUNM clinic shifts where they will observe routine clinical policies and procedures, doctor/student intern-patient relationships, diagnosis and treatment, application of therapeutic modalities, and referral management. *Note: Additional fee required*

Clinic: 10 | Tutorial: 22 | Lecture: 10 | Total Hours: 42

PHL 5110 - Naturopathic History and Philosophy I

Credit(s): 1.00

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.

Lecture: 12 | Total Hours: 12

PHL 5113 - Introduction to Medical Systems

Credit(s): 2.00

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.

Lecture: 24 | Total Hours: 24

- Electives **Credit(s): 1.00 ***

Lecture: 12 | Total Hours: 12

First-Year Fall Totals - Clinic: 10 | Tutorial: 56 | Lab: 44 | Lecture: 238 | Total Hours: 348
| Credits: 26.75

Winter

BAS 5120 - Structure and Function II

Credit(s): 8.00

Course II covers gastrointestinal and dermatologic structure and function, physiology and pathology. *Prerequisite(s): BAS 5110. Corequisite(s): BAS 5120T, BAS 5120L.*

Lecture: 96 | Total Hours: 96

BAS 5120T - Structure and Function II Tutorial

Credit(s): 1.38

Corequisite(s): BAS 5120, BAS 5120L. Note: Additional fee required

Tutorial: 16.50 | Total Hours: 16.50

BAS 5120L - Structure and Function II Lab

Credit(s): 0.33

Corequisite(s): BAS 5120, BAS 5120T

Lab: 8 | Total Hours: 8

BAS 5121 - Clinical Anatomy II

Credit(s): 3.00

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. *Prerequisite(s): BAS 5111. Corequisite(s): BAS 5121T, BAS 5121L.*

Lecture: 36 | Total Hours: 36

BAS 5121T - Clinical Anatomy II Tutorial

Credit(s): 1.00

Corequisite(s): BAS 5121, BAS 5121L

Tutorial: 12 | Total Hours: 12

BAS 5121L - Clinical Anatomy II Lab

Credit(s): 1.50

Corequisite(s): BAS 5121, BAS 5121T Note: Additional fee required

Lab: 36 | Total Hours: 36

CLE 5121 - Clinical Education II

Credit(s): 3.08

This course series focuses on early development of knowledge, skills and judgement essential for clinical practice. This includes a focus on cultivation of the practitioner, professionalism, evidence-informed practice, foundational clinical skills, charting and physical clinical diagnosis, observation of praxis, and reflection. Throughout the series, year-one students are assigned to NUNM clinic shifts where they will observe routine clinical policies and procedures, doctor/student intern-patient relationships, diagnosis and treatment, application of therapeutic modalities, and referral management. *Note: Additional fee required*

Clinic: 10 | Tutorial: 22 | Lecture: 10 | Total Hours: 42

PHL 5120 - Naturopathic History and Philosophy II

Credit(s): 1.00

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.

Lecture: 12 | Total Hours: 12

THR 5120 - Therapeutic Modalities I

Credit(s): 6.00

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. *Corequisite(s): THR 5120T, THR 5120L*

Lecture: 72 | Total Hours: 72

THR 5120T - Therapeutic Modalities I Tutorial

Credit(s): 2.00

Corequisite(s): THR 5120, THR 5120L

Tutorial: 24 | Total Hours: 24

THR 5120L - Therapeutic Modalities I Lab

Credit(s): 1.00

Corequisite(s): THR 5120, THR 5120T. Note: Additional fee required

Lab: 24 | Total Hours: 24

- Electives **Credit(s): 1.00 ***

Lecture: 12 | Total Hours: 12

First-Year Winter Totals - Clinic: 10 | Tutorial: 74.50 | Lab: 68 | Lecture: 238 | Total Hours: 390.50 | Credits: 29.29

Spring

BAS 5130 - Structure and Function III

Credit(s): 8.00

Course III covers the central nervous system, behavior, pain, stress, and reproductive system structure and function, physiology and pathology. *Prerequisite(s): BAS 5120. Corequisite(s): BAS 5130T, BAS 5130L*

Lecture: 96 | Total Hours: 96

BAS 5130T - Structure and Function III Tutorial

Credit(s): 0.50

Corequisite(s): BAS 5130. Note: Additional fee required

Tutorial: 6 | Total Hours: 6

BAS 5131 - Microbiology, Public Health and Immunology

Credit(s): 3.00

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. *Corequisite(s): BAS 5131T*

Lecture: 36 | Total Hours: 36

BAS 5131T - Microbiology, Public Health and Immunology Tutorial

Credit(s): 2.00

Corequisite(s): BAS 5131

Tutorial: 24 | Total Hours: 24

CLE 5132 - Clinical Education III

Credit(s): 2.92

This course series focuses on early development of knowledge, skills and judgement essential for clinical practice. This includes a focus on cultivation of the practitioner, professionalism, evidence-informed practice, foundational clinical skills, charting and physical clinical diagnosis, observation of praxis, and reflection. Throughout the series, year-one students are assigned to NUNM clinic shifts where they will observe routine clinical policies and procedures,

doctor/student intern-patient relationships, diagnosis and treatment, application of therapeutic modalities, and referral management. During the final course of this series, students are introduced to principles and practices involved in community education. *Note: Additional fee required*

Clinic: 10 | Tutorial: 22 | Lecture: 8 | Total Hours: 40

PHL 5130 - Naturopathic Medicine Retreat

Credit(s): 0.75

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.

Lab: 18 | Total Hours: 18

THR 5131 - Therapeutic Modalities II

Credit(s): 6.00

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. *Corequisite(s): THR 5131T, THR 5131L*

Lecture: 72 | Total Hours: 72

THR 5131T - Therapeutic Modalities II Tutorial

Credit(s): 2.00

Corequisite(s): THR 5131, THR 5131L

Tutorial: 24 | Total Hours: 24

THR 5131L - Therapeutic Modalities II Lab

Credit(s): 0.50

Corequisite(s): THR 5131, THR 5131T. Note: Additional fee required

Lab: 12 | Total Hours: 12

- Electives **Credit(s): 1.00 ***

Lecture: 12 | Total Hours: 12

First-Year Spring Totals - Clinic: 10 | Tutorial: 76 | Lab: 30 | Lecture: 224 | Total Hours: 340 | Credits: 26.67

First-Year Totals - Clinic: 30 | Tutorial: 206.50 | Lab: 142 | Lecture: 700 | Total Hours: 1078.50 | Credits: 82.71

Second Year

Fall

CLS 6210 - Musculoskeletal, Orthopedics, Exercise Physiology and Rehabilitation

Credit(s): 9.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6210T, CLS 6210L*

Lecture: 108 | Total Hours: 108

CLS 6210T - Musculoskeletal, Orthopedics, Exercise Physiology and Rehabilitation Tutorial

Credit(s): 6.00

Corequisite(s): CLS 6210, CLS 6210L. Note: Additional fee required

Tutorial: 72 | Total Hours: 72

CLS 6210L - Musculoskeletal, Orthopedics, Exercise Physiology and Rehabilitation Lab

Credit(s): 3.00

Corequisite(s): CLS 6210, CLS 6210T. Note: Additional fee required

Lab: 72 | Total Hours: 72

CLS 6211 - Neurology

Credit(s): 5.50

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6211T, CLS 6211L*

Lecture: 66 | Total Hours: 66

CLS 6211T - Neurology Tutorial

Credit(s): 1.50

Corequisite(s): CLS 6211, CLS 6211L

Tutorial: 18 | Total Hours: 18

CLS 6211L - Neurology Lab

Credit(s): 0.25

Corequisite(s): CLS 6211, CLS 6211T. Note: Additional fee required

Lab: 6 | Total Hours: 6

Second-Year Fall Totals - Tutorial: 90 | Lab: 78 | Lecture: 174 | Total Hours: 342 |

Credits: 25.25

Winter

CLS 6220 - Cardiology and Pulmonology

Credit(s): 9.00

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.

Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6220T, CLS 6220L

Lecture: 108 | Total Hours: 108

CLS 6220T - Cardiology and Pulmonology Tutorial

Credit(s): 4.00

Corequisite(s): CLS 6220, CLS 6220L. Note: Additional fee required

Tutorial: 48 | Total Hours: 48

CLS 6220L - Cardiology and Pulmonology Lab

Credit(s): 0.50

Corequisite(s): CLS 6220, CLS 6220T. Note: Additional fee required

Lab: 12 | Total Hours: 12

CLS 6221 - Hematology and Oncology

Credit(s): 6.50

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.

Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6221T, CLS 6221L

Lecture: 78 | Total Hours: 78

CLS 6221T - Hematology and Oncology Tutorial

Credit(s): 1.50

Corequisite(s): CLS 6221, CLS 6221L

Tutorial: 18 | Total Hours: 18

CLS 6221L - Hematology and Oncology Lab

Credit(s): 0.50

Corequisite(s): CLS 6221, CLS 6221T. Note: Additional fee required

Lab: 12 | Total Hours: 12

CLE 6222 - Hydrotherapy Rotation

Credit(s): 2.00

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.

Prerequisite(s): CLE 5120, CLE 5130, THR 5120, THR 5120T, THR 5120L

Clinic: 48 | Total Hours: 48

Second-Year Winter Totals - Clinic: 48 | Tutorial: 66 | Lab: 24 | Lecture: 186 | Total Hours: 324 | Credits: 24

Spring

CLS 6230 - Gastroenterology and Proctology

Credit(s): 8.50

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6230T, CLS 6230L*

Lecture: 102 | Total Hours: 102

CLS 6230T - Gastroenterology and Proctology Tutorial

Credit(s): 2.00

Corequisite(s): CLS 6230, CLS 6230L. Note: Additional fee required

Tutorial: 24 | Total Hours: 24

CLS 6230L - Gastroenterology and Proctology Lab

Credit(s): 0.25

Corequisite(s): CLS 6230, CLS 6230T. Note: Additional fee required

Lab: 6 | Total Hours: 6

CLS 6231 - Urology and Nephrology

Credit(s): 5.50

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6231T*

Lecture: 66 | Total Hours: 66

CLS 6231T - Urology and Nephrology Tutorial

Credit(s): 3.00

Corequisite(s): CLS 6231. Note: Additional fee required

Tutorial: 36 | Total Hours: 36

CLS 6232 - Metabolism and Endocrinology

Credit(s): 7.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6232T*

Lecture: 84 | Total Hours: 84

CLS 6232T - Metabolism and Endocrinology Tutorial

Credit(s): 3.00

Corequisite(s): CLS 6232

Tutorial: 36 | Total Hours: 36

CLE 6212 - Introduction to Clinic

Credit(s): 0.25

This course gives students an overview of NUNM clinic procedures and includes required OSHA training. *Prerequisite(s): CLE 5120 , CLE 5130 . Note: Additional fee required*

Lecture: 3 | Total Hours: 3

Second-Year Spring Totals - Tutorial: 96 | Lab: 6 | Lecture: 255 | Total Hours: 357 |
Credits: 29.50

Second-Year Totals - Clinic: 48 | Tutorial: 252 | Lab: 108 | Lecture: 615 | Total
Hours: 1023 | Credits: 78.75

Third Year

Fall

CLS 7310 - Reproductive Systems (Andrology, Gynecology and Natural Childbirth)

Credit(s): 11.00

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 sex-specific conditions and LGBTQI health care. This course also provides students with

foundational knowledge of natural childbirth, as well as prenatal and postpartum care.

Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7310T, CLS 7310L

Lecture: 132 | Total Hours: 132

CLS 7310T - Reproductive Systems Tutorial (Andrology, Gynecology and Natural Childbirth)

Credit(s): 3.00

Corequisite(s): CLS 7310, CLS 7310L

Tutorial: 36 | Total Hours: 36

CLS 7310L - Reproductive Systems Lab (Andrology, Gynecology and Natural Childbirth)

Credit(s): 0.50

Corequisite(s): CLS 7310, CLS 7310T. Note: Additional fee required

Lab: 12 | Total Hours: 12

CLS 7311 - Rheumatology and Clinical Immunology

Credit(s): 4.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7311T*

Lecture: 48 | Total Hours: 48

CLS 7311T - Rheumatology and Clinical Immunology Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7311. Note: Additional fee required

Tutorial: 24 | Total Hours: 24

CLE 7300 - Secondary Rotation

Credit(s): 2.50

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. *Prerequisite(s): CLE 5120 , CLE 5130 , CLE 6212, CLE 6222, CLS 6210, CLS 6220, CLS 6230. Successful completion of OSCE 1. Note: 3 required rotations*

Clinic: 60 | Total Hours: 60

CLE 7311 - Community Education

Credit(s): 2.00

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(s): CLE 5131

Tutorial: 24 | Total Hours: 24

Third-Year Fall Totals - Clinic: 60 | Tutorial: 84 | Lab: 12 | Lecture: 180 | Total Hours: 336
| Credits: 25.00

Winter

CLS 7320 - Eyes, Ears, Nose and Throat (EENT)

Credit(s): 5.00

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.

Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7320T, CLS 7320L

Lecture: 60 | Total Hours: 60

CLS 7320T - Eyes, Ears, Nose and Throat (EENT) Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7320, CLS 7320L

Tutorial: 24 | Total Hours: 24

CLS 7320L - Eyes, Ears, Nose and Throat (EENT) Lab

Credit(s): 0.25

Corequisite(s): CLS 7320, CLS 7320T. Note: Additional fee required

Lab: 6 | Total Hours: 6

CLS 7321 - Dermatology and Minor Surgery

Credit(s): 7.50

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7321T, CLS 7321L*

Lecture: 90 | Total Hours: 90

CLS 7321T - Dermatology and Minor Surgery Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7321, CLS 7321L

Tutorial: 24 | Total Hours: 24

CLS 7321L - Dermatology and Minor Surgery Lab

Credit(s): 1.00

Corequisite(s): CLS 7321, CLS 7321T Note: Additional fee required

Lab: 24 | Total Hours: 24

BUS 7321 - Business I: HR and Human Relations

Credit(s): 2.00

This is the first of three courses that aim to prepare the naturopathic student to succeed in practice. In this course, students learn the fundamentals of business human resources and relationships.

Lecture: 24 | Total Hours: 24

CLE 7300 - Secondary Rotation

Credit(s): 2.50

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. *Prerequisite(s): CLE 5120 , CLE 5130 , CLE 6212, CLE 6222, CLS 6210, CLS 6220, CLS 6230. Successful completion of OSCE 1. Note: 3 required rotations*

Clinic: 60 | Total Hours: 60

Third-Year Winter Totals - Clinic: 60 | Tutorial: 48 | Lab: 30 | Lecture: 174 | Total Hours: 312 | Credits: 22.25

Spring

CLS 7332 - Psychology and Mental Health

Credit(s): 4.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7332T*

Lecture: 48 | Total Hours: 48

CLS 7332T - Psychology and Mental Health Tutorial

Credit(s): 3.00

Corequisite(s): CLS 7332. Note: Additional fee required

Tutorial: 36 | Total Hours: 36

CLS 7330 - Pediatrics and Geriatrics

Credit(s): 6.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7330T*

Lecture: 72 | Total Hours: 72

CLS 7330T - Pediatrics and Geriatrics Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7330. Note: Additional fee required

Tutorial: 24 | Total Hours: 24

CLS 7331 - Parenteral Therapy and Environmental Medicine

Credit(s): 3.50

Environmental medicine is the diagnosis and treatment of conditions related to the human exposure of both macro- and 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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7331T, CLS 7331L*

Lecture: 42 | Total Hours: 42

CLS 7331T - Parenteral Therapy and Environmental Medicine Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7331, CLS 7331L

Tutorial: 24 | Total Hours: 24

CLS 7331L - Parenteral Therapy and Environmental Medicine Lab

Credit(s): 0.50

Corequisite(s): CLS 7331, CLS 7331T. Note: Additional fee required

Lab: 12 | Total Hours: 12

CLE 7300 - Secondary Rotation

Credit(s): 2.50

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. *Prerequisite(s): CLE 5120 , CLE 5130 , CLE 6212, CLE 6222, CLS 6210, CLS 6220, CLS 6230. Successful completion of OSCE 1. Note: 3 required rotations*

Clinic: 60 | Total Hours: 60

Third-Year Spring Totals - Clinic: 60 | Tutorial: 84 | Lab: 12 | Lecture: 162 | Total Hours: 318 | Credits: 23.50

Third-Year Totals - Clinic: 180 | Tutorial: 216 | Lab: 54 | Lecture: 516 | Total Hours: 966 | Credits: 70.75

Fourth Year

Summer

CLE 8400 - Primary Rotations

Credit(s): 2.50 credits each

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, evidence-informed practice, and diagnostic skills to the treatment and management of patients in a primary care setting.

Prerequisite(s): CLE 7300, CLS 6210, CLS 6211, CLS 6220, CLS 6221, CLS 6230, CLS 6231, CLS 6232, CLS 7310, CLS 7311, CLS 7320, CLS 7321, CLS 7330, CLS 7331, CLS 7332.

Successful completion of OSCE 2. Note: 13 required rotations

Clinic: 180 | Total Hours: 180

BUS 8400 - Jurisprudence

Credit(s): 1.00

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.

Lecture: 12 | Total Hours: 12

CLE 8400T - Case Integration Mentorship Tutorial I

Credit(s): 1.50

The purpose of this four-course series is to cultivate reflective practitioners, foster critical thinking, and enhance clinical judgment through team-based learning, self-awareness and peer evaluation. Through mentorship and evidence-informed knowledge translation, nascent practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems.

Corequisite(s): CLE 8400

Tutorial: 18 | Total Hours: 18

CLE 8401 - Community Experience (ComEx) Preceptorship

Credit(s): 5.00

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(s): CLE 5120*

Clinic: 120 | Total Hours: 120

- Electives **Credit(s): 3.00 ***

Lecture: 36 | Total Hours: 36

Fourth-Year Summer Totals - Clinic: 300 | Tutorial: 18 | Lecture: 48 | Total Hours: 366 | Credits: 18.00

Fall

CLE 8400 - Primary Rotations

Credit(s): 2.50 credits each

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, evidence-informed practice, and diagnostic skills to the treatment and management of patients in a primary care setting.

Prerequisite(s): CLE 7300, CLS 6210, CLS 6211, CLS 6220, CLS 6221, CLS 6230, CLS 6231, CLS 6232, CLS 7310, CLS 7311, CLS 7320, CLS 7321, CLS 7330, CLS 7331, CLS 7332.

Successful completion of OSCE 2. Note: 13 required rotations

Clinic: 180 | Total Hours: 180

CLE 8411 - Grand Rounds

Credit(s): 1.50

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.

Lecture: 18 | Total Hours: 18

CLE 8410T - Case Integration Mentorship Tutorial II

Credit(s): 1.50

The purpose of this four-course series is to cultivate reflective practitioners, foster critical thinking, and enhance clinical judgment through team-based learning, self-awareness and peer evaluation. Through mentorship and evidence-informed knowledge translation, nascent practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems.

Corequisite(s): CLE 8400

Tutorial: 18 | Total Hours: 18

- Electives **Credit(s): 3.00 ***

Lecture: 36 | Total Hours: 36

Fourth-Year Fall Totals - Clinic: 180 | Tutorial: 18 | Lecture: 54 | Total Hours: 252 |

Credits: 13.50

Winter

CLE 8400 - Primary Rotations

Credit(s): 2.50 credits each

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, evidence-informed practice, and diagnostic skills to the treatment and management of patients in a primary care setting.

Prerequisite(s): CLE 7300, CLS 6210, CLS 6211, CLS 6220, CLS 6221, CLS 6230, CLS 6231, CLS 6232, CLS 7310, CLS 7311, CLS 7320, CLS 7321, CLS 7330, CLS 7331, CLS 7332.

Successful completion of OSCE 2. Note: 13 required rotations

Clinic: 180 | Total Hours: 180

CLE 8421 - Grand Rounds

Credit(s): 1.50

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.

Lecture: 18 | Total Hours: 18

CLE 8420T - Case Integration Mentorship Tutorial III

Credit(s): 1.50

The purpose of this four-course series is to cultivate reflective practitioners, foster critical thinking, and enhance clinical judgment through team-based learning, self-awareness and peer evaluation. Through mentorship and evidence-informed knowledge translation, nascent practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems.

Corequisite(s): CLE 8400

Tutorial: 18 | Total Hours: 18

BUS 8421 - Business II: Marketing and Portfolio

Credit(s): 2.00

This course prepares students to establish a portfolio and develop effective marketing strategies.

Lecture: 24 | Total Hours: 24

- Electives **Credit(s): 4.00 ***

Lecture: 48 | Total Hours: 48

Fourth-Year Winter Totals - Clinic: 180 | Tutorial: 18 | Lecture: 90 | Total Hours: 288 | Credits: 16.50

Spring

CLE 8400 - Primary Rotations

Credit(s): 2.50 credits each

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, evidence-informed practice, and diagnostic skills to the treatment and management of patients in a primary care setting.

Prerequisite(s): CLE 7300, CLS 6210, CLS 6211, CLS 6220, CLS 6221, CLS 6230, CLS 6231, CLS 6232, CLS 7310, CLS 7311, CLS 7320, CLS 7321, CLS 7330, CLS 7331, CLS 7332.

Successful completion of OSCE 2. Note: 13 required rotations

Clinic: 240 | Total Hours: 240

CLE 8431 - Grand Rounds

Credit(s): 1.50

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.

Lecture: 18 | Total Hours: 18

CLE 8430T - Case Integration Mentorship Tutorial IV

Credit(s): 1.50

The purpose of this four-course series is to cultivate reflective practitioners, foster critical thinking, and enhance clinical judgment through team-based learning, self-awareness and peer evaluation. Through mentorship and evidence-informed knowledge translation, nascent practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems.

Corequisite(s): CLE 8400

Tutorial: 18 | Total Hours: 18

BUS 8430 - Business III: Readiness for Life Beyond NUNM

Credit(s): 1.50

The practice management series culminates in a capstone project, for which students prepare for their chosen career.

Lecture: 18 | Total Hours: 18

CLE 8432 - Community Experience (ComEx) Preceptorship

Credit(s): 4.00

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(s): CLE 5120*

Clinic: 96 | Total Hours: 96

- Electives **Credit(s): 3.00 ***

Lecture: 36 | Total Hours: 36

Fourth-Year Spring Totals - Clinic: 336 | Tutorial: 18 | Lecture: 72 | Total Hours: 426 | Credits: 21.50

Fourth-Year Totals - Clinic: 996 | Tutorial: 72 | Lecture: 264 | Total Hours: 1332 | Credits: 69.50

*May be taken in any year or quarter; 16 elective credits required

**One rotation to be taken in priority term

***These hours are cumulative and may be earned in a term other than term registered

Program Totals - Clinic: 1254 | Tutorial: 746.50 | Lab: 304 | Lecture: 2095 | Total Hours: 4399.50 | Credits: 301.71

Electives

[Click here for a list of the available ND electives.](#)

College of Classical Chinese Medicine

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.

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 fascinating and effective.

The roots of Chinese Medicine extend back thousands of years—to the wisdom and work of cultivated individuals who understood that human beings are microcosms of the natural world.

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 most authentic expression.

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 museum-worthy 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 is so motivated) 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 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 45.5 credits and 552 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 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 and tube-assisted 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.

DSOM students also take the first course in a series titled "Imaginal and Experiential Inquiries" (IEI). 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 the first-year IEI course, students focus on the development of their perceptual abilities.

Biomedicine

While the first year of the curriculum has a focus on research literacy and critical thinking, it does not emphasize biomedical knowledge. 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

Students are introduced to the practical and philosophical fundamentals of working in the NUNM health centers, and begin their clinical observation training.

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 portions of the *Huangdi Neijing*, with an emphasis on clinical application of the knowledge gleaned from this seminal text of Chinese medicine.

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 complete one clinical observation rotation per quarter, in which 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 the *Shanghanlun* and *Jingui Yaolüe*, with an emphasis on clinical application. The third-year IEI course focuses on "developing a medical mind" as well as doctoral capstone preparation.

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(s) 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 systems-based 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 and the 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 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: Doctoral students complete at least one collaborative care rotation, in which they engage in patient-centered care while co-treating patients with naturopathic students (and potentially additional healthcare practitioners) in a multidisciplinary setting. In addition to participating in one or more primary care teams with naturopathic physicians at NUNM's 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. Students are encouraged to take electives through the

College of Classical Chinese Medicine, which deepen the student's connection with the classical roots of the medicine. In addition, students may also take elective courses through the College of Naturopathic Medicine and School of Graduate Studies (as long as course prerequisites are met).

The CCM-specific electives include coursework in such subjects as calligraphy, shiatsu, classical tea arts, *Yijing*, *bazi suanming*, *qimen dunjia*, *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 and DSOM degrees are accredited by the Accreditation Commission for Acupuncture and Oriental Medicine (ACAOM) and qualify 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

NCCAOM
76 South Laura St., Suite 1290
Jacksonville, FL 32202
904.598.5001

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

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

Doctor of Science in Oriental Medicine, DSOM

The Doctor of Science in Oriental Medicine is a four-year program consisting of 3,930 hours and 266.25 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 read and 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

1. Relate the ancient Chinese view of macrocosm-microcosm correspondences to the contemporary practice of medicine
2. 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
6. Demonstrate the ability to work collaboratively within the healthcare system to provide patient-centered 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

Elective Requirement

DSOM students are required to complete 10 elective credits for the purpose of enhancing the breadth of their education. Students are encouraged to take electives through the College of Classical Chinese Medicine, which deepen the student's connection with the classical roots of the medicine. In addition, students may also take graduate-level elective courses through the College of Naturopathic Medicine, and School of Undergraduate and Graduate Studies (as long as course prerequisites are met).

Students enrolled in concurrent programs are required to complete the number of elective credit hours of the program that has the greater number of electives between the two programs.

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 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 second-year Observation component, students must complete the first year of study and pass Herbs I-II, Acu-Moxa Points and Techniques I-III, Palpation and Perception I-III, Chinese Diagnostic Techniques I-II, Evidence-Informed Practice, Introduction to Clinic, and Pre-Observation Rotation. 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 progress through the clinical experience in a sequential fashion, from active observation of highly experienced practitioners, to greater involvement in patient care under fully guided mentoring, to being able to conduct a comprehensive patient intake and assessment, and design and deliver an individually tailored treatment protocol under expert supervision. 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. With a focus on patient-centered care, students learn how to make and receive appropriate referrals, and to communicate and collaborate within the prevailing biomedically based healthcare system.

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.

Clinical Training

The components of the clinical portion of the program are Introduction to Clinic, Clinical Pre-Observation, Clinical Observation, Clinical Mentoring, Clinical Pre-Internship, Clinical Case Presentation, Clinical Internship, and Internship Case Presentation. DSOM students also complete a Collaborative Care Rotation and Collaborative Care Case Presentation. These are organized as follows:

Year of Study		Clinical Component
DSOM	DSOM/ ND	
1st	1st	Introduction to Clinic: Students learn the fundamentals of working in the NUNM clinics
1st	1st	Clinical Pre-Observation Rotation: Students get their first experience observing clinical supervisors treating patients 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: Clinical cases are viewed through multiple lenses
3rd	5th	Clinical Pre-Internship Rotation: Students learn the role and responsibilities of the intern by following the interns soon to graduate
4th	6th	Clinical Internship Rotation I-III: Students (under supervision) assume primary responsibility for diagnosis and treatment of patients; 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-II: Presentation and discussion of internship cases with peers and supervisors

4th	6th	Collaborative Care Rotation: DSOM students deliver patient-centered care alongside naturopathic primary students.
4th	6th	Collaborative Care Case Presentation: Presentation of collaborative care cases, with a focus on inter-professionalism and systems-based medical care.

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 Practicums, during which they are mentored in the process of teaching their 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 are fully prepared to use shiatsu as an independent treatment modality.

DSOM Four-Year Curriculum

Note: courses marked with an asterisk () are unique to the DSOM program, and are not included in the MSOM*

First Year

Fall

CM* 911 - Classical Texts I: Introduction to Classical Chinese Language and the Chinese Classical Texts

Credit(s): 3.00

The Classical Texts I-IX series deepens 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 which evolved from it. The first three courses (Classical Texts I-III) introduce basics of the spoken and written classical Chinese language, including the use of a Chinese dictionary. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 36 | Total Hours: 36

CM 511 - Foundations of Classical Chinese Medicine I

Credit(s): 2.00

This course introduces students to the common principles that underlie all traditional nature sciences, as observed from the specific perspective of classical Chinese medicine. Core concepts 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. *Note: May be taken concurrently with CM 521*

Lecture: 24 | Total Hours: 24

CM 512 - Chinese History and Culture I

Credit(s): 1.50

These courses present 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(s): These courses are to be taken in the ordered sequence

Lecture: 18 | Total Hours: 18

CM 513 - Acu-Moxa Points I (Point Actions)

Credit(s): 2.00

Acu-Moxa Points and Techniques I-II 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(s): Concurrent enrollment in CM 514 (Tech I)*

Lecture: 24 | Total Hours: 24

CM 514 - Acu-Moxa Techniques I (Point Location)

Credit(s): 1.50

Acu-Moxa Points and Techniques I-II 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 practice locating points on their classmates, with a focus on the development of skills that will bring clinical success and patient satisfaction. Classical approaches from source texts are integrated into the class. These classes build a foundation for life-long learning through independent investigation using all senses and a reasoned evaluation of different opinions. *Corequisite(s): Concurrent enrollment in CM 513.*

Note: Additional fee required

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 515 - Palpation and Perception I Practicum

Credit(s): 1.50

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 518 - Qigong I Retreat

Credit(s): 0.50

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. *Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 519 - Qigong I Practicum

Credit(s): 1.50

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.

Lecture: 18 | Total Hours: 18

CM 551 - The Business of Chinese Medicine I

Credit(s): 1.50

This four-course series uses a skills-based approach to business education and career development. By the end of the series, students will have completed all necessary components of a professional business or career plan that can be used to start a large multi-room clinic, a single practitioner business, or to find an employee position at an integrated clinic or hospital. In this first course, students develop public speaking and networking skills in addition to learning the elements of a successful business and/or career plan as a licensed Chinese medicine provider.

Prerequisite(s): These courses are to be taken in the ordered sequence

Lecture: 18 | Total Hours: 18

CM 530 - Introduction to Clinic

Credit(s): 1.50

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. *Note: Additional fee required*

Lecture: 18 | Total Hours: 18

First-Year Fall Totals - Lab: 36 | Lecture: 180 | Total Hours: 216 | Credits: 16.50

Winter

CM* 921 - Classical Texts II: Introduction to Classical Chinese Language and the Chinese Classical Texts

Credit(s): 3.00

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. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 36 | Total Hours: 36

CM 521 - Foundations of Classical Chinese Medicine II

Credit(s): 2.00

The second in a series of three courses on the foundations of classical Chinese medicine, this course introduces students to the basic anatomy and physiology of the body as understood by classical Chinese medicine. Definitions, functions and interactions between the functional systems of the *zàng* and *fù* organs are covered, as are the extraordinary organs and additional unique aspects of Chinese medicine anatomy. *Note: May be taken concurrently with CM 511*

Lecture: 24 | Total Hours: 24

CM* 522 - Chinese History and Culture II

Credit(s): 1.50

These courses present 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(s): These courses are to be taken in the ordered sequence

Lecture: 18 | Total Hours: 18

CM 502 - Professional Development

Credit(s): 1.00

This course introduces students to the history and faculty of their program, and cultivates skills needed to successfully navigate their journey at NUNM. Topics include critical thinking, learning strategies, professional personae, stress reduction, and self-regulation.

Lab: 12 | Total Hours: 12

CM 562 - Chinese Diagnostic Techniques I

Credit(s): 1.50

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 introduces the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. 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 (*shiwu*), are also practiced in class.

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 523 - Acu-Moxa Points II (Point Actions)

Credit(s): 2.00

Acu-Moxa Points and Techniques I-II 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. The meridian and acupoint system of Chinese medicine lay out a treatment modality that is both profound and therapeutically effective for a wide range of health conditions. *Prerequisite(s): CM 513 and CM 514 (Pts & Tech I). Corequisite(s): Concurrent enrollment in CM 524 (Tech II)*

Lecture: 24 | Total Hours: 24

CM 524 - Acu-Moxa Techniques II (Point Location)

Credit(s): 1.50

Acu-Moxa Points and Techniques I-II 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 practice locating points on their classmates, with a focus on the development of skills that will bring clinical success and patient satisfaction. Classical approaches from source texts are integrated into the class. These classes build a foundation for life-long learning through independent investigation using all senses and a reasoned evaluation of different opinions. *Prerequisite(s): CM 514. Corequisite(s): Concurrent enrollment in CM 523. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 525 - Palpation and Perception II Practicum

Credit(s): 1.50

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 516 - Herbs I

Credit(s): 2.00

In the Herbs I-III series, students develop the foundation of Chinese herbology in preparation to become competent practitioners of Chinese herbal medicine. Students learn approximately 180 key herbs including properties, therapeutic actions, preparation and application. Herbs I introduces the history and development of Chinese herbal medical knowledge. Students focus on learning approximately half of 64 core herbs used in Zhang Zhongjing's *Shanghan Zabing Lun*, which is a major, foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Student learn properties and therapeutic actions of individual herbs described in materia medicas and textbooks. In addition, students are introduced to the concept of herb patterns and corresponding pathomechanisms, and gain knowledge of time-tested herbal combinations and formulary employed in classical herbal formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

Lecture: 24 | Total Hours: 24

CM 556 - Herbs I Practicum

Credit(s): 1.00

The Herbs Practicum series introduces the key principles, research methods, and technical elements of classical energetic alchemy and Chinese herbalism. It supplements the herbs lecture courses and brings to life the accumulated wisdom of the materia medica through direct interaction with key Chinese medicinal herbs and their traditional forms of preparation. Strong emphasis is placed on the primacy and immediacy of sensational experience as the path to deeper understanding of qi dynamics and the energetic signatures of various herbal medicines. Herbs I Practicum introduces the basic principles of qi dynamics, classical discussion of herbal properties, their unique movement signatures, and other key elements of an herbal research framework. These concepts are developed through the sampling and appreciation of single herbs, often in pairs, covering a large cross section of signatures. Energetic awareness is cultivated through the comparison of one's own experience with descriptions from classical sources. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 12 | Total Hours: 12

CM 528 - Qigong II Retreat

Credit(s): 0.50

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). *Prerequisite(s): CM 518, CM 519.*
Note: Additional fee required

Lab: 12 | Total Hours: 12

CM 529 - Qigong II Practicum

Credit(s): 1.50

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). *Prerequisite(s): CM 518, CM 519*

Lecture: 18 | Total Hours: 18

First-Year Winter Totals - Lab: 48 | Lecture: 204 | Total Hours: 252 | Credits: 19.00

Spring

CM* 931 - Classical Texts III: Introduction to Classical Chinese Language and the Chinese Classical Texts

Credit(s): 3.00

This course incorporates the following three parts: the study of classical Chinese syntax and grammar, the study of *Han Zi* (Chinese characters) through analyzing and learning the standard 214 radicals adopted in *Kangxi Zidian*, and the reading of passages from selected classical texts. It emphasizes the proper scholar's way of approaching ancient texts and classics, and reinforces a high standard of scholarship. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 36 | Total Hours: 36

CM 531 - Foundations of Classical Chinese Medicine III

Credit(s): 2.00

This third course of the series introduces students to basic channel anatomy and physiology. Students learn the structures, levels and pathways of the energetic web interpenetrating the body, as well as their functions and interactions. The relationships between the organs and the channels

will be considered to elucidate how the two systems work together to support the vitality and working functionality of a human being. *Prerequisite(s): CM 511, CM 521*

Lecture: 24 | Total Hours: 24

CM* 532 - Chinese History and Culture III

Credit(s): 1.50

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(s): CM* 522*

Lecture: 18 | Total Hours: 18

CM* 595 - Imaginal and Experiential Inquiries I

Credit(s): 1.50

This course 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, and create a professional portfolio. Special attention is given to the cultivation of resilience, clarity of purpose, self-responsibility, and professionalism.

Prerequisite(s): These courses are to be taken in the ordered sequence

Lecture: 18 | Total Hours: 18

CM 572 - Chinese Diagnostic Techniques II

Credit(s): 1.50

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 introduces the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. 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 (*shiwu*), are also practiced in class.

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 533 - Acu-Moxa Points III

Credit(s): 2.00

Students study the "extra points," and 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. The course also introduces classical methods of needling. Rigorous application of classical texts gives foundations for more painless and effective techniques. Classical freehand needling and tube techniques are a focus of this term, along with the development of patient comfort and practitioner confidence. This course sets the stage for advanced classical needle techniques and more challenging points in the following year. *Prerequisite(s): CM 523.*

Corequisite(s): Concurrent enrollment in CM 534

Lecture: 24 | Total Hours: 24

CM 534 - Acu-Moxa Techniques III**Credit(s): 2.00**

In this hands-on complement to Acu-Moxa Points III, students learn to become competent practitioners of manual therapies while applying the depth of classical Chinese literature. The course develops non-needle and simple needle techniques under supervision while emphasizing clean needle technique and proper draping and body positioning. Students witness and then use acupressure and the full array of non-needle techniques, including moxabustion, cupping, guasha, magnets and beads. This practicum also introduces classical free hand and gentle tube insertion needling techniques, setting the stage for advanced classical needle techniques and more challenging points to be learned in subsequent courses. *Prerequisite(s): CM 524. Corequisite(s): Concurrent enrollment in CM 533. Note: Additional fee required. The Clean Needle Technique course offered by CCAOM is also required.*

Lab: 24 | Lecture: 12 | Total Hours: 36

CM 535 - Palpation and Perception III Practicum**Credit(s): 1.50**

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 526 - Herbs II

Credit(s): 2.00

In Herbs II, students learn the second-half of 64 core herbs used in Zhang Zhongjing's *Shanghan Zabing Lun*, which is a major, foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Student learn properties and therapeutic actions of individual herbs described in materia medicas and textbooks. In addition, students are introduced to the concept of herb patterns and corresponding pathomechanisms, and gain knowledge of time-tested herbal combinations and formulary employed in classical herbal formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 24 | Total Hours: 24

CM 566 - Herbs II Practicum

Credit(s): 1.00

Herbs II Practicum continues the series with a review of the basic principles of qi dynamics, classical discussion of herbal properties, their unique movement signatures, and other key elements of an herbal research framework. These concepts are developed through the sampling and appreciation of single herbs, often in pairs, covering a large cross section of signatures. Energetic awareness is cultivated through the comparison of one's own experience with descriptions from classical sources. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 12 | Total Hours: 12

CM 599 - Evidence-Informed Practice

Credit(s): 2.00

This course builds students' research literacy skills. In order to become successful, holistic practitioners, students learn to read and critically evaluate medical literature, and to weigh this evidence with clinical experience and patient values when making clinical decisions. Students learn to quickly locate relevant medical literature, as well as evaluate the strengths and weaknesses of the studies they need to support their clinical practice.

Lecture: 24 | Total Hours: 24

CM 538 - Qigong III Retreat

Credit(s): 0.50

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). *Prerequisite(s): CM 518, CM 519. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 539 - Qigong III Practicum

Credit(s): 1.50

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). *Prerequisite(s): CM 518, CM 519.*

Lecture: 18 | Total Hours: 18

CM 500 - Pre-Observation Rotation

Credit(s): 1.00

Students have their first exposure to working in the NUNM Health Centers through a first-year Clinical Observation experience.

Clinic: 24 | Total Hours: 24

First-Year Spring Totals - Clinic: 24 | Lab: 60 | Lecture: 234 | Total Hours: 318 | Credits: 23.00

First-Year Totals - Clinic: 24 | Lab: 144 | Lecture: 618 | Total Hours: 786 | Credits: 58.50

Second Year

Fall

CM* 971 - Classical Texts VII: Neijing Seminar

Credit(s): 2.00

In the Neijing Seminar I-III series, students gain direct access to the wisdom found in the *Huangdi Neijing* ("Yellow Emperor's Inner Classic"), the foundational classic of Chinese medicine. Students read a selection of excerpts in the original Chinese characters, explore their meanings, and discuss how to integrate this wisdom into clinical practice and their own lives. The first course provides an overview of the text and then delves into the clinically important passages focusing on channels and acupuncture. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 611 - Chinese Organ Systems: Cosmology and Symbolism I

Credit(s): 2.00

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(s): Second-year status*

Lecture: 24 | Total Hours: 24

CM 612 - Chinese Pathology I

Credit(s): 2.00

In this course, students develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the Classical medical model. The models explored in this course include yin/yang, sanyin, bagang and liuqi. For the first few weeks, Zang Organs will be the focus. In the following half of the term, the Six Conformation model will be the focus of exploration. *Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 613 - Acu-Moxa Points IV

Credit(s): 2.00

In this course, students learn how to understand and apply the Jingluo theory as a whole. Following an in-depth discussion on the constitution and construction of the Jingluo theory, the characteristics of Biaoben, Genjie, Qijie and Sihai will be compared to the 12 regular meridians, 12 divergent channels, 12 cutaneous zones, 12 sinews, 15 collaterals, and 8 extra meridians. Students learn the physiological functions of the Jingluo system, along with associated pathological phenomenon and specific needling/moxibustion techniques for resolving pathological patterns. The class also explores how to prevent needling accidents and resolve needling injury. As a highlight of the class, students are guided to gain an embodied understanding of Shen Anchoring and Deqi.

Additional topics include a consideration of the relationship between acupuncture points and herbs; the integration of herbal prescription into acupuncture treatment protocols; the "dose" of acupuncture associated with different needling techniques; and an overview of the acupuncture classic *Biao You Fu* (Ode to Elucidate Mysteries), written by Dou Hanqing during the Jin-Yuan dynasty. *Prerequisite(s): CM 533. Corequisite(s): Concurrent enrollment in CM 614*

Lecture: 24 | Total Hours: 24

CM 614 - Acu-Moxa Techniques IV

Credit(s): 2.00

In the practical complement to CM 613 - Acu-Moxa Points IV, 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(s): CM 534. Corequisite(s): Concurrent enrollment in CM 613. Note: Additional fee required*

Lab: 24 | Lecture: 12 | Total Hours: 36

CM 615 - Asian Bodywork

Credit(s): 1.50

Bodywork in most traditional systems of medicine is considered foundational. Other key elements of Traditional East Asian Medical practice—e.g., pulse diagnosis, channel diagnosis, abdominal diagnosis, needling, gua sha, cupping, moxibustion—depend on refined touch skills. The cultivation and development of palpatory sensitivity in the practice of somatic therapies allows one to quickly advance in these other skills.

In this course, students explore a Japanese and a Chinese style of bodywork, both of which boil down to creative use of the yin-yang dynamic in the body. The Sotai system from Japan, developed by Dr. Keizo Hashimoto—and its later evolution into Yin Sotai and Sotai Intuitivo—and the ancient Daoist qigong tuina system are the core of this course. Students learn to assess their patients from a gross structural perspective, but also on the subtler level of fascial distortions. They learn to deliver effective treatments that move patients to a greater sense of ease in their physical and emotional selves. *Prerequisite(s): Second-year status. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 536 - Herbs III

Credit(s): 2.00

Herbs III completes the exploration of 180 key herbs in the context of the herbal classifications employed by most modern textbooks from China. Students learn the properties, actions, indications, contraindications, dosage, and preparation of each of these individual herbs.

Prerequisite(s): These courses are to be taken in the ordered sequence.

Lecture: 24 | Total Hours: 24

CM 576 - Herbs III Practicum

Credit(s): 1.00

Herbs Practicum III rounds out our survey of the dynamic range of single herb categories. In addition, we begin an exploration of "dui yao"—commonly used combinations of herbs and their clinical applications. This final portion of the first-year herbs practicum will also familiarize students with other key topics in classical Chinese herbology including dietetics, paozhi methods, and formula preparation. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

Note: Additional fee required

Lecture: 12 | Total Hours: 12

CM 617 - Biomedicine I**Credit(s): 2.00**

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 develop the ability to integrate biomedical and classical Chinese medical concepts regarding disease processes, and to view biomedical knowledge from the perspective of whole-systems 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(s): these courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 699 - Immunology**Credit(s): 3.00**

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.

Lecture: 36 | Total Hours: 36

CM 618 - Qigong IV Retreat**Credit(s): 0.50**

This qigong module teaches students the third eight-segment 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. *Prerequisite(s): CM 538, CM 539. Note:*

Additional fee required

Lab: 12 | Total Hours: 12

CM 619 - Qigong IV Practicum

Credit(s): 1.50

This qigong module teaches students the third eight-segment 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. *Prerequisite(s): CM 538, CM 539*

Lecture: 18 | Total Hours: 18

CM 600 - Clinical Observation

Credit(s): 2.00

Students receive lineage-based training that emphasizes transmission and mentoring as major methods for promoting personal and professional cultivation, *and patient care informed by the principles and philosophy of classical Chinese medicine*. Clinic rotations provide students with opportunities to broaden and strengthen their clinical skill within the context of diverse pathologies, patient populations, and uniquely individualized treatments. Students are expected to demonstrate competence of entry-level knowledge and skills in Chinese diagnostic techniques, acupuncture, herbal medicine, Asian bodywork, qigong, Chinese dietetics, and lifestyle counseling. Clinic rotations prepare students both for the national licensing exams and their future roles as healthcare professionals.

Clinical observation rotations provide a forum in which five observers watch a seasoned clinical supervisor in session with a client. The focus is on the behavioral and procedural aspects of the therapeutic encounter. Students observe effective treatment, engage in the patient-practitioner relationship with appropriate boundaries, apply interview skills when directed by the supervisor, examine the patient for vitals, practice the pillars of classical Chinese diagnosis, and uphold modern integrative standards of care. They also create patient timelines for case reports.

Prerequisite(s): Students must be CPR certified, have passed the CNT course, and have completed CM 530. Note: 3 required shifts

Clinic: 48 | Total Hours: 48

Second-Year Fall Totals - Clinic: 48 | Lab: 48 | Lecture: 234 | Total Hours: 330 | Credits: 23.50

Winter

CM* 981 - Classical Texts VIII: Neijing Seminar

Credit(s): 2.00

The second course in the Neijing Seminar series focuses on reading, translating and understanding the clinical relevance of Suwen chapters 1-3. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 621 - Chinese Organ Systems: Cosmology and Symbolism II

Credit(s): 2.00

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(s): Second-year status*

Lecture: 24 | Total Hours: 24

CM 622 - Chinese Pathology II

Credit(s): 2.00

In this course, students develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the classical medical model. The models explored in this course include yin/yang, Open-Close-Pivot and Biao-Ben Zhong Qi Dynamic model, bagang and liuqi. The Six Conformation model is the focus of exploration.

Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence

Lecture: 24 | Total Hours: 24

CM 623 - Acu-Moxa Points V

Credit(s): 2.00

This course focuses on point prescriptions designed to address diseases and symptoms that are commonly seen in a clinical setting. Class discussions focus on basic principles of point combination and compatibility, 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(s): CM 613. Corequisite(s): Concurrent enrollment in CM 624*

Lecture: 24 | Total Hours: 24

CM 663 - Auricular Points

Credit(s): 1.25

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 as auricular medicine. Students utilize ear seeds and pellets, as well as ear needles to learn the individual points of the ear. *Note: Additional fee required*

Lab: 6 | Lecture: 12 | Total Hours: 18

CM 624 - Acu-Moxa Techniques V

Credit(s): 2.00

Needling practice continues with a focus on the 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. Students develop the ability to apply all techniques accurately and safely on any body. Through demonstration and practice, this course cultivates the clinical ability to diagnose and treat disease conditions using the concepts of classical Chinese medicine. *Prerequisite(s): CM 614. Corequisite(s): Concurrent enrollment in CM 623. Note: Additional fee required*

Lab: 24 | Lecture: 12 | Total Hours: 36

CM 616 - Herbs IV

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs IV), formulas are grouped for their relation to the historically relevant disease categories of the Shanghan Zabing Lun, with awareness of classical concepts of matching pattern to physiology. Approximately 50 formulas are introduced for core patterns within common use today. *Prerequisite(s): CM 536; these courses are to be taken in the ordered sequence.*

Lecture: 24 | Total Hours: 24

CM 656 - Herbs IV Practicum

Credit(s): 1.00

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key formulas. *Prerequisite(s): CM 576; these courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 12 | Total Hours: 12

CM 627 - Biomedicine II

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine II compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of gastrointestinal, hepato-biliary, and pancreatic disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 657 - Acu-Moxa Anatomy I

Credit(s): 1.25

In this course, students develop clinically applicable anatomical knowledge that will help them not only locate, but also understand the structural relationships and physical parameters related to needling techniques of the acupuncture points. Students learn to describe the six upper limb channels: HT, PC, LU, SI, LI, TE, plus Ren, Du and upper BL channels in terms of their

anatomical relationships to the pertinent bones, muscles, major nerves and blood vessels.

Corequisite(s): Concurrent enrollment in CM 614. Note: Additional fee required

Lab: 6 | Lecture: 12 | Total Hours: 18

CM 628 - Qigong V Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 618, CM 619. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 629 - Qigong V Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 618, CM 619*

Lecture: 18 | Total Hours: 18

CM 600 - Clinical Observation

Credit(s): 2.00

Students receive lineage-based training that emphasizes transmission and mentoring as major methods for promoting personal and professional cultivation, *and patient care informed by the principles and philosophy of classical Chinese medicine*. Clinic rotations provide students with opportunities to broaden and strengthen their clinical skill within the context of diverse pathologies, patient populations, and uniquely individualized treatments. Students are expected to demonstrate competence of entry-level knowledge and skills in Chinese diagnostic techniques, acupuncture, herbal medicine, Asian bodywork, qigong, Chinese dietetics, and lifestyle counseling. Clinic rotations prepare students both for the national licensing exams and their future roles as healthcare professionals.

Clinical observation rotations provide a forum in which five observers watch a seasoned clinical supervisor in session with a client. The focus is on the behavioral and procedural aspects of the therapeutic encounter. Students observe effective treatment, engage in the patient-practitioner relationship with appropriate boundaries, apply interview skills when directed by the supervisor, examine the patient for vitals, practice the pillars of classical Chinese diagnosis, and uphold modern integrative standards of care. They also create patient timelines for case reports.

Prerequisite(s): Students must be CPR certified, have passed the CNT course, and have completed CM 530. Note: 3 required shifts

Clinic: 48 | Total Hours: 48

Second-Year Winter Totals - Clinic: 48 | Lab: 48 | Lecture: 234 | Total Hours: 330 | Credits: 23.50

Spring

CM* 991 - Classical Texts IX: Neijing Seminar

Credit(s): 2.00

The final course in the Neijing Seminar series covers Suwen 8, followed by Lingshu 8. Students read a selection of excerpts in Chinese, compare and refine their translations, explore progressively deeper layers of meaning, and discuss how to integrate this wisdom into clinical practice and their personal lives. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 631 - Chinese Organ Systems: Cosmology and Symbolism III

Credit(s): 2.00

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(s): Second-year status*

Lecture: 24 | Total Hours: 24

CM 632 - Chinese Pathology III

Credit(s): 2.00

In this course, students continue to develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the classical medical model. The models explored in this course include yin/yang, Open-Close-Pivot and Biao-Ben Zhong Qi Dynamic model, bagang and liuqi. The Six Conformation model continues as the focus, along with an exploration of the Wen Bing and Nineteen Lines (SW 74). *Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 633 - Acu-Moxa Points VI

Credit(s): 2.00

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. Students deepen their understanding of disease diagnosis, etiology and pathogenesis, and develop an overall understanding of syndrome differentiation, acupuncture treatment principles, acupuncture prescriptions, point selection, and acupuncture techniques from a classical Chinese medicine perspective. The focus is on cultivating the clinical ability to treat common diseases, some miscellaneous diseases, and gynecological conditions. *Prerequisite(s): CM 623. Corequisite(s): Concurrent enrollment in CM 634*

Lecture: 24 | Total Hours: 24

CM 634 - Acu-Moxa Techniques VI

Credit(s): 2.00

This practicum continues to build on previously learned needling techniques, with a focus on scalp and ear acupuncture. Students are supported to master their connection with the needle and their qi. *Prerequisite(s): CM 624, CM 663. Corequisite(s): Concurrent enrollment in CM 633. Note: Additional fee required*

Lab: 24 | Lecture: 12 | Total Hours: 36

CM 635 - Practitioner Cultivation I

Credit(s): 1.50

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.

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 626 - Herbs V

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation

for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs V), formulas are presented sequentially in groups centered around the classical use of key medicinals as a means of understanding the synergistic use of herbs in context. Students scaffold understanding of core patterns introduced in the prior term (Herbs IV) in order to deepen and diversify the diagnostic and therapeutic application of a broad array of Chinese herbal formulas as approximately 55 formulas are discussed. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

Lecture: 24 | Total Hours: 24

CM 666 - Herbs V Practicum

Credit(s): 1.00

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 12 | Total Hours: 12

CM 637 - Biomedicine III

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine III compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of renal, adrenal, urogenital, and reproductive disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 667 - Acu-Moxa Anatomy II

Credit(s): 1.25

In this course, students develop clinically applicable anatomical knowledge that will help them not only locate, but also understand the structural relationships and physical parameters related to needling techniques of the acupuncture points. Students learn to describe the six lower limb channels (SP, KI, LV, BL, GB, ST) and abdominal and lower back channels in terms of their anatomical relationships to the pertinent bones, muscles, major nerves and blood vessels.

Prerequisite(s): CM 657. Corequisite(s): Concurrent enrollment in CM 624. Note: Additional fee required

Lab: 6 | Lecture: 12 | Total Hours: 18

CM 638 - Qigong VI Retreat

Credit(s): 0.50

Students review and deepen their practice of the forms and walks learned in the Qigong I-V Retreats and Practica. *Prerequisite(s): CM 628, CM 629. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 639 - Qigong VI Practicum

Credit(s): 1.50

Students review and deepen their practice of the forms and walks learned in the Qigong I-V Retreats and Practica. *Prerequisite(s): CM 628, CM 629*

Lecture: 18 | Total Hours: 18

CM 600 - Clinical Observation

Credit(s): 2.00

Students receive lineage-based training that emphasizes transmission and mentoring as major methods for promoting personal and professional cultivation, *and patient care informed by the principles and philosophy of classical Chinese medicine*. Clinic rotations provide students with opportunities to broaden and strengthen their clinical skill within the context of diverse pathologies, patient populations, and uniquely individualized treatments. Students are expected to demonstrate competence of entry-level knowledge and skills in Chinese diagnostic techniques, acupuncture, herbal medicine, Asian bodywork, qigong, Chinese dietetics, and lifestyle counseling. Clinic rotations prepare students both for the national licensing exams and their future roles as healthcare professionals.

Clinical observation rotations provide a forum in which five observers watch a seasoned clinical supervisor in session with a client. The focus is on the behavioral and procedural aspects of the therapeutic encounter. Students observe effective treatment, engage in the patient-practitioner relationship with appropriate boundaries, apply interview skills when directed by the supervisor, examine the patient for vitals, practice the pillars of classical Chinese diagnosis, and uphold modern integrative standards of care. They also create patient timelines for case reports.

Prerequisite(s): Students must be CPR certified, have passed the CNT course, and have completed CM 530. Note: 3 required shifts

Clinic: 48 | Total Hours: 48

CM 671 - The Business of Chinese Medicine II

Credit(s): 1.00

In the second course of the business series, students learn and practice a variety of marketing and communication techniques used frequently in the field of acupuncture and Chinese medicine.

Prerequisite(s): These courses are to be taken in the ordered sequence

Lecture: 12 | Total Hours: 12

Second-Year Spring Totals - Clinic: 48 | Lab: 54 | Lecture: 246 | Total Hours: 348 |
Credits: 24.75

Second-Year Totals - Clinic: 144 | Lab: 150 | Lecture: 714 | Total Hours: 1008 |
Credits: 71.75

Third Year

Fall

CM* 941 - Classical Texts IV: Shanghan Lun, Jingui Yaolüe

Credit(s): 2.00

Zhang Zhongjing's *Shanghan Zabing Lun* (Treatise on Cold Damage) has been passed down in the form of two separate texts: *Shanghan Lun* and *Jingui Yaolüe* (Essentials from the Golden Cabinet). Both texts are essential to the understanding of Zhang Zhongjing's clinical principle and formulary, which are the very foundation of Chinese herbal medicine. The first course of the series focuses not only on the language and structure of the *Shanghan Lun*, but also on the clinical application of the text. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM* 711 - Advanced Chinese Organ Systems: Cosmology and Symbolism I

Credit(s): 2.00

This three-course series represents a gradually deepening introduction into the time-honored system of Chinese symbol science, which defines the physiology of microcosm as a projection of macrocosmic themes (stellar constellations, months of the year, earthly branches, hexagrams, rivers in the sacred landscape of ancient China). Presenting the results of eight years of continuous inquiry by NUNM's ancient symbolism research group, the functional archetypes informing the acupuncture point names 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 symbolism behind the point names of the channels of the lung, large intestine, stomach and spleen.

Lecture: 24 | Total Hours: 24

CM 712 - Clinical Medicine I**Credit(s): 4.00**

The Clinical Medicine I-III series builds upon foundational material in the development of clinical reasoning. It address disease etiology, pattern differentiation and treatment strategies, including a focus on prognosis, long-term case management, referral and co-management, and issues of cultural literacy. The series takes a systematic and integrative approach to all major areas of the body (organized by upper, middle, and lower jiao) and the conditions associated with them. Particular attention is given to the pathological categories more commonly seen in practice in the US, as well as the diseases internationally recognized to be global epidemics. Patient cases are viewed through multiple lenses (including biomedicine, TCM and CCM) using the classical texts of Chinese medicine as the primary source of guidance. In addition to lectures and case discussion, there are monthly clinical theaters in which multiple faculty compare and contrast their lineage approaches to diagnosis and treatment. Clinical Medicine I begins with an emphasis on *bian bing* that occur in the upper jiao, including everything from sinusitis and headaches to neurology, depression and dermatology. *Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 714 - Advanced Acu-Moxa Techniques I**Credit(s): 1.50**

In this first of a two-course series, 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. There is a particular focus 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 using

muscle motor points, trigger points, and traditional Chinese medical points are practiced.

Prerequisite(s): CM 634. Note: Additional fee required

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 715 - Chinese Medical Psychology I

Credit(s): 2.00

This course explores principles of general psychology, and compares them to Chinese medicine approaches to psychological pathology, including etiology, diagnosis, and treatment in the context of a classical body-mind paradigm. It explores how the five-phase model can be applied to a humanistic psychology, and the use of common herbal formulas and acupuncture to aid in the evolution of being. *Prerequisite(s): Third-year status*

Lecture: 24 | Total Hours: 24

CM 636 - Herbs VI

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs VI), formulas continue to be presented sequentially in groups centered around the classical use of key medicinals as a means of understanding the synergistic use of herbs in context. Students scaffold understanding of core patterns introduced in prior terms (Herbs IV and V) with a focus on compact formulas that are readily used in modification to expand the therapeutic scope of Chinese herbal formulas with approximately 55 additional formulas discussed. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

Lecture: 24 | Total Hours: 24

CM 676 - Herbs VI Practicum

Credit(s): 1.00

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal

formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note:*

Additional fee required

Lecture: 12 | Total Hours: 12

CM 717 - Biomedicine IV

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. In this fourth course of a six-course series, students explore the nervous and sensory systems. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. The goal of this course is to enable students of Chinese medicine to cultivate a broad understanding of conventional biomedical sciences, which will be useful in their future clinical training. *Prerequisite(s): these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 718 - Qigong VII Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 638, CM 639. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 719 - Qigong VII Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 638, CM 639*

Lecture: 18 | Total Hours: 18

CM 710 - Clinical Case Presentation I

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

Clinic: 24 | Total Hours: 24

CM 700 - Clinical Mentoring Rotations

Credit(s): 2.00 credits each

Clinical Mentoring Rotations have the same structure as Clinical Observation Rotations, with the addition that students become more directly involved in patient intake, diagnosis and treatment under the direct guidance of their clinical supervisor. The focus is on the procedural and treatment aspects of the therapeutic encounter. Students learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, integrate subjective signs with objective findings in classical Chinese medical diagnosis, and work closely under supervision alongside a practitioner to collaboratively perform treatment. Using cases from their clinical experience, students learn how to create a meaningful case report. *Note: 6 required rotations*

Clinic: 96 | Total Hours: 96

CM 751 - The Business of Chinese Medicine III

Credit(s): 1.50

The third business course focuses on the rules and regulations of owning a classical Chinese medicine practice with an herbal dispensary; in addition to the local, state and federal laws that pertain to having a successful career in this field. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

Third-Year Fall Totals - Clinic: 120 | Lab: 24 | Lecture: 252 | Total Hours: 396 | Credits: 27.00

Winter

CM* 951 - Classical Texts V: Shanghan Lun, Jingui Yaolüe

Credit(s): 2.00

The second course of the *Shanghan Lun/Jingui Yaolüe* series continues the focus on the language and structure of the *Shanghan Lun*, and supports students to achieve a deeper understanding of how its content can be applied in a clinical context. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM* 721 - Advanced Chinese Organ Systems: Cosmology and Symbolism II

Credit(s): 2.00

In this series, the functional archetypes informing the acupuncture point names of Chinese medicine and their expression in the physical, mental, emotional and spiritual planes are described in exclusive detail. The second course covers the points of the heart, small intestine, bladder and kidney channels.

Lecture: 24 | Total Hours: 24

CM 722 - Clinical Medicine II

Credit(s): 4.00

The second course in the Clinical Medicine series focuses on the middle jiao, exploring everything from abdominal pain and reflux to "gu" syndrome and inflammatory bowel diseases. *Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 724 - Advanced Acu-Moxa Techniques II

Credit(s): 1.50

In this second of a two-part series, students continue to 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. There is a particular focus 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 using muscle motor points, trigger points, and traditional Chinese medical points are practiced.

Prerequisite(s): CM 714. Note: Additional fee required

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 725 - Chinese Medical Psychology II

Credit(s): 2.00

This course continues to explore principles of general psychology, and compare them to Chinese medicine approaches to psychological pathology, including etiology, diagnosis and treatment in the context of a classical body-mind paradigm. The emphasis is on treatment and developing an understanding of Western psychological diagnosis from the DSM-V perspective. It explores Eastern and Western constructs for looking at the psyche, ranging from classical concepts and patterns, to the basic curative functions of the therapeutic relationship, and the use of common herbal formulas and acupuncture. Treatment and patterns are reviewed from both classical and modern psychological diagnostic models. *Prerequisite(s): Third-year status*

Lecture: 24 | Total Hours: 24

CM 727 - Biomedicine V

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine V compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. In this fifth course of a six-course series, students learn the anatomy, physiology, pathology, diagnostic assessment, and biomedical treatments for the respiratory, thyroid-parathyroid, cardiovascular, and hematological systems. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 777 - Clinical and Physical Diagnosis

Credit(s): 1.50

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.

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 728 - Qigong VIII Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 718, CM 719. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 729 - Qigong VIII Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 718, CM 719*

Lecture: 18 | Total Hours: 18

CM 720 - Clinical Case Presentation II

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

Clinic: 24 | Total Hours: 24

CM 700 - Clinical Mentoring Rotations

Credit(s): 2.00 credits each

Clinical Mentoring Rotations have the same structure as Clinical Observation Rotations, with the addition that students become more directly involved in patient intake, diagnosis and treatment under the direct guidance of their clinical supervisor. The focus is on the procedural and treatment aspects of the therapeutic encounter. Students learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, integrate subjective signs with objective findings in classical Chinese medical diagnosis, and work closely under supervision alongside a practitioner to collaboratively perform treatment. Using cases from their clinical experience, students learn how to create a meaningful case report. *Note: 6 required rotations*

Clinic: 96 | Total Hours: 96

Third-Year Winter Totals - Clinic: 120 | Lab: 36 | Lecture: 210 | Total Hours: 366 | Credits: 24.00

Spring

CM* 961 - Classical Texts VI: Shanghan Lun, Jingui Yaolüe

Credit(s): 2.00

The third course of the *Shanghan Lun/Jingui Yaolüe* series focuses on understanding the language, structure and clinical application of the *Jingui Yaolüe*, one of most important classical texts in the history of Chinese herbal medicine. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM* 731 - Advanced Chinese Organ Systems: Cosmology and Symbolism III

Credit(s): 2.00

In this series, the functional archetypes informing the acupuncture point names of Chinese medicine and their expression in the physical, mental, emotional and spiritual planes are described in exclusive detail. The third course presents the symbolism behind the point names of the pericardium, triple warmer, gallbladder and liver channels.

Lecture: 24 | Total Hours: 24

CM* 795 - Imaginal and Experiential Inquiries II

Credit(s): 1.50

This course 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, and define their doctoral capstone topic. Special attention is given to the cultivation of resilience, clarity of purpose, self-responsibility, and professionalism. This course 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 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. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

CM 732 - Clinical Medicine III

Credit(s): 4.00

The final Clinical Medicine course focuses on the lower jiao, with a strong emphasis on gynecology, andrology and LGBTQ health. By the end of the series, students are prepared to enter their final clinical year with the ability to address a wide variety of clinical presentations.

Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence

Lecture: 48 | Total Hours: 48

CM 735 - Applied Palpation and Perception

Credit(s): 1.50

In this course, students learn key assessment, bodywork, and acupuncture/adjunctive techniques and strategies to treat a variety of conditions, primarily physical pain. Students are expected to be familiar with the underlying myofascial and skeletal anatomy of the regions covered each week in class. The course also covers patient communication and strategic thinking, as well as gentle movement techniques to be taught to patients. *Prerequisite(s): CM 535, CM 615. Note:*

Additional fee required

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 737 - Biomedicine VI

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine VI compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of dermatological and musculoskeletal disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 799 - Nutrition

Credit(s): 2.00

This introduction to nutrition explores the current scientific perspective of diet, individual nutrients, and their relationship to health and disease. The course covers the basics of individual nutrients and how they relate to a whole-food diet, current topics in nutrition, as well as an exploration of how modern nutrition science relates to classic theories in Chinese medicine.

Lecture: 24 | Total Hours: 24

CM 889 - Race and Disparities in Health Care

Credit(s): 2.00

This course provides an overview of health disparities along racial and ethnic categories. Students learn how political, economic and social contexts shape health, access to health care, and the quality of care across racial and ethnic groups. This course also explores the socio-scientific processes that have privileged "innate" difference as explanations for inequality and marginalization; and examine ways in which "race" intersects with other categories of difference, such as gender, class, sexuality and religion to impact one's health and one's access to health care.

Lecture: 24 | Total Hours: 24

CM 738 - Qigong IX Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 728, CM 729. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 739 - Qigong IX Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 728, CM 729*

Lecture: 18 | Total Hours: 18

CM 730 - Clinical Case Presentation III

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

Clinic: 24 | Total Hours: 24

CM 700 - Clinical Mentoring Rotations

Credit(s): 2.00 credits each

Clinical Mentoring Rotations have the same structure as Clinical Observation Rotations, with the addition that students become more directly involved in patient intake, diagnosis and treatment under the direct guidance of their clinical supervisor. The focus is on the procedural and treatment aspects of the therapeutic encounter. Students learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, integrate subjective signs with objective findings in classical Chinese medical diagnosis, and work closely under supervision alongside a practitioner to collaboratively perform treatment. Using cases from their clinical experience, students learn how to create a meaningful case report. *Note: 6 required rotations*

Clinic: 96 | Total Hours: 96

CM 770 - Clinical Pre-Internship Rotation

Credit(s): 1.00

In the pre-internship rotations, students spend six weeks learning the role and responsibilities of the intern as they follow and support the interns who are preparing to graduate. Pre-interns continue to learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, and integrate subjective signs with objective findings in classical Chinese medical diagnosis. *Prerequisite(s): Completion of at least two clinical mentoring rotations*

Clinic: 24 | Total Hours: 24

Third-Year Spring Totals - Clinic: 144 | Lab: 24 | Lecture: 240 | Total Hours: 408 |
Credits: 27.00

Third-Year Totals - Clinic: 384 | Lab: 84 | Lecture: 702 | Total Hours: 1170 |
Credits: 78.00

Fourth Year

Summer

CM* 845 - Imaginal and Experiential Inquiries III

Credit(s): 0.50

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. In the final year of the series, students further refine their doctoral capstone project. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 6 | Total Hours: 6

CM 805 - Ethics and Jurisprudence

Credit(s): 1.00

Students explore the larger scope of ethical and legal issues pertinent to those with a Chinese medicine practice 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. The course considers Chinese medical ethics espoused in the *Huangdi Neijing*, Confucianist and Daoist ideologies and how these are correlated to the four principles of biomedical ethics, Kant's Moral Imperative, and modern ideas of trust and vulnerability in regards to the practitioner and patient relationship. In addition, the course covers state licensure requirements, handling biomedical waste, scope of practice for the acupuncturist, mandatory reporting, sexual misconduct, social media boundaries, insurance billing, and the importance of involvement with one's state association. It also touches on concepts around the ethical considerations when providing acupuncture in international relief situations, selling supplements, and the ecological and toxicity issues in utilizing Chinese herbs.

Lecture: 12 | Total Hours: 12

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

Clinic: 144 | Total Hours: 144

Fourth-Year Summer Totals - Clinic: 144 | Lecture: 18 | Total Hours: 162 | Credits: 7.50

Fall

CM* 537 - CCM View of Biomedicine

Credit(s): 1.00

The content of this course considers Eastern versus Western epistemology, and deepens the

student's understanding of how the information presented in the biomedicine series can be viewed from the perspective of CCM. It explores how these complementary medical approaches can inspire and inform each other to achieve a collaborative, patient-centered, and highly effective system of health care.

Lecture: 12 | Total Hours: 12

CM 812 - Traditional Mentorship Tutorial I

Credit(s): 2.00

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(s): These courses are designed to be taken in sequence*

Lecture: 24 | Total Hours: 24

CM 815 - Practitioner Cultivation II

Credit(s): 1.50

This course focuses on relationship dynamics between the practitioner and patient. The recognition and attention to these dynamics can greatly enhance and support the healing dynamic. There is a strong emphasis on deeper listening, connection, communication, and understanding of boundary dynamics, role/power dynamics, and transference/counter transference. These concepts are applied directly to current patient interactions and relationships, and therefore it is required that students be actively seeing patients. The primary tools of exploration are discussion, lecture, case-study, role-play, mind-body exercises, self-reflection and writing. *Prerequisite(s): CM 635 and intern status*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM* 855 - Imaginal and Experiential Inquiries IV

Credit(s): 0.50

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. In this quarter, students present writing samples of their doctoral capstone report. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 6 | Total Hours: 6

CM 817 - Physiology of Acupuncture

Credit(s): 1.00

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. Attention will be paid to acupuncture point and meridian structure, as it holds the key to one of the most effective means of practice, and provides insight into how acupuncture is likely to have been discovered and developed. Students learn several practical methods related to the topics covered. They also gain a better understanding of the biological utility of acupuncture network components, and explore why the physiological mechanisms underlying acupuncture action have been preserved in almost every genera of animal life for over 200 million years of evolution.

Lecture: 12 | Total Hours: 12

CM 819 - Taiji I Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. This course covers the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. It introduces the student to the concept of *zhuāng gōng* 樁功, the foundational "posting" meditation exercise practiced by the *Zhēn rén* 真人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問. *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures in which the student begins to find motion within stillness and stillness within motion 靜中有動, 動中有靜. It offers an opportunity for the student to engage with the concept of *wúwéi* 無為 or "effortlessness."

This class also touches on the *Tàijí Nèigōng* 太極內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jìn-gù* 皮筋骨 (skin, tendons and bone). This instruction gives students the framework needed to continue cultivating a balance between yin and yang in themselves for the rest of their lives. Students work towards an embodied understanding of the macrocosm-microcosm that can promote the harmony between the mind and body that is necessary for achieving the level of the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

CM 810 - Internship Case Presentation I

Credit(s): 1.00

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(s): Intern status*

Clinic: 24 | Total Hours: 24

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

Clinic: 96 | Total Hours: 96

Fourth-Year Fall Totals - Clinic: 120 | Lab: 12 | Lecture: 84 | Total Hours: 216 | Credits: 12.50

Winter

CM 822 - Traditional Mentorship Tutorial II

Credit(s): 2.00

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(s): These courses are designed to be taken in sequence*

Lecture: 24 | Total Hours: 24

CM* 865 - Imaginal and Experiential Inquiries V

Credit(s): 0.50

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. In this course, students present a rough draft of their doctoral capstone report. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 6 | Total Hours: 6

CM 826 - Herbs Review/Medicinary Practicum

Credit(s): 1.50

This course is a review and culmination of the herbal program at NUNM, and prepares students to take the NCCAOM and CALE herbal examinations. In addition, it 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(s): Fourth-year status*

Lecture: 18 | Total Hours: 18

CM 829 - Taiji II Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. In this course, students continue to study the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. They deepen their practice of *zhuāng gōng* 樁功, the foundational "posting" meditation exercise practiced by the *Zhēn rén* 真人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問. *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures that provide a path to experiencing motion within stillness and stillness within motion 靜中有動, 動中有靜. Through these practices, students continue to engage with the concept of *wúwéi* 無為 or "effortlessness." Students also further their practice of *Tàijí Nèigōng* 太極 內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jìn-gù* 皮筋骨 (skin, tendons and bone). They continue to cultivate an inner balance of yin and yang, as well as an embodied understanding of the macrocosm-microcosm. The ultimate lifetime goal is to achieve the level of harmony between the mind and body that characterizes the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

CM 820 - Internship Case Presentation II

Credit(s): 1.00

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(s): Intern status*

Clinic: 24 | Total Hours: 24

CM 861 - The Business of Chinese Medicine IV

Credit(s): 1.50

The final business course focuses on financial knowledge and skills. Students garner practical knowledge of money management, taxes and start-up costs, in addition to exploring financing options for opening a large or small Chinese medicine practice. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

CM* 862 - Healthcare Landscape

Credit(s): 1.00

This course explores the current and projected state of acupuncturists and Chinese medicine within the national healthcare landscape. It investigates viable careers in Chinese medicine, and the interface between regulatory (governmental, health care, insurance) organizations and acupuncturists. Topics include challenges facing the profession on the state and national level; models of practice; insurance concepts and reimbursement; and collaboration with other healthcare providers within the variety of healthcare systems.

Lecture: 12 | Total Hours: 12

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

Clinic: 48 | Total Hours: 48

CM 900 - Collaborative Care Rotation

Credit(s): 2.50

In the collaborative care rotation, DSOM interns and their CCM supervisor collaborate with naturopathic primaries and their ND supervisor to provide patient-centered care focused on the non-opioid treatment of pain. Students are provided with opportunities to broaden and strengthen their clinical skills within the context of diverse pain pathologies, patient populations, and uniquely individualized treatments. All aspects of the therapeutic encounter are addressed and assessed—with special attention to the arc of patient care management, interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standard of care

expected of a licensed practitioner. *Prerequisite(s): Intern status. Note: May be taken any term in 4th year*

Clinic: 60 | Total Hours: 60

Fourth-Year Winter Totals - Clinic: 132 | Lecture: 96 | Total Hours: 228 | Credits: 13.50

Spring

CM 993 - Doctoral Capstone Mentorship

Credit(s): 2.00

Over the course of their final year in the program, students are mentored by their doctoral capstone committee chair to research, write and present their doctoral capstone project.

Lecture: 24 | Total Hours: 24

CM 813 - Acu-Moxa Board Review

Credit(s): 1.00

This course is offered in the spring term of the final year in preparation for the NCCAOM board exams (Foundations of Oriental Medicine and Acupuncture with Point Location). The course outlines the national certification and state licensure processes, as well as essential resources and study strategies for the board exams. Topics are covered through lectures, quizzes and discussions. *Prerequisite(s): CM 724*

Lecture: 12 | Total Hours: 12

CM 832 - Traditional Mentorship Tutorial III

Credit(s): 2.00

A hallmark of the CCM programs, the Traditional Mentorship Tutorial classes support the lineage culture of a classical Chinese medicine education. Students meet with their chosen mentor for two hours per week for a year; topics are discussed from the unique perspective of the mentor's own path of learning and knowledge integration. This series is a core requirement in the final year of study. *Prerequisite(s): These courses are designed to be taken in sequence*

Lecture: 24 | Total Hours: 24

CM* 875 - Imaginal and Experiential Inquiries VI

Credit(s): 0.50

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. Students prepare to present their doctoral capstone project.

Prerequisite(s): These courses are to be taken in the ordered sequence

Lecture: 6 | Total Hours: 6

CM* 857 - Eastern and Western Correspondences

Credit(s): 2.00

This course aims to help students integrate their training in classical Chinese medicine with modern biomedicine. Through lecture and discussion, students explore the connections between Zang-Fu patterns, biomedical organ systems, and current concepts in neuro-endocrine-immunology. Cases representing common clinical conditions encountered by Chinese medicine practitioners are discussed.

Lecture: 24 | Total Hours: 24

CM 839 - Taiji III Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. In this course, students continue to study the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. They deepen their practice of *zhuāng gōng* 樁功, the foundational "posting" meditation exercise practiced by the *Zhēn rén* 真人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問. *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures that provide a path to experiencing motion within stillness and stillness within motion 靜中有動, 動中有靜. Through these practices, students continue to engage with the concept of *wúwéi* 無為 or "effortlessness." Students also further their practice of *Tàijí Nèigōng* 太極內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jìn-gù* 皮筋骨 (skin, tendons and bone). They continue to cultivate an inner balance of yin and yang, as well as an embodied understanding of the macrocosm-microcosm. The ultimate lifetime goal is to achieve the level of harmony between the mind and body that characterizes the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

Clinic: 96 | Total Hours: 96

CM 930 - Collaborative Care Case Presentation

Credit(s): 1.00

This specialized version of the Internship Case Presentation course allows students to focus on issues of systems-based and inter-professional care as they relate to patients the students have co-treated with other medical practitioners in a collaborative setting. *Prerequisite(s):*

/Corequisite(s): CM 900

Clinic: 24 | Total Hours: 24

CM 871 - Community Education

Credit(s): 0.50

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.

Lab: 12 | Total Hours: 12

Fourth-Year Spring Totals - Clinic: 120 | Lab: 12 | Lecture: 108 | Total Hours: 240 | Credits: 14.50

Fourth-Year Totals - Clinic: 516 | Lab: 24 | Lecture: 306 | Total Hours: 846 | Credits: 48.00

^These hours are cumulative and may be earned in a term other than term registered.

^^May be taken any term in 4th year

Program Totals Before Electives - Clinic: 1068 | Lab: 402 | Lecture: 2340 | Total Hours: 3810 | Credits: 256.25

Program Totals With Electives - Total Hours: 3930 | Credits: 266.25

Electives

[Click here for a list of the available CCM electives.](#)

Master of Science in Oriental Medicine, MSOM

The Master of Science in Oriental Medicine is a four-year program consisting of 3,378 hours and 220.75 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 qigong and shiatsu.

MSOM Program Outcomes

1. Apply the fundamental principles of classical Chinese medicine to patient care
2. 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
6. Discuss the role of the AOM practitioner in patient-centered care within the healthcare system
7. Describe the theory and practices of Chinese medicine to patients and the public

Elective Requirement

MSOM students are required to complete six elective credits for the purpose of rounding out their education. Students are encouraged to take electives through the College of Classical Chinese Medicine, which deepen the student's connection with the classical roots of the medicine. In addition, students may also take graduate-level elective courses through the College of Naturopathic Medicine, and School of Undergraduate and Graduate Studies (as long as course prerequisites are met).

Students enrolled in concurrent programs are required to complete the number of elective credit hours of the program that has the greater number of electives between the two programs.

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 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-II, Acu-Moxa Points and Techniques I-III, Palpation and Perception I-III, 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 progress through the clinical experience in a sequential fashion, from active observation of highly experienced practitioners, to greater involvement in patient care under fully guided mentoring, to being able to conduct a comprehensive patient intake and assessment, and design and deliver an individually tailored treatment protocol under expert supervision. 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. With a focus on patient-centered care, students learn how to make and receive appropriate referrals, and to communicate and collaborate within the prevailing biomedically based healthcare system.

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.

Clinical Training

The components of the clinical portion of the program are Introduction to Clinic, Clinical Pre-Observation, Clinical Observation, Clinical Mentoring, Clinical Pre-Internship, Clinical Case

Presentation, Clinical Internship, and Internship Case Presentation. These are organized as follows:

Year of Study		Clinical Component
MSOM	MSOM/ ND	
1st	1st	Introduction to Clinic: Students learn the fundamentals of working in the NUNM clinics
1st	1st	Clinical Pre-Observation Rotation: Students get their first experience observing clinical supervisors treating patients 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
3rd	5th	Clinical Pre-Internship Rotation: Students learn the role and responsibilities of the intern by following the interns soon to graduate
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

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 Practicums, during which they are mentored in the process of teaching their 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 are fully prepared to use shiatsu as an independent treatment modality.

MSOM Four-Year Curriculum

First Year

Fall

CM 511 - Foundations of Classical Chinese Medicine I

Credit(s): 2.00

This course introduces students to the common principles that underlie all traditional nature sciences, as observed from the specific perspective of classical Chinese medicine. Core concepts 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. *Note: May be taken concurrently with CM 521*

Lecture: 24 | Total Hours: 24

CM 512 - Chinese History and Culture I

Credit(s): 1.50

These courses present 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(s): These courses are to be taken in the ordered sequence

Lecture: 18 | Total Hours: 18

CM 513 - Acu-Moxa Points I (Point Actions)

Credit(s): 2.00

Acu-Moxa Points and Techniques I-II 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(s): Concurrent enrollment in CM 514 (Tech I)*

Lecture: 24 | Total Hours: 24

CM 514 - Acu-Moxa Techniques I (Point Location)

Credit(s): 1.50

Acu-Moxa Points and Techniques I-II 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 practice locating points on their classmates, with a focus on the development of skills that will bring clinical success and patient satisfaction. Classical approaches from source texts are integrated into the class. These classes build a foundation for life-long learning through independent investigation using all senses and a reasoned evaluation of different opinions. *Corequisite(s): Concurrent enrollment in CM 513.*

Note: Additional fee required

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 515 - Palpation and Perception I Practicum

Credit(s): 1.50

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 518 - Qigong I Retreat

Credit(s): 0.50

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. *Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 519 - Qigong I Practicum

Credit(s): 1.50

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.

Lecture: 18 | Total Hours: 18

CM 530 - Introduction to Clinic

Credit(s): 1.50

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. *Note: Additional fee required*

Lecture: 18 | Total Hours: 18

CM 551 - The Business of Chinese Medicine I

Credit(s): 1.50

This four-course series uses a skills-based approach to business education and career development. By the end of the series, students will have completed all necessary components of a professional business or career plan that can be used to start a large multi-room clinic, a single practitioner business, or to find an employee position at an integrated clinic or hospital. In this first course, students develop public speaking and networking skills in addition to learning the elements of a successful business and/or career plan as a licensed Chinese medicine provider.

Prerequisite(s): These courses are to be taken in the ordered sequence

Lecture: 18 | Total Hours: 18

First-Year Fall Totals - Lab: 36 | Lecture: 144 | Total Hours: 180 | Credits: 13.50

Winter

CM 502 - Professional Development

Credit(s): 1.00

This course introduces students to the history and faculty of their program, and cultivates skills needed to successfully navigate their journey at NUNM. Topics include critical thinking, learning strategies, professional personae, stress reduction, and self-regulation.

Lecture: 12 | Total Hours: 12

CM 521 - Foundations of Classical Chinese Medicine II

Credit(s): 2.00

The second in a series of three courses on the foundations of classical Chinese medicine, this course introduces students to the basic anatomy and physiology of the body as understood by classical Chinese medicine. Definitions, functions and interactions between the functional systems of the *zàng* and *fù* organs are covered, as are the extraordinary organs and additional unique aspects of Chinese medicine anatomy. *Note: May be taken concurrently with CM 511*

Lecture: 24 | Total Hours: 24

CM 562 - Chinese Diagnostic Techniques I

Credit(s): 1.50

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 introduces the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. 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 (*shiwu*), are also practiced in class.

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 523 - Acu-Moxa Points II (Point Actions)

Credit(s): 2.00

Acu-Moxa Points and Techniques I-II 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. The meridian and acupoint system of Chinese medicine lay out a treatment modality that is both profound and therapeutically effective for a wide range of health conditions.

Prerequisite(s): CM 513 and CM 514 (Pts & Tech I). Corequisite(s): Concurrent enrollment in CM 524 (Tech II)

Lecture: 24 | Total Hours: 24

CM 524 - Acu-Moxa Techniques II (Point Location)

Credit(s): 1.50

Acu-Moxa Points and Techniques I-II 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 practice locating points on their classmates, with a focus on the development of skills that will bring clinical success and patient satisfaction. Classical approaches from source texts are integrated into the class. These classes build a foundation for life-long learning through independent investigation using all senses and a reasoned evaluation of different opinions. *Prerequisite(s): CM 514. Corequisite(s): Concurrent enrollment in CM 523. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 525 - Palpation and Perception II Practicum

Credit(s): 1.50

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 516 - Herbs I

Credit(s): 2.00

In the Herbs I-III series, students develop the foundation of Chinese herbology in preparation to become competent practitioners of Chinese herbal medicine. Students learn approximately 180 key herbs including properties, therapeutic actions, preparation and application.

Herbs I introduces the history and development of Chinese herbal medical knowledge. Students focus on learning approximately half of 64 core herbs used in Zhang Zhongjing's *Shanghan Zabing Lun*, which is a major, foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Student learn properties and therapeutic actions of individual herbs described in materia medicas and textbooks. In addition, students are introduced to the concept of herb patterns and corresponding pathomechanisms, and gain knowledge of time-tested herbal combinations and formulary employed in classical herbal formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

Lecture: 24 | Total Hours: 24

CM 556 - Herbs I Practicum

Credit(s): 1.00

The Herbs Practicum series introduces the key principles, research methods, and technical elements of classical energetic alchemy and Chinese herbalism. It supplements the herbs lecture courses and brings to life the accumulated wisdom of the materia medica through direct interaction with key Chinese medicinal herbs and their traditional forms of preparation. Strong emphasis is placed on the primacy and immediacy of sensational experience as the path to deeper understanding of qi dynamics and the energetic signatures of various herbal medicines.

Herbs I Practicum introduces the basic principles of qi dynamics, classical discussion of herbal properties, their unique movement signatures, and other key elements of an herbal research framework. These concepts are developed through the sampling and appreciation of single herbs, often in pairs, covering a large cross section of signatures. Energetic awareness is cultivated through the comparison of one's own experience with descriptions from classical sources.

Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required

Lecture: 12 | Total Hours: 12

CM 528 - Qigong II Retreat

Credit(s): 0.50

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). *Prerequisite(s): CM 518, CM 519.*
Note: Additional fee required

Lab: 12 | Total Hours: 12

CM 529 - Qigong II Practicum

Credit(s): 1.50

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). *Prerequisite(s): CM 518, CM 519*

Lecture: 18 | Total Hours: 18

First-Year Winter Totals - Lab: 48 | Lecture: 150 | Total Hours: 198 | Credits: 14.50

Spring

CM 531 - Foundations of Classical Chinese Medicine III

Credit(s): 2.00

This third course of the series introduces students to basic channel anatomy and physiology. Students learn the structures, levels and pathways of the energetic web interpenetrating the body, as well as their functions and interactions. The relationships between the organs and the channels will be considered to elucidate how the two systems work together to support the vitality and working functionality of a human being. *Prerequisite(s): CM 511, CM 521*

Lecture: 24 | Total Hours: 24

CM 572 - Chinese Diagnostic Techniques II

Credit(s): 1.50

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 introduces the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. 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 (*shiwèn*), are also practiced in class.

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 533 - Acu-Moxa Points III

Credit(s): 2.00

Students study the "extra points," and 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. The course also introduces classical methods of needling. Rigorous application of classical texts gives foundations for more painless and effective techniques. Classical freehand needling and tube techniques are a focus of this term, along with the development of patient comfort and practitioner confidence. This course sets the stage for advanced classical needle techniques and more challenging points in the following year. *Prerequisite(s): CM 523.*

Corequisite(s): Concurrent enrollment in CM 534

Lecture: 24 | Total Hours: 24

CM 534 - Acu-Moxa Techniques III

Credit(s): 2.00

In this hands-on complement to Acu-Moxa Points III, students learn to become competent practitioners of manual therapies while applying the depth of classical Chinese literature. The course develops non-needle and simple needle techniques under supervision while emphasizing clean needle technique and proper draping and body positioning. Students witness and then use acupressure and the full array of non-needle techniques, including moxibustion, cupping, guasha, magnets and beads. This practicum also introduces classical free hand and gentle tube insertion needling techniques, setting the stage for advanced classical needle techniques and more challenging points to be learned in subsequent courses. *Prerequisite(s): CM 524. Corequisite(s): Concurrent enrollment in CM 533. Note: Additional fee required. The Clean Needle Technique course offered by CCAOM is also required.*

Lab: 24 | Lecture: 12 | Total Hours: 36

CM 535 - Palpation and Perception III Practicum

Credit(s): 1.50

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 526 - Herbs II

Credit(s): 2.00

In Herbs II, students learn the second-half of 64 core herbs used in Zhang Zhongjing's *Shanghan Zabing Lun*, which is a major, foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Student learn properties and therapeutic actions of individual herbs described in materia medicas and textbooks. In addition, students are introduced to the concept of herb patterns and corresponding pathomechanisms, and gain knowledge of time-tested herbal combinations and formulary employed in classical herbal formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 24 | Total Hours: 24

CM 566 - Herbs II Practicum

Credit(s): 1.00

Herbs II Practicum continues the series with a review of the basic principles of qi dynamics, classical discussion of herbal properties, their unique movement signatures, and other key elements of an herbal research framework. These concepts are developed through the sampling and appreciation of single herbs, often in pairs, covering a large cross section of signatures. Energetic awareness is cultivated through the comparison of one's own experience with descriptions from classical sources. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 12 | Total Hours: 12

CM 599 - Evidence-Informed Practice

Credit(s): 2.00

This course builds students' research literacy skills. In order to become successful, holistic practitioners, students learn to read and critically evaluate medical literature, and to weigh this evidence with clinical experience and patient values when making clinical decisions. Students learn to quickly locate relevant medical literature, as well as evaluate the strengths and weaknesses of the studies they need to support their clinical practice.

Lecture: 24 | Total Hours: 24

CM 538 - Qigong III Retreat

Credit(s): 0.50

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). *Prerequisite(s): CM 518, CM 519. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 539 - Qigong III Practicum

Credit(s): 1.50

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). *Prerequisite(s): CM 518, CM 519.*

Lecture: 18 | Total Hours: 18

CM 500 - Pre-Observation Rotation

Credit(s): 1.00

Students have their first exposure to working in the NUNM Health Centers through a first-year Clinical Observation experience.

Clinic: 24 | Total Hours: 24

First-Year Spring Totals - Clinic: 24 | Lab: 60 | Lecture: 162 | Total Hours: 246 | Credits: 17.00

First-Year Totals - Clinic: 24 | Lab: 144 | Lecture: 456 | Total Hours: 624 | Credits: 45.00

Second Year

Fall

CM 611 - Chinese Organ Systems: Cosmology and Symbolism I

Credit(s): 2.00

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(s): Second-year status*

Lecture: 24 | Total Hours: 24

CM 612 - Chinese Pathology I

Credit(s): 2.00

In this course, students develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the Classical medical model. The models explored in this course include yin/yang, sanyin, bagang and liuqi. For the first few weeks, Zang Organs will be the focus. In the following half of the term, the Six Conformation model will be the focus of exploration. *Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 613 - Acu-Moxa Points IV

Credit(s): 2.00

In this course, students learn how to understand and apply the Jingluo theory as a whole. Following an in-depth discussion on the constitution and construction of the Jingluo theory, the characteristics of Biaoben, Genjie, Qijie and Sihai will be compared to the 12 regular meridians, 12 divergent channels, 12 cutaneous zones, 12 sinews, 15 collaterals, and 8 extra meridians. Students learn the physiological functions of the Jingluo system, along with associated pathological phenomenon and specific needling/moxibustion techniques for resolving pathological patterns. The class also explores how to prevent needling accidents and resolve needling injury. As a highlight of the class, students are guided to gain an embodied understanding of Shen Anchoring and Deqi.

Additional topics include a consideration of the relationship between acupuncture points and herbs; the integration of herbal prescription into acupuncture treatment protocols; the "dose" of acupuncture associated with different needling techniques; and an overview of the acupuncture classic *Biao You Fu* (Ode to Elucidate Mysteries), written by Dou Hanqing during the Jin-Yuan dynasty. *Prerequisite(s): CM 533. Corequisite(s): Concurrent enrollment in CM 614*

Lecture: 24 | Total Hours: 24

CM 614 - Acu-Moxa Techniques IV

Credit(s): 2.00

In the practical complement to CM 613 - Acu-Moxa Points IV, 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(s): CM 534. Corequisite(s): Concurrent enrollment in CM 613. Note: Additional fee required*

Lab: 24 | Lecture: 12 | Total Hours: 36

CM 615 - Asian Bodywork

Credit(s): 1.50

Bodywork in most traditional systems of medicine is considered foundational. Other key elements of Traditional East Asian Medical practice—e.g., pulse diagnosis, channel diagnosis, abdominal diagnosis, needling, gua sha, cupping, moxibustion—depend on refined touch skills. The cultivation and development of palpatory sensitivity in the practice of somatic therapies allows one to quickly advance in these other skills.

In this course, students explore a Japanese and a Chinese style of bodywork, both of which boil down to creative use of the yin-yang dynamic in the body. The Sotai system from Japan, developed by Dr. Keizo Hashimoto—and its later evolution into Yin Sotai and Sotai Intuitivo—and the ancient Daoist qigong tuina system are the core of this course. Students learn to assess their patients from a gross structural perspective, but also on the subtler level of fascial distortions. They learn to deliver effective treatments that move patients to a greater sense of ease in their physical and emotional selves. *Prerequisite(s): Second-year status. Note: Additional fee required*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 536 - Herbs III

Credit(s): 2.00

Herbs III completes the exploration of 180 key herbs in the context of the herbal classifications employed by most modern textbooks from China. Students learn the properties, actions, indications, contraindications, dosage, and preparation of each of these individual herbs.

Prerequisite(s): These courses are to be taken in the ordered sequence.

Lecture: 24 | Total Hours: 24

CM 576 - Herbs III Practicum

Credit(s): 1.00

Herbs Practicum III rounds out our survey of the dynamic range of single herb categories. In addition, we begin an exploration of "dui yao"—commonly used combinations of herbs and their clinical applications. This final portion of the first-year herbs practicum will also familiarize students with other key topics in classical Chinese herbology including dietetics, paozhi methods, and formula preparation. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

Note: Additional fee required

Lecture: 12 | Total Hours: 12

CM 617 - Biomedicine I

Credit(s): 2.00

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 develop the ability to integrate biomedical and classical Chinese medical concepts regarding disease processes, and to view biomedical knowledge from the perspective of whole-systems 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(s): these courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 699 - Immunology**Credit(s): 3.00**

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.

Lecture: 36 | Total Hours: 36

CM 618 - Qigong IV Retreat**Credit(s): 0.50**

This qigong module teaches students the third eight-segment 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. *Prerequisite(s): CM 538, CM 539. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 619 - Qigong IV Practicum**Credit(s): 1.50**

This qigong module teaches students the third eight-segment 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. *Prerequisite(s): CM 538, CM 539*

Lecture: 18 | Total Hours: 18

CM 600 - Clinical Observation

Credit(s): 2.00

Students receive lineage-based training that emphasizes transmission and mentoring as major methods for promoting personal and professional cultivation, *and patient care informed by the principles and philosophy of classical Chinese medicine*. Clinic rotations provide students with opportunities to broaden and strengthen their clinical skill within the context of diverse pathologies, patient populations, and uniquely individualized treatments. Students are expected to demonstrate competence of entry-level knowledge and skills in Chinese diagnostic techniques, acupuncture, herbal medicine, Asian bodywork, qigong, Chinese dietetics, and lifestyle counseling. Clinic rotations prepare students both for the national licensing exams and their future roles as healthcare professionals.

Clinical observation rotations provide a forum in which five observers watch a seasoned clinical supervisor in session with a client. The focus is on the behavioral and procedural aspects of the therapeutic encounter. Students observe effective treatment, engage in the patient-practitioner relationship with appropriate boundaries, apply interview skills when directed by the supervisor, examine the patient for vitals, practice the pillars of classical Chinese diagnosis, and uphold modern integrative standards of care. They also create patient timelines for case reports.

Prerequisite(s): Students must be CPR certified, have passed the CNT course, and have completed CM 530. Note: 3 required shifts

Clinic: 48 | Total Hours: 48

Second-Year Fall Totals - Clinic: 48 | Lab: 48 | Lecture: 210 | Total Hours: 306 | Credits: 21.50

Winter

CM 621 - Chinese Organ Systems: Cosmology and Symbolism II

Credit(s): 2.00

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(s): Second-year status*

Lecture: 24 | Total Hours: 24

CM 622 - Chinese Pathology II

Credit(s): 2.00

In this course, students develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the classical medical model. The models explored in this course include yin/yang, Open-Close-Pivot and Biao-Ben Zhong Qi Dynamic model, bagang and liuqi. The Six Conformation model is the focus of exploration.

Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence

Lecture: 24 | Total Hours: 24

CM 623 - Acu-Moxa Points V

Credit(s): 2.00

This course focuses on point prescriptions designed to address diseases and symptoms that are commonly seen in a clinical setting. Class discussions focus on basic principles of point combination and compatibility, 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(s): CM 613. Corequisite(s): Concurrent enrollment in CM 624*

Lecture: 24 | Total Hours: 24

CM 663 - Auricular Points

Credit(s): 1.25

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 as auricular medicine. Students utilize ear seeds and pellets, as well as ear needles to learn the individual points of the ear. *Note: Additional fee required*

Lab: 6 | Lecture: 12 | Total Hours: 18

CM 624 - Acu-Moxa Techniques V

Credit(s): 2.00

Needling practice continues with a focus on the 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. Students develop the ability to apply all techniques accurately and safely on any body. Through demonstration and practice, this course cultivates the clinical ability to diagnose and treat disease conditions using the concepts of classical Chinese medicine. *Prerequisite(s): CM 614. Corequisite(s): Concurrent enrollment in CM 623. Note: Additional fee required*

Lab: 24 | Lecture: 12 | Total Hours: 36

CM 616 - Herbs IV

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs IV), formulas are grouped for their relation to the historically relevant disease categories of the Shanghan Zabing Lun, with awareness of classical concepts of matching pattern to physiology. Approximately 50 formulas are introduced for core patterns within common use today. *Prerequisite(s): CM 536; these courses are to be taken in the ordered sequence.*

Lecture: 24 | Total Hours: 24

CM 656 - Herbs IV Practicum

Credit(s): 1.00

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key formulas. *Prerequisite(s): CM 576; these courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 12 | Total Hours: 12

CM 627 - Biomedicine II

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine II compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of gastrointestinal, hepato-biliary, and pancreatic disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 657 - Acu-Moxa Anatomy I

Credit(s): 1.25

In this course, students develop clinically applicable anatomical knowledge that will help them not only locate, but also understand the structural relationships and physical parameters related to needling techniques of the acupuncture points. Students learn to describe the six upper limb channels: HT, PC, LU, SI, LI, TE, plus Ren, Du and upper BL channels in terms of their anatomical relationships to the pertinent bones, muscles, major nerves and blood vessels.

Corequisite(s): Concurrent enrollment in CM 614. Note: Additional fee required

Lab: 6 | Lecture: 12 | Total Hours: 18

CM 628 - Qigong V Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 618, CM 619. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 629 - Qigong V Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 618, CM 619*

Lecture: 18 | Total Hours: 18

CM 600 - Clinical Observation

Credit(s): 2.00

Students receive lineage-based training that emphasizes transmission and mentoring as major methods for promoting personal and professional cultivation, *and patient care informed by the principles and philosophy of classical Chinese medicine*. Clinic rotations provide students with opportunities to broaden and strengthen their clinical skill within the context of diverse pathologies, patient populations, and uniquely individualized treatments. Students are expected to demonstrate competence of entry-level knowledge and skills in Chinese diagnostic techniques, acupuncture, herbal medicine, Asian bodywork, qigong, Chinese dietetics, and lifestyle counseling. Clinic rotations prepare students both for the national licensing exams and their future roles as healthcare professionals.

Clinical observation rotations provide a forum in which five observers watch a seasoned clinical supervisor in session with a client. The focus is on the behavioral and procedural aspects of the therapeutic encounter. Students observe effective treatment, engage in the patient-practitioner relationship with appropriate boundaries, apply interview skills when directed by the supervisor, examine the patient for vitals, practice the pillars of classical Chinese diagnosis, and uphold modern integrative standards of care. They also create patient timelines for case reports.

Prerequisite(s): Students must be CPR certified, have passed the CNT course, and have completed CM 530. Note: 3 required shifts

Clinic: 48 | Total Hours: 48

Second-Year Winter Totals - Clinic: 48 | Lab: 48 | Lecture: 210 | Total Hours: 306 | Credits: 21.50

Spring

CM 631 - Chinese Organ Systems: Cosmology and Symbolism III

Credit(s): 2.00

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(s): Second-year status*

Lecture: 24 | Total Hours: 24

CM 632 - Chinese Pathology III

Credit(s): 2.00

In this course, students continue to develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the classical medical model. The models explored in this course include yin/yang, Open-Close-Pivot and Biao-Ben Zhong Qi Dynamic model, bagang and liuqi. The Six Conformation model continues as the focus, along with an exploration of the Wen Bing and Nineteen Lines (SW 74). *Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence*

Lecture: 24 | Total Hours: 24

CM 633 - Acu-Moxa Points VI

Credit(s): 2.00

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. Students deepen their understanding of disease diagnosis, etiology and pathogenesis, and develop an overall understanding of syndrome differentiation, acupuncture treatment principles, acupuncture prescriptions, point selection, and acupuncture techniques from a classical Chinese medicine perspective. The focus is on cultivating the clinical ability to treat common diseases, some miscellaneous diseases, and gynecological conditions. *Prerequisite(s): CM 623. Corequisite(s): Concurrent enrollment in CM 634*

Lecture: 24 | Total Hours: 24

CM 634 - Acu-Moxa Techniques VI

Credit(s): 2.00

This practicum continues to build on previously learned needling techniques, with a focus on scalp and ear acupuncture. Students are supported to master their connection with the needle and their qi. *Prerequisite(s): CM 624, CM 663. Corequisite(s): Concurrent enrollment in CM 633.*

Note: Additional fee required

Lab: 24 | Lecture: 12 | Total Hours: 36

CM 635 - Practitioner Cultivation I

Credit(s): 1.50

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.

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 626 - Herbs V

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs V), formulas are presented sequentially in groups centered around the classical use of key medicinals as a means of understanding the synergistic use of herbs in context. Students scaffold understanding of core patterns introduced in the prior term (Herbs IV) in order to deepen and diversify the diagnostic and therapeutic application of a broad array of Chinese herbal formulas as approximately 55 formulas are discussed. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

Lecture: 24 | Total Hours: 24

CM 666 - Herbs V Practicum

Credit(s): 1.00

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 12 | Total Hours: 12

CM 637 - Biomedicine III

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine III compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of renal, adrenal, urogenital, and reproductive disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 667 - Acu-Moxa Anatomy II

Credit(s): 1.25

In this course, students develop clinically applicable anatomical knowledge that will help them not only locate, but also understand the structural relationships and physical parameters related to needling techniques of the acupuncture points. Students learn to describe the six lower limb channels (SP, KI, LV, BL, GB, ST) and abdominal and lower back channels in terms of their anatomical relationships to the pertinent bones, muscles, major nerves and blood vessels.

Prerequisite(s): CM 657. Corequisite(s): Concurrent enrollment in CM 624. Note: Additional fee required

Lab: 6 | Lecture: 12 | Total Hours: 18

CM 638 - Qigong VI Retreat

Credit(s): 0.50

Students review and deepen their practice of the forms and walks learned in the Qigong I-V Retreats and Practica. *Prerequisite(s): CM 628, CM 629. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 639 - Qigong VI Practicum

Credit(s): 1.50

Students review and deepen their practice of the forms and walks learned in the Qigong I-V Retreats and Practica. *Prerequisite(s): CM 628, CM 629*

Lecture: 18 | Total Hours: 18

CM 600 - Clinical Observation

Credit(s): 2.00

Students receive lineage-based training that emphasizes transmission and mentoring as major methods for promoting personal and professional cultivation, *and patient care informed by the principles and philosophy of classical Chinese medicine*. Clinic rotations provide students with opportunities to broaden and strengthen their clinical skill within the context of diverse pathologies, patient populations, and uniquely individualized treatments. Students are expected to demonstrate competence of entry-level knowledge and skills in Chinese diagnostic techniques, acupuncture, herbal medicine, Asian bodywork, qigong, Chinese dietetics, and lifestyle counseling. Clinic rotations prepare students both for the national licensing exams and their future roles as healthcare professionals.

Clinical observation rotations provide a forum in which five observers watch a seasoned clinical supervisor in session with a client. The focus is on the behavioral and procedural aspects of the therapeutic encounter. Students observe effective treatment, engage in the patient-practitioner relationship with appropriate boundaries, apply interview skills when directed by the supervisor, examine the patient for vitals, practice the pillars of classical Chinese diagnosis, and uphold modern integrative standards of care. They also create patient timelines for case reports.

Prerequisite(s): Students must be CPR certified, have passed the CNT course, and have completed CM 530. Note: 3 required shifts

Clinic: 48 | Total Hours: 48

CM 671 - The Business of Chinese Medicine II

Credit(s): 1.00

In the second course of the business series, students learn and practice a variety of marketing and communication techniques used frequently in the field of acupuncture and Chinese medicine.

Prerequisite(s): These courses are to be taken in the ordered sequence

Lecture: 12 | Total Hours: 12

Second-Year Spring Totals - Clinic: 48 | Lab: 54 | Lecture: 222 | Total Hours: 324 |
Credits: 22.75

Second-Year Totals - Clinic: 144 | Lab: 150 | Lecture: 642 | Total Hours: 936 |
Credits: 65.75

Third Year

Fall

CM 712 - Clinical Medicine I

Credit(s): 4.00

The Clinical Medicine I-III series builds upon foundational material in the development of clinical reasoning. It address disease etiology, pattern differentiation and treatment strategies, including a focus on prognosis, long-term case management, referral and co-management, and issues of cultural literacy. The series takes a systematic and integrative approach to all major areas of the body (organized by upper, middle, and lower jiao) and the conditions associated with them. Particular attention is given to the pathological categories more commonly seen in practice in the US, as well as the diseases internationally recognized to be global epidemics. Patient cases are viewed through multiple lenses (including biomedicine, TCM and CCM) using the classical texts of Chinese medicine as the primary source of guidance. In addition to lectures and case discussion, there are monthly clinical theaters in which multiple faculty compare and contrast their lineage approaches to diagnosis and treatment. Clinical Medicine I begins with an emphasis on *bian bing* that occur in the upper jiao, including everything from sinusitis and headaches to neurology, depression and dermatology. *Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 714 - Advanced Acu-Moxa Techniques I

Credit(s): 1.50

In this first of a two-course series, 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. There is a particular focus 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 using muscle motor points, trigger points, and traditional Chinese medical points are practiced.

Prerequisite(s): CM 634. Note: Additional fee required

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 715 - Chinese Medical Psychology I

Credit(s): 2.00

This course explores principles of general psychology, and compares them to Chinese medicine approaches to psychological pathology, including etiology, diagnosis, and treatment in the context of a classical body-mind paradigm. It explores how the five-phase model can be applied to a humanistic psychology, and the use of common herbal formulas and acupuncture to aid in the evolution of being. *Prerequisite(s): Third-year status*

Lecture: 24 | Total Hours: 24

CM 717 - Biomedicine IV

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. In this fourth course of a six-course series, students explore the nervous and sensory systems. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. The goal of this course is to enable students of Chinese medicine to cultivate a broad understanding of conventional biomedical sciences, which will be useful in their future clinical training. *Prerequisite(s): these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 636 - Herbs VI**Credit(s): 2.00**

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs VI), formulas continue to be presented sequentially in groups centered around the classical use of key medicinals as a means of understanding the synergistic use of herbs in context. Students scaffold understanding of core patterns introduced in prior terms (Herbs IV and V) with a focus on compact formulas that are readily used in modification to expand the therapeutic scope of Chinese herbal formulas with approximately 55 additional formulas discussed. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

Lecture: 24 | Total Hours: 24

CM 676 - Herbs VI Practicum**Credit(s): 1.00**

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key

formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

Lecture: 12 | Total Hours: 12

CM 718 - Qigong VII Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 638, CM 639. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 719 - Qigong VII Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 638, CM 639*

Lecture: 18 | Total Hours: 18

CM 710 - Clinical Case Presentation I

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

Clinic: 24 | Total Hours: 24

CM 700 - Clinical Mentoring Rotations

Credit(s): 2.00 credits each

Clinical Mentoring Rotations have the same structure as Clinical Observation Rotations, with the addition that students become more directly involved in patient intake, diagnosis and treatment under the direct guidance of their clinical supervisor. The focus is on the procedural and treatment aspects of the therapeutic encounter. Students learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, integrate subjective signs with objective findings in classical Chinese medical diagnosis, and work closely under supervision alongside a practitioner to collaboratively perform treatment. Using cases from their clinical experience, students learn how to create a meaningful case report. *Note: 6 required rotations*

Clinic: 96 | Total Hours: 96

CM 751 - The Business of Chinese Medicine III

Credit(s): 1.50

The third business course focuses on the rules and regulations of owning a classical Chinese medicine practice with an herbal dispensary; in addition to the local, state and federal laws that pertain to having a successful career in this field. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

Third-Year Fall Totals - Clinic: 120 | Lab: 24 | Lecture: 204 | Total Hours: 348 | Credits: 23.00

Winter

CM 722 - Clinical Medicine II

Credit(s): 4.00

The second course in the Clinical Medicine series focuses on the middle jiao, exploring everything from abdominal pain and reflux to "gu" syndrome and inflammatory bowel diseases. *Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 724 - Advanced Acu-Moxa Techniques II

Credit(s): 1.50

In this second of a two-part series, students continue to 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. There is a particular focus 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 using muscle motor points, trigger points, and traditional Chinese medical points are practiced.

Prerequisite(s): CM 714. Note: Additional fee required

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 725 - Chinese Medical Psychology II

Credit(s): 2.00

This course continues to explore principles of general psychology, and compare them to Chinese medicine approaches to psychological pathology, including etiology, diagnosis and treatment in the context of a classical body-mind paradigm. The emphasis is on treatment and developing an understanding of Western psychological diagnosis from the DSM-V perspective. It explores Eastern and Western constructs for looking at the psyche, ranging from classical concepts and patterns, to the basic curative functions of the therapeutic relationship, and the use of common herbal formulas and acupuncture. Treatment and patterns are reviewed from both classical and modern psychological diagnostic models. *Prerequisite(s): Third-year status*

Lecture: 24 | Total Hours: 24

CM 727 - Biomedicine V

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine V compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. In this fifth course of a six-course series, students learn the anatomy, physiology, pathology, diagnostic assessment, and biomedical treatments for the respiratory, thyroid-parathyroid, cardiovascular, and hematological systems. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 777 - Clinical and Physical Diagnosis

Credit(s): 1.50

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.

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 728 - Qigong VIII Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 718, CM 719. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 729 - Qigong VIII Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 718, CM 719*

Lecture: 18 | Total Hours: 18

CM 720 - Clinical Case Presentation II

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

Clinic: 24 | Total Hours: 24

CM 700 - Clinical Mentoring Rotations

Credit(s): 2.00 credits each

Clinical Mentoring Rotations have the same structure as Clinical Observation Rotations, with the addition that students become more directly involved in patient intake, diagnosis and treatment under the direct guidance of their clinical supervisor. The focus is on the procedural and treatment

aspects of the therapeutic encounter. Students learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, integrate subjective signs with objective findings in classical Chinese medical diagnosis, and work closely under supervision alongside a practitioner to collaboratively perform treatment. Using cases from their clinical experience, students learn how to create a meaningful case report. *Note: 6 required rotations*

Clinic: 96 | Total Hours: 96

Third-Year Winter Totals - Clinic: 120 | Lab: 36 | Lecture: 162 | Total Hours: 318 |
Credits: 20.00

Spring

CM 732 - Clinical Medicine III

Credit(s): 4.00

The final Clinical Medicine course focuses on the lower jiao, with a strong emphasis on gynecology, andrology and LGBTQ health. By the end of the series, students are prepared to enter their final clinical year with the ability to address a wide variety of clinical presentations.

Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence

Lecture: 48 | Total Hours: 48

CM 735 - Applied Palpation and Perception

Credit(s): 1.50

In this course, students learn key assessment, bodywork, and acupuncture/adjunctive techniques and strategies to treat a variety of conditions, primarily physical pain. Students are expected to be familiar with the underlying myofascial and skeletal anatomy of the regions covered each week in class. The course also covers patient communication and strategic thinking, as well as gentle movement techniques to be taught to patients. *Prerequisite(s): CM 535, CM 615. Note:*

Additional fee required

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 737 - Biomedicine VI

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine VI compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of dermatological and musculoskeletal disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological

concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): these courses are to be taken in the ordered sequence*

Lecture: 48 | Total Hours: 48

CM 799 - Nutrition

Credit(s): 2.00

This introduction to nutrition explores the current scientific perspective of diet, individual nutrients, and their relationship to health and disease. The course covers the basics of individual nutrients and how they relate to a whole-food diet, current topics in nutrition, as well as an exploration of how modern nutrition science relates to classic theories in Chinese medicine.

Lecture: 24 | Total Hours: 24

CM 889 - Race and Disparities in Health Care

Credit(s): 2.00

This course provides an overview of health disparities along racial and ethnic categories. Students learn how political, economic and social contexts shape health, access to health care, and the quality of care across racial and ethnic groups. This course also explores the socio-scientific processes that have privileged "innate" difference as explanations for inequality and marginalization; and examine ways in which "race" intersects with other categories of difference, such as gender, class, sexuality and religion to impact one's health and one's access to health care.

Lecture: 24 | Total Hours: 24

CM 738 - Qigong IX Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 728, CM 729. Note: Additional fee required*

Lab: 12 | Total Hours: 12

CM 739 - Qigong IX Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 728, CM 729*

Lecture: 18 | Total Hours: 18

CM 730 - Clinical Case Presentation III

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

Clinic: 24 | Total Hours: 24

CM 700 - Clinical Mentoring Rotations

Credit(s): 2.00 credits each

Clinical Mentoring Rotations have the same structure as Clinical Observation Rotations, with the addition that students become more directly involved in patient intake, diagnosis and treatment under the direct guidance of their clinical supervisor. The focus is on the procedural and treatment aspects of the therapeutic encounter. Students learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, integrate subjective signs with objective findings in classical Chinese medical diagnosis, and work closely under supervision alongside a practitioner to collaboratively perform treatment. Using cases from their clinical experience, students learn how to create a meaningful case report. *Note: 6 required rotations*

Clinic: 96 | Total Hours: 96

CM 770 - Clinical Pre-Internship Rotation

Credit(s): 1.00

In the pre-internship rotations, students spend six weeks learning the role and responsibilities of the intern as they follow and support the interns who are preparing to graduate. Pre-interns continue to learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, and integrate subjective signs with objective findings in classical Chinese medical diagnosis. *Prerequisite(s): Completion of at least two clinical mentoring rotations*

Clinic: 24 | Total Hours: 24

Third-Year Spring Totals - Clinic: 144 | Lab: 24 | Lecture: 174 | Total Hours: 342 |
Credits: 21.50

Third-Year Totals - Clinic: 384 | Lab: 84 | Lecture: 540 | Total Hours: 1008 |
Credits: 64.50

Fourth Year

Summer

CM 805 - Ethics and Jurisprudence

Credit(s): 1.00

Students explore the larger scope of ethical and legal issues pertinent to those with a Chinese medicine practice 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. The course considers Chinese medical ethics espoused in the *Huangdi Neijing*, Confucianist and Daoist ideologies and how these are correlated to the four principles of biomedical ethics, Kant's Moral Imperative, and modern ideas of trust and vulnerability in regards to the practitioner and patient relationship. In addition, the course covers state licensure requirements, handling biomedical waste, scope of practice for the acupuncturist, mandatory reporting, sexual misconduct, social media boundaries, insurance billing, and the importance of involvement with one's state association. It also touches on concepts around the ethical considerations when providing acupuncture in international relief situations, selling supplements, and the ecological and toxicity issues in utilizing Chinese herbs.

Lecture: 12 | Total Hours: 12

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

Clinic: 144 | Total Hours: 144

Fourth-Year Summer Totals - Clinic: 144 | Lecture: 12 | Total Hours: 156 | Credits: 7.00

Fall

CM 812 - Traditional Mentorship Tutorial I

Credit(s): 2.00

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(s): These courses are designed to be taken in sequence*

Lecture: 24 | Total Hours: 24

CM 815 - Practitioner Cultivation II

Credit(s): 1.50

This course focuses on relationship dynamics between the practitioner and patient. The recognition and attention to these dynamics can greatly enhance and support the healing dynamic. There is a strong emphasis on deeper listening, connection, communication, and understanding of boundary dynamics, role/power dynamics, and transference/counter transference. These concepts are applied directly to current patient interactions and relationships, and therefore it is required that students be actively seeing patients. The primary tools of exploration are discussion, lecture, case-study, role-play, mind-body exercises, self-reflection and writing. *Prerequisite(s): CM 635 and intern status*

Lab: 12 | Lecture: 12 | Total Hours: 24

CM 817 - Physiology of Acupuncture

Credit(s): 1.00

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. Attention will be paid to acupuncture point and meridian structure, as it holds the key to one of the most effective means of practice, and provides insight into how acupuncture is likely to have been discovered and developed. Students learn several practical methods related the topics covered. They also gain a better understanding of the biological utility of acupuncture network components, and explore why the physiological mechanisms underlying acupuncture action have been preserved in almost every genera of animal life for over 200 million years of evolution.

Lecture: 12 | Total Hours: 12

CM 819 - Taiji I Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. This course covers the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. It introduces the student to the concept of *zhuāng gōng* 樁功, the

foundational "posting" meditation exercise practiced by the *Zhēn rén* 真人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問. *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures in which the student begins to find motion within stillness and stillness within motion 靜中有動，動中有靜. It offers an opportunity for the student to engage with the concept of *wúwéi* 無為 or "effortlessness."

This class also touches on the *Tàijí Nèigōng* 太極內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jīn-gù* 皮筋骨 (skin, tendons and bone). This instruction gives students the framework needed to continue cultivating a balance between yin and yang in themselves for the rest of their lives. Students work towards an embodied understanding of the macrocosm-microcosm that can promote the harmony between the mind and body that is necessary for achieving the level of the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

CM 810 - Internship Case Presentation I

Credit(s): 1.00

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(s): Intern status*

Clinic: 24 | Total Hours: 24

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

Clinic: 96 | Total Hours: 96

Fourth-Year Fall Totals - Clinic: 120 | Lab: 12 | Lecture: 66 | Total Hours: 198 | Credits: 11.00

Winter

CM 822 - Traditional Mentorship Tutorial II

Credit(s): 2.00

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(s): These courses are designed to be taken in sequence*

Lecture: 24 | Total Hours: 24

CM 826 - Herbs Review/Medicinary Practicum

Credit(s): 1.50

This course is a review and culmination of the herbal program at NUNM, and prepares students to take the NCCAOM and CALE herbal examinations. In addition, it 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(s): Fourth-year status*

Lecture: 18 | Total Hours: 18

CM 829 - Taiji II Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. In this course, students continue to study the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. They deepen their practice of *zhuāng gōng* 樁功, the foundational "posting" meditation exercise practiced by the *Zhēn rén* 真人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問. *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures that provide a path to experiencing motion within stillness and stillness within motion 靜中有動, 動中有靜. Through these practices, students continue to engage with the concept of *wúwéi* 無為 or "effortlessness." Students also further their practice of *Tàijí Nèigōng* 太極內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jìn-gù* 皮筋骨 (skin, tendons and bone). They continue to cultivate an inner balance of yin and yang, as well as an embodied understanding of the macrocosm-microcosm. The ultimate lifetime goal is to achieve the level of harmony between the mind and body that characterizes the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

CM 820 - Internship Case Presentation II

Credit(s): 1.00

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(s): Intern status*

Clinic: 24 | Total Hours: 24

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

Clinic: 96 | Total Hours: 96

CM 861 - The Business of Chinese Medicine IV

Credit(s): 1.50

The final business course focuses on financial knowledge and skills. Students garner practical knowledge of money management, taxes and start-up costs, in addition to exploring financing options for opening a large or small Chinese medicine practice. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

Fourth-Year Winter Totals - Clinic: 120 | Lecture: 78 | Total Hours: 198 | Credits: 11.50

Spring

CM 832 - Traditional Mentorship Tutorial III

Credit(s): 2.00

A hallmark of the CCM programs, the Traditional Mentorship Tutorial classes support the lineage culture of a classical Chinese medicine education. Students meet with their chosen mentor for two hours per week for a year; topics are discussed from the unique perspective of the mentor's own path of learning and knowledge integration. This series is a core requirement in the final year of study. *Prerequisite(s): These courses are designed to be taken in sequence*

Lecture: 24 | Total Hours: 24

CM 813 - Acu-Moxa Board Review

Credit(s): 1.00

This course is offered in the spring term of the final year in preparation for the NCCAOM board exams (Foundations of Oriental Medicine and Acupuncture with Point Location). The course outlines the national certification and state licensure processes, as well as essential resources and study strategies for the board exams. Topics are covered through lectures, quizzes and discussions. *Prerequisite(s): CM 724*

Lecture: 12 | Total Hours: 12

CM 839 - Taiji III Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. In this course, students continue to study the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. They deepen their practice of *zhuāng gōng* 樁功, the foundational "posting" meditation exercise practiced by the *Zhēn rén* 真人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問. *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures that provide a path to experiencing motion within stillness and stillness within motion 靜中有動, 動中有靜. Through these practices, students continue to engage with the concept of *wúwéi* 無為 or "effortlessness." Students also further their practice of *Tàijí Nèigōng* 太極內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jìn-gù* 皮筋骨 (skin, tendons and bone). They continue to cultivate an inner balance of yin and yang, as well as an embodied understanding of the macrocosm-microcosm. The ultimate lifetime goal is to achieve the level of harmony between the mind and body that characterizes the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Lecture: 18 | Total Hours: 18

CM 830 - Internship Case Presentation III

Credit(s): 1.00

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(s): Intern status*

Clinic: 24 | Total Hours: 24

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

Clinic: 96 | Total Hours: 96

CM 871 - Community Education

Credit(s): 0.50

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.

Lab: 12 | Total Hours: 12

Fourth-Year Spring Totals - Clinic: 120 | Lab: 12 | Lecture: 54 | Total Hours: 186 | Credits: 10.00

Fourth-Year Totals - Clinic: 504 | Lab: 24 | Lecture: 210 | Total Hours: 738 | Credits: 39.50

^ These hours are cumulative and may be earned in a term other than term registered.

Program Totals Before Electives - Clinic: 1056 | Lab: 420 | Lecture: 1848 | Total Hours: 3306 | Credits: 214.75

Program Totals With Electives - Total Hours: 3378 | Credits: 220.75

Electives

[Click here for a list of the available CCM electives.](#)

School of Undergraduate and Graduate Studies

The mission of the School of Undergraduate and Graduate Studies is to transform individuals and communities through integrative, socially responsible, and evidence-informed approaches to health and well-being.

Undergraduate Studies at NUNM

NUNM's two undergraduate majors offer an integrative approach to nutrition and health sciences. Each degree will prepare students for careers in the burgeoning health and wellness field, or continuing on to related graduate degree programs.

Employers and graduate schools are seeking well-rounded candidates with interpersonal skills, intercultural competency, and academic preparation in the natural sciences such as organic chemistry, biochemistry, physics and more. Toward that end, we have designed an integrated curriculum featuring core threads in natural sciences, social sciences and critical thinking for each program.

Students who graduate from the School of Undergraduate Studies will:

1. Articulate concepts and demonstrate skills related to nutrition and integrative health sciences.
2. Practice professional communication and work productively, both independently and as part of a team. Effectively communicate using verbal, nonverbal and written skills.
3. 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.
4. 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.

Graduate Studies at NUNM

As people face significant health challenges worldwide, the need for approaches to health and health care that capitalize on what nature provides is increasingly evident. Integrative health and medicine incorporates a variety of systems to create optimal health and wellness for individuals and communities. It recognizes that health is not simply something that can be achieved at the individual level but must also include environmental, social, and political action. It also recognizes that the world cannot be subdivided into discrete, isolated regions but is interrelated in all its parts. At NUNM, our unique master's programs in the School of Graduate Studies prepare our graduates to make significant contributions to the fields of global health, whole-foods nutrition, integrative medicine research, international community organizing and social activism, and international development and service. We emphasize active learning, encourage international travel, and ensure that our students graduate with the tools to succeed in their profession.

Students who graduate from the School of Graduate Studies will:

1. Demonstrate professionalism through communication, presentation and interpersonal skill.

2. Abide by ethical and legal standards within the scope of their professional practice.
3. Embrace the value of integrative approaches to health and wellness.
4. Apply a social justice perspective to addressing key issues in health and wellness.
5. Embrace equity and diversity as strengths in promoting health and wellness.
6. Practice humility and empathy in dealing with others.
7. Be lifelong learners who seek continual professional growth.
8. Utilize evidence-informed approaches to determine the most effective methods of promoting health and wellness.

Other Resources

Food as Medicine Institute:

The Food as Medicine Institute (FAMI) provides nutrition education for individuals, families, and communities to help nourish healthy relationships with whole foods and to enhance healthcare professionals' understanding of food as medicine. FAMI's vision is, "We envision communities free of chronic disease and nourished through healthy whole foods." FAMI is based on the Food as Medicine Everyday (FAME) philosophy:

- Promote whole foods and low-processed foods.
- Encourage a diverse, primarily plant-based diet.
- Include food from healthy animals.
- Promote anti-inflammatory food choices.
- Recognize that individuals have unique food needs.
- Care about food and its sources.

FAMI sponsors an annual FAMI Symposium in the late winter that is open to practitioners, students, and others in the community interested in learning more about current trends in evidence-informed approaches to nutrition. In addition, FAMI teaches the Food as Medicine Everyday curriculum to nutrition educators (including students studying in the Master of Science in Nutrition program) and offers FAME workshops to people in a variety of locations around the United States. More information can be obtained at the FAMI website.

IPSL Global Institute at NUNM:

The International Partnership for Service Learning has been in the business of guiding students into opportunities for international service for over 30 years. In addition to the two master's degrees offered at NUNM based on IPSL principals (Master of Arts in Community Organizing and Social Activism, and Master of Arts in International Development and Service), we also now offer custom programs for students who wish to make a difference in the world. More information can be obtained at the IPSL Global Institute at NUNM website.

Faculty-Led Travel Courses:

Each year, School of Graduate Studies faculty members lead students on a variety of travel courses to locations around the globe. Focusing on nutrition, health care or research, trips are currently taught within the Master of Science in Nutrition and Master of Science in Global Health programs and can be found as electives within those programs. Travel courses are currently planned for Croatia, Ghana, India, Israel, Tanzania and Thailand. Students from any NUNM program are eligible for these travel courses and financial aid may apply to defray the expenses.

School of Undergraduate and Graduate Studies Symposium:

Each spring, the students graduating from programs in the School of Undergraduate and Graduate Studies share their capstone projects with the NUNM community, family, and friends. The symposium is held the Saturday in June one week prior to graduation. Students provide a brief presentation on the value of their capstone experience and the audience is invited to ask questions as we celebrate the outstanding achievements of the graduates.

Accelerated Bachelor to Master of Science in Nutrition

With the accelerated three-year nutrition program, students earn both degrees at a lower cost and gain faster entry into the employment market. Upon successful completion of the requirements, students earn a Bachelor of Science in Nutrition (BScN) degree at the end of the second year and a Master of Science in Nutrition (MScN) degree at the end of the third academic year.

Students take undergraduate courses during their first year, a mixture of undergraduate and graduate courses the second year (completing the BScN), and all graduate courses during their final four quarters (spring of the second year; fall, winter and spring of the third year). *Note: Students pay undergraduate tuition for undergraduate credit courses and graduate tuition for graduate credit courses.*

Food truly is medicine. Our nutrition programs are focused on whole, unprocessed foods and traditional diets, and our philosophy that Food is Medicine is represented in every course.

As undergraduates, 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 also choose from a variety of electives to gain deeper knowledge in a topic of interest.

BScN 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.

MScN 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-to-table, 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
 - j. 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

Elective Courses

The accelerated nutrition program requires students to complete 18 elective credits for the purpose of rounding out their education. Undergraduate students may take any undergraduate elective courses through the School of Undergraduate and Graduate Studies, and cross-listed courses in graduate programs, as long as course prerequisites are met. In addition, core courses in other undergraduate programs can be taken for elective credit.

Accelerated BScN\MScN Three-Year Curriculum

First Year

Fall

- NU 310 - Fundamentals of Nutrition **Credit(s): 4.00** (for description, refer to GSN 507)

NU 312 - American Food Systems

Credit(s): 3.00

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 313 - Fundamentals of Nutrition Workshop **Credit(s): 1.00** (for description, refer to GSN 508)
- NU 314 - Culinary Skills **Credit(s): 2.00** (for description, refer to GSN 502)

NS 311 - Anatomy and Physiology

Credit(s): 4.00

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. *Corequisite(s): NS 312*

NS 312 - Anatomy and Physiology Lab

Credit(s): 1.00

Corequisite(s): NS 311. Note: Additional fee required

First-Year Fall Total Credits: 15

Winter

NU 322 - Nutritional Anthropology

Credit(s): 3.00

This course examines human nutrition and food systems from behavioral, social, biocultural and evolutionary perspectives, and how these interact in the production of nutritional health at the individual, community and population levels. Two central areas of research in the anthropology of food and nutrition will be addressed. First, long-term evolutionary processes are examined within an ecological framework as significant factors affecting human biology and susceptibility to dietary patterns and diet-related disease. Second, global relations of power and inequity are examined as key factors influencing access to food and patterns of over- and under-nutrition for both populations and individuals. Students will also learn how this information applies to the real world as they conduct an anthropological research project.

NS 324 - Organic Chemistry I with Lab

Credit(s): 3.00

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. *Note: Additional fee required*

SS 321 - Culture, Identity and Emotion

Credit(s): 3.00

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

Credit(s): 3.00

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.

- Elective **Credit(s): 3.00**

First-Year Winter Total Credits: 15

Spring

- NU 332 - Health Coaching **Credit(s): 2.00** (for description, refer to GSN 528)

NS 334 - Organic Chemistry II with Lab

Credit(s): 3.00

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. *Note: Additional fee required*

IM 321 - Critical Thinking for Pre-Health Professionals

Credit(s): 3.00

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.

SS 332 - Intercultural Communication Skills

Credit(s): 3.00

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.

- Elective **Credit(s): 3.00**

First-Year Spring Total Credits: 14

First-Year Total Credits: 44

Second Year

Summer

- NU 301 - Farm to Table **Credit(s): 2.00** (for description, refer to GSN 503)

NS 401 - Biochemistry for Life Sciences

Credit(s): 4.00

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(s): NS 324, NS 334*

Second-Year Summer Total Credits: 6

Fall

GSN 516 - Pathophysiology

Credit(s): 3.00

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 590 - Professional Development I

Credit(s): 1.00

This course provides students with skills, knowledge and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning.

IM 411 - Health Psychology and Mind-Body Medicine

Credit(s): 3.00

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.

NS 411 - Biostatistics for Pre-Health Majors

Credit(s): 3.00

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

Credit(s): 3.00

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 413 - Introduction to Research Methods

Credit(s): 3.00

Students become acquainted with the fundamentals of research through an overview of research questions and methods in the natural, clinical and social sciences. Students will be prepared to act as an educated consumer of research, data and results; and use their knowledge to support their capstone in the spring.

Second-Year Fall Total Credits: 16

Winter

GSN 505 - Healing Foods I

Credit(s): 2.00

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. *Prerequisite(s): GSN 507. Corequisite(s): GSN 506*

GSN 506 - Healing Foods I Practicum

Credit(s): 2.00

This complementary course brings to life the content covered in the GSN 505 - Healing Foods I. Students will have hands-on experience preparing foods and meals that showcase their healing properties in creative ways. *Corequisite(s): GSN 505. Note: Additional fee required*

GSN 515 - Nutritional Assessment

Credit(s): 2.00

Learn clinical and dietary evaluations to determine an individual's nutritional status. Gain proficiency in clinical documentation; taking a medical and nutrition history, charting a SOAP note and determine the nutrition diagnosis matched to medical diagnoses. Perform nutrition physical exam; including dietary analysis, questionnaires and basic anthropometric measurements. Propose recommendations based on individual nutritional needs using evidence-based nutrition practice guidelines. Evaluate laboratory tests from urine, saliva or blood. Communicate nutrition therapy plans with primary care physicians or healthcare teams to ensure clear coordination of care. *Prerequisite(s): GSN 507, GSN 514, GSN 516*

NS 321 - Genetics

Credit(s): 4.00

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 421 - Evidence-Based Practice for Pre-Health Professionals

Credit(s): 3.00

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. *Prerequisite(s): NS 412*

SS 421 - Ethics and Philosophical Dilemmas

Credit(s): 3.00

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.

Second-Year Winter Total Credits: 16

Spring

GSN 524 - Medical Nutrition Therapy

Credit(s): 3.00

Examine nutritional concepts for specific disease states, including anemia, bone health, cancer, cardiovascular disease, gastrointestinal disorders, hypertension, metabolic dysregulation, and renal disease. Synthesize evidence-based medical and nutrition literature to determine which personalized nutrition plan to implement for each patient condition. *Prerequisite(s): GSN 507, GSN 515, GSN 516 Corequisite(s): GSN 529*

GSN 529 - Applied Medical Nutrition Therapy

Credit(s): 2.00

In this experiential course, students develop recipes and menus, as well as prepare meals for specific medical conditions. *Corequisite(s): GSN 524. Note: Additional fee required*

NU 531 - Whole Food: Rethinking the Science of Nutrition

Credit(s): 4.00

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. *Note: Additional fee required*

NU 532 - Nutritional Epidemiology

Credit(s): 4.00

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(s): GSN 516*

Second-Year Spring Total Credits: 13

Second-Year Total Credits: 51

Third Year

Summer

GSN 591 - Professional Development II

Credit(s): 2.00

This course provides students with a bridge from the academic program to career opportunities in the field of nutrition. *Prerequisite(s): GSN 590*

- Elective **Credit(s): 2.00**

Third-Year Summer Total Credits: 4

Fall

GSN 517 - Psychology of Eating

Credit(s): 2.00

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. *Prerequisite(s): GSN 507, GSN 516*

GSN 534 - Cultural Humility and Food Justice

Credit(s): 2.00

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 563 - Business of Nutrition

Credit(s): 2.00

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 690 - Capstone Preparation

Credit(s): 1.00

This course assists students in finding an appropriate capstone project, either an internship or directed study. If the capstone experience is to be an internship, students are taught how to properly carry out the activity, make the connection with the host site, and select a mentor to guide the process. If the capstone experience is to be a directed study, students are taught how to properly develop their project proposal and select a mentor to guide the process. *Prerequisite(s): or corequisite: GSN 591*

- Elective **Credit(s): 2.00**

Third-Year Fall Total Credits: 9

Winter

GSN 536 - Gut Microbiome

Credit(s): 2.00

The microbiome/host relationship in human health is widely recognized. Microbiota impact nearly every aspect of human health. Yet, the diversity of microbes between individuals leaves us pondering how to best influence this health system. This course explores the ecology and evolution of the microbiome, how to measure the microbiome, and the relevance of microbial change. Students will examine the current research literature, discuss "-omics", and collect and analyze microbiome data.

GSN 691 - Capstone I: Internship

Credit(s): 2.00

This course operationalizes the student's approved capstone project as an internship. The student may substitute GSN 697 - Capstone I: Directed Study to meet the Capstone I requirement.

Prerequisite(s): GSN 690

or:

GSN 697 - Capstone I: Directed Study

Credit(s): 2.00

This version of Capstone I allows students to design their own capstone project to meet their specific employment goals. They must develop a directed study proposal, obtain the consent of a faculty member to serve as their mentor during the directed study, and then carry out the activities necessary to attain the learning objectives they have developed in the directed study proposal.

Prerequisite(s): GSN 690. Note: May be taken to meet the Capstone I requirement in place of GSN 691

- Elective **Credit(s): 4.00**

Third-Year Winter Total Credits: 8

Spring

GSN 509 - Community Nutrition and Food Policy

Credit(s): 3.00

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. *Prerequisite(s): GSN 534*

GSN 526 - Lifecycle Nutrition

Credit(s): 3.00

The specific nutritional needs and nutrition-related issues during various stages of the lifecycle are identified. Topics include preconception, pregnancy, lactation, childhood, adolescent, adulthood and geriatric nutrition. *Prerequisite(s): GSN 515, GSN 516*

GSN 692 - Capstone II: Internship

Credit(s): 2.00

In this course, students continue in their approved capstone project. Students will give an oral presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSN 691. Note: Students who took GSN 697 - Capstone I: Directed Study to meet their capstone requirement should register for GSN 698 - Capstone II: Directed Study to complete their capstone experience.*

or:

GSN 698 - Capstone II: Directed Study

Credit(s): 2.00

In this course, students continue in their approved capstone project. Student will give an oral presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSN 697*

- Elective **Credit(s): 4.00**

Third-Year Spring Total Credits:12

Third-Year Total Credits: 33

Total Core Credits: 110

(Undergraduate: 66 | Graduate: 44)

Total Elective Credits: 18

(Undergraduate: 6 | Graduate: 12)

Total Required Credits: 128

Electives

[Click here for a list of the available undergraduate electives.](#)

[Click here for a list of the available graduate-level nutrition electives.](#)

Bachelor of Science in Integrative Health Sciences, BSiHS

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 decision-making 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.

Elective Courses

Integrative health sciences students are required to complete eight elective credits for the purpose of rounding out their education. Undergraduate students may take any elective courses through the School of Undergraduate Studies, and cross-listed courses in graduate programs, as long as course prerequisites are met. In addition, core courses in other undergraduate programs can be taken for elective credit.

BSiHS Two-Year Curriculum

First Year

Fall

IM 311 - Introduction to Integrative Medicine

Credit(s): 3.00

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. *Note: Additional fee required*

NS 311 - Anatomy and Physiology

Credit(s): 4.00

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. *Corequisite(s): NS 312*

NS 312 - Anatomy and Physiology Lab

Credit(s): 1.00

Corequisite(s): NS 311. Note: Additional fee required

SS 311 - Self-Care and Self-Management

Credit(s): 3.00

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 312 - Introduction to Medical Anthropology**Credit(s): 3.00**

This course 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.

First-Year Fall Total Credits: 14

Winter

IM 422 - Introduction to Botanical Medicine**Credit(s): 4.00**

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. *Note: Additional fee required*

NS 324 - Organic Chemistry I with Lab**Credit(s): 3.00**

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. *Note: Additional fee required*

SS 321 - Culture, Identity and Emotion

Credit(s): 3.00

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

Credit(s): 3.00

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.

First-Year Winter Total Credits: 13

Spring

IM 321 - Critical Thinking for Pre-Health Professionals

Credit(s): 3.00

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

Credit(s): 3.00

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

Credit(s): 4.00

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 334 - Organic Chemistry II with Lab

Credit(s): 3.00

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. *Note: Additional fee required*

SS 332 - Intercultural Communication Skills

Credit(s): 3.00

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.

First-Year Spring Total Credits: 16

First-Year Total Credits: 43

Second Year

Summer

NS 401 - Biochemistry for Life Sciences

Credit(s): 4.00

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(s): NS 324, NS 334*

Second-Year Summer Total Credits: 4

Fall

IM 411 - Health Psychology and Mind-Body Medicine

Credit(s): 3.00

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.

NS 411 - Biostatistics for Pre-Health Majors

Credit(s): 3.00

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

Credit(s): 3.00

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 413 - Introduction to Research Methods

Credit(s): 3.00

Students become acquainted with the fundamentals of research through an overview of research questions and methods in the natural, clinical and social sciences. Students will be prepared to act as an educated consumer of research, data and results; and use their knowledge to support their capstone in the spring.

- Elective **Credit(s): 2.00**

Second-Year Fall Total Credits: 14

Winter

NS 321 - Genetics

Credit(s): 4.00

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, oncocyto-genetics and clinical applications of principles. The importance and implication of genetic disease is also discussed.

NS 421 - Evidence-Based Practice for Pre-Health Professionals

Credit(s): 3.00

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. *Prerequisite(s): NS 412*

SS 421 - Ethics and Philosophical Dilemmas

Credit(s): 3.00

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.

SS 422 - Careers: From Undergraduate Degree to Employment

Credit(s): 2.00

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 the health and wellness field (relevant to an undergraduate student's major) 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(s): Completion of 50 undergraduate credits at NUNM*

- Elective **Credit(s): 3.00**

Second-Year Winter Total Credits: 15

Spring

NU 431 - Whole Food: Rethinking the Science of Nutrition

Credit(s): 4.00

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. *Note: Additional fee required*

NS 432 - Physics with Lab

Credit(s): 5.00

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. *Note: Additional fee required*

SS 499 - Undergraduate Capstone

Credit(s): 3.00

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 undergraduate program. Students are expected to draw from their 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 program director), 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(s): Completion of a minimum of 75 undergraduate credits at NUNM, including SS 422. Note: Additional fee required*

- Elective **Credit(s): 3.00**

Second-Year Spring Total Credits: 15

Second-Year Total Credits: 48

Total Core Credits: 83

Total Elective Credits: 8

(8 required, students may take up to 18)

Total Required Credits: 91

Electives

[Click here for a list of the available undergraduate electives.](#)

Bachelor of Science in Nutrition, BScN

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.

Elective Courses

Nutrition students are required to complete five elective credits for the purpose of rounding out their education. Undergraduate students may take any elective courses through the School of Undergraduate Studies, and cross-listed courses in graduate programs, as long as course prerequisites are met. In addition, core courses in other undergraduate programs can be taken for elective credit.

BScN Two-Year Curriculum

First Year

Fall

- NU 310 - Fundamentals of Nutrition **Credit(s): 4.00** (for description, refer to GSN 507)

NU 312 - American Food Systems

Credit(s): 3.00

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 313 - Fundamentals of Nutrition Workshop **Credit(s): 1.00** (for description, refer to GSN 508)
- NU 314 - Culinary Skills **Credit(s): 2.00** (for description, refer to GSN 502)

NS 311 - Anatomy and Physiology

Credit(s): 4.00

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. *Corequisite(s): NS 312*

NS 312 - Anatomy and Physiology Lab

Credit(s): 1.00

Corequisite(s): NS 311. Note: Additional fee required

First-Year Fall Total Credits: 15

Winter

NU 322 - Nutritional Anthropology

Credit(s): 3.00

This course examines human nutrition and food systems from behavioral, social, biocultural and evolutionary perspectives, and how these interact in the production of nutritional health at the individual, community and population levels. Two central areas of research in the anthropology of food and nutrition will be addressed. First, long-term evolutionary processes are examined within an ecological framework as significant factors affecting human biology and susceptibility to dietary patterns and diet-related disease. Second, global relations of power and inequity are examined as key factors influencing access to food and patterns of over- and under-nutrition for both populations and individuals. Students will also learn how this information applies to the real world as they conduct an anthropological research project.

NU 422 - Diet and Disease

Credit(s): 3.00

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.

NS 324 - Organic Chemistry I with Lab

Credit(s): 3.00

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. *Note: Additional fee required*

SS 321 - Culture, Identity and Emotion

Credit(s): 3.00

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

Credit(s): 3.00

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.

First-Year Winter Total Credits: 15

Spring

NU 331 - Foundations of Community Nutrition

Credit(s): 3.00

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(s): An introduction to nutrition or fundamentals of nutrition course*

- NU 332 - Health Coaching **Credit(s): 2.00** (for description, refer to GSN 528)

NS 334 - Organic Chemistry II with Lab

Credit(s): 3.00

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. *Note: Additional fee required*

SS 332 - Intercultural Communication Skills

Credit(s): 3.00

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.

IM 321 - Critical Thinking for Pre-Health Professionals

Credit(s): 3.00

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.

First-Year Spring Total Credits: 14

First-Year Total Credits: 44

Second Year

Summer

- NU 301 - Farm to Table **Credit(s): 2.00** (for description, refer to GSN 503)

NS 401 - Biochemistry for Life Sciences

Credit(s): 4.00

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(s): NS 324, NS 334*

Second-Year Summer Total Credits: 6

Fall

NU 411 - Food Security

Credit(s): 3.00

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.

IM 411 - Health Psychology and Mind-Body Medicine

Credit(s): 3.00

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.

NS 411 - Biostatistics for Pre-Health Majors

Credit(s): 3.00

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

Credit(s): 3.00

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 413 - Introduction to Research Methods

Credit(s): 3.00

Students become acquainted with the fundamentals of research through an overview of research questions and methods in the natural, clinical and social sciences. Students will be prepared to act as an educated consumer of research, data and results; and use their knowledge to support their capstone in the spring.

Second-Year Fall Total Credits: 15

Winter

NS 321 - Genetics

Credit(s): 4.00

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 421 - Evidence-Based Practice for Pre-Health Professionals

Credit(s): 3.00

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. *Prerequisite(s): NS 412*

SS 421 - Ethics and Philosophical Dilemmas

Credit(s): 3.00

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.

SS 422 - Careers: From Undergraduate Degree to Employment

Credit(s): 2.00

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 the health and wellness field (relevant to an undergraduate student's major) 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(s): Completion of 50 undergraduate credits at NUNM*

- Elective **Credit(s): 2.00**

Second-Year Winter Total Credits: 14

Spring

NU 431 - Whole Food: Rethinking the Science of Nutrition

Credit(s): 4.00

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. *Note: Additional fee required*

NU 432 - Nutritional Epidemiology

Credit(s): 4.00

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(s): NU 422*

SS 499 - Undergraduate Capstone

Credit(s): 3.00

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 undergraduate program. Students are expected to

draw from their 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 program director), 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(s): Completion of a minimum of 75 undergraduate credits at NUNM, including SS 422. Note: Additional fee required*

- Elective **Credit(s): 3.00**

Second-Year Spring Total Credits: 14

Second-Year Total Credits: 49

Total Core Credits: 88

Total Elective Credits: 5

(5 required, students may take up to 18)

Total Required Credits: 93

Electives

[Click here for a list of the available undergraduate electives.](#)

Master of Arts in Community Organizing and Social Activism (COSA) –or– International Development and Service (IDS)

The mission of both the Master of Arts in Community Organizing and Social Activism (COSA), and the Master of Arts in International Development and Service (IDS) is to engage students, educators, and grassroots organizations around the world in volunteer service to promote equitable relationships, social justice, sustainable change, and a commitment to our shared humanity.

There is a clear and pressing need to engage with our world in an ACTIVE way. The world needs young leaders to fight for social justice and equal rights. COSA and IDS are the only study abroad programs working to create sustainable change through advocacy!

The IPSL Global Institute at NUNM degrees teach you the practical skills to be an active agent of change and social justice. You will study the many international efforts that have effected social change historically, learn from these efforts, and use them to develop a personal ethic of service,

advocacy and civic engagement. IPSL will teach you the skills of community organizing and will empower you to create sustainable change in your own communities.

Both degrees consist of academic course work providing a necessary body of knowledge that will enrich student's understanding of local conditions and their historical and political roots.

Academic course work may be completed online or, when travel is permissible, on-ground in country. All courses are taught by scholars and scholar-practitioners who are from our partner locations. Courses are interdisciplinary in nature and serve to enrich knowledge in a variety of fields, making these programs extremely flexible and tailored to your goals. In addition, students work and engage in advocacy research with organizations that are based in IPSL program destinations around the world, serving in various capacities, both direct and indirect, to assist those organizations in meeting their goals. Both course work and volunteer service are geared for the student who is actively seeking to change the world for the better.

Either degree can be completed in four terms of approximately 12 weeks each, for a total time of approximately 13 months including breaks. Students may choose to travel internationally for one, two, or three of the terms and may choose to travel to a different country in each of the travel terms or spend multiple terms in one country. Students may currently choose locations in Africa, Latin America, Asia, or Europe as destinations during their program. Program fees vary depending on the number of terms the student chooses to travel.

Both degree programs are similar in that they have two required introductory courses and one re-entry course, allowing students to create a personalized curriculum that best suits their goals and flexibility to choose to travel one, two or three terms. The IDS program has a requirement of one course focusing on development in each of the four terms. Students completing the COSA degree choose volunteer service opportunities that emphasize social activism, whereas IDS students work to assist organizations that foster community development.

Program Outcomes and Competencies

Upon graduation from the COSA or IDS program, students will be prepared to meet the following program outcomes and competencies:

1. Become an ethical and competent leader of an international and/or intercultural service organization.
 - a. Describe the basis for ethical decision-making.
 - b. Develop competency in leading organizations through service.
 - c. Explore and summarize the roles of NGOs in different societies.
2. Develop networks and partnerships that will facilitate the establishment of healthy communities.
 - a. Increase the number and quality of professional interactions.
 - b. Gain knowledge of the leaders in establishing healthy communities globally.
 - c. Be able to foster meaningful partnerships with individuals and organizations that will assist in establishing healthy communities.

3. Master techniques of engagement that empower individuals to make positive changes in their communities.
 - a. Gain necessary skills to navigate intercultural conflict successfully.
 - b. Be able to recruit and develop volunteers for NGOs.
 - c. Become an active listener.
4. Gain the skills necessary to conduct ethical and culturally sensitive research that empowers community-based organizations.
 - a. Develop insight into the human research subject ethical review process in an international context.
 - b. Describe what constitutes human subject research and how it might be viewed differently in different cultures.
 - c. Use human subject research to assist organizations in reaching their missions.
5. The ability to understand, communicate with, and effectively interact with people across cultures.
 - a. Become aware of one's own world.
 - b. Develop a positive attitude toward cultural differences.
 - c. Gain knowledge of different cultural practices and world views.

Program Organization

COSA and IDS students are required to complete 49.5 quarter credits successfully in order to graduate. Two online intensive courses, USA 601 - History and Ethics of International Development and Service, and USA 602 - Social Research Methods are required of all students in the first term. Students are then guided by program staff in the selection of course work that best matches the student's personal goals and that will best assist the student in meeting program outcomes and competencies. Courses are available either in an online format or, if traveling to a country, taught locally in a face-to-face setting by local scholars and scholar-practitioners. Because students have great flexibility in producing a tailored curriculum, the number of credits taken per term by a student may vary. During each travel term, students are required to complete a XXX500 course based in the country they are visiting (e.g., COL 500 if they travel to Colombia). At the end of their course work, students are required to complete an online course, USA 698 - Study Abroad Re-Entry, in which they complete a capstone project and reflect on their international experiences to formulate a plan for how they will move forward in their careers. Students in the IDS program are required to complete a course related to community development each term in the program. The total program thus has 9 credits of preparation and re-entry, and 40.5 credits of courses that are focused on global issues related to community organizing and social activism.

In addition to the academic requirements, COSA and IDS students must also complete at least 10-15 hours of community service each week they are enrolled in the terms of the program. Typically this service-learning component is carried out in organizations or agencies affiliated with the student's area of interest. This service-learning is essential to achieve the program outcomes and competencies, and is a critical component of the capstone project that the student will complete.

Elective Courses

Within each term, students have the ability to choose from a variety of courses. In addition, students may choose to take up to an additional 4.5 credits of course work beyond the required 49.5 credits without additional cost. This course must be selected from the courses open to COSA and IDS students (i.e., courses with prefixes of COL, GRE, GUA, SAF and VIE).

Program Tracks

The COSA and IDS programs offer three tracks, each of which is composed of four terms of approximately 12 weeks each. The 49.5-credit curriculum can be accomplished by completing one term online and three terms abroad, two terms online and two terms abroad, or three terms online and one term abroad. Each program requires the completion of a capstone project that the student selects and completes under the guidance of a faculty mentor.

Curriculum

Because there is a great deal of flexibility in the choice of courses and which terms are completed either online or abroad, the curriculum layouts described here may vary. Required courses for both degrees are indicated by an asterisk. Those development-specific courses required only of IDS students are indicated by a double asterisk. (Note: The following courses are considered development-specific: XXX500, COL501, COL502, COL503, GRE501, GRE504, GUA501, GUA502, SAF501, VIE501, VIE502, VIE506.)

COSA or IDS example program for those traveling three of the four terms

First Term: Fully online

USA 601 - History and Ethics of International Development and Service

Credit(s): 3.00

This course examines the history, current state, and emerging trends in international development and global service-learning. Topics include historical roots (including an overview of international volunteerism, international education, and international aid/development), current statistics, individual/organizational/institutional motivations and benefits, effective practices and trends, and ethical and philosophical issues relevant to modern international service-learning.

Prerequisite(s): Instructor approval required

USA 602 - Social Research Methods

Credit(s): 3.00

This course introduces students to the range of methods engaged by social scientists to systematically understand social phenomena. Students will gain the knowledge necessary to analyze, understand and engage in social science research, and learn the basic framework and skills required to design and implement a research study. Students will also learn to be a critical reader and analyzer of research in their field of study. *Prerequisite(s): Instructor approval required*

COL 503 - From Escobar to Santos: Socio-Historical Perspectives on Modern Colombia

Credit(s): 4.50

It is impossible to talk about modern Colombia without an examination of the impact of the decades-long "narco-tráfico"—the narcotics trade that was at the center of Colombia's political, economic and social structures. The socio-political core of Colombia is what it is today, in part, because of the illegal drug trade. By the same token, Colombia is not the same country it was one generation ago, which is when Pablo Escobar, the head of the Medellín Drug Cartel, died. At the time one of the wealthiest men in the world, Pablo Emilio Escobar Gaviria continues to engender strong opinions on all sides and all spectrums. Some of the nation's poorest people praise Escobar's attention to the plight of the poor. Other Colombians and foreigners rightfully bring attention to the violence, and the tens of thousands of dead that were part of the drug trade and the accompanying terrorism. The years of "narco-tráfico" affected countless Colombians and many others during those years, and the history is only starting to be discussed and researched. Not unlike post-WWII in Germany, it has taken over one generation for Colombians to begin to come to terms with their history and with Pablo Escobar. For years, people ignored the topic and focused on rebuilding their country. But the incredible changes and economic growth in Colombia are informed by a silence about the past that is starting to be brought out more into the open. Recently, Juan Manuel Santos, the past President of Colombia, received the Nobel Peace Prize for his role in bringing peace and reconciliation to Colombia. It has been a long road from Pablo Escobar to President Santos; this course examines the socio-historical events and opinions of those years. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

SAF 501 - Ethics and Community Health in South Africa

Credit(s): 4.50

This course explores public health issues in South Africa via hands-on training at IPSL's partner organization in Cape Town, South Africa. By uniting service with traditional learning, students gain knowledge about the historical, political, economic, cultural and geographic forces that shape the history of public health interventions in South Africa. The service places students at the nexus of community-based health, social enterprise, and the struggle for social and racial justice. Through lectures from scholars and scholar-practitioners, readings, hands-on service, and selected

site visits in the region, students critically examine topics related to health promotion and provision, traditional healing, rural health, and social justice in South Africa. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

Second Term: Travel to Greece

GRE 500 - Community Organizing and Social Activism in Greece

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. The course starts with an overview of the country's history relating to social change institutions, political and social movements, as well as the ethics regarding international service and advocacy efforts. Topics are examined through the prism of hands-on community service in Greek NGOs and NPOs, and include intercultural communication within structures that aim at social, political or infrastructural change. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through in-class reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 503 - Greek History and Culture

Credit(s): 4.50

This course is designed to familiarize students with Greek history and culture. Its aim is to explore the 5,000 years of Greek history; understanding why Greece is still considered the cradle of our civilization; stopping at its greatest moments; discovering those elements that made Greece stand out through the ages; exploring ancient Greek art and culture; and understanding the ways and the degree it shaped the Western world. The course will connect the dots from prehistoric times and the era of the great heroes and legends, like Hercules, Odysseus and the Trojan War, with the achievements of ancient Greece; the troubled years of medieval and Byzantine Greece until its independence after the Greek Revolution of 1821; and Greece in the 21st century. Taking place in the large, vibrant port city of Thessaloniki, with a history of over 2,500 years, students will be able to experience Greece's living history firsthand. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 504 - The Rise of Social Solidarity in Greece: Exploring Shifting Civilian Responses to the European Refugee Crisis in Greece

Credit(s): 4.50

This course explores the concept of solidarity, or social unity, in the context of austerity and refugee burdened Greece. Austerity measures motivated community efforts including soup

kitchens and free pharmacy distribution clinics. At the height of the European refugee crisis, civilian volunteers offered clothing, food, transportation and shelter to immigrants and refugees entering Greece. This course explores how these two crises moments have challenged established forms of sociality and motivated a movement toward national and global solidarity.

Prerequisite(s): Instructor approval required. Note: Additional fee required

Third Term: Travel to Guatemala

GUA 500 - Community Organizing and Social Activism in Guatemala

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices, in community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GUA 501 - Guatemala One Health

Credit(s): 4.50

This course captures in-situ the interconnectedness of people, the environment, and animals that we use for food. This topic is examined through a One Health lens, which will be expanded and explored through site visits and hands-on service projects with local Guatemalan farms, cooperatives, and community-based agricultural initiatives. Students will reflect upon their service and experiential learning with a One Health lens via group seminars throughout the 10-day course. Prior to departure, students will receive a series of readings and assignments required for pre-departure. Students will also complete written reflections while in-country, as well as a final reflection paper/project incorporating scholarly sources. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GUA 555 - Sponsored Research COSA

Credit(s): 4.50

Students engage in a sponsored advocacy research project as a core part of their first COSA course. Research continues in the second and third terms, with students conducting primary or secondary research (or both) in support of their culminating project or thesis work. For students engaging in primary research, your academic advisor (as well as faculty and other staff) and the structure of the Advocacy Research Program will support you in this process. Research will be officially reviewed by the IPSL International Institutional Review Board (IRB), making it eligible for publishing and presentation at professional conferences. During the Pre-Departure Residency

in Portland, there will be an Advocacy Research Orientation and the IPSL research support person will assist you throughout the program. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

Fourth Term: Travel to Vietnam

VIE 500 - Community Organizing and Social Activism in Vietnam

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

VIE 502 - Global Health and the Environment

Credit(s): 4.50

This course examines major global health challenges, programs and policies in Vietnam, with practical examples. Students are introduced to Southeast Asia's diversity of determinants of health and diseases. Students explore and analyze current and emerging health priorities, including emerging infectious zoonotic diseases, poverty, environmental pollution, dioxin/Agent Orange and the War's legacy, health inequity, health systems reforms, health policy advocacy, and major initiatives for disease prevention and health promotion in Vietnam, Southeast Asia and worldwide. One of the primary goals of this course is to help students develop skills in critical thinking in relation to global health issues, and compare the health situation in Vietnam with that in another developed country. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

USA 698 - Study Abroad Re-Entry

Credit(s): 3.00

This course is for students who have recently returned from overseas study and service programs. The course provides an opportunity for reflection on the overseas experiences and their meaning. A major focus is the practical applications for the knowledge that students gained in their overseas experience, including academic, professional, political and personal applications, as well as ideas for further overseas experience. The course operates in a mixed format (culminating project/thesis presentations, seminar, mini-lectures, guest speaker panels, directed activities) and requires a high level of student engagement and participation. *Prerequisite(s): Instructor approval required*

Total Program Credits Required: 49.5

COSA or IDS example program for those traveling two of the four terms

First Term: Fully online

USA 601 - History and Ethics of International Development and Service

Credit(s): 3.00

This course examines the history, current state, and emerging trends in international development and global service-learning. Topics include historical roots (including an overview of international volunteerism, international education, and international aid/development), current statistics, individual/organizational/institutional motivations and benefits, effective practices and trends, and ethical and philosophical issues relevant to modern international service-learning.

Prerequisite(s): Instructor approval required

USA 602 - Social Research Methods

Credit(s): 3.00

This course introduces students to the range of methods engaged by social scientists to systematically understand social phenomena. Students will gain the knowledge necessary to analyze, understand and engage in social science research, and learn the basic framework and skills required to design and implement a research study. Students will also learn to be a critical reader and analyzer of research in their field of study. *Prerequisite(s): Instructor approval required*

COL 503 - From Escobar to Santos: Socio-Historical Perspectives on Modern Colombia

Credit(s): 4.50

It is impossible to talk about modern Colombia without an examination of the impact of the decades-long "narco-tráfico"—the narcotics trade that was at the center of Colombia's political, economic and social structures. The socio-political core of Colombia is what it is today, in part, because of the illegal drug trade. By the same token, Colombia is not the same country it was one generation ago, which is when Pablo Escobar, the head of the Medellín Drug Cartel, died. At the time one of the wealthiest men in the world, Pablo Emilio Escobar Gaviria continues to engender strong opinions on all sides and all spectrums. Some of the nation's poorest people praise Escobar's attention to the plight of the poor. Other Colombians and foreigners rightfully bring attention to the violence, and the tens of thousands of dead that were part of the drug trade and the accompanying terrorism. The years of "narco-tráfico" affected countless Colombians and many

others during those years, and the history is only starting to be discussed and researched. Not unlike post-WWII in Germany, it has taken over one generation for Colombians to begin to come to terms with their history and with Pablo Escobar. For years, people ignored the topic and focused on rebuilding their country. But the incredible changes and economic growth in Colombia are informed by a silence about the past that is starting to be brought out more into the open. Recently, Juan Manuel Santos, the past President of Colombia, received the Nobel Peace Prize for his role in bringing peace and reconciliation to Colombia. It has been a long road from Pablo Escobar to President Santos; this course examines the socio-historical events and opinions of those years. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

SAF 501 - Ethics and Community Health in South Africa

Credit(s): 4.50

This course explores public health issues in South Africa via hands-on training at IPSL's partner organization in Cape Town, South Africa. By uniting service with traditional learning, students gain knowledge about the historical, political, economic, cultural and geographic forces that shape the history of public health interventions in South Africa. The service places students at the nexus of community-based health, social enterprise, and the struggle for social and racial justice. Through lectures from scholars and scholar-practitioners, readings, hands-on service, and selected site visits in the region, students critically examine topics related to health promotion and provision, traditional healing, rural health, and social justice in South Africa. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

Second Term: Fully online

COL 501 - Afro-Caribbean Culture and History

Credit(s): 4.50

This course is an interdisciplinary examination of the history, politics, race, class, gender and cultural expression of the African descendants in the Caribbean region with special focus on Afro-Colombians. Special attention is given to issues in the creation of a multicultural society, such as the dynamics of cultural identity, and social and political issues. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 501 - Micro-Enterprise in Rural Communities: Seminar and Field Work in Samothraki Island

Credit(s): 4.50

This course is designed to familiarize students with different types of enterprises in rural communities, and explore national and international case studies as well as opportunities and challenges in sustaining micro- and small-sized enterprises. It sets out the criteria for identifying

whether a company is a micro-, small- or medium-sized enterprise. These different categories, based on the number of a company's employees and its turnover or balance sheet, determine its eligibility for EU and national financial and support programs, especially in the more rural areas of Europe. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

VIE 502 - Global Health and the Environment

Credit(s): 4.50

This course examines major global health challenges, programs and policies in Vietnam, with practical examples. Students are introduced to Southeast Asia's diversity of determinants of health and diseases. Students explore and analyze current and emerging health priorities, including emerging infectious zoonotic diseases, poverty, environmental pollution, dioxin/Agent Orange and the War's legacy, health inequity, health systems reforms, health policy advocacy, and major initiatives for disease prevention and health promotion in Vietnam, Southeast Asia and worldwide. One of the primary goals of this course is to help students develop skills in critical thinking in relation to global health issues, and compare the health situation in Vietnam with that in another developed country. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

Third Term: Travel to Guatemala

GUA 500 - Community Organizing and Social Activism in Guatemala

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices, in community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GUA 501 - Guatemala One Health

Credit(s): 4.50

This course captures in-situ the interconnectedness of people, the environment, and animals that we use for food. This topic is examined through a One Health lens, which will be expanded and explored through site visits and hands-on service projects with local Guatemalan farms, cooperatives, and community-based agricultural initiatives. Students will reflect upon their service and experiential learning with a One Health lens via group seminars throughout the 10-day course. Prior to departure, students will receive a series of readings and assignments required for pre-departure. Students will also complete written reflections while in-country, as well as a

final reflection paper/project incorporating scholarly sources. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

Fourth Term: Travel to Vietnam

VIE 500 - Community Organizing and Social Activism in Vietnam

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

VIE 502 - Global Health and the Environment

Credit(s): 4.50

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USA 698 - Study Abroad Re-Entry

Credit(s): 3.00

This course is for students who have recently returned from overseas study and service programs. The course provides an opportunity for reflection on the overseas experiences and their meaning. A major focus is the practical applications for the knowledge that students gained in their overseas experience, including academic, professional, political and personal applications, as well as ideas for further overseas experience. The course operates in a mixed format (culminating project/thesis presentations, seminar, mini-lectures, guest speaker panels, directed activities) and requires a high level of student engagement and participation. *Prerequisite(s): Instructor approval required*

Total Program Credits Required: 49.5

COSA or IDS example program for those traveling one of the four terms

First Term: Fully online

USA 601 - History and Ethics of International Development and Service

Credit(s): 3.00

This course examines the history, current state, and emerging trends in international development and global service-learning. Topics include historical roots (including an overview of international volunteerism, international education, and international aid/development), current statistics, individual/organizational/institutional motivations and benefits, effective practices and trends, and ethical and philosophical issues relevant to modern international service-learning.

Prerequisite(s): Instructor approval required

USA 602 - Social Research Methods

Credit(s): 3.00

This course introduces students to the range of methods engaged by social scientists to systematically understand social phenomena. Students will gain the knowledge necessary to analyze, understand and engage in social science research, and learn the basic framework and skills required to design and implement a research study. Students will also learn to be a critical reader and analyzer of research in their field of study. *Prerequisite(s): Instructor approval required*

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Credit(s): 4.50

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others during those years, and the history is only starting to be discussed and researched. Not unlike post-WWII in Germany, it has taken over one generation for Colombians to begin to come to terms with their history and with Pablo Escobar. For years, people ignored the topic and focused on rebuilding their country. But the incredible changes and economic growth in Colombia are informed by a silence about the past that is starting to be brought out more into the open. Recently, Juan Manuel Santos, the past President of Colombia, received the Nobel Peace Prize for his role in bringing peace and reconciliation to Colombia. It has been a long road from Pablo Escobar to President Santos; this course examines the socio-historical events and opinions of those years. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

SAF 501 - Ethics and Community Health in South Africa

Credit(s): 4.50

This course explores public health issues in South Africa via hands-on training at IPSL's partner organization in Cape Town, South Africa. By uniting service with traditional learning, students gain knowledge about the historical, political, economic, cultural and geographic forces that shape the history of public health interventions in South Africa. The service places students at the nexus of community-based health, social enterprise, and the struggle for social and racial justice. Through lectures from scholars and scholar-practitioners, readings, hands-on service, and selected site visits in the region, students critically examine topics related to health promotion and provision, traditional healing, rural health, and social justice in South Africa. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

Second Term: Fully online

GRE 503 - Greek History and Culture

Credit(s): 4.50

This course is designed to familiarize students with Greek history and culture. Its aim is to explore the 5,000 years of Greek history; understanding why Greece is still considered the cradle of our civilization; stopping at its greatest moments; discovering those elements that made Greece stand out through the ages; exploring ancient Greek art and culture; and understanding the ways and the degree it shaped the Western world. The course will connect the dots from prehistoric times and the era of the great heroes and legends, like Hercules, Odysseus and the Trojan War, with the achievements of ancient Greece; the troubled years of medieval and Byzantine Greece until its independence after the Greek Revolution of 1821; and Greece in the 21st century. Taking place in the large, vibrant port city of Thessaloniki, with a history of over 2,500 years, students will be able to experience Greece's living history firsthand. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 504 - The Rise of Social Solidarity in Greece: Exploring Shifting Civilian Responses to the European Refugee Crisis in Greece

Credit(s): 4.50

This course explores the concept of solidarity, or social unity, in the context of austerity and refugee burdened Greece. Austerity measures motivated community efforts including soup kitchens and free pharmacy distribution clinics. At the height of the European refugee crisis, civilian volunteers offered clothing, food, transportation and shelter to immigrants and refugees entering Greece. This course explores how these two crises moments have challenged established forms of sociality and motivated a movement toward national and global solidarity.

Prerequisite(s): Instructor approval required. Note: Additional fee required

VIE 506 - Sustainable Tourism

Credit(s): 4.50

This course covers many topics for the greater appreciation and understanding of those involved in researching or implementing sustainable tourism projects in their field of work. Major topics include general knowledge of tourism and sustainability, insight into alternative forms of tourism such as ecotourism, community-based tourism, and the pro-poor tourism approach.

Prerequisite(s): Instructor approval required. Note: Additional fee required

Third Term: Fully online

GUA 502 - Applications of Mayan Cosmology in Contemporary Health Systems

Credit(s): 4.50

This course offers the opportunity to get immersed in the reality of some of the many indigenous communities in Guatemala and reflect on issues related to health, multiculturalism, policy making, and Maya culture, among others. The course is delivered in an intensive and modular format; as such, it requires complete participation and engagement for a successful experience. During the course, students will be part of lectures, workshops, visits to community-based organizations, dialogues with health services providers, group discussions, and written coursework. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

COL 502 - Conflict, Peace, and Reconciliation: A Comparative Approach to Colombia, Northern Ireland, South Africa and Rwanda

Credit(s): 4.50

This course develops a comparative analysis of the peace processes conducted in Colombia, Northern Ireland, South Africa and Rwanda in order to define their ethnic, religious, political and economic specificities, as well as their particularities. This is the appropriate context to highlight the novelty of the Colombian process in which the reparation of victims is recognized; although this is one of the fundamental aspects of the negotiation, it is also truth that returning land to their

original owners poses great challenges due to the reluctance of the holders who acquired such illegally. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

USA 525 - Language Across the Curriculum

Credit(s): 4.50

This course is of theoretical and practical nature that blends instruction in the target language (the host country language) with an individualized study plan. The course is based on the communicative approach to language acquisition and aims to ensure competencies corresponding to level B2, and to familiarize the student with the format of the certification exams that attest to language proficiency levels according to the standards of the European Community Framework of Reference (CEFR). *Prerequisite(s): Instructor approval required*

Fourth Term: Travel to Vietnam

VIE 500 - Community Organizing and Social Activism in Vietnam

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

VIE 555 - Sponsored Research COSA

Credit(s): 4.50

Students engage in a sponsored advocacy research project as a core part of their first COSA course. Research continues in the second and third terms, with students conducting primary or secondary research (or both) in support of their culminating project or thesis work. For students engaging in primary research, your academic advisor (as well as faculty and other staff) and the structure of the Advocacy Research Program will support you in this process. Research will be officially reviewed by the IPSL International Institutional Review Board (IRB), making it eligible for publishing and presentation at professional conferences. During the Pre-Departure Residency in Portland, there will be an Advocacy Research Orientation and the IPSL research support person will assist you throughout the program. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

USA 698 - Study Abroad Re-Entry

Credit(s): 3.00

This course is for students who have recently returned from overseas study and service programs. The course provides an opportunity for reflection on the overseas experiences and their meaning. A major focus is the practical applications for the knowledge that students gained in their overseas experience, including academic, professional, political and personal applications, as well as ideas for further overseas experience. The course operates in a mixed format (culminating project/thesis presentations, seminar, mini-lectures, guest speaker panels, directed activities) and requires a high level of student engagement and participation. *Prerequisite(s): Instructor approval required*

Total Program Credits Required: 49.5

Master of Science in Global Health, MScGH

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.

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. Describe the culturally-specific health-related knowledge and practices ("traditional knowledge") used in diverse communities worldwide.
 - 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.
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 and other, relevant scientific methods to the breadth of settings and situations in health-related practice.
 - b. Select quantitative and qualitative data collection methods appropriate for a given global health 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.
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.
 - b. 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.
 - c. Identify the culturally-specific beliefs, behaviors and preferences that influence public health and healthcare service utilization in diverse settings.
5. **Planning and Management to Promote Health:** Use scientific evidence and community input to design, implement, manage and evaluate culturally-appropriate and sustainable health-related policies, programs, projects and/or interventions.
 - a. Assess population needs, assets and capacities 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/or interventions.
 - c. Design a population-based policy, program, project or intervention.
 - d. Explain basic principles and tools of budget and resource management.
 - e. Select methods to evaluate public health programs and assure their sustainability.

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.
 - b. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health and medical outcomes in local, national and global settings.
 - c. 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.
7. **Communication:** Demonstrate effective skills for communicating with different audiences and culturally diverse stakeholders.
 - a. Select communication strategies for different audiences and sectors.
 - b. Communicate audience-appropriate health content, both in writing and through oral presentation.
 - c. Describe the importance of cultural sensitivity (competence) in communicating health-related 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.
 - a. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration, and guiding decision-making.
 - b. Use negotiation and mediation skills to address organizational or community challenges.
 - c. Incorporate ethical standards of practice (e.g., Public Health Code of Ethics) into all interactions with individuals, communities and organizations/agencies.
9. **Interprofessional Practice:** Engage and collaborate with professionals outside of common public health disciplines, such as legislators and transportation officials, to improve health outcomes in diverse settings.
 - a. Perform effectively on interprofessional teams/partnerships.
 - b. Demonstrate the importance of including representatives of diverse constituencies in teams/partnerships and in decision-making practices.

Elective Courses

Global health students are required to complete 12 elective credits for the purpose of enhancing the breadth of their education. In addition to global health electives, students may also take graduate-level elective courses through the College of Naturopathic Medicine, College of Classical Chinese Medicine, and School of Undergraduate and Graduate Studies (as long as course prerequisites are met).

Students enrolled in concurrent programs are required to complete the number of elective credit hours of the program that has the greater number of electives between the two programs.

Program Track

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.

Concurrent Program Option

Students can combine the MScGH degree program with any other graduate program offered at NUNM. Concurrent tracks may require additional time for completion.

MScGH Two-Year Curriculum

First Year

Fall

GSGH 511 - Foundations of Global Health

Credit(s): 2.00

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 521 - Social and Behavioral Foundations of Health

Credit(s): 2.00

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 590 - Professional Development I

Credit(s): 1.00

This course provides students with skills, knowledge and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning.

RES 502 - Principles of Epidemiology

Credit(s): 3.00

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 510 - Introduction to Integrative Health and Medicine

Credit(s): 2.00

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.

- Elective **Credit(s): 2.00**

First-Year Fall Total Credits: 12

Winter

GSGH 524 - Population Research Approaches

Credit(s): 3.00

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 using quantitative, qualitative and mixed-methods approaches. Additional focus is placed on research ethics, information sourcing, and the interpretation of health-related research findings. *Prerequisite(s): GSGH 511, RES 502*

GSGH 525 - Program Development

Credit(s): 2.00

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. *Prerequisite(s): GSGH 511, GSGH 521*

RES 505 - Bioethics

Credit(s): 2.00

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 600 - Biostatistics I

Credit(s): 2.00

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 610 - Technical Writing

Credit(s): 2.00

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.

- Elective **Credit(s): 2.00**

First-Year Winter Total Credits: 13

Spring

GSGH 510 - Global Health Discussion Series

Credit(s): 1.00

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. *Prerequisite(s): GSGH 511, RES 510*

GSGH 526 - Program Evaluation

Credit(s): 2.00

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. *Prerequisite(s): GSGH 525*

RES 601 - Biostatistics II

Credit(s): 3.00

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(s): RES 600*

RES 630 - Public Health Policy

Credit(s): 2.00

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. *Prerequisite(s): RES 502*

- Elective **Credit(s): 2.00**

First-Year Spring Total Credits: 10

First-Year Totals: 35

Second Year

Fall

GSGH 513 - Comparative Global Health Systems

Credit(s): 3.00

In this course, students examine diverse models of health systems currently in use around the globe. Topics include service delivery; access and utilization; workforce preparation and practice; health information systems; the distribution of, and access to, medical products (medicine, vaccines, technology); financing; and governance and leadership. Additional topics include resource allocation challenges and relevant policy development and implementation processes. *Prerequisite(s): GSGH 511, RES 510*

GSGH 530 - Environmental Global Health

Credit(s): 2.00

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. *Prerequisite(s): GSGH 511, RES 505*

GSGH 532 - Community Organizing

Credit(s): 2.00

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.

Prerequisite(s): GSGH 511

GSGH 690 - Capstone Preparation

Credit(s): 2.00

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. *Prerequisite(s): GSGH 526, RES 505*

- Elective **Credit(s): 2.00**

Second-Year Fall Total Credits: 11

Winter

GSGH 691 - Capstone I: Global Health Fieldwork Experience

Credit(s): 6.00

Fieldwork provides students with supervised, advanced practical experience in a population-focused, health-related local, national or international setting over an 8-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. *Prerequisite(s): GSGH 690. Note: Itinerary-specific trip fee applies*

Second-Year Winter Total Credits: 6

Spring

GSGH 591 - Professional Development II

Credit(s): 2.00

This course provides students with a bridge from the academic program to career opportunities in the field of global health. *Prerequisite(s): GSGH 590*

GSGH 610 - Grant Writing

Credit(s): 2.00

This course teaches skills in grant proposal development. 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 grant proposals that are responsive to the stated interests of funding agencies. *Prerequisite(s): RES 610*

GSGH 692 - Capstone II: Fieldwork Culminating Experience

Credit(s): 2.00

Students have an opportunity to reflect on their fieldwork experience, disseminate the final product of the fieldwork experience so as to benefit both the student and the host site, and present a summary of their reflections at an annual capstone symposium. *Prerequisite(s): GSGH 691*

- Electives **Credit(s): 4.00**

Second-Year Spring Total Credits: 10

Second-Year Totals: 27

Total Core Credits: 50

Total Elective Credits: 12

(Electives must include one Global Health Experience Trip)

Total Required Credits: 62

Electives

[Click here for a list of the available MScGH electives.](#)

Master of Science in Integrative Medicine Research, MSiMR

The mission of the integrative medicine research program is to train research professionals to advance the science of natural medicine.

The Master of Science in Integrative Medicine Research (MSiMR) degree brings together faculty and researchers from various integrative medicine fields to work with students in a collaborative project-based environment. As the use of integrative medicine continues to increase, so does the need to develop the evidence base for its use. Clinical, laboratory and observational research methods are emphasized in the MSiMR program, as they are essential to provide a solid foundation for natural therapies. In close partnerships with skilled mentors, students in this

program conduct novel health and medical research on studies including herbal medicine, nutrition, mind-body therapies, and behavioral and environmental effects on health.

Required courses provide a foundation in clinical and laboratory research, public health, and courses in 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 many 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.

Program Outcomes and Competencies

Students in the MSiMR program will be prepared to meet the following program outcomes and competencies:

1. **Develop research skills expertise**
 - a. Summarize the current understanding of a research topic, especially by searching databases to identify relevant literature.
 - b. Critically appraise various types of literature, including intervention, observation, systematic review, and case studies.
 - c. Describe and apply all aspects of study design, including articulating appropriate questions, generating hypotheses, choosing appropriate design and methods, selecting outcomes, and designing data management and analytic strategies.
 - d. Effectively communicate methods, data and results of research in written, oral and visual formats for varied audiences.
2. **Gain a working knowledge of the basic aspects of integrative medicine and health**
 - a. Describe integrative medicine modalities and their clinical application.
 - b. Explain processes by which social, behavioral, economic and policy factors, including nutritional behaviors and practices, influence individual and community health.
 - c. Describe etiology, progression and treatment of some common diseases/conditions.
 - d. Demonstrate expert knowledge concerning at least one question of interest in the field of integrative health.
3. **Scientific integrity: Be a steward of ethical research practice**
 - a. Demonstrate an understanding of ethical issues in human subjects research, including the need for inclusion and diversity in research study planning, oversight and participation.
 - b. Describe the purpose and the process of IRB approval and oversight of research.
 - c. Demonstrate safe, HIPAA-compliant data management strategies.
4. **Demonstrate 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.

Elective Courses

Research students are required to complete 8 elective credits for the purpose of enhancing the breadth of their education. In addition to research electives, students may also take graduate-level elective courses through the College of Naturopathic Medicine, College of Classical Chinese Medicine, and School of Undergraduate and Graduate Studies (as long as course prerequisites are met).

Students enrolled in concurrent programs are required to complete the number of elective credit hours of the program that has the greater number of electives between the two programs.

MSiMR Two-Year Curriculum

First Year

Fall

GSN 516 - Pathophysiology

Credit(s): 3.00

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.

RES 502 - Principles of Epidemiology

Credit(s): 3.00

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 510 - Introduction to Integrative Health and Medicine

Credit(s): 2.00

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 Medicine Research Fundamentals

Credit(s): 1.00

This course provides foundational knowledge to support students through the MSiMR program. The course covers landmark studies in integrative medicine and integrative medicine research concepts. Students learn about researchers, mentors and projects at NUNM and other locations in the vicinity, and develop their individual research interests and program goals.

RES 530 - Research Methodology

Credit(s): 3.00

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. Methods for randomized trials, observational data collection and analysis, case studies, and reviews will be addressed. Students will develop a preliminary research proposal in this course.

RES 590 - Professional Development I

Credit(s): 1.00

This course provides students with skills, knowledge, and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning.

First-Year Fall Total Credits: 13

Winter

RES 501 - Journal Club

Credit(s): 1.00

In this course, students present and discuss recently published articles in natural medicine and health-related behaviors. *Note: MSiMR students are required to take two terms of Journal Club.*

RES 505 - Bioethics

Credit(s): 2.00

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 591 - Professional Development II

Credit(s): 2.00

This course provides students with a bridge from the academic program to career opportunities in their chosen field. Each program will tailor this course to best assist students to achieve employment and be able to sustain their career in the future. Students will be exposed to the various ways in which research may assist them in their future careers. In addition, students will decide on a topic for their own research, develop a contract with a faculty mentor, and begin conceptualizing what that research will look like. *Prerequisite(s): RES 590*

RES 600 - Biostatistics I

Credit(s): 2.00

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 610 - Technical Writing

Credit(s): 2.00

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.

- Elective **Credit(s): 2.00**

First-Year Winter Total Credits: 11

Spring

RES 531 - Integrative Medicine Research Seminar

Credit(s): 1.00

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. *Note: Additional fee required. May be taken a second time to replace one hour of electives.*

RES 601 - Biostatistics II

Credit(s): 3.00

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(s): RES 600*

RES 620 - Introduction to Laboratory Methods

Credit(s): 2.00

This course is aimed at familiarizing students with the methodology, data analysis, and critical literature evaluation of common laboratory techniques. Students will have hands-on exposure to a variety of lab techniques, including ELISA, flow cytometry, HPLC and cell culture, and will learn how these techniques are applied to answer a scientific question. In addition, students will read and critically evaluate primary research articles in order to advance their understanding of appropriate experimental design.

RES 630 - Public Health Policy

Credit(s): 2.00

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. *Prerequisite(s): RES 502*

RES 690 - Capstone Preparation: Literature Review and Experimental Design

Credit(s): 3.00

This course focuses on development of each student's specific research question. 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 will be guided by a mentor, develop a hypothesis, identify appropriate literature to support the structure of the proposed research, and develop a detailed experimental protocol for their research project. *Prerequisite(s): RES 530, RES 591*

First-Year Spring Total Credits: 11

First-Year Total Credits: 35

Second Year

Fall

GSN 507 - Fundamentals of Nutrition

Credit(s): 4.00

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. *Corequisite(s): GSN 508 is required for MScN students; not required for MSiMR students*

RES 691 - Capstone I: Research and Data Collection

Credit(s): 2.00 credits each

Capstone I focuses on the conductance of the MSiMR thesis project. During this course, students

work with their mentor to collect and analyze data, pursuant to the study protocol. Additional planning and design may be required, depending upon the complexity of the project.

Prerequisite(s): RES 690. Note: Must be repeated four (4) times for a total of eight (8) credits, and may be taken more than once in a single term.

RES 702 - Integrative Immunology

Credit(s): 3.00

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.

- Elective **Credit(s): 2.00**

Second-Year Fall Total Credits: 11

Winter

RES 501 - Journal Club

Credit(s): 1.00

In this course, students present and discuss recently published articles in natural medicine and health-related behaviors. *Note: MSiMR students are required to take two terms of Journal Club.*

RES 691 - Capstone I: Research and Data Collection

Credit(s): 2.00 credits each

Capstone I focuses on the conductance of the MSiMR thesis project. During this course, students work with their mentor to collect and analyze data, pursuant to the study protocol. Additional planning and design may be required, depending upon the complexity of the project.

Prerequisite(s): RES 690. Note: Must be repeated four (4) times for a total of eight (8) credits, and may be taken more than once in a single term.

- Elective **Credit(s): 3.00**

Second-Year Winter Total Credits: 10

Spring

GSGH 610 - Grant Writing

Credit(s): 2.00

This course teaches skills in grant proposal development. 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 grant proposals that are responsive to the stated interests of funding agencies. *Prerequisite(s): RES 610*

RES 692 - Capstone II: Thesis Writing and Defense

Credit(s): 2.00

Students use the data generated from their experiment to write a thesis and then defend the thesis in public and before a panel of three faculty members, including their mentor. Students will make a brief presentation of their thesis at the School of Graduate Studies Symposium held at the end of spring term of the year they will graduate. *Prerequisite(s): RES 691. Note: Must be repeated three (3) times for a total of six (6) credits, and may be taken more than once in a single term.*

- Elective **Credit(s): 2.00**

Second-Year Spring Total Credits: 10

Second-Year Total Credits: 31

Total Core Credits: 57

Total Elective Credits: 9

Total Required Credits: 66

*May be taken any term

Electives

Click here for a list of the available MSiMR electives.

Master of Science in Nutrition, MScN

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.

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 truer. 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.

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, chronic preventable diseases associated with lifestyle-related risk factors are on the 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 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-to-table, 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:

Outcome 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. Identify nutrients in foods and explain specific functions in maintaining health.
- c. Discuss basic human physiological mechanisms and pathophysiology.
- d. Detail biochemical pathways influenced by macro- and micronutrients.
- e. Correlate nutrition's influence on disease prevention and risk.

Outcome 2: Skills Expertise – Develop necessary tools to effectively apply nutrition knowledge in clinical, educational and culinary settings.

- a. Perform nutritional assessment including anthropometric, biochemical, clinical, and dietary evaluation.
- b. Perform effective nutrition counseling resulting in a client's successful implementation of lifestyle behavioral changes.
- c. Apply skills in cooking, recipe development and meal planning.
- d. Match nutritional therapies to medical diagnoses.
- e. Effectively communicate with healthcare practitioners, the scientific community, and the general public in written documents and oral presentations.
- f. Demonstrate how to locate, interpret, evaluate and use literature to make ethical evidence-informed practice decisions.

Outcome 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. Behave professionally in a manner that is empathic, ethical and culturally aware.
- d. Provide culturally competent nutrition services for individuals and communities.

Outcome 4: Personal and Professional Growth – Cultivate an ongoing practice of scholarly activity that promotes a career in a continually evolving profession.

- a. Understand one's professional role within the context of the broader nutrition and healthcare community.
- b. Recognize professional interests and communicate career goals.

Elective Courses

Nutrition students are required to complete 14 elective credits for the purpose of enhancing the breadth of their education. In addition to nutrition electives, students may also take graduate-level elective courses through the College of Naturopathic Medicine, College of Classical Chinese Medicine, and School of Undergraduate and Graduate Studies (as long as course prerequisites are met).

Students enrolled in concurrent programs are required to complete the number of elective credit hours of the program that has the greater number of electives between the two programs.

Program Tracks

Two Year (on campus or online)

This is the standard program track, beginning in fall of the first year and ending in spring of the second.

MScN Two-Year On-Ground Curriculum

[scroll down for the online track]

First Year

Fall

GSN 502 - Culinary Skills

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 507 - Fundamentals of Nutrition

Credit(s): 4.00

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. *Corequisite(s): GSN 508 is required for MScN students; not required for MSiMR students*

GSN 508 - Fundamentals of Nutrition Workshop

Credit(s): 1.00

This hands-on class emphasizes the objectives of macro- and micronutrient nutrition. Students learn through a variety of culinary experiments and case-based activities. *Corequisite(s): GSN 507 . Note: Additional fee required*

GSN 514 - Nutritional Biochemistry

Credit(s): 3.00

Learn the molecular, biochemical and metabolic characteristics of dietary nutrients, bioactive compounds in food, and the gut microbiota, with emphasis on their relationships and contributions to health and disease. Gain the core knowledge and key concepts related to the science of human nutrition, including enzyme kinetics, bioenergetics, the metabolic pathways, and the regulation of metabolism in different physiologic states.

GSN 516 - Pathophysiology

Credit(s): 3.00

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 590 - Professional Development I

Credit(s): 1.00

This course provides students with skills, knowledge and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning.

First-Year Fall Total Credits: 14

Winter

GSN 505 - Healing Foods I

Credit(s): 2.00

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. *Prerequisite(s): GSN 507. Corequisite(s): GSN 506*

GSN 506 - Healing Foods I Practicum

Credit(s): 2.00

This complementary course brings to life the content covered in the GSN 505 - Healing Foods I. Students will have hands-on experience preparing foods and meals that showcase their healing properties in creative ways. *Corequisite(s): GSN 505. Note: Additional fee required*

GSN 515 - Nutritional Assessment

Credit(s): 2.00

Learn clinical and dietary evaluations to determine an individual's nutritional status. Gain proficiency in clinical documentation; taking a medical and nutrition history, charting a SOAP note and determine the nutrition diagnosis matched to medical diagnoses. Perform nutrition physical exam; including dietary analysis, questionnaires and basic anthropometric measurements. Propose recommendations based on individual nutritional needs using evidence-based nutrition practice guidelines. Evaluate laboratory tests from urine, saliva or blood. Communicate nutrition therapy plans with primary care physicians or healthcare teams to ensure clear coordination of care. *Prerequisite(s): GSN 507, GSN 514, GSN 516*

GSN 536 - Gut Microbiome

Credit(s): 2.00

The microbiome/host relationship in human health is widely recognized. Microbiota impact nearly every aspect of human health. Yet, the diversity of microbes between individuals leaves us pondering how to best influence this health system. This course explores the ecology and evolution of the microbiome, how to measure the microbiome, and the relevance of microbial change. Students will examine the current research literature, discuss "-omics", and collect and analyze microbiome data.

First-Year Winter Total Credits: 8

Spring

GSN 524 - Medical Nutrition Therapy

Credit(s): 3.00

Examine nutritional concepts for specific disease states, including anemia, bone health, cancer, cardiovascular disease, gastrointestinal disorders, hypertension, metabolic dysregulation, and renal disease. Synthesize evidence-based medical and nutrition literature to determine which personalized nutrition plan to implement for each patient condition. *Prerequisite(s): GSN 507, GSN 515, GSN 516 Corequisite(s): GSN 529*

GSN 526 - Lifecycle Nutrition

Credit(s): 3.00

The specific nutritional needs and nutrition-related issues during various stages of the lifecycle are identified. Topics include preconception, pregnancy, lactation, childhood, adolescent, adulthood and geriatric nutrition. *Prerequisite(s): GSN 515, GSN 516*

GSN 528 - Health Coaching

Credit(s): 2.00

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 one-on-one and group coaching are highlighted. Practical application of the material is woven throughout the course.

GSN 529 - Applied Medical Nutrition Therapy

Credit(s): 2.00

In this experiential course, students develop recipes and menus, as well as prepare meals for specific medical conditions. *Corequisite(s): GSN 524. Note: Additional fee required*

First-Year Spring Total Credits: 10

First-Year Totals: 32

Second Year

Summer

GSN 503 - Farm to Table

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 591 - Professional Development II

Credit(s): 2.00

This course provides students with a bridge from the academic program to career opportunities in the field of nutrition. *Prerequisite(s): GSN 590*

- Electives **Credit(s): 4.00**

Second-Year Summer Total Credits: 8

Fall

GSN 517 - Psychology of Eating

Credit(s): 2.00

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. *Prerequisite(s): GSN 507, GSN 516*

GSN 534 - Cultural Humility and Food Justice

Credit(s): 2.00

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 563 - Business of Nutrition

Credit(s): 2.00

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 690 - Capstone Preparation

Credit(s): 1.00

This course assists students in finding an appropriate capstone project, either an internship or directed study. If the capstone experience is to be an internship, students are taught how to properly carry out the activity, make the connection with the host site, and select a mentor to guide the process. If the capstone experience is to be a directed study, students are taught how to properly develop their project proposal and select a mentor to guide the process. *Prerequisite(s): or corequisite: GSN 591*

Second-Year Fall Total Credits: 7

Winter

GSN 691 - Capstone I: Internship

Credit(s): 2.00

This course operationalizes the student's approved capstone project as an internship. The student may substitute GSN 697 - Capstone I: Directed Study to meet the Capstone I requirement. *Prerequisite(s): GSN 690*

or

GSN 697 - Capstone I: Directed Study

Credit(s): 2.00

This version of Capstone I allows students to design their own capstone project to meet their specific employment goals. They must develop a directed study proposal, obtain the consent of a faculty member to serve as their mentor during the directed study, and then carry out the activities necessary to attain the learning objectives they have developed in the directed study proposal. *Prerequisite(s): GSN 690. Note: May be taken to meet the Capstone I requirement in place of GSN 691*

- Electives **Credit(s): 6.00**

Second-Year Winter Total Credits: 8

Spring

GSN 509 - Community Nutrition and Food Policy

Credit(s): 3.00

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. *Prerequisite(s): GSN 534*

GSN 692 - Capstone II: Internship

Credit(s): 2.00

In this course, students continue in their approved capstone project. Students will give an oral presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSN 691. Note: Students who took GSN 697 - Capstone I: Directed Study to meet their capstone requirement should register for GSN 698 - Capstone II: Directed Study to complete their capstone experience.*

or

GSN 698 - Capstone II: Directed Study

Credit(s): 2.00

In this course, students continue in their approved capstone project. Student will give an oral presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSN 697*

- Electives **Credit(s): 4.00**

Second-Year Spring Total Credits: 9

Second-Year Totals: 32

Total Core Credits: 50

Total Elective Credits: 14

Total Required Credits: 64

MScN Online Curriculum

First Year

Fall

GSNO 514 - Nutritional Biochemistry

Credit(s): 3.00

Learn the molecular, biochemical and metabolic characteristics of dietary nutrients, bioactive compounds in food, and the gut microbiota, with emphasis on their relationships and contributions to health and disease. Gain the core knowledge and key concepts related to the science of human nutrition, including enzyme kinetics, bioenergetics, the metabolic pathways, and the regulation of metabolism in different physiologic states. *Note: For online MScN cohort students only*

GSNO 516 - Pathophysiology

Credit(s): 3.00

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. *Note: For online MScN cohort students only*

GSNO 584 - Fundamentals of Nutrition

Credit(s): 5.00

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. This course includes a hands-on component emphasizing the objectives of macro- and micronutrient nutrition. Students will learn through a variety of culinary experiments and case-based activities. *Note: For online MScN students only*

GSNO 590 - Professional Development I

Credit(s): 1.00

This course provides students with skills, knowledge and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning. *Note: For online MScN cohort students only*

First-Year Fall Total Credits: 12

Winter

GSNO 502 - Culinary Skills

Credit(s): 2.00

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. *Note: For online MScN cohort students only*

GSNO 515 - Nutritional Assessment

Credit(s): 2.00

Learn clinical and dietary evaluations to determine an individual's nutritional status. Gain proficiency in clinical documentation; taking a medical and nutrition history, charting a SOAP note and determine the nutrition diagnosis matched to medical diagnoses. Perform nutrition physical exam; including dietary analysis, questionnaires and basic anthropometric measurements. Propose recommendations based on individual nutritional needs using evidence-based nutrition practice guidelines. Evaluate laboratory tests from urine, saliva or blood. Communicate nutrition therapy plans with primary care physicians or healthcare teams to ensure clear coordination of care. *Prerequisite(s): GSNO 514, GSNO 516, GSNO 584. Note: For online MScN cohort students only*

GSNO 536 - Gut Microbiome

Credit(s): 2.00

The microbiome/host relationship in human health is widely recognized. Microbiota impact nearly every aspect of human health. Yet, the diversity of microbes between individuals leaves us pondering how to best influence this health system. This course explores the ecology and evolution of the microbiome, how to measure the microbiome, and the relevance of microbial change. Students will examine the current research literature, discuss "-omics", and collect and analyze microbiome data. *Note: For online MScN cohort students only*

GSNO 585 - Healing Foods

Credit(s): 4.00

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. Students will have hands-on experience preparing foods and meals that showcase their healing properties in creative ways. *Prerequisite(s): GSNO 584. Note: For online MScN students only*

First-Year Winter Total Credits: 10

Spring

GSNO 526 - Lifecycle Nutrition

Credit(s): 3.00

The specific nutritional needs and nutrition-related issues during various stages of the lifecycle are identified. Topics include preconception, pregnancy, lactation, childhood, adolescent and geriatric nutrition. *Prerequisite(s): GSNO 515, GSNO 516. Note: For online MScN cohort students only*

GSNO 528 - Health Coaching

Credit(s): 2.00

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 one-on-one and group coaching are highlighted. Practical application of the material is woven throughout the course. *Note: For online MScN cohort students only*

GSNO 586 - Medical Nutrition Therapy

Credit(s): 5.00

Examine nutritional concepts for specific disease states, including anemia, bone health, cancer, cardiovascular disease, gastrointestinal disorders, hypertension, metabolic dysregulation, and renal disease. Synthesize evidence-based medical and nutrition literature to determine which personalized nutrition plan to implement for each patient condition. Students develop recipes and menus, as well as prepare meals for specific medical conditions. *Prerequisite(s): GSNO 515, GSNO 516. Note: For online MScN students only*

First-Year Spring Total Credits: 10

First-Year Totals: 32

Second Year

Summer

GSNO 503 - Farm to Table

Credit(s): 2.00

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. *Note: For online MScN cohort students only*

GSNO 591 - Professional Development II

Credit(s): 2.00

This course provides students with a bridge from the academic program to career opportunities in the field of nutrition. *Prerequisite(s): GSNO 590. Note: For online MScN cohort students only*

- Electives **Credit(s): 4.00**

Second-Year Summer Total Credits: 8

Fall

GSNO 517 - Psychology of Eating

Credit(s): 2.00

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. *Prerequisite(s): GSNO 516, GSNO 584. Note: For online MScN cohort students only*

GSNO 534 - Cultural Humility and Food Justice

Credit(s): 2.00

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. *Note: For online MScN cohort students only*

GSNO 563 - Business of Nutrition

Credit(s): 2.00

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. *Note: For online MScN cohort students only*

GSNO 690 - Capstone Preparation

Credit(s): 1.00

This course assists students in finding an appropriate capstone project, either an internship or directed study. If the capstone experience is to be an internship, students are taught how to properly carry out the activity, make the connection with the host site, and select a mentor to guide the process. If the capstone experience is to be a directed study, students are taught how to properly develop their project proposal and select a mentor to guide the process. *Prerequisite(s): or corequisite: GSNO 591. Note: For online MScN cohort students only*

Second-Year Fall Total Credits: 7

Winter

GSNO 509 - Community Nutrition and Food Policy

Credit(s): 3.00

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. *Prerequisite(s): GSNO 534. Note: For online MScN cohort students only*

GSNO 691 - Capstone I: Internship

Credit(s): 2.00

This course operationalizes the student's approved capstone project as an internship. Students may also substitute GSNO 697 - Capstone I: Directed Study to meet the Capstone I requirement. *Prerequisite(s): GSNO 690. Note: For online MScN cohort students only*
or

GSNO 697 - Capstone I: Directed Study

Credit(s): 2.00

This version of Capstone I allows students to design their own capstone project to meet their specific employment goals. Students must develop a directed study proposal, obtain the consent

of a faculty member to serve as their mentor during the directed study, and then carry out the activities necessary to attain the learning objectives they have developed in the directed study proposal. *Prerequisite(s): GSNO 690. Note: For online MScN cohort students only. May be taken to meet the Capstone I requirement in place of GSNO 691.*

- Electives **Credit(s): 4.00**

Second-Year Winter Total Credits: 9

Spring

GSNO 692 - Capstone II: Internship

Credit(s): 2.00

In this course, students continue in their approved capstone project. Students will give an oral, virtual presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSNO 691. Note: For online MScN cohort students only*
or

GSNO 698 - Capstone II: Directed Study

Credit(s): 2.00

In this course, students continue in their approved capstone project. Students will give an oral presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSNO 697. Note: For online MScN cohort students only. May be taken to meet the Capstone II requirement in place of GSNO 692.*

- Electives **Credit(s): 6.00**

Second-Year Spring Total Credits: 8

Second-Year Totals: 32

Total Core Credits: 50

Total Elective Credits: 14

Total Required Credits: 64

Electives

[Click here for a list of the available MScN electives.](#)

Course Descriptions

Acu-Moxa

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.

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 qigong component in the belief that good acupuncture is dependent on the practitioner's awareness of, and sensitivity to, qi.

CM 54E - Facial Acupuncture

Credit(s): 2.00

This class introduces facial acupuncture and cupping for the Chinese medicine practitioner. A review of the facial muscles, motor points, and channels that pass through the face will help students to understand the mechanism of action; and safe practices and reasonable expectations are discussed. Pattern differentiation is reviewed using channel theory and five-element theory as it specifically applies to treatment through the regions of the face. Finally, formulating for the specific skincare needs of the patient will be covered. *Note: Additional fee required*

CM 74E - Advanced Point Location and Techniques I

Credit(s): 1.50

Students advance their acupuncture skills through a combined didactic and practical approach to anatomically based point location and needling. *Prerequisite(s): CM 634*

CM 84E - Advanced Point Location and Techniques II

Credit(s): 1.50

These courses combine a didactic and practical approach to anatomically based point location and

needling. *Prerequisite(s): CM 74E*

CM 513 - Acu-Moxa Points I (Point Actions)

Credit(s): 2.00

Acu-Moxa Points and Techniques I-II 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(s): Concurrent enrollment in CM 514 (Tech I)*

CM 514 - Acu-Moxa Techniques I (Point Location)

Credit(s): 1.50

Acu-Moxa Points and Techniques I-II 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 practice locating points on their classmates, with a focus on the development of skills that will bring clinical success and patient satisfaction. Classical approaches from source texts are integrated into the class. These classes build a foundation for life-long learning through independent investigation using all senses and a reasoned evaluation of different opinions. *Corequisite(s): Concurrent enrollment in CM 513.*
Note: Additional fee required

CM 523 - Acu-Moxa Points II (Point Actions)

Credit(s): 2.00

Acu-Moxa Points and Techniques I-II 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. The meridian and acupoint system of Chinese medicine lay out a treatment modality that is both profound and therapeutically effective for a wide range of health conditions. *Prerequisite(s): CM 513 and CM 514 (Pts & Tech I). Corequisite(s): Concurrent enrollment in CM 524 (Tech II)*

CM 524 - Acu-Moxa Techniques II (Point Location)

Credit(s): 1.50

Acu-Moxa Points and Techniques I-II 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 practice locating points on their classmates, with a focus on the development of skills that will bring clinical success and patient satisfaction. Classical approaches from source texts are integrated into the class. These classes build a foundation for life-long learning through independent investigation using all senses and a reasoned evaluation of different opinions. *Prerequisite(s): CM 514. Corequisite(s): Concurrent enrollment in CM 523. Note: Additional fee required*

CM 533 - Acu-Moxa Points III

Credit(s): 2.00

Students study the "extra points," and apply their knowledge of point location and action to the creation of individualized treatment protocols that consider the use of acupuncture and the full array of non-needle techniques, including moxibustion, cupping, guasha, magnets, beads and microneedles. The course also introduces classical methods of needling. Rigorous application of classical texts gives foundations for more painless and effective techniques. Classical freehand needling and tube techniques are a focus of this term, along with the development of patient comfort and practitioner confidence. This course sets the stage for advanced classical needle techniques and more challenging points in the following year. *Prerequisite(s): CM 523. Corequisite(s): Concurrent enrollment in CM 534*

CM 534 - Acu-Moxa Techniques III

Credit(s): 2.00

In this hands-on complement to Acu-Moxa Points III, students learn to become competent practitioners of manual therapies while applying the depth of classical Chinese literature. The course develops non-needle and simple needle techniques under supervision while emphasizing clean needle technique and proper draping and body positioning. Students witness and then use acupuncture and the full array of non-needle techniques, including moxibustion, cupping, guasha, magnets and beads. This practicum also introduces classical free hand and gentle tube insertion needling techniques, setting the stage for advanced classical needle techniques and more challenging points to be learned in subsequent courses. *Prerequisite(s): CM 524. Corequisite(s): Concurrent enrollment in CM 533. Note: Additional fee required. The Clean Needle Technique course offered by CCAOM is also required.*

CM 613 - Acu-Moxa Points IV

Credit(s): 2.00

In this course, students learn how to understand and apply the Jingluo theory as a whole. Following an in-depth discussion on the constitution and construction of the Jingluo theory, the characteristics of Biaoben, Genjie, Qijie and Sihai will be compared to the 12 regular meridians, 12 divergent channels, 12 cutaneous zones, 12 sinews, 15 collaterals, and 8 extra meridians. Students learn the physiological functions of the Jingluo system, along with associated pathological phenomenon and specific needling/moxibustion techniques for resolving pathological patterns. The class also explores how to prevent needling accidents and resolve needling injury. As a highlight of the class, students are guided to gain an embodied understanding of Shen Anchoring and Deqi.

Additional topics include a consideration of the relationship between acupuncture points and herbs; the integration of herbal prescription into acupuncture treatment protocols; the "dose" of acupuncture associated with different needling techniques; and an overview of the acupuncture classic *Biao You Fu* (Ode to Elucidate Mysteries), written by Dou Hanqing during the Jin-Yuan dynasty. *Prerequisite(s): CM 533. Corequisite(s): Concurrent enrollment in CM 614*

CM 614 - Acu-Moxa Techniques IV

Credit(s): 2.00

In the practical complement to CM 613 - Acu-Moxa Points IV, 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(s): CM 534. Corequisite(s): Concurrent enrollment in CM 613. Note: Additional fee required*

CM 623 - Acu-Moxa Points V

Credit(s): 2.00

This course focuses on point prescriptions designed to address diseases and symptoms that are commonly seen in a clinical setting. Class discussions focus on basic principles of point combination and compatibility, 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(s): CM 613. Corequisite(s): Concurrent enrollment in CM 624*

CM 624 - Acu-Moxa Techniques V

Credit(s): 2.00

Needling practice continues with a focus on the 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. Students develop the ability to apply all techniques accurately and safely on any body. Through demonstration and practice, this course cultivates the clinical ability to diagnose and treat disease conditions using the concepts of classical Chinese medicine. *Prerequisite(s): CM 614. Corequisite(s): Concurrent enrollment in CM 623. Note: Additional fee required*

CM 633 - Acu-Moxa Points VI

Credit(s): 2.00

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. Students deepen their understanding of disease diagnosis, etiology and pathogenesis, and develop an overall understanding of syndrome differentiation, acupuncture treatment principles, acupuncture prescriptions, point selection, and acupuncture techniques from a classical Chinese medicine perspective. The focus is on cultivating the clinical ability to treat common diseases, some miscellaneous diseases, and gynecological conditions. *Prerequisite(s): CM 623. Corequisite(s): Concurrent enrollment in CM 634*

CM 634 - Acu-Moxa Techniques VI

Credit(s): 2.00

This practicum continues to build on previously learned needling techniques, with a focus on scalp and ear acupuncture. Students are supported to master their connection with the needle and their qi. *Prerequisite(s): CM 624, CM 663. Corequisite(s): Concurrent enrollment in CM 633. Note: Additional fee required*

CM 663 - Auricular Points

Credit(s): 1.25

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 as auricular medicine. Students utilize ear seeds and pellets, as well as ear needles to learn the individual points of the ear. *Note: Additional fee required*

CM 714 - Advanced Acu-Moxa Techniques I

Credit(s): 1.50

In this first of a two-course series, 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. There is a particular focus 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 using muscle motor points, trigger points, and traditional Chinese medical points are practiced.

Prerequisite(s): CM 634. Note: Additional fee required

CM 724 - Advanced Acu-Moxa Techniques II

Credit(s): 1.50

In this second of a two-part series, students continue to 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. There is a particular focus 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 using muscle motor points, trigger points, and traditional Chinese medical points are practiced.

Prerequisite(s): CM 714. Note: Additional fee required

CM 813 - Acu-Moxa Board Review

Credit(s): 1.00

This course is offered in the spring term of the final year in preparation for the NCCAOM board exams (Foundations of Oriental Medicine and Acupuncture with Point Location). The course outlines the national certification and state licensure processes, as well as essential resources and study strategies for the board exams. Topics are covered through lectures, quizzes and discussions. *Prerequisite(s): CM 724*

Ayurveda

GSA 530E - Panchakarma

Credit(s): 2.00

Panchakarma is the Ayurvedic approach to detoxification, cleansing of the body and mind for rejuvenation and treatment of disease. This course provides an overview of the philosophy and types of Panchakarma. Indications, contraindications, and the preparatory process for Panchakarma therapy will be covered. The modalities explored in this course include: personalized application of whole-body massage (oleation therapy), Udvartana (massage with dry

herbal powder), Kati Basti, Griva Basti, Janu Basti, Pinda Swedana (hot pack-sudation therapy) technique, Virechana (purging), and Nasya (nasal drops). *Note: Additional fee required*

GSA 541E - Tridosha

Credit(s): 2.00

This course methodically explains Tridosha: Vata, Pitta and Kapha (also known as "bio energies" in the Ayurvedic tradition). Tridosha is the important concept of Ayurvedic philosophy. The course provides an overview of the role of each of the Tridosha in the context of health and management of health and the role of dosha with the formation, progression and treatment of disease in the selected context. The relationship of Tridosha with food, digestion, formation of body type, age, and time of day, seasons, emotions and spiritual aspects will also be emphasized in this course. *Note: Additional fee required*

GSA 542E - Ayurvedic Nutrition

Credit(s): 2.00

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 will also be explored. The course provides hands-on experience with Ayurvedic cooking and nutrition counseling. *Note: Additional fee required*

GSA 543E - Ayurvedic Herbs

Credit(s): 2.00

The course surveys the basic principles of Ayurvedic botanicals. It introduces students to taste, properties, energies, selected Ayurvedic classification and actions, and effect on doshas with study of selected individual herbs. Dosage and the essential carrier medium consumed along with the herb are covered. The course will also provide a brief introduction of making selected forms of herbal preparations including dry powder, juice, pulp, and decoctions from selected herbs. *Note: Additional fee required*

GSA 544E - Ayurvedic Yoga

Credit(s): 2.00

This course examines yoga and its eight limbs with Ayurvedic perspective. Through instruction and practice, the application of various aspects of yoga as modalities in the Ayurvedic practice (with their indications and contraindications for Tridosha-wise body types, conditions of balance

and imbalance), for the objective of conservation of health, and prevention and pacification of disorders, will be explored. Selected practices of asana, mantra, mudra, bandha, breathing technique, and meditation will be covered.

GSA 545E - Philosophy of Ayurveda

Credit(s): 2.00

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 Panchamahabhoota (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 Dhātu (body tissue), Malas (body wastes), Gunas (universal qualities of matter), Agni (transformation), tastes and the digestive process are also covered.

GSA 622E - Ayurvedic Dietetics Practicum

Credit(s): 0.50

This course is a hands-on experience with selected Ayurvedic techniques of cooking for therapeutic diets, and cooking according to body type and season to evaluate the effect of food on the mind, body and spirit. Students will practice Ayurvedic regimen, mantras and rituals related to the consumption of food, along with mindful eating. *Note: Additional fee required*

CCM Biomedical Sciences

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

CM 599 - Evidence-Informed Practice

Credit(s): 2.00

This course builds students' research literacy skills. In order to become successful, holistic practitioners, students learn to read and critically evaluate medical literature, and to weigh this evidence with clinical experience and patient values when making clinical decisions. Students learn 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 - Biomedicine I

Credit(s): 2.00

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 develop the ability to integrate biomedical and classical Chinese medical concepts regarding disease processes, and to view biomedical knowledge from the perspective of whole-systems 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(s): these courses are to be taken in the ordered sequence*

CM 627 - Biomedicine II**Credit(s): 4.00**

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine II compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of gastrointestinal, hepato-biliary, and pancreatic disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM 637 - Biomedicine III**Credit(s): 4.00**

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine III compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of renal, adrenal, urogenital, and reproductive disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM 657 - Acu-Moxa Anatomy I

Credit(s): 1.25

In this course, students develop clinically applicable anatomical knowledge that will help them not only locate, but also understand the structural relationships and physical parameters related to needling techniques of the acupuncture points. Students learn to describe the six upper limb channels: HT, PC, LU, SI, LI, TE, plus Ren, Du and upper BL channels in terms of their anatomical relationships to the pertinent bones, muscles, major nerves and blood vessels.

Corequisite(s): Concurrent enrollment in CM 614. Note: Additional fee required

CM 667 - Acu-Moxa Anatomy II

Credit(s): 1.25

In this course, students develop clinically applicable anatomical knowledge that will help them not only locate, but also understand the structural relationships and physical parameters related to needling techniques of the acupuncture points. Students learn to describe the six lower limb channels (SP, KI, LV, BL, GB, ST) and abdominal and lower back channels in terms of their anatomical relationships to the pertinent bones, muscles, major nerves and blood vessels.

Prerequisite(s): CM 657. Corequisite(s): Concurrent enrollment in CM 624. Note: Additional fee required

CM 699 - Immunology

Credit(s): 3.00

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 717 - Biomedicine IV

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. In this fourth course of a six-course series, students explore the nervous and sensory systems. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. The goal of this course is to enable students of Chinese medicine to cultivate a broad understanding of conventional biomedical sciences, which will be useful in their future clinical training. *Prerequisite(s): these courses are to be taken in the ordered sequence*

CM 727 - Biomedicine V

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine V compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. In this fifth course of a six-course series, students learn the anatomy, physiology, pathology, diagnostic assessment, and biomedical treatments for the respiratory, thyroid-parathyroid, cardiovascular, and hematological systems. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): these courses are to be taken in the ordered sequence*

CM 737 - Biomedicine VI

Credit(s): 4.00

This course is designed to enable students of Chinese medicine to develop clinically applicable knowledge of Western biomedical sciences. Biomedicine VI compares Chinese and Western medical aspects of what can be observed in a patient and how this can be interpreted in light of Western medical theory. This course focuses on the anatomy, physiology, pathology, and biomedical assessment and treatment of dermatological and musculoskeletal disorders. Through lecture and class discussion, biomedical concepts are applied and integrated with physiological concepts prevalent in classical Chinese medicine. Possible correspondences will be examined between the Western concepts of cell and tissue physiology, and the Chinese concepts of Jing and Qi. *Prerequisite(s): these courses are to be taken in the ordered sequence*

CM 777 - Clinical and Physical Diagnosis

Credit(s): 1.50

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

Credit(s): 2.00

This introduction to nutrition explores the current scientific perspective of diet, individual nutrients, and their relationship to health and disease. The course covers the basics of individual

nutrients and how they relate to a whole-food diet, current topics in nutrition, as well as an exploration of how modern nutrition science relates to classic theories in Chinese medicine.

CM 817 - Physiology of Acupuncture

Credit(s): 1.00

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. Attention will be paid to acupuncture point and meridian structure, as it holds the key to one of the most effective means of practice, and provides insight into how acupuncture is likely to have been discovered and developed. Students learn several practical methods related to the topics covered. They also gain a better understanding of the biological utility of acupuncture network components, and explore why the physiological mechanisms underlying acupuncture action have been preserved in almost every genera of animal life for over 200 million years of evolution.

CM 889 - Race and Disparities in Health Care

Credit(s): 2.00

This course provides an overview of health disparities along racial and ethnic categories. Students learn how political, economic and social contexts shape health, access to health care, and the quality of care across racial and ethnic groups. This course also explores the socio-scientific processes that have privileged "innate" difference as explanations for inequality and marginalization; and examine ways in which "race" intersects with other categories of difference, such as gender, class, sexuality and religion to impact one's health and one's access to health care.

CM* 537 - CCM View of Biomedicine

Credit(s): 1.00

The content of this course considers Eastern versus Western epistemology, and deepens the student's understanding of how the information presented in the biomedicine series can be viewed from the perspective of CCM. It explores how these complementary medical approaches can inspire and inform each other to achieve a collaborative, patient-centered, and highly effective system of health care.

CM* 857 - Eastern and Western Correspondences

Credit(s): 2.00

This course aims to help students integrate their training in classical Chinese medicine with modern biomedicine. Through lecture and discussion, students explore the connections between

Zang-Fu patterns, biomedical organ systems, and current concepts in neuro-endocrine-immunology. Cases representing common clinical conditions encountered by Chinese medicine practitioners are discussed.

CCM Clinical Training

CM 500 - Pre-Observation Rotation

Credit(s): 1.00

Students have their first exposure to working in the NUNM Health Centers through a first-year Clinical Observation experience.

CM 530 - Introduction to Clinic

Credit(s): 1.50

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. *Note: Additional fee required*

CM 600 - Clinical Observation

Credit(s): 2.00

Students receive lineage-based training that emphasizes transmission and mentoring as major methods for promoting personal and professional cultivation, *and patient care informed by the principles and philosophy of classical Chinese medicine*. Clinic rotations provide students with opportunities to broaden and strengthen their clinical skill within the context of diverse pathologies, patient populations, and uniquely individualized treatments. Students are expected to demonstrate competence of entry-level knowledge and skills in Chinese diagnostic techniques, acupuncture, herbal medicine, Asian bodywork, qigong, Chinese dietetics, and lifestyle counseling. Clinic rotations prepare students both for the national licensing exams and their future roles as healthcare professionals.

Clinical observation rotations provide a forum in which five observers watch a seasoned clinical supervisor in session with a client. The focus is on the behavioral and procedural aspects of the therapeutic encounter. Students observe effective treatment, engage in the patient-practitioner relationship with appropriate boundaries, apply interview skills when directed by the supervisor, examine the patient for vitals, practice the pillars of classical Chinese diagnosis, and uphold modern integrative standards of care. They also create patient timelines for case reports.

Prerequisite(s): Students must be CPR certified, have passed the CNT course, and have completed CM 530. Note: 3 required shifts

CM 600E - Clinical Observation Elective

Credit(s): 2.00

Elective clinic rotations are designed to expand the clinical opportunities available to students. They may increase the number of rotations that can be offered at community clinic sites and/or focus on a supervisor's particular area of interest, such as shiatsu, facial acupuncture, or auricular acupuncture. *Prerequisite(s): Second-year status*

CM 700 - Clinical Mentoring Rotations

Credit(s): 2.00 credits each

Clinical Mentoring Rotations have the same structure as Clinical Observation Rotations, with the addition that students become more directly involved in patient intake, diagnosis and treatment under the direct guidance of their clinical supervisor. The focus is on the procedural and treatment aspects of the therapeutic encounter. Students learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, integrate subjective signs with objective findings in classical Chinese medical diagnosis, and work closely under supervision alongside a practitioner to collaboratively perform treatment. Using cases from their clinical experience, students learn how to create a meaningful case report. *Note: 6 required rotations*

CM 700E - Clinical Mentorship Elective

Credit(s): 2.00

Elective clinic rotations are designed to expand the clinical opportunities available to students. They may increase the number of rotations that can be offered at community clinic sites and/or focus on a supervisor's particular area of interest, such as shiatsu, facial acupuncture, or auricular acupuncture. *Prerequisite(s): Third-year status*

CM 710 - Clinical Case Presentation I

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical

Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

CM 720 - Clinical Case Presentation II

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

CM 730 - Clinical Case Presentation III

Credit(s): 1.00

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. The types of cases examined and discussed include the following: patient cases encountered on clinical mentorship shifts, teaching cases presented by the instructor, and live cases facilitated in the classroom. Rather than simply reviewing what the practitioner did, this class considers each case from a variety of classical Chinese medical perspectives. Students bridge their understanding of Chinese cosmology to an exploration of the case from zang-fu, six conformation, and five-element lenses, thereby connecting the classroom education to the clinical realm. *Prerequisite(s): Third-year status*

CM 770 - Clinical Pre-Internship Rotation

Credit(s): 1.00

In the pre-internship rotations, students spend six weeks learning the role and responsibilities of the intern as they follow and support the interns who are preparing to graduate. Pre-interns continue to learn and use the lineage model, observe effective treatment, uphold integrative medical standards through electronic charting, and integrate subjective signs with objective findings in classical Chinese medical diagnosis. *Prerequisite(s): Completion of at least two clinical mentoring rotations*

CM 800 - Clinical Internship Rotations

Credit(s): 2.00 credits each

Clinical internship rotations focus on all aspects of the therapeutic encounter with special attention to the arc of patient care management, including interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standards of care expected of a licensed practitioner. In the first quarter of clinical internship, interns are paired and needle insertions are directly supervised. Students continue to work under supervision as they gain clinical competence and confidence. By the end of the year, students have produced a case report based on their own patient encounters. *Prerequisite(s): Students must be CPR certified. Note: 9 required rotations*

CM 800E - Clinical Internship Elective

Credit(s): 2.00

Elective clinic rotations are designed to expand the clinical opportunities available to students. They may increase the number of rotations that can be offered at community clinic sites and/or focus on a supervisor's particular area of interest, such as shiatsu, facial acupuncture, or auricular acupuncture. *Prerequisite(s): Fourth-year status*

CM 800H - Clinical Internship Holiday Requirement

Credit(s): None

Students are required to do 24 hours (six individual shifts) of clinical internship during designated holiday periods.

CM 810 - Internship Case Presentation I

Credit(s): 1.00

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(s): Intern status*

CM 820 - Internship Case Presentation II

Credit(s): 1.00

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(s): Intern status*

CM 830 - Internship Case Presentation III

Credit(s): 1.00

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(s): Intern status*

CM 900 - Collaborative Care Rotation

Credit(s): 2.50

In the collaborative care rotation, DSOM interns and their CCM supervisor collaborate with naturopathic primaries and their ND supervisor to provide patient-centered care focused on the non-opioid treatment of pain. Students are provided with opportunities to broaden and strengthen their clinical skills within the context of diverse pain pathologies, patient populations, and uniquely individualized treatments. All aspects of the therapeutic encounter are addressed and assessed—with special attention to the arc of patient care management, interviewing and assessment, clinical reasoning, therapeutics, integrative medical systems, and the standard of care expected of a licensed practitioner. *Prerequisite(s): Intern status. Note: May be taken any term in 4th year*

CM 930 - Collaborative Care Case Presentation

Credit(s): 1.00

This specialized version of the Internship Case Presentation course allows students to focus on issues of systems-based and inter-professional care as they relate to patients the students have co-treated with other medical practitioners in a collaborative setting. *Prerequisite(s): /Corequisite(s): CM 900*

CCM Foundations

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

CM 01E - China Trip

Credit(s): 5.50

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(s): Second-year standing. Note: Additional fee required

CM 11E - Bazi Suanming I

Credit(s): 1.50

The Bazi Suanming series provides 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. In courses I and II, 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. *Note: Additional fee required*

CM 21E - Bazi Suanming II

Credit(s): 1.50

The Bazi Suanming series provides 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. In courses I and II, 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.

CM 31E - Qimen Dunjia

Credit(s): 3.00

Qimen dunjia complements the *bazi suanming* in using the heavenly stems and earthly branches to understand a person's strengths and weaknesses, as well as their predisposition to certain types of disease. Originally developed as a system of military strategy, *qimen dunjia* can be used to predict what choices an individual can make to support their health and well-being. It is particularly useful when making lifestyle choices related to location and direction. *Note: Additional fee required*

CM 41E - Bazi Suanming III

Credit(s): 1.50

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. In courses III and IV, students develop a deeper understanding of psychological disharmonies and relationship dynamics, respectively.

CM 51E - Bazi Suanming IV

Credit(s): 1.50

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. In courses III and IV, students develop a deeper understanding of psychological disharmonies and relationship dynamics, respectively.

CM 502 - Professional Development

Credit(s): 1.00

This course introduces students to the history and faculty of their program, and cultivates skills needed to successfully navigate their journey at NUNM. Topics include critical thinking, learning strategies, professional personae, stress reduction, and self-regulation.

CM 511 - Foundations of Classical Chinese Medicine I

Credit(s): 2.00

This course introduces students to the common principles that underlie all traditional nature sciences, as observed from the specific perspective of classical Chinese medicine. Core concepts 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. *Note: May be taken concurrently with CM 521*

CM 512 - Chinese History and Culture I

Credit(s): 1.50

These courses present 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(s): These courses are to be taken in the ordered sequence

CM 521 - Foundations of Classical Chinese Medicine II

Credit(s): 2.00

The second in a series of three courses on the foundations of classical Chinese medicine, this course introduces students to the basic anatomy and physiology of the body as understood by

classical Chinese medicine. Definitions, functions and interactions between the functional systems of the *zàng* and *fù* organs are covered, as are the extraordinary organs and additional unique aspects of Chinese medicine anatomy. *Note: May be taken concurrently with CM 511*

CM 531 - Foundations of Classical Chinese Medicine III

Credit(s): 2.00

This third course of the series introduces students to basic channel anatomy and physiology. Students learn the structures, levels and pathways of the energetic web interpenetrating the body, as well as their functions and interactions. The relationships between the organs and the channels will be considered to elucidate how the two systems work together to support the vitality and working functionality of a human being. *Prerequisite(s): CM 511, CM 521*

CM 562 - Chinese Diagnostic Techniques I

Credit(s): 1.50

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 introduces the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. 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 (*shiwèn*), are also practiced in class.

CM 572 - Chinese Diagnostic Techniques II

Credit(s): 1.50

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 introduces the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. 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 (*shiwèn*), are also practiced in class.

CM 611 - Chinese Organ Systems: Cosmology and Symbolism I

Credit(s): 2.00

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(s): Second-year status*

CM 612 - Chinese Pathology I

Credit(s): 2.00

In this course, students develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the Classical medical model. The models explored in this course include yin/yang, sanyin, bagang and liuqi. For the first few weeks, Zang Organs will be the focus. In the following half of the term, the Six Conformation model will be the focus of exploration. *Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence*

CM 621 - Chinese Organ Systems: Cosmology and Symbolism II

Credit(s): 2.00

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(s): Second-year status*

CM 622 - Chinese Pathology II

Credit(s): 2.00

In this course, students develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the classical medical model. The models explored in this course include yin/yang, Open-Close-Pivot and Biao-Ben Zhong Qi Dynamic model, bagang and liuqi. The Six Conformation model is the focus of exploration.

Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence

CM 631 - Chinese Organ Systems: Cosmology and Symbolism III

Credit(s): 2.00

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(s): Second-year status*

CM 632 - Chinese Pathology III

Credit(s): 2.00

In this course, students continue to develop an overall understanding of the inherent logic that governs the sophisticated science of pathophysiology according to the classical medical model. The models explored in this course include yin/yang, Open-Close-Pivot and Biao-Ben Zhong Qi Dynamic model, bagang and liuqi. The Six Conformation model continues as the focus, along with an exploration of the Wen Bing and Nineteen Lines (SW 74). *Prerequisite(s): Second-year status; these courses are to be taken in the ordered sequence*

CM 712 - Clinical Medicine I

Credit(s): 4.00

The Clinical Medicine I-III series builds upon foundational material in the development of clinical reasoning. It address disease etiology, pattern differentiation and treatment strategies, including a focus on prognosis, long-term case management, referral and co-management, and issues of cultural literacy. The series takes a systematic and integrative approach to all major

areas of the body (organized by upper, middle, and lower jiao) and the conditions associated with them. Particular attention is given to the pathological categories more commonly seen in practice in the US, as well as the diseases internationally recognized to be global epidemics. Patient cases are viewed through multiple lenses (including biomedicine, TCM and CCM) using the classical texts of Chinese medicine as the primary source of guidance. In addition to lectures and case discussion, there are monthly clinical theaters in which multiple faculty compare and contrast their lineage approaches to diagnosis and treatment. Clinical Medicine I begins with an emphasis on *bian bing* that occur in the upper jiao, including everything from sinusitis and headaches to neurology, depression and dermatology. *Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence*

CM 722 - Clinical Medicine II

Credit(s): 4.00

The second course in the Clinical Medicine series focuses on the middle jiao, exploring everything from abdominal pain and reflux to "gu" syndrome and inflammatory bowel diseases. *Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence*

CM 732 - Clinical Medicine III

Credit(s): 4.00

The final Clinical Medicine course focuses on the lower jiao, with a strong emphasis on gynecology, andrology and LGBTQ health. By the end of the series, students are prepared to enter their final clinical year with the ability to address a wide variety of clinical presentations. *Prerequisite(s): Third-year status; these courses are to be taken in the ordered sequence*

CM* 522 - Chinese History and Culture II

Credit(s): 1.50

These courses present 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(s): These courses are to be taken in the ordered sequence

CM* 532 - Chinese History and Culture III

Credit(s): 1.50

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(s):* CM* 522

CM* 711 - Advanced Chinese Organ Systems: Cosmology and Symbolism I

Credit(s): 2.00

This three-course series represents a gradually deepening introduction into the time-honored system of Chinese symbol science, which defines the physiology of microcosm as a projection of macrocosmic themes (stellar constellations, months of the year, earthly branches, hexagrams, rivers in the sacred landscape of ancient China). Presenting the results of eight years of continuous inquiry by NUNM's ancient symbolism research group, the functional archetypes informing the acupuncture point names 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 symbolism behind the point names of the channels of the lung, large intestine, stomach and spleen.

CM* 721 - Advanced Chinese Organ Systems: Cosmology and Symbolism II

Credit(s): 2.00

In this series, the functional archetypes informing the acupuncture point names of Chinese medicine and their expression in the physical, mental, emotional and spiritual planes are described in exclusive detail. The second course covers the points of the heart, small intestine, bladder and kidney channels.

CM* 731 - Advanced Chinese Organ Systems: Cosmology and Symbolism III

Credit(s): 2.00

In this series, the functional archetypes informing the acupuncture point names of Chinese medicine and their expression in the physical, mental, emotional and spiritual planes are described in exclusive detail. The third course presents the symbolism behind the point names of the pericardium, triple warmer, gallbladder and liver channels.

CCM 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 06E - Chinese Dietetics

Credit(s): 1.50

Through didactic and hands-on cooking instruction, students learn to use the power of food as medicine through the lens of Chinese medicinal principles. It is a course for people who love food and its power to heal and transform. Topics include the nature and flavor of food, a seasonal overview of eating, cooking with medicinal and common herbs/spices, and creating individualized nutrition plans. The weekend format affords the time to go in-depth and create a restorative experience while developing skills to integrate food recommendations into clinical practice. *Note: Additional fee required*

CM 516 - Herbs I

Credit(s): 2.00

In the Herbs I-III series, students develop the foundation of Chinese herbology in preparation to become competent practitioners of Chinese herbal medicine. Students learn approximately 180 key herbs including properties, therapeutic actions, preparation and application. Herbs I introduces the history and development of Chinese herbal medical knowledge. Students focus on learning approximately half of 64 core herbs used in Zhang Zhongjing's *Shanghan Zabing Lun*, which is a major, foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Student learn properties and therapeutic actions of individual herbs described in materia medicas and textbooks. In addition, students are introduced to the concept of herb patterns and corresponding pathomechanisms, and gain knowledge of time-tested herbal combinations and formulary employed in classical herbal formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

CM 526 - Herbs II

Credit(s): 2.00

In Herbs II, students learn the second-half of 64 core herbs used in Zhang Zhongjing's *Shanghan Zabing Lun*, which is a major, foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Student learn properties and therapeutic actions of individual herbs described in materia medicas and textbooks. In addition, students are introduced to the concept of herb patterns and corresponding pathomechanisms, and gain knowledge of time-tested herbal combinations and formulary employed in classical herbal formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 536 - Herbs III

Credit(s): 2.00

Herbs III completes the exploration of 180 key herbs in the context of the herbal classifications employed by most modern textbooks from China. Students learn the properties, actions, indications, contraindications, dosage, and preparation of each of these individual herbs.

Prerequisite(s): These courses are to be taken in the ordered sequence.

CM 556 - Herbs I Practicum

Credit(s): 1.00

The Herbs Practicum series introduces the key principles, research methods, and technical elements of classical energetic alchemy and Chinese herbalism. It supplements the herbs lecture courses and brings to life the accumulated wisdom of the materia medica through direct interaction with key Chinese medicinal herbs and their traditional forms of preparation. Strong emphasis is placed on the primacy and immediacy of sensational experience as the path to deeper understanding of qi dynamics and the energetic signatures of various herbal medicines.

Herbs I Practicum introduces the basic principles of qi dynamics, classical discussion of herbal properties, their unique movement signatures, and other key elements of an herbal research framework. These concepts are developed through the sampling and appreciation of single herbs, often in pairs, covering a large cross section of signatures. Energetic awareness is cultivated through the comparison of one's own experience with descriptions from classical sources.

Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required

CM 566 - Herbs II Practicum

Credit(s): 1.00

Herbs II Practicum continues the series with a review of the basic principles of qi dynamics, classical discussion of herbal properties, their unique movement signatures, and other key elements of an herbal research framework. These concepts are developed through the sampling and appreciation of single herbs, often in pairs, covering a large cross section of signatures. Energetic awareness is cultivated through the comparison of one's own experience with

descriptions from classical sources. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 576 - Herbs III Practicum

Credit(s): 1.00

Herbs Practicum III rounds out our survey of the dynamic range of single herb categories. In

addition, we begin an exploration of "dui yao"—commonly used combinations of herbs and their clinical applications. This final portion of the first-year herbs practicum will also familiarize students with other key topics in classical Chinese herbology including dietetics, paozhi methods, and formula preparation. *Prerequisite(s): These courses are to be taken in the ordered sequence.*
Note: Additional fee required

CM 616 - Herbs IV

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs IV), formulas are grouped for their relation to the historically relevant disease categories of the Shanghan Zabing Lun, with awareness of classical concepts of matching pattern to physiology. Approximately 50 formulas are introduced for core patterns within common use today. *Prerequisite(s): CM 536; these courses are to be taken in the ordered sequence.*

CM 626 - Herbs V

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs V), formulas are presented sequentially in groups centered around the classical use of key medicinals as a means of understanding the synergistic use of herbs in context. Students scaffold understanding of core patterns introduced in the prior term (Herbs IV) in order to deepen and diversify the diagnostic and therapeutic application of a broad array of

Chinese herbal formulas as approximately 55 formulas are discussed. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

CM 636 - Herbs VI

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs VI), formulas continue to be presented sequentially in groups centered around the classical use of key medicinals as a means of understanding the synergistic use of herbs in context. Students scaffold understanding of core patterns introduced in prior terms (Herbs IV and V) with a focus on compact formulas that are readily used in modification to expand the therapeutic scope of Chinese herbal formulas with approximately 55 additional formulas discussed. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

CM 656 - Herbs IV Practicum

Credit(s): 1.00

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key formulas. *Prerequisite(s): CM 576; these courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 666 - Herbs V Practicum

Credit(s): 1.00

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the

lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 676 - Herbs VI Practicum

Credit(s): 1.00

In the Herbs IV-VI Practicum series, students develop a personal and experiential relationship with Chinese herbal formulas, and expand on the case studies and material presented in the lecture series (Herbs IV-VI). Students engage with the practicalities of Chinese herbal formulations, as well as food as medicine, with opportunity to prepare formulas, lead and share in discussions, and sample herbal formulas. Tastings focus on empirical inquiry, organoleptic assessment, and meditative depth diagnosis. Instruction emphasis is on classical preparation, modern administration methods, principles of formula composition, and flavor and qi of key formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 826 - Herbs Review/Medicinary Practicum

Credit(s): 1.50

This course is a review and culmination of the herbal program at NUNM, and prepares students to take the NCCAOM and CALE herbal examinations. In addition, it 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(s): Fourth-year status*

CCM Mind-Body Medicine

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

CM 16E - Five-Element Wilderness Retreat

Credit(s): 1.50

This wilderness-based course facilitates the practitioner's journey toward a deeper connection to nature. During a two-day rafting trip in Central Oregon, students learn about the Chinese Five Elements and how nature reflects in human physiology. *Note: Additional fee required*

CM 26E - Shan Ren Dao Retreat

Credit(s): 4.00

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 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. *Note: Additional fee required*

CM 30E - Sound Resonance Therapy for Chinese Medicine

Credit(s): 1.50

This course introduces a variety of sound resonance therapies that are useful adjuncts to the practice of Chinese medicine. The history of sound therapy in Chinese medicine (theory and practice) is explored, and modern sound resonance therapies are studied through the lens of the Chinese medicine model. There will be discussion of a variety of tuning fork modalities, singing bowl therapy, drumming, as well as vocal toning. *Note: Students will need an introductory set of tuning forks. In a group order, the cost is approximately \$120.*

CM 36E - Embodied Cosmology Retreat

Credit(s): 1.50

This intensive retreat takes Chinese medicine's base in Daoist cosmology and presents it through a series of hands-on, practical tools for facilitating systemic transformation. As we move through life, we often go into contractions to get through the "tight" places the world presents to us. These contractions distort and diminish our internal space. This, according to classical Chinese medicine, is the root cause of physical and emotional dis-ease. In order to move beyond the management of symptoms into the realm of real transformative processes, one must acquire a means for re-accessing these internal spaces. This weekend intensive provides practical instruction that facilitates this potent process. *Note: Additional fee required*

CM 635 - Practitioner Cultivation I

Credit(s): 1.50

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 715 - Chinese Medical Psychology I

Credit(s): 2.00

This course explores principles of general psychology, and compares them to Chinese medicine approaches to psychological pathology, including etiology, diagnosis, and treatment in the context of a classical body-mind paradigm. It explores how the five-phase model can be applied to a humanistic psychology, and the use of common herbal formulas and acupuncture to aid in the evolution of being. *Prerequisite(s): Third-year status*

CM 725 - Chinese Medical Psychology II

Credit(s): 2.00

This course continues to explore principles of general psychology, and compare them to Chinese medicine approaches to psychological pathology, including etiology, diagnosis and treatment in the context of a classical body-mind paradigm. The emphasis is on treatment and developing an understanding of Western psychological diagnosis from the DSM-V perspective. It explores Eastern and Western constructs for looking at the psyche, ranging from classical concepts and patterns, to the basic curative functions of the therapeutic relationship, and the use of common herbal formulas and acupuncture. Treatment and patterns are reviewed from both classical and modern psychological diagnostic models. *Prerequisite(s): Third-year status*

CM 815 - Practitioner Cultivation II

Credit(s): 1.50

This course focuses on relationship dynamics between the practitioner and patient. The recognition and attention to these dynamics can greatly enhance and support the healing dynamic. There is a strong emphasis on deeper listening, connection, communication, and understanding of boundary dynamics, role/power dynamics, and transference/counter transference. These concepts are applied directly to current patient interactions and relationships, and therefore it is required that students be actively seeing patients. The primary tools of exploration are discussion, lecture, case-study, role-play, mind-body exercises, self-reflection and writing. *Prerequisite(s): CM 635 and intern status*

CM* 595 - Imaginal and Experiential Inquiries I

Credit(s): 1.50

This course 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, and create a professional portfolio. Special attention is given to the cultivation of resilience, clarity of purpose, self-responsibility, and professionalism.

Prerequisite(s): These courses are to be taken in the ordered sequence

CM* 795 - Imaginal and Experiential Inquiries II

Credit(s): 1.50

This course 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, and define their doctoral capstone topic. Special attention is given to the cultivation of resilience, clarity of purpose, self-responsibility, and professionalism. This course 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 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. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 845 - Imaginal and Experiential Inquiries III

Credit(s): 0.50

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. In the final year of the series, students further refine their doctoral capstone project. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 855 - Imaginal and Experiential Inquiries IV

Credit(s): 0.50

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. In this quarter, students present writing samples of their doctoral capstone report. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 865 - Imaginal and Experiential Inquiries V

Credit(s): 0.50

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. In this course, students present a rough draft of their doctoral capstone report. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 875 - Imaginal and Experiential Inquiries VI

Credit(s): 0.50

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. Students prepare to present their doctoral capstone project. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CCM Physical Medicine

CM 515 - Palpation and Perception I Practicum

Credit(s): 1.50

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 525 - Palpation and Perception II Practicum

Credit(s): 1.50

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 535 - Palpation and Perception III Practicum

Credit(s): 1.50

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 615 - Asian Bodywork

Credit(s): 1.50

Bodywork in most traditional systems of medicine is considered foundational. Other key elements of Traditional East Asian Medical practice—e.g., pulse diagnosis, channel diagnosis, abdominal diagnosis, needling, gua sha, cupping, moxibustion—depend on refined touch skills. The cultivation and development of palpatory sensitivity in the practice of somatic therapies allows one to quickly advance in these other skills.

In this course, students explore a Japanese and a Chinese style of bodywork, both of which boil down to creative use of the yin-yang dynamic in the body. The Sotai system from Japan, developed by Dr. Keizo Hashimoto—and its later evolution into Yin Sotai and Sotai Intuitivo—and the ancient Daoist qigong tuina system are the core of this course. Students learn to assess their patients from a gross structural perspective, but also on the subtler level of fascial distortions. They learn to deliver effective treatments that move patients to a greater sense of ease in their physical and emotional selves. *Prerequisite(s): Second-year status. Note: Additional fee required*

CM 735 - Applied Palpation and Perception

Credit(s): 1.50

In this course, students learn key assessment, bodywork, and acupuncture/adjunctive techniques and strategies to treat a variety of conditions, primarily physical pain. Students are expected to be familiar with the underlying myofascial and skeletal anatomy of the regions covered each week in class. The course also covers patient communication and strategic thinking, as well as gentle movement techniques to be taught to patients. *Prerequisite(s): CM 535, CM 615. Note: Additional fee required*

CCM Practice Management

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

CM 10E - Billing Insurance for Chinese Medical Professionals

Credit(s): 1.00

During this course, students learn how to ethically and sustainably bill insurance. Course topics cover in- and out-of-network billing, benefits, coding, fee schedules, responding to denials, software programs and more. At the end of the course, students should feel confident in their ability to create an insurance bill, submit it for reimbursement, and process payments.

CM 551 - The Business of Chinese Medicine I

Credit(s): 1.50

This four-course series uses a skills-based approach to business education and career development. By the end of the series, students will have completed all necessary components of a professional business or career plan that can be used to start a large multi-room clinic, a single practitioner business, or to find an employee position at an integrated clinic or hospital. In this first course, students develop public speaking and networking skills in addition to learning the elements of a successful business and/or career plan as a licensed Chinese medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM 671 - The Business of Chinese Medicine II

Credit(s): 1.00

In the second course of the business series, students learn and practice a variety of marketing and communication techniques used frequently in the field of acupuncture and Chinese medicine. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM 751 - The Business of Chinese Medicine III

Credit(s): 1.50

The third business course focuses on the rules and regulations of owning a classical Chinese medicine practice with an herbal dispensary; in addition to the local, state and federal laws that pertain to having a successful career in this field. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM 805 - Ethics and Jurisprudence

Credit(s): 1.00

Students explore the larger scope of ethical and legal issues pertinent to those with a Chinese medicine practice 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. The course considers Chinese medical ethics espoused in the *Huangdi Neijing*, Confucianist and Daoist ideologies and how these are correlated to the four principles of biomedical ethics, Kant's Moral Imperative, and modern ideas of trust and vulnerability in regards to the practitioner and patient relationship. In addition, the course covers state licensure requirements, handling biomedical waste, scope of practice for the acupuncturist, mandatory reporting, sexual misconduct, social media boundaries, insurance billing, and the importance of involvement with one's state association. It also touches on concepts around the ethical considerations when providing acupuncture in international relief situations, selling supplements, and the ecological and toxicity issues in utilizing Chinese herbs.

CM 861 - The Business of Chinese Medicine IV

Credit(s): 1.50

The final business course focuses on financial knowledge and skills. Students garner practical knowledge of money management, taxes and start-up costs, in addition to exploring financing options for opening a large or small Chinese medicine practice. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM 871 - Community Education

Credit(s): 0.50

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.

CM* 862 - Healthcare Landscape

Credit(s): 1.00

This course explores the current and projected state of acupuncturists and Chinese medicine within the national healthcare landscape. It investigates viable careers in Chinese medicine, and the interface between regulatory (governmental, health care, insurance) organizations and acupuncturists. Topics include challenges facing the profession on the state and national level; models of practice; insurance concepts and reimbursement; and collaboration with other healthcare providers within the variety of healthcare systems.

CCM Research

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

CM 993 - Doctoral Capstone Mentorship

Credit(s): 2.00

Over the course of their final year in the program, students are mentored by their doctoral capstone committee chair to research, write and present their doctoral capstone project.

CCM Traditional Mentorship Tutorial

CM 12E - Traditional Mentorship Tutorial I

Credit(s): 2.00

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 chosen mentor's own path of learning and knowledge integration. Students take one TMT series as a core requirement in the internship year of study (CM 812/822/832), but may take additional TMTs as electives in either the pre-internship or internship year. *Prerequisite(s): These courses are designed to be taken in sequence*

CM 22E - Traditional Mentorship Tutorial II

Credit(s): 2.00

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 chosen mentor's own path of learning and knowledge integration. Students take one TMT series as a core requirement in the internship year of study (CM 812/822/832), but may take additional TMTs as electives in either the pre-internship or internship year. *Prerequisite(s): These courses are designed to be taken in sequence*

CM 32E - Traditional Mentorship Tutorial III

Credit(s): 2.00

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 chosen mentor's own path of learning and knowledge integration. Students take one TMT series as a core requirement in the internship year of study (CM 812/822/832), but may take additional TMTs as electives in either the pre-internship or internship year. *Prerequisite(s): These courses are designed to be taken in sequence*

CM 812 - Traditional Mentorship Tutorial I

Credit(s): 2.00

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(s): These courses are designed to be taken in sequence*

CM 822 - Traditional Mentorship Tutorial II

Credit(s): 2.00

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(s): These courses are designed to be taken in sequence*

CM 832 - Traditional Mentorship Tutorial III

Credit(s): 2.00

A hallmark of the CCM programs, the Traditional Mentorship Tutorial classes support the lineage culture of a classical Chinese medicine education. Students meet with their chosen mentor for two hours per week for a year; topics are discussed from the unique perspective of the mentor's own path of learning and knowledge integration. This series is a core requirement in the final year of study. *Prerequisite(s): These courses are designed to be taken in sequence*

Chinese Cultural Arts

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.

CM 13E - Chinese Calligraphy I

Credit(s): 1.00

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.

CM 23E - Chinese Calligraphy II

Credit(s): 1.00

Students learn new symbols and continue the inner cultivation begun in Chinese Calligraphy I.

Prerequisite(s): CM 13E

CM 33E - Weiqi

Credit(s): 1.00

Students learn the history, philosophy and principles of weiqi (Chinese chess, also known as "Go"). This course develops critical thinking skills as students learn to apply the strategies and techniques of the game to the art of treating disease.

CM 43E - Tea as Medicine: The Dao of Chinese Tea

Credit(s): 1.50

This retreat-style course immerses participants in the tea philosophy of *jing* (purity), *jing* (peace), and *jing* (gratitude) while providing an academic and experiential introduction to China's major tea varieties. Using the Six-Conformation model of classical Chinese medicine diagnosis (*liujing bianzheng*), students learn how to distinguish the medicinal properties of green tea (*l cha*), white tea (*bai cha*), yellow tea (*huang cha*), Oolong tea (*qing cha*), black tea (*hong cha*), and dark tea (*hei cha*). Through tasting teas in multiple grades, students learn how to recognize high quality teas, especially in the highly mythologized and overpriced category of aged Pu'er teas. *Note: Additional fee required*

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.

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

CM 17E - Yijing I (I Ching): An Introduction to the Yijing

Credit(s): 2.00

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 seminal text from ancient China. *Note: Open to all NUNM students.*

CM* 911 - Classical Texts I: Introduction to Classical Chinese Language and the Chinese Classical Texts

Credit(s): 3.00

The Classical Texts I-IX series deepens 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 which evolved from it. The first three courses (Classical Texts I-III) introduce basics of the spoken and written classical Chinese language, including the use of a Chinese dictionary. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 921 - Classical Texts II: Introduction to Classical Chinese Language and the Chinese Classical Texts

Credit(s): 3.00

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. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 931 - Classical Texts III: Introduction to Classical Chinese Language and the Chinese Classical Texts

Credit(s): 3.00

This course incorporates the following three parts: the study of classical Chinese syntax and grammar, the study of *Han Zi* (Chinese characters) through analyzing and learning the standard 214 radicals adopted in *Kangxi Zidian*, and the reading of passages from selected classical texts. It emphasizes the proper scholar's way of approaching ancient texts and classics, and reinforces a high standard of scholarship. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 941 - Classical Texts IV: Shanghan Lun, Jingui Yaolüe

Credit(s): 2.00

Zhang Zhongjing's *Shanghan Zabing Lun* (Treatise on Cold Damage) has been passed down in the form of two separate texts: *Shanghan Lun* and *Jingui Yaolüe* (Essentials from the Golden Cabinet). Both texts are essential to the understanding of Zhang Zhongjing's clinical principle and formulary, which are the very foundation of Chinese herbal medicine. The first course of the series focuses not only on the language and structure of the *Shanghan Lun*, but also on the clinical application of the text. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 951 - Classical Texts V: Shanghan Lun, Jingui Yaolüe

Credit(s): 2.00

The second course of the *Shanghan Lun/Jingui Yaolüe* series continues the focus on the language and structure of the *Shanghan Lun*, and supports students to achieve a deeper understanding of how its content can be applied in a clinical context. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 961 - Classical Texts VI: Shanghan Lun, Jingui Yaolüe

Credit(s): 2.00

The third course of the *Shanghan Lun/Jingui Yaolüe* series focuses on understanding the language, structure and clinical application of the *Jingui Yaolüe*, one of most important classical texts in the history of Chinese herbal medicine. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 971 - Classical Texts VII: Neijing Seminar

Credit(s): 2.00

In the Neijing Seminar I-III series, students gain direct access to the wisdom found in the *Huangdi Neijing* ("Yellow Emperor's Inner Classic"), the foundational classic of Chinese medicine. Students read a selection of excerpts in the original Chinese characters, explore their meanings, and discuss how to integrate this wisdom into clinical practice and their own lives. The first course provides an overview of the text and then delves into the clinically important passages focusing on channels and acupuncture. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 981 - Classical Texts VIII: Neijing Seminar

Credit(s): 2.00

The second course in the Neijing Seminar series focuses on reading, translating and understanding the clinical relevance of Suwen chapters 1-3. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM* 991 - Classical Texts IX: Neijing Seminar

Credit(s): 2.00

The final course in the Neijing Seminar series covers Suwen 8, followed by Lingshu 8. Students read a selection of excerpts in Chinese, compare and refine their translations, explore progressively deeper layers of meaning, and discuss how to integrate this wisdom into clinical practice and their personal lives. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Global Health

CAM 400 - Community Organizing and Social Activism in Cambodia

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

CAM 401 - Sustainable Tourism in Southeast Asia

Credit(s): 4.50

The world is not such a lonely planet anymore, but the very resources we promote through

tourism are in danger of degradation. Tourism done poorly can harm people, cultures and the environment, and we have a responsibility to re-invent tourism into a sustainable, ethical experience. This course covers many of these aspects across a range of topics involved in researching or implementing sustainable tourism projects. The major topics to be discussed include general knowledge on tourism and sustainability, and operations and marketing for sustainable tourism. Discussions aim to bring understanding into alternative forms of tourism such as ecotourism and community-based tourism approaches. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

CAM 402 - Peace and Reconciliation in Cambodia

Credit(s): 4.50

This course introduces students to Cambodia's Khmer Rouge history and the ongoing reconciliation process. The Cambodian genocide committed by Khmer Rouge (1975-1979) is the defining tragedy in Cambodia, with the loss of nearly two million lives. To preserve the memory of the victims, Documentation Center of Cambodia (DC-Cam) provides Khmer Rouge history education to diverse students and visitors, both from Cambodia and around the world. Students, researchers and visitors can immerse themselves in the Khmer Rouge history through unique programs including film screenings, lectures, and a forum hosted by historians and guest speakers. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

COL 500 - Community Organizing and Social Activism in Columbia

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

COL 501 - Afro-Caribbean Culture and History

Credit(s): 4.50

This course is an interdisciplinary examination of the history, politics, race, class, gender and cultural expression of the African descendants in the Caribbean region with special focus on Afro-Colombians. Special attention is given to issues in the creation of a multicultural society, such as the dynamics of cultural identity, and social and political issues. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

COL 502 - Conflict, Peace, and Reconciliation: A Comparative Approach to Colombia, Northern Ireland, South Africa and Rwanda

Credit(s): 4.50

This course develops a comparative analysis of the peace processes conducted in Colombia, Northern Ireland, South Africa and Rwanda in order to define their ethnic, religious, political and economic specificities, as well as their particularities. This is the appropriate context to highlight the novelty of the Colombian process in which the reparation of victims is recognized; although this is one of the fundamental aspects of the negotiation, it is also truth that returning land to their original owners poses great challenges due to the reluctance of the holders who acquired such illegally. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

COL 503 - From Escobar to Santos: Socio-Historical Perspectives on Modern Colombia

Credit(s): 4.50

It is impossible to talk about modern Colombia without an examination of the impact of the decades-long "narco-tráfico"—the narcotics trade that was at the center of Colombia's political, economic and social structures. The socio-political core of Colombia is what it is today, in part, because of the illegal drug trade. By the same token, Colombia is not the same country it was one generation ago, which is when Pablo Escobar, the head of the Medellín Drug Cartel, died. At the time one of the wealthiest men in the world, Pablo Emilio Escobar Gaviria continues to engender strong opinions on all sides and all spectrums. Some of the nation's poorest people praise Escobar's attention to the plight of the poor. Other Colombians and foreigners rightfully bring attention to the violence, and the tens of thousands of dead that were part of the drug trade and the accompanying terrorism. The years of "narco-tráfico" affected countless Colombians and many others during those years, and the history is only starting to be discussed and researched. Not unlike post-WWII in Germany, it has taken over one generation for Colombians to begin to come to terms with their history and with Pablo Escobar. For years, people ignored the topic and focused on rebuilding their country. But the incredible changes and economic growth in Colombia are informed by a silence about the past that is starting to be brought out more into the open. Recently, Juan Manuel Santos, the past President of Colombia, received the Nobel Peace Prize for his role in bringing peace and reconciliation to Colombia. It has been a long road from Pablo Escobar to President Santos; this course examines the socio-historical events and opinions of those years. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

COL 525 - Language Across the Curriculum

Credit(s): 4.50

This course is of theoretical and practical nature that blends instruction in the target language (the host country language) with an individualized study plan. The course is based on the

communicative approach to language acquisition and aims to ensure competencies corresponding to level B2, and to familiarize the student with the format of the certification exams that attest to language proficiency levels according to the standards of the European Community Framework of Reference (CEFR). *Prerequisite(s): Instructor approval required. Note: Additional fee required*

COL 555 - Sponsored Research COSA

Credit(s): 4.50

Students engage in a sponsored advocacy research project as a core part of their first COSA course. Research continues in the second and third terms, with students conducting primary or secondary research (or both) in support of their culminating project or thesis work. For students engaging in primary research, your academic advisor (as well as faculty and other staff) and the structure of the Advocacy Research Program will support you in this process. Research will be officially reviewed by the IPSL International Institutional Review Board (IRB), making it eligible for publishing and presentation at professional conferences. During the Pre-Departure Residency in Portland, there will be an Advocacy Research Orientation and the IPSL research support person will assist you throughout the program. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

CPR 101 - CPR for Wilderness First Aid

Credit(s): 0.0

This is an optional CPR training course that accompanies GSGH 714E - Wilderness First Aid and results in a CPR certificate. *Corequisite(s): GSGH 714E. Note: Additional fee required*

GRE 500 - Community Organizing and Social Activism in Greece

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. The course starts with an overview of the country's history relating to social change institutions, political and social movements, as well as the ethics regarding international service and advocacy efforts. Topics are examined through the prism of hands-on community service in Greek NGOs and NPOs, and include intercultural communication within structures that aim at social, political or infrastructural change. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through in-class reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 501 - Micro-Enterprise in Rural Communities: Seminar and Field Work in Samothraki Island

Credit(s): 4.50

This course is designed to familiarize students with different types of enterprises in rural communities, and explore national and international case studies as well as opportunities and challenges in sustaining micro- and small-sized enterprises. It sets out the criteria for identifying whether a company is a micro-, small- or medium-sized enterprise. These different categories, based on the number of a company's employees and its turnover or balance sheet, determine its eligibility for EU and national financial and support programs, especially in the more rural areas of Europe. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 503 - Greek History and Culture

Credit(s): 4.50

This course is designed to familiarize students with Greek history and culture. Its aim is to explore the 5,000 years of Greek history; understanding why Greece is still considered the cradle of our civilization; stopping at its greatest moments; discovering those elements that made Greece stand out through the ages; exploring ancient Greek art and culture; and understanding the ways and the degree it shaped the Western world. The course will connect the dots from prehistoric times and the era of the great heroes and legends, like Hercules, Odysseus and the Trojan War, with the achievements of ancient Greece; the troubled years of medieval and Byzantine Greece until its independence after the Greek Revolution of 1821; and Greece in the 21st century. Taking place in the large, vibrant port city of Thessaloniki, with a history of over 2,500 years, students will be able to experience Greece's living history firsthand. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 504 - The Rise of Social Solidarity in Greece: Exploring Shifting Civilian Responses to the European Refugee Crisis in Greece

Credit(s): 4.50

This course explores the concept of solidarity, or social unity, in the context of austerity and refugee burdened Greece. Austerity measures motivated community efforts including soup kitchens and free pharmacy distribution clinics. At the height of the European refugee crisis, civilian volunteers offered clothing, food, transportation and shelter to immigrants and refugees entering Greece. This course explores how these two crises moments have challenged established forms of sociality and motivated a movement toward national and global solidarity. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 505 - Creative Thinking and Entrepreneurship

Credit(s): 4.50

This course is about productive thinking, and is designed to assist students in developing critical and creative-thinking skills that are essential ingredients to enhance their innovation and decision-making skills. These skills include the ability to make well-reasoned decisions, solve problems skillfully, and make carefully thought-out judgments about the worth, accuracy and value of information, ideas, claims and proposals. Students will apply various modes of thinking to address critical business issues and workplace applications. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 525 - Language Across the Curriculum

Credit(s): 4.50

This course is of theoretical and practical nature that blends instruction in the target language (the host country language) with an individualized study plan. The course is based on the communicative approach to language acquisition and aims to ensure competencies corresponding to level B2, and to familiarize the student with the format of the certification exams that attest to language proficiency levels according to the standards of the European Community Framework of Reference (CEFR). *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GRE 555 - Sponsored Research COSA

Credit(s): 4.50

Students engage in a sponsored advocacy research project as a core part of their first COSA course. Research continues in the second and third terms, with students conducting primary or secondary research (or both) in support of their culminating project or thesis work. For students engaging in primary research, your academic advisor (as well as faculty and other staff) and the structure of the Advocacy Research Program will support you in this process. Research will be officially reviewed by the IPSL International Institutional Review Board (IRB), making it eligible for publishing and presentation at professional conferences. During the Pre-Departure Residency in Portland, there will be an Advocacy Research Orientation and the IPSL research support person will assist you throughout the program. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GSGH 510 - Global Health Discussion Series

Credit(s): 1.00

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. *Prerequisite(s): GSGH 511, RES 510*

GSGH 511 - Foundations of Global Health

Credit(s): 2.00

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

Credit(s): 3.00

In this course, students examine diverse models of health systems currently in use around the globe. Topics include service delivery; access and utilization; workforce preparation and practice; health information systems; the distribution of, and access to, medical products (medicine, vaccines, technology); financing; and governance and leadership. Additional topics include resource allocation challenges and relevant policy development and implementation processes. *Prerequisite(s): GSGH 511, RES 510*

GSGH 521 - Social and Behavioral Foundations of Health

Credit(s): 2.00

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 524 - Population Research Approaches

Credit(s): 3.00

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 using quantitative, qualitative and mixed-methods approaches. Additional focus is placed on research ethics, information sourcing, and the interpretation of health-related research findings. *Prerequisite(s): GSGH 511, RES 502*

GSGH 525 - Program Development

Credit(s): 2.00

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. *Prerequisite(s): GSGH 511, GSGH 521*

GSGH 526 - Program Evaluation

Credit(s): 2.00

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. *Prerequisite(s): GSGH 525*

GSGH 530 - Environmental Global Health

Credit(s): 2.00

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. *Prerequisite(s): GSGH 511, RES 505*

GSGH 532 - Community Organizing

Credit(s): 2.00

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.
Prerequisite(s): GSGH 511

GSGH 590 - Professional Development I

Credit(s): 1.00

This course provides students with skills, knowledge and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning.

GSGH 591 - Professional Development II

Credit(s): 2.00

This course provides students with a bridge from the academic program to career opportunities in the field of global health. *Prerequisite(s): GSGH 590*

GSGH 610 - Grant Writing

Credit(s): 2.00

This course teaches skills in grant proposal development. 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 grant proposals that are responsive to the stated interests of funding agencies. *Prerequisite(s): RES 610*

GSGH 690 - Capstone Preparation

Credit(s): 2.00

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. *Prerequisite(s): GSGH 526, RES 505*

GSGH 691 - Capstone I: Global Health Fieldwork Experience

Credit(s): 6.00

Fieldwork provides students with supervised, advanced practical experience in a population-focused, health-related local, national or international setting over an 8-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. *Prerequisite(s): GSGH 690. Note: Itinerary-specific trip fee applies*

GSGH 692 - Capstone II: Fieldwork Culminating Experience

Credit(s): 2.00

Students have an opportunity to reflect on their fieldwork experience, disseminate the final product of the fieldwork experience so as to benefit both the student and the host site, and present a summary of their reflections at an annual capstone symposium. *Prerequisite(s): GSGH 691*

GSGH 703E - Maternal and Child Health

Credit(s): 2.00

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 - Conference in Global Health

Credit(s): 1.00

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. *Note: Additional fee required*

GSGH 714E - Wilderness First Aid

Credit(s): 2.00

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 (CPR 101) is available. *Note: Additional fee required*

GSGH 717E - Psychology of Connection

Credit(s): 2.00

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 821E - Tanzania Global Health Experience

Credit(s): 6.00

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. *Note: Itinerary-specific trip fee applies*

GSGH 832E - Thailand Global Health Experience

Credit(s): 4.00

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 self-care. 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. *Note: Itinerary-specific trip fee applies*

GSGH 836E - Ghana Global Health Experience

Credit(s): 4.00

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. *Note: Itinerary-specific trip fee applies*

GSGH 837E - Collaborative Global Health Experience

Credit(s): 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 the International Partnership for Service Learning (IPSL) Global Institute at NUNM or 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 Department of Health Sciences chair 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. *Prerequisite(s): Approval of the Department of Health Sciences chair. Note: Itinerary-specific trip fee applies*

GSGH 838E - India Global Health Experience

Credit(s): 4.00

This 14-day intercultural experience trip in India focuses on traditional Indian healthcare systems, mainly Ayurvedic medicine, including traditional detox modalities (Panchakarma) and Ayurvedic cooking with indigenous ingredients, herbal medicine, and lifestyle for enhancing immunity and self-care. Students participate in activities such as getting insights from local NGOs about tribal healthcare support, role and practice of traditional medicine in remote and austere environments; and visits to tribal sites, organic herb farms, Ayurvedic hospitals and clinics, yoga institutes, medical tourism sites, historic sites, vedic-architecture sites, and other cultural events. There are options for additional study in Ayurvedic medicine, yoga, meditation and movement classes. For students in clinical programs (e.g., ND, MSOM, DSOM), clinical shadowing hours may be applied toward preceptor hours or community education with prior approval. *Note: Itinerary-specific fee applies*

GUA 500 - Community Organizing and Social Activism in Guatemala

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices, in community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GUA 501 - Guatemala One Health

Credit(s): 4.50

This course captures in-situ the interconnectedness of people, the environment, and animals that we use for food. This topic is examined through a One Health lens, which will be expanded and explored through site visits and hands-on service projects with local Guatemalan farms, cooperatives, and community-based agricultural initiatives. Students will reflect upon their service and experiential learning with a One Health lens via group seminars throughout the 10-

day course. Prior to departure, students will receive a series of readings and assignments required for pre-departure. Students will also complete written reflections while in-country, as well as a final reflection paper/project incorporating scholarly sources. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GUA 502 - Applications of Mayan Cosmology in Contemporary Health Systems

Credit(s): 4.50

This course offers the opportunity to get immersed in the reality of some of the many indigenous communities in Guatemala and reflect on issues related to health, multiculturalism, policy making, and Maya culture, among others. The course is delivered in an intensive and modular format; as such, it requires complete participation and engagement for a successful experience. During the course, students will be part of lectures, workshops, visits to community-based organizations, dialogues with health services providers, group discussions, and written coursework. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GUA 525 - Language Across the Curriculum

Credit(s): 4.50

This course is of theoretical and practical nature that blends instruction in the target language (the host country language) with an individualized study plan. The course is based on the communicative approach to language acquisition and aims to ensure competencies corresponding to level B2, and to familiarize the student with the format of the certification exams that attest to language proficiency levels according to the standards of the European Community Framework of Reference (CEFR). *Prerequisite(s): Instructor approval required. Note: Additional fee required*

GUA 555 - Sponsored Research COSA

Credit(s): 4.50

Students engage in a sponsored advocacy research project as a core part of their first COSA course. Research continues in the second and third terms, with students conducting primary or secondary research (or both) in support of their culminating project or thesis work. For students engaging in primary research, your academic advisor (as well as faculty and other staff) and the structure of the Advocacy Research Program will support you in this process. Research will be officially reviewed by the IPSL International Institutional Review Board (IRB), making it eligible for publishing and presentation at professional conferences. During the Pre-Departure Residency in Portland, there will be an Advocacy Research Orientation and the IPSL research support person will assist you throughout the program. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

IRE 400 - Community Organizing and Social Activism in Ireland

Credit(s): 9.00

COSA explores community organizing and social activism with the goal of learning how to effectively translate these ideas and techniques into a concrete knowledge of social activism (including a practical tool set and the development of a personal ethic of advocacy) that can be applied across cultures, countries and efforts. COSA Ireland is an overview of social change institutions, explores the history and ethics of international service, and moves to the examination of past and current political and social movements and advocacy efforts on the Emerald Isle. Students learn the theories and practical realities of intercultural service-learning in a, Irish context. This course complements IPSL community service placements and helps students make meaning of their international experiences in order to deepen their understanding of development on both macro- and micro-levels, and to develop intercultural competence. Topics are examined through the prism of hands-on community service in/with Irish NGOs and other nonprofits and include intercultural communication, the legal structure of Irish nonprofits/NGOs, politics and activism in Ireland, local civic engagement/advocacy efforts, and the exploration of civil society. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

IRE 401 - Exploring Irish Literature from the Birth of Ireland to Contemporary Times

Credit(s): 4.50

This course introduces students to Irish literature (short story, poetry and play). It presents literature from the foundation of the Irish Free State (Saorstát Éireann) early in the 20th century to contemporary works of the 21st century. The course enables students to critically analyse the literary aspects of a text and to explore the text and conduct research, to interpret and discuss the text in relation to its location in time and place. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

IRE 402 - Filmmaking/Digital Production for Social Justice

Credit(s): 4.50

The dynamic landscape of the digital era, which experiences constant advancements in social media and other digital platforms, has created both an opportunity and need for NGOs and service organizations to have a digital footprint and use these accessible platforms to raise awareness, social or otherwise, for their brand and get their message out to the world. The creation of engaging content with a clear vision and message is the focal point of this course, which aims to deliver both an environment and instruction for participants to obtain the relevant, creative and technical knowledge; and furthermore, apply that knowledge in the service-learning setting. The digital production component is a practical course for all levels, allowing participants to focus on

developing new skills and/or hone their existing competencies. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

PER 500 - Community Organizing and Social Activism in Perú

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

PER 502 - Environmental Justice as a Social Movement

Credit(s): 4.50

Biological diversity is one of the most valuable assets our society has in order to achieve sustainable development. This course provides knowledge of the theory and practice of this concept. Topics aim to stimulate a critical examination of the potential of biological resources and interactions in meeting sustainability goals, while also understanding the need for constant economic growth and social equity. This course is specifically created to address the complex issues of environmental sustainability as they relate to biodiversity conservation, with its main focus in Perú. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

PER 504 - Incan Architecture and Urban Development in the Andean Region

Credit(s): 4.50

The course introduces students to the general, quantitative and qualitative aspects of the evolution of architecture and urban planning in the Andes. Also covered, are the aspects of territorial management under Andean societies and its development through the height of its glory under the Inca culture. The purpose of the course is to develop students' knowledge of, as well as their interest in, the concepts, techniques, and architectonic and urban management of Andean society represented by the Inca culture. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

PER 505 - Indigenous Knowledge and Traditional Healing in Perú

Credit(s): 4.50

Traditional healers are found in every society. Their knowledge and leadership have been key in the survival of ancient communities since the beginning of humanity. This course provides

information that underscores this concept. Topics aim to stimulate a critical examination of the role of traditional healers in Perú going back to the pre-Inca cultures, through the Inca Empire, and finishing in our current society. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

PER 525 - Language Across the Curriculum

Credit(s): 4.50

This course is of theoretical and practical nature that blends instruction in the target language (the host country language) with an individualized study plan. The course is based on the communicative approach to language acquisition and aims to ensure competencies corresponding to level B2, and to familiarize the student with the format of the certification exams that attest to language proficiency levels according to the standards of the European Community Framework of Reference (CEFR). *Prerequisite(s): Instructor approval required. Note: Additional fee required*

PER 555 - Sponsored Research COSA

Credit(s): 4.50

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SAF 500 - Community Organizing and Social Activism in South Africa

Credit(s): 4.50

This course unpacks apartheid's intricacies and impact. It explores apartheid's footprint on South Africa's socioeconomic platform and how the country is grappling with much-needed transformation. The course will identify and relate the injustices of apartheid to past and current world injustices, and will unpack how the human condition needs to change in order to eradicate all injustices. Coursework is complemented by volunteer service in a community project and engagement with diverse cultures and viewpoints. Students reflect on national and international practices using the curriculum framework and drawing on literature and discussions with South Africans. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

SAF 501 - Ethics and Community Health in South Africa

Credit(s): 4.50

This course explores public health issues in South Africa via hands-on training at IPSL's partner organization in Cape Town, South Africa. By uniting service with traditional learning, students gain knowledge about the historical, political, economic, cultural and geographic forces that shape the history of public health interventions in South Africa. The service places students at the nexus of community-based health, social enterprise, and the struggle for social and racial justice. Through lectures from scholars and scholar-practitioners, readings, hands-on service, and selected site visits in the region, students critically examine topics related to health promotion and provision, traditional healing, rural health, and social justice in South Africa. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

TAN 500 - Community Organizing and Social Activism in Tanzania

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

TAN 502 - Fistula and Other Health Issues in Tanzania

Credit(s): 4.50

The course introduces students to the current health issues in Tanzania, focusing specifically on women's health issues. Discussions will center around healthcare access, prevention and interventions in the country by various key international and local players. Students will engage in an in-depth study of obstetric fistula as a prevalent and devastating women's health issue in Tanzania and other countries in Africa. The impact on the individual woman, their family, and their broader community is examined. Students will explore the societal reaction and response to women suffering from this disease; and finally, students will study the local and international efforts to prevent and cure obstetric fistula, which is considered a "disease of poverty." *Prerequisite(s): Instructor approval required. Note: Additional fee required*

TAN 503 - Global Health and Epidemiology

Credit(s): 4.50

This course assists students to see the inter-relatedness of global health and epidemiology, as well

as the role of public health institutions in their efforts to strengthen global health systems.

Prerequisite(s): Instructor approval required. Note: Additional fee required

TAN 504 - HIV/AIDS in Tanzania

Credit(s): 4.50

This theoretical/practical course introduces the current and historical context of the impact of HIV/AIDS pandemic in Tanzania, and provides information about sexually transmitted infections and facts about HIV/AIDS in Tanzania. Students will explore prevention theory and public health, HIV/AIDS treatment, and post-infection care. Topics of interest are studied in relation to the current Tanzanian experience in order to understand it and apply that knowledge to the volunteer service in their service sites, which students will participate during their stay in Arusha, Tanzania. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

TAN 505 - Human Rights in Tanzania

Credit(s): 4.50

This course introduces students to the nature and purpose of human rights, with special attention given to those documents that encapsulate the international communities' values and thinking regarding human rights. The second part of the course focuses on the situation of human rights in Tanzania, the bodies responsible for the implementation of those treaties governing humanitarian law, as well as an up-to-date assessment of how far they have been implemented. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

TAN 507 - Peace Studies and Conflict Resolution

Credit(s): 4.50

This course assists students to appreciate that peacebuilding and conflict resolution is a distinct field of activity that has both a history and a distinct language that not only articulates what is meant by a conflict, but also the steps needed to resolve it. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

TAN 508 - Sustainable Community Development in Tanzania

Credit(s): 4.50

This course introduces students to the concept and history of community development in Tanzania and East Africa. Discussion will also include the laws, policies and regulations that currently govern development in Tanzania. Students will examine the makeup of civil society and community service in Tanzania, and examine the goals and measurable outcomes toward the country's development. Examination and discussion of the goals and achievements of the United

Nations' development goals are part of the course. The class will visit several NGOs in Arusha and receive lectures from a government speaker to understand more specific data and policies about sustainable development. Students will gain knowledge and information to help understand community development in Tanzania, along with the tools to think critically about this complex concept. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

TAN 509 - Tanzanian Socialism in Transition

Credit(s): 4.50

This theoretical course introduces the current and historical context of the impact of Nyerere's socialist experiment of 1967-1985 in Tanzania. The course provides information about the rise and fall of socialism in Tanzania, with a main focus on the essays and speeches of Tanzanian founding father, Julius Kambarage Nyerere, in the 1960s. Students will explore the ideology, structure and implementation of Tanzanian socialism from the late 60s to the mid 80s. Topics of interest are studied in relation to the current Tanzanian experience in order to understand it and apply that knowledge to the volunteer service in their service sites, which students will participate during their stay in Arusha, Tanzania. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

TAN 555 - Sponsored Research COSA

Credit(s): 4.50

Students engage in a sponsored advocacy research project as a core part of their first COSA course. Research continues in the second and third terms, with students conducting primary or secondary research (or both) in support of their culminating project or thesis work. For students engaging in primary research, your academic advisor (as well as faculty and other staff) and the structure of the Advocacy Research Program will support you in this process. Research will be officially reviewed by the IPSL International Institutional Review Board (IRB), making it eligible for publishing and presentation at professional conferences. During the Pre-Departure Residency in Portland, there will be an Advocacy Research Orientation and the IPSL research support person will assist you throughout the program. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

USA 499 - Introduction to Community Organizing and Social Activism

Credit(s): 4.50

This course introduces students to the history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community organizing, and social activism. The class complements on-the-ground activities abroad, including local service efforts and classroom activities in the sister course, Community Organizing and Social Activism (in the student's chosen country; e.g. GRE 500). Students also reflect on their service

using an international lens via bi-weekly reflection activities. *Prerequisite(s): Instructor approval required*

USA 525 - Language Across the Curriculum

Credit(s): 4.50

This course is of theoretical and practical nature that blends instruction in the target language (the host country language) with an individualized study plan. The course is based on the communicative approach to language acquisition and aims to ensure competencies corresponding to level B2, and to familiarize the student with the format of the certification exams that attest to language proficiency levels according to the standards of the European Community Framework of Reference (CEFR). *Prerequisite(s): Instructor approval required*

USA 601 - History and Ethics of International Development and Service

Credit(s): 3.00

This course examines the history, current state, and emerging trends in international development and global service-learning. Topics include historical roots (including an overview of international volunteerism, international education, and international aid/development), current statistics, individual/organizational/institutional motivations and benefits, effective practices and trends, and ethical and philosophical issues relevant to modern international service-learning. *Prerequisite(s): Instructor approval required*

USA 602 - Social Research Methods

Credit(s): 3.00

This course introduces students to the range of methods engaged by social scientists to systematically understand social phenomena. Students will gain the knowledge necessary to analyze, understand and engage in social science research, and learn the basic framework and skills required to design and implement a research study. Students will also learn to be a critical reader and analyzer of research in their field of study. *Prerequisite(s): Instructor approval required*

USA 698 - Study Abroad Re-Entry

Credit(s): 3.00

This course is for students who have recently returned from overseas study and service programs. The course provides an opportunity for reflection on the overseas experiences and their meaning. A major focus is the practical applications for the knowledge that students gained in their overseas experience, including academic, professional, political and personal applications, as well

as ideas for further overseas experience. The course operates in a mixed format (culminating project/thesis presentations, seminar, mini-lectures, guest speaker panels, directed activities) and requires a high level of student engagement and participation. *Prerequisite(s): Instructor approval required*

VIE 500 - Community Organizing and Social Activism in Vietnam

Credit(s): 4.50

This course introduces the in-country history of, and current effective practices in, community and civic engagement; including domestic and international volunteerism, community building and organizing, and social activism. Coursework is complemented by service efforts in the community; students reflect on service using both local and international lenses through bi-weekly reflection activities. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

VIE 501 - Environmental Science and Sustainable Development

Credit(s): 4.50

This course provides fundamental concepts and basic knowledge of functions of environment; natural resources; global climate change; environmental pollution and waste management; environment and human health; solutions, strategies and policies for sustainable use of natural resources; environmental protection; and sustainable development. Academic excursions take place to provide better understanding of case studies related to environment, pollution and sustainable development in Vietnam. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

VIE 502 - Global Health and the Environment

Credit(s): 4.50

This course examines major global health challenges, programs and policies in Vietnam, with practical examples. Students are introduced to Southeast Asia's diversity of determinants of health and diseases. Students explore and analyze current and emerging health priorities, including emerging infectious zoonotic diseases, poverty, environmental pollution, dioxin/Agent Orange and the War's legacy, health inequity, health systems reforms, health policy advocacy, and major initiatives for disease prevention and health promotion in Vietnam, Southeast Asia and worldwide. One of the primary goals of this course is to help students develop skills in critical thinking in relation to global health issues, and compare the health situation in Vietnam with that in another developed country. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

VIE 506 - Sustainable Tourism

Credit(s): 4.50

This course covers many topics for the greater appreciation and understanding of those involved in researching or implementing sustainable tourism projects in their field of work. Major topics include general knowledge of tourism and sustainability, insight into alternative forms of tourism such as ecotourism, community-based tourism, and the pro-poor tourism approach.

Prerequisite(s): Instructor approval required. Note: Additional fee required

VIE 525 - Language Across the Curriculum

Credit(s): 4.50

This course is of theoretical and practical nature that blends instruction in the target language (the host country language) with an individualized study plan. The course is based on the communicative approach to language acquisition and aims to ensure competencies corresponding to level B2, and to familiarize the student with the format of the certification exams that attest to language proficiency levels according to the standards of the European Community Framework of Reference (CEFR). *Prerequisite(s): Instructor approval required. Note: Additional fee required*

VIE 555 - Sponsored Research COSA

Credit(s): 4.50

Students engage in a sponsored advocacy research project as a core part of their first COSA course. Research continues in the second and third terms, with students conducting primary or secondary research (or both) in support of their culminating project or thesis work. For students engaging in primary research, your academic advisor (as well as faculty and other staff) and the structure of the Advocacy Research Program will support you in this process. Research will be officially reviewed by the IPSL International Institutional Review Board (IRB), making it eligible for publishing and presentation at professional conferences. During the Pre-Departure Residency in Portland, there will be an Advocacy Research Orientation and the IPSL research support person will assist you throughout the program. *Prerequisite(s): Instructor approval required. Note: Additional fee required*

Integrative Medicine Research

RES 501 - Journal Club

Credit(s): 1.00

In this course, students present and discuss recently published articles in natural medicine and health-related behaviors. *Note: MSiMR students are required to take two terms of Journal Club.*

RES 502 - Principles of Epidemiology

Credit(s): 3.00

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

Credit(s): 2.00

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

Credit(s): 2.00

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 Medicine Research Fundamentals

Credit(s): 1.00

This course provides foundational knowledge to support students through the MSiMR program. The course covers landmark studies in integrative medicine and integrative medicine research concepts. Students learn about researchers, mentors and projects at NUNM and other locations in the vicinity, and develop their individual research interests and program goals.

RES 530 - Research Methodology

Credit(s): 3.00

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. Methods for randomized trials, observational data collection and analysis, case studies, and reviews will be addressed. Students will develop a preliminary research proposal in this course.

RES 531 - Integrative Medicine Research Seminar

Credit(s): 1.00

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. *Note: Additional fee required. May be taken a second time to replace one hour of electives.*

RES 538E - Teaching Strategies and Course Development

Credit(s): 2.00

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 590 - Professional Development I

Credit(s): 1.00

This course provides students with skills, knowledge, and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning.

RES 591 - Professional Development II

Credit(s): 2.00

This course provides students with a bridge from the academic program to career opportunities in their chosen field. Each program will tailor this course to best assist students to achieve employment and be able to sustain their career in the future. Students will be exposed to the various ways in which research may assist them in their future careers. In addition, students will

decide on a topic for their own research, develop a contract with a faculty mentor, and begin conceptualizing what that research will look like. *Prerequisite(s): RES 590*

RES 600 - Biostatistics I

Credit(s): 2.00

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

Credit(s): 3.00

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(s): RES 600*

RES 610 - Technical Writing

Credit(s): 2.00

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 615E - How to Write and Publish Case Studies

Credit(s): 2.00

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 620 - Introduction to Laboratory Methods

Credit(s): 2.00

This course is aimed at familiarizing students with the methodology, data analysis, and critical literature evaluation of common laboratory techniques. Students will have hands-on exposure to a variety of lab techniques, including ELISA, flow cytometry, HPLC and cell culture, and will learn how these techniques are applied to answer a scientific question. In addition, students will read and critically evaluate primary research articles in order to advance their understanding of appropriate experimental design.

RES 622E - Botanicals: Bench to Bedside

Credit(s): 2.00

Students in this course read botanical research papers, including basic science, translational and clinical studies. They discuss the challenges and limitations of conducting botanical research and why many large clinical botanical research studies have failed. Students also work in a botanical lab and develop the skills to conduct research on botanicals. *Note: Additional fee required*

RES 630 - Public Health Policy

Credit(s): 2.00

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. *Prerequisite(s): RES 502*

RES 690 - Capstone Preparation: Literature Review and Experimental Design

Credit(s): 3.00

This course focuses on development of each student's specific research question. 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 will be guided by a mentor, develop a hypothesis, identify appropriate literature to support the structure of the proposed research, and develop a detailed experimental protocol for their research project. *Prerequisite(s): RES 530, RES 591*

RES 691 - Capstone I: Research and Data Collection

Credit(s): 2.00 credits each

Capstone I focuses on the conductance of the MSiMR thesis project. During this course, students work with their mentor to collect and analyze data, pursuant to the study protocol. Additional planning and design may be required, depending upon the complexity of the project.

Prerequisite(s): RES 690. Note: Must be repeated four (4) times for a total of eight (8) credits, and may be taken more than once in a single term.

RES 692 - Capstone II: Thesis Writing and Defense

Credit(s): 2.00

Students use the data generated from their experiment to write a thesis and then defend the thesis in public and before a panel of three faculty members, including their mentor. Students will make a brief presentation of their thesis at the School of Graduate Studies Symposium held at the end of spring term of the year they will graduate. *Prerequisite(s): RES 691. Note: Must be repeated three (3) times for a total of six (6) credits, and may be taken more than once in a single term.*

RES 702 - Integrative Immunology

Credit(s): 3.00

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.

RES 803E - Advanced Research Methods

Credit(s): 2.00

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. *Prerequisite(s): Instructor approval required*

RES 806E - Essentials of Integrative Oncology

Credit(s): 2.00

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.

Integrative Mental Health

GSMH 521 - Consultation I

Credit(s): 1.00

Students meet with a clinical supervisor following the students' clinical shift 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. *Corequisite(s): GSMH 691*

GSMH 533 - Consultation II

Credit(s): 1.00

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. *Corequisite(s): GSMH 691*

GSMH 600 - Integrating Anti-Oppressive Practice

Credit(s): 2.00

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 socioeconomic, education, gender identity, sexual orientation, race, culture and ability.

GSMH 612 - Integrative Psychopharmacology

Credit(s): 4.00

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 supplement-drug 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 613 - Consultation III

Credit(s): 1.00

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. *Corequisite(s): GSMH 691*

GSMH 620 - Practice Strategies I: Introduction to Addiction

Credit(s): 3.00

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, and 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. This portion of the series focuses on exploring theories of dealing with addictions and the application of this to working in a healthcare setting. The focus of Practice Strategies I is to work effectively with patients experiencing addictions.

GSMH 621 - Consultation IV

Credit(s): 1.00

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. *Corequisite(s): GSMH 691*

GSMH 630 - Practice Strategies II: Grief and Loss

Credit(s): 3.00

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, and 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. This portion of the series focuses on exploring the theories of grief and loss, and the application of this to working in a healthcare setting. The focus of Practice Strategies II is to work effectively with patients experiencing grief and loss.

GSMH 638 - Objective Structured Clinical Exam (OSCE) 1

Credit(s): None

Prior to beginning mental health clinical practicum, students must demonstrate content knowledge, clinical skill, judgment, professional and ethical behavior, and communication skills by passing the OSCE 1 exam. *Note: Additional fee required*

GSMH 639 - Objective Structured Clinical Exam (OSCE) 2

Credit(s): None

Successful completion of the OSCE 2, administered in winter quarter of the final year, is required for graduation. *Note: Additional fee required*

GSMH 643 - Practice Strategies III: Crisis and Trauma

Credit(s): 3.00

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, and 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. This portion of the series focuses on exploring the theories of crisis and trauma, and the application of this to working in a healthcare setting. The focus of Practice Strategies III is to work effectively with patients experiencing crisis and trauma.

GSMH 690 - Capstone Preparation

Credit(s): 1.00

This capstone course prepares students to work effectively in a clinical setting. Topics range from clinical skills building, managing the therapeutic relationship, creating short-term treatment plans, long-term treatment visions, and sharpening one's professional identity as an integrative mental

healthcare provider. In addition, this course covers some of the more practical components of clinic, including necessary forms, reporting responsibilities, charting, and describing one's work. Final approval to move into clinic (GSMH 691 - Capstone I: Clinical Practicum I-IV) will be determined by successful completion of this course and passing GSMH 638 - Objective Structured Clinical Exam (OSCE) 1. *Corequisite(s): GSMH 638*

GSMH 691 - Capstone I: Clinical Practicum I-IV

Credit(s): 2.00

Clinical shifts specialize in mental health concerns and provide students an opportunity to integrate and apply skills in assessment, active listening, psychotherapeutic processing, psychopharmacology, cultural competence, case conceptualization and documentation, and self-evaluation; honing their skills as integrative mental healthcare practitioners. Format: clinical rotation; students see patients as student practitioners and are overseen by an attending clinician. This clinical rotation must be repeated four times. *Prerequisite(s): GSMH 690. Corequisite(s): GSMH 521, 533, 613 or 621 (depending on term). Note: Upon entering and exiting Clinical Practicum, students must successfully complete the OSCE I and II exams (GSMH 638 and GSMH 639).*

GSMH 692 - Capstone II

Credit(s): 1.00

Students reflect on their experience in clinic and review their work as integrative mental health practitioners, presenting in a capstone symposium and successfully completing the clinical exit exam (OSCE II, GSMH 639). Students are expected to provide a presentation that outlines a review of a clinical case (all identifiable patient information will be redacted). *Prerequisite(s): GSMH 691. Corequisite(s): GSMH 691, GSMH 621, GSMH 639*

GSMH 711 - Practice Tutorial IV

Credit(s): 0.50

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 712E - Introduction to LGBTQ Counseling

Credit(s): 3.00

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 735E - Military, Veterans and Mental Health

Credit(s): 2.00

This course serves as an introduction to military culture and language, the struggles some individuals have with reintegration, the unique experiences of female service members and veterans, military Post-Traumatic Stress Disorder (PTSD), Traumatic Brain Injury (TBI), Military Sexual Trauma (MST), and military and veteran suicide.

SS 502E - Introduction to Human Sexuality

Credit(s): 3.00

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 our life choices. This course examines sexuality not just as a physical act, but as a philosophical concept as well. Students are introduced to concepts and issues related to topics of: consent, sexual identity, sexual orientation, gender, relationships, reproductive politics, sexual violence, and love. By the end of this course, students will have a more critical and dynamic understanding of human sexuality and how these topics directly impact their lives. *Note: Cross-listed as SS 402E*

ND Basic and Biomedical Sciences: 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 - Clinical Anatomy I

Credit(s): 3.00

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. *Corequisite(s): BAS 5111T, BAS 5111L*

BAS 5111L - Clinical Anatomy I Lab

Credit(s): 1.50

Corequisite(s): BAS 5111, BAS 5111T. Note: Additional fee required

BAS 5111T - Clinical Anatomy I Tutorial

Credit(s): 1.00

Corequisite(s): BAS 5111, BAS 5111L

BAS 5121 - Clinical Anatomy II

Credit(s): 3.00

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. *Prerequisite(s): BAS 5111. Corequisite(s): BAS 5121T, BAS 5121L.*

BAS 5121L - Clinical Anatomy II Lab

Credit(s): 1.50

Corequisite(s): BAS 5121, BAS 5121T Note: Additional fee required

BAS 5121T - Clinical Anatomy II Tutorial

Credit(s): 1.00

Corequisite(s): BAS 5121, BAS 5121L

BAS 5131 - Microbiology, Public Health and Immunology

Credit(s): 3.00

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. *Corequisite(s): BAS 5131T*

BAS 5131T - Microbiology, Public Health and Immunology Tutorial

Credit(s): 2.00

Corequisite(s): BAS 5131

ND 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 - Structure and Function I

Credit(s): 12.00

Course I covers basic biochemistry; cell and tissue pathology; and cardiac, circulatory, respiratory and renal structure and function. *Corequisite(s): BAS 5110T, BAS 5110L*

BAS 5110L - Structure and Function I Lab

Credit(s): 0.33

Corequisite(s): BAS 5110, BAS 5110T

BAS 5110T - Structure and Function I Tutorial

Credit(s): 1.83

Corequisite(s): BAS 5110, BAS 5110L

BAS 5120 - Structure and Function II

Credit(s): 8.00

Course II covers gastrointestinal and dermatologic structure and function, physiology and pathology. *Prerequisite(s): BAS 5110. Corequisite(s): BAS 5120T, BAS 5120L.*

BAS 5120L - Structure and Function II Lab

Credit(s): 0.33

Corequisite(s): BAS 5120, BAS 5120T

BAS 5120T - Structure and Function II Tutorial

Credit(s): 1.38

Corequisite(s): BAS 5120, BAS 5120L. Note: Additional fee required

BAS 5130 - Structure and Function III

Credit(s): 8.00

Course III covers the central nervous system, behavior, pain, stress, and reproductive system structure and function, physiology and pathology. *Prerequisite(s): BAS 5120. Corequisite(s): BAS 5130T, BAS 5130L*

BAS 5130T - Structure and Function III Tutorial

Credit(s): 0.50

Corequisite(s): BAS 5130. Note: Additional fee required

ND 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

Credit(s): None

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 program director. During this six-week course, students are tutored individually or in a small group in areas where they need skill development. *Corequisite(s): Secondary or primary intern status. Note: Additional fee required*

CLE 828 - Objective Structured Clinical Examination (OSCE) Skills Tutorial

Credit(s): None

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(s): This course is assigned after a second OSCE exam failure. Note: Additional fee required*

CLE 829 - Clinical Tutoring

Credit(s): None

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(s): Primary intern status*

CLE 931 - Objective Structured Clinical Examination 1

Credit(s): None

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. *Prerequisite(s): Successful completion of CLE 5120 , CLE 5130*

CLE 932 - Objective Structured Clinical Examination 2

Credit(s): None

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.

Prerequisite(s): successful completion of one rotation of CLS 7300 or two rotations of CLE 709

CLE 933 - Objective Structured Clinical Examination 3

Credit(s): None

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.

Prerequisite(s): successful completion of six rotations of CLE 8400 or CLE 811

CLE 5110 - Clinical Education I

Credit(s): 3.08

This course series focuses on early development of knowledge, skills and judgement essential for clinical practice. This includes a focus on cultivation of the practitioner, professionalism, evidence-informed practice, foundational clinical skills, charting and physical clinical diagnosis, observation of praxis, and reflection. Throughout the series, year-one students are assigned to NUNM clinic shifts where they will observe routine clinical policies and procedures, doctor/student intern-patient relationships, diagnosis and treatment, application of therapeutic modalities, and referral management. *Note: Additional fee required*

CLE 5121 - Clinical Education II

Credit(s): 3.08

This course series focuses on early development of knowledge, skills and judgement essential for clinical practice. This includes a focus on cultivation of the practitioner, professionalism, evidence-informed practice, foundational clinical skills, charting and physical clinical diagnosis, observation of praxis, and reflection. Throughout the series, year-one students are assigned to NUNM clinic shifts where they will observe routine clinical policies and procedures,

doctor/student intern-patient relationships, diagnosis and treatment, application of therapeutic modalities, and referral management. *Note: Additional fee required*

CLE 5131 - Introduction to Community Education

Credit(s): 0.25

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

CLE 5132 - Clinical Education III

Credit(s): 2.92

This course series focuses on early development of knowledge, skills and judgement essential for clinical practice. This includes a focus on cultivation of the practitioner, professionalism, evidence-informed practice, foundational clinical skills, charting and physical clinical diagnosis, observation of praxis, and reflection. Throughout the series, year-one students are assigned to NUNM clinic shifts where they will observe routine clinical policies and procedures, doctor/student intern-patient relationships, diagnosis and treatment, application of therapeutic modalities, and referral management. During the final course of this series, students are introduced to principles and practices involved in community education. *Note: Additional fee required*

CLE 6212 - Introduction to Clinic

Credit(s): 0.25

This course gives students an overview of NUNM clinic procedures and includes required OSHA training. *Prerequisite(s): CLE 5120 , CLE 5130 . Note: Additional fee required*

CLE 6222 - Hydrotherapy Rotation

Credit(s): 2.00

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. *Prerequisite(s): CLE 5120 , CLE 5130 , THR 5120, THR 5120T, THR 5120L*

CLE 7300 - Secondary Rotation

Credit(s): 2.50

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. *Prerequisite(s): CLE 5120 , CLE 5130 , CLE 6212, CLE 6222, CLS 6210, CLS 6220, CLS 6230. Successful completion of OSCE 1. Note: 3 required rotations*

CLE 7311 - Community Education**Credit(s): 2.00**

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(s): CLE 5131

CLE 8400 - Primary Rotations**Credit(s): 2.50 credits each**

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, evidence-informed practice, and diagnostic skills to the treatment and management of patients in a primary care setting.

Prerequisite(s): CLE 7300, CLS 6210, CLS 6211, CLS 6220, CLS 6221, CLS 6230, CLS 6231, CLS 6232, CLS 7310, CLS 7311, CLS 7320, CLS 7321, CLS 7330, CLS 7331, CLS 7332.

Successful completion of OSCE 2. Note: 13 required rotations

CLE 8400T - Case Integration Mentorship Tutorial I**Credit(s): 1.50**

The purpose of this four-course series is to cultivate reflective practitioners, foster critical thinking, and enhance clinical judgment through team-based learning, self-awareness and peer

evaluation. Through mentorship and evidence-informed knowledge translation, nascent practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems.

Corequisite(s): CLE 8400

CLE 8401 - Community Experience (ComEx) Preceptorship

Credit(s): 5.00

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(s): CLE 5120*

CLE 8410T - Case Integration Mentorship Tutorial II

Credit(s): 1.50

The purpose of this four-course series is to cultivate reflective practitioners, foster critical thinking, and enhance clinical judgment through team-based learning, self-awareness and peer evaluation. Through mentorship and evidence-informed knowledge translation, nascent practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems.

Corequisite(s): CLE 8400

CLE 8411 - Grand Rounds

Credit(s): 1.50

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 8420T - Case Integration Mentorship Tutorial III

Credit(s): 1.50

The purpose of this four-course series is to cultivate reflective practitioners, foster critical thinking, and enhance clinical judgment through team-based learning, self-awareness and peer

evaluation. Through mentorship and evidence-informed knowledge translation, nascent practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems.

Corequisite(s): CLE 8400

CLE 8421 - Grand Rounds

Credit(s): 1.50

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 8430T - Case Integration Mentorship Tutorial IV

Credit(s): 1.50

The purpose of this four-course series is to cultivate reflective practitioners, foster critical thinking, and enhance clinical judgment through team-based learning, self-awareness and peer evaluation. Through mentorship and evidence-informed knowledge translation, nascent practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems.

Corequisite(s): CLE 8400

CLE 8431 - Grand Rounds

Credit(s): 1.50

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 8432 - Community Experience (ComEx) Preceptorship

Credit(s): 4.00

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(s): CLE 5120*

CLE 8499 - Case Portfolio

Credit(s): None

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(s): CLE 8400

ND 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 - Musculoskeletal, Orthopedics, Exercise Physiology and Rehabilitation

Credit(s): 9.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6210T, CLS 6210L*

CLS 6210L - Musculoskeletal, Orthopedics, Exercise Physiology and Rehabilitation Lab

Credit(s): 3.00

Corequisite(s): CLS 6210, CLS 6210T. Note: Additional fee required

CLS 6210T - Musculoskeletal, Orthopedics, Exercise Physiology and Rehabilitation Tutorial

Credit(s): 6.00

Corequisite(s): CLS 6210, CLS 6210L. Note: Additional fee required

CLS 6211 - Neurology

Credit(s): 5.50

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6211T, CLS 6211L*

CLS 6211L - Neurology Lab

Credit(s): 0.25

Corequisite(s): CLS 6211, CLS 6211T. Note: Additional fee required

CLS 6211T - Neurology Tutorial

Credit(s): 1.50

Corequisite(s): CLS 6211, CLS 6211L

CLS 6220 - Cardiology and Pulmonology

Credit(s): 9.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6220T, CLS 6220L*

CLS 6220L - Cardiology and Pulmonology Lab

Credit(s): 0.50

Corequisite(s): CLS 6220, CLS 6220T. Note: Additional fee required

CLS 6220T - Cardiology and Pulmonology Tutorial

Credit(s): 4.00

Corequisite(s): CLS 6220, CLS 6220L. Note: Additional fee required

CLS 6221 - Hematology and Oncology

Credit(s): 6.50

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.

Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6221T, CLS 6221L

CLS 6221L - Hematology and Oncology Lab

Credit(s): 0.50

Corequisite(s): CLS 6221, CLS 6221T. Note: Additional fee required

CLS 6221T - Hematology and Oncology Tutorial

Credit(s): 1.50

Corequisite(s): CLS 6221, CLS 6221L

CLS 6230 - Gastroenterology and Proctology

Credit(s): 8.50

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6230T, CLS 6230L*

CLS 6230L - Gastroenterology and Proctology Lab

Credit(s): 0.25

Corequisite(s): CLS 6230, CLS 6230T. Note: Additional fee required

CLS 6230T - Gastroenterology and Proctology Tutorial

Credit(s): 2.00

Corequisite(s): CLS 6230, CLS 6230L. Note: Additional fee required

CLS 6231 - Urology and Nephrology

Credit(s): 5.50

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6231T*

CLS 6231T - Urology and Nephrology Tutorial

Credit(s): 3.00

Corequisite(s): CLS 6231. Note: Additional fee required

CLS 6232 - Metabolism and Endocrinology

Credit(s): 7.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 6232T*

CLS 6232T - Metabolism and Endocrinology Tutorial

Credit(s): 3.00

Corequisite(s): CLS 6232

CLS 7310 - Reproductive Systems (Andrology, Gynecology and Natural Childbirth)

Credit(s): 11.00

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 sex-specific conditions and LGBTQI health care. This course also provides students with foundational knowledge of natural childbirth, as well as prenatal and postpartum care.

Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7310T, CLS 7310L

CLS 7310L - Reproductive Systems Lab (Andrology, Gynecology and Natural Childbirth)

Credit(s): 0.50

Corequisite(s): CLS 7310, CLS 7310T. Note: Additional fee required

CLS 7310T - Reproductive Systems Tutorial (Andrology, Gynecology and Natural Childbirth)

Credit(s): 3.00

Corequisite(s): CLS 7310, CLS 7310L

CLS 7311 - Rheumatology and Clinical Immunology

Credit(s): 4.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7311T*

CLS 7311T - Rheumatology and Clinical Immunology Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7311. Note: Additional fee required

CLS 7320 - Eyes, Ears, Nose and Throat (EENT)

Credit(s): 5.00

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.

Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7320T, CLS 7320L

CLS 7320L - Eyes, Ears, Nose and Throat (EENT) Lab

Credit(s): 0.25

Corequisite(s): CLS 7320, CLS 7320T. Note: Additional fee required

CLS 7320T - Eyes, Ears, Nose and Throat (EENT) Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7320, CLS 7320L

CLS 7321 - Dermatology and Minor Surgery

Credit(s): 7.50

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7321T, CLS 7321L*

CLS 7321L - Dermatology and Minor Surgery Lab

Credit(s): 1.00

Corequisite(s): CLS 7321, CLS 7321T Note: Additional fee required

CLS 7321T - Dermatology and Minor Surgery Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7321, CLS 7321L

CLS 7330 - Pediatrics and Geriatrics

Credit(s): 6.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7330T*

CLS 7330T - Pediatrics and Geriatrics Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7330. Note: Additional fee required

CLS 7331 - Parenteral Therapy and Environmental Medicine

Credit(s): 3.50

Environmental medicine is the diagnosis and treatment of conditions related to the human exposure of both macro- and 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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7331T, CLS 7331L*

CLS 7331L - Parenteral Therapy and Environmental Medicine Lab

Credit(s): 0.50

Corequisite(s): CLS 7331, CLS 7331T. Note: Additional fee required

CLS 7331T - Parenteral Therapy and Environmental Medicine Tutorial

Credit(s): 2.00

Corequisite(s): CLS 7331, CLS 7331L

CLS 7332 - Psychology and Mental Health

Credit(s): 4.00

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. *Prerequisite(s): BAS 5130, BAS 5121, THR 5120, THR 5131. Corequisite(s): CLS 7332T*

CLS 7332T - Psychology and Mental Health Tutorial

Credit(s): 3.00

Corequisite(s): CLS 7332. Note: Additional fee required

ND Electives

NDEB 5110E - Northwest Herbs I

Credit(s): 2.00

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. *Note: Additional fee required*

NDEB 5130E - Northwest Herbs II

Credit(s): 2.00

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. *Note: Additional fee required*

NDEB 5200E - San Juan Island Herbal Experience

Credit(s): 2.00

This experiential class focuses on the unique environment found on the San Juan Islands. Faculty lead a small group of students on a 3-day/2-night exploration of the rich diversity of land and sea plants of the maritime islands; traveling in groups to Anacortes and Shaw Island, and car camp at the University of Washington's field station on Shaw Island. Students will bring all personal items for camping, including tents and sleeping bags, and will be responsible for various camp chores

including meals. The cost of the ferry, transportation, camping at Washington Park, seaweed, and shellfish license will be paid by each student and is not covered by the lab fee. *Note: Additional fee required*

NDEB 5201E - Cascade Mountain Herbal Intensive

Credit(s): 2.00

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. *Note: Additional fee required*

NDEB 5210E - Herbal Garden Processing

Credit(s): 0.50

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. *Note: Additional fee required*

NDEB 5231E - CASEE Center Herb Walk

Credit(s): 0.50

This field study course is 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.

NDEB 6230E - Advanced Topics in Botanical Medicine I

Credit(s): 3.00

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(s): THR 5131*

NDEB 6310E - Effective Formulas for Top General Practice Conditions

Credit(s): 1.00

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. *Prerequisite(s): CLS 7310, CLS 7311, CLS 7320, CLS 7321*

NDEB 6330E - Botanical Cell Biology, Molecular Mechanisms and Research

Credit(s): 1.00

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(s): THR 5131*

NDEB 6331E - Advanced Topics in Botanical Medicine II

Credit(s): 3.00

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(s): THR 5131*

NDEC 5125E - Personal Development as a Physician

Credit(s): 1.50

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 5203E - Advanced Anatomy Techniques in Dissection

Credit(s): 3.00

Students obtain a deeper understanding of anatomy through guided dissection of human cadavers. This course is a unique opportunity to experience the process from the original, undissected cadavers, to fully dissected (as was experienced during the first year). Students will have opportunities to present visible structures to their peers, providing an opportunity to expand their professional growth as well as public speaking skills. *Prerequisite(s): BAS 5121, BAS 5130; open to ND students in year two or higher*

NDEC 6240E - Advanced Electrocardiogram and Spirometric Interpretation

Credit(s): 0.50

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(s): CLS 6220*

NDEC 6349E - Advanced Medical Biochemistry

Credit(s): 3.00

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. *Prerequisite(s): BAS 5110*

NDEC 7310E - Pharmacology for Clinical Practice

Credit(s): 2.00

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. *Prerequisite(s): CLS 7310, CLS 7311, CLS 7320, CLS 7321*

NDEC 7311E - Pain: Pathophysiology and Management Options

Credit(s): 2.00

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(s): CLS 6210*

NDEC 7313E - Neuroendocrine Immunology

Credit(s): 2.00

This course is primarily intended to help concurrent students (those working toward both their ND and CCM degrees) 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(s): Third-year status in the ND and CCM programs*

NDEC 7320E - Microbiome

Credit(s): 1.00

This course focuses on the importance of the gut microflora to human health. Emphasis is given to traditional naturopathic practices that support healthy gut flora and overall health. Students will also learn about the Human Microbiome Project and the American Gut Project. *Prerequisite(s): THR 5120*

NDEC 7330E - Transgender Health and Gender Transition

Credit(s): 2.00

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(s): CLS 7310*

NDEC 7340E - The Liver in Health and Disease

Credit(s): 2.00

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(s): CLS 6230

NDEC 7341E - Sleep Health and Disorders

Credit(s): 2.00

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(s): BAS 5130*

NDEC 7342E - Advanced Gastroenterology

Credit(s): 2.00

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(s): CLS 6230*

NDEC 7350E - Auriculomedicine

Credit(s): 2.00

This class is a solid introduction to ear microsystem acupuncture 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

Credit(s): 2.50

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. *Note: Additional fee required*

NDEC 8430E - Advanced Gastroenterology Lab

Credit(s): 1.00

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(s): CLS 6230*

NDEH 7310E - Homeopathy I

Credit(s): 3.00

This course series builds on the core homeopathic curriculum and supports the attainment of the homeopathy certificate. The courses are intended to help students advance their understanding and practical application of homeopathy in a clinical setting. Students will further develop their skills in case analysis, symptom and rubric selection, navigation of the computerized repertory, special functions of the computerized repertory, and familiarity with the reportorial language. *Prerequisite(s): THR 5131*

NDEH 7320E - Homeopathy II

Credit(s): 3.00

This course series builds on the core homeopathic curriculum and supports the attainment of the homeopathy certificate. The courses are intended to help students advance their understanding and practical application of homeopathy in a clinical setting. Students will further develop their skills in case analysis, symptom and rubric selection, navigation of the computerized repertory, special functions of the computerized repertory, and familiarity with the reportorial language. *Prerequisite(s): THR 5131, NDEH 7310E*

NDER 7330E - Natural Childbirth II: Pregnancy

Credit(s): 3.00

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 well-being 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(s): CLS 7310*

NDER 7331E - Advanced Gynecology: Special Topics

Credit(s): 2.00

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(s): CLS 7310*

NDER 7340E - Natural Childbirth III: Labor and Delivery

Credit(s): 3.00

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(s): CLS 7310*

NDER 7341E - Advanced Gynecology: Infertility and Endocrinology

Credit(s): 2.50

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(s): CLS 7310*

NDER 8420E - Natural Childbirth IV: Postpartum Management

Credit(s): 3.00

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(s): CLS 7310*

NDER 8430E - Natural Childbirth V: Neonatology

Credit(s): 3.00

This course educates both the generalist naturopathic student as well as those seeking the midwifery certificate 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. *Prerequisite(s): CLS 7310, CLS 7330. Note: Additional fee required*

NDER 8440E - Natural Childbirth VI: Special Topics

Credit(s): 2.00

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(s): CLS 7310*

NDER 8441E - Natural Childbirth VII: Legal Aspects

Credit(s): 1.00

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

NDET 5120E - Bodywork I: Massage Foundations

Credit(s): 1.00

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. *Note: Additional fee required*

NDET 5121E - Somatic Re-Education I

Credit(s): 1.00

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

NDET 5130E - Bodywork II: Advanced Massage

Credit(s): 1.00

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(s): NDET 5120E. Note: Additional fee required*

NDET 5131E - Somatic Re-Education II

Credit(s): 1.00

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

NDET 5140E - Bodywork III: Energy Work

Credit(s): 1.00

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(s): NDET 5130E. Note: Additional fee required*

NDET 5141E - Somatic Re-Education III

Credit(s): 1.00

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

NDET 6121E - Somatic Re-Education IV

Credit(s): 1.00

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

NDET 6140E - Aromatherapy

Credit(s): 1.50

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. *Note: Additional fee required*

NDET 6215E - Race and Disparities in Health Care

Credit(s): 2.00

This course provides an overview of health disparities along racial and ethnic categories. We will seek to understand how political, economic and social contexts shape health, access to healthcare, and the quality of care across racial and ethnic groups. This course also explores the socio-scientific processes that have privileged "innate" difference as explanations for inequality and marginalization; and examine ways in which "race" intersects with other categories of difference, such as gender, class, sexuality and religion to impact one's health and one's access to health care. This course addresses the implications of this framework for understanding health inequality and how we choose to address it. *Note: This course is open to students, staff and faculty.*

NDET 6230E - Mindful Self-Compassion

Credit(s): 2.00

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 (loving-kindness, 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

Credit(s): 2.00

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. *Note: Additional fee required*

NDET 6251E - Advanced Physical Medicine

Credit(s): 3.00

This course provides an opportunity to consolidate and review physical medicine concepts and skills pertaining to the assessment and treatment of common primary care presentations. Students will review and practice cervical, lumbar, and pelvis/SI adjustment; and also further their clinical acumen in assessment and treatment of musculoskeletal conditions that commonly present to family practice. *Prerequisite(s): CLS 6210*

ND Philosophy

PHL 5110 - Naturopathic History and Philosophy I

Credit(s): 1.00

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

Credit(s): 2.00

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 5120 - Naturopathic History and Philosophy II

Credit(s): 1.00

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 5130 - Naturopathic Medicine Retreat

Credit(s): 0.75

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.

ND Practice Management

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 7321 - Business I: HR and Human Relations

Credit(s): 2.00

This is the first of three courses that aim to prepare the naturopathic student to succeed in practice. In this course, students learn the fundamentals of business human resources and relationships.

BUS 8400 - Jurisprudence

Credit(s): 1.00

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.

BUS 8421 - Business II: Marketing and Portfolio

Credit(s): 2.00

This course prepares students to establish a portfolio and develop effective marketing strategies.

BUS 8430 - Business III: Readiness for Life Beyond NUNM

Credit(s): 1.50

The practice management series culminates in a capstone project, for which students prepare for their chosen career.

ND Therapeutics

THR 5120 - Therapeutic Modalities I

Credit(s): 6.00

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. *Corequisite(s): THR 5120T, THR 5120L*

THR 5120L - Therapeutic Modalities I Lab

Credit(s): 1.00

Corequisite(s): THR 5120, THR 5120T. Note: Additional fee required

THR 5120T - Therapeutic Modalities I Tutorial

Credit(s): 2.00

Corequisite(s): THR 5120, THR 5120L

THR 5131 - Therapeutic Modalities II

Credit(s): 6.00

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. *Corequisite(s): THR 5131T, THR 5131L*

THR 5131L - Therapeutic Modalities II Lab

Credit(s): 0.50

Corequisite(s): THR 5131, THR 5131T. Note: Additional fee required

THR 5131T - Therapeutic Modalities II Tutorial

Credit(s): 2.00

Corequisite(s): THR 5131, THR 5131L

Nutrition (Master's Level)

GSN 501E - Seasonal Cooking - Summer

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 502 - Culinary Skills

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 503 - Farm to Table

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 505 - Healing Foods I

Credit(s): 2.00

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. *Prerequisite(s): GSN 507. Corequisite(s): GSN 506*

GSN 506 - Healing Foods I Practicum

Credit(s): 2.00

This complementary course brings to life the content covered in the GSN 505 - Healing Foods I. Students will have hands-on experience preparing foods and meals that showcase their healing properties in creative ways. *Corequisite(s): GSN 505. Note: Additional fee required*

GSN 507 - Fundamentals of Nutrition

Credit(s): 4.00

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. *Corequisite(s): GSN 508 is required for MScN students; not required for MSiMR students*

GSN 508 - Fundamentals of Nutrition Workshop

Credit(s): 1.00

This hands-on class emphasizes the objectives of macro- and micronutrient nutrition. Students learn through a variety of culinary experiments and case-based activities. *Corequisite(s): GSN 507. Note: Additional fee required*

GSN 509 - Community Nutrition and Food Policy

Credit(s): 3.00

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. *Prerequisite(s): GSN 534*

GSN 510E - Seasonal Cooking - Fall

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 514 - Nutritional Biochemistry

Credit(s): 3.00

Learn the molecular, biochemical and metabolic characteristics of dietary nutrients, bioactive compounds in food, and the gut microbiota, with emphasis on their relationships and contributions to health and disease. Gain the core knowledge and key concepts related to the science of human nutrition, including enzyme kinetics, bioenergetics, the metabolic pathways, and the regulation of metabolism in different physiologic states.

GSN 515 - Nutritional Assessment

Credit(s): 2.00

Learn clinical and dietary evaluations to determine an individual's nutritional status. Gain proficiency in clinical documentation; taking a medical and nutrition history, charting a SOAP note and determine the nutrition diagnosis matched to medical diagnoses. Perform nutrition physical exam; including dietary analysis, questionnaires and basic anthropometric measurements. Propose recommendations based on individual nutritional needs using evidence-based nutrition practice guidelines. Evaluate laboratory tests from urine, saliva or blood. Communicate nutrition therapy plans with primary care physicians or healthcare teams to ensure clear coordination of care. *Prerequisite(s): GSN 507, GSN 514, GSN 516*

GSN 516 - Pathophysiology

Credit(s): 3.00

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

Credit(s): 2.00

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. *Prerequisite(s): GSN 507, GSN 516*

GSN 520E - Seasonal Cooking - Winter

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 524 - Medical Nutrition Therapy

Credit(s): 3.00

Examine nutritional concepts for specific disease states, including anemia, bone health, cancer, cardiovascular disease, gastrointestinal disorders, hypertension, metabolic dysregulation, and renal disease. Synthesize evidence-based medical and nutrition literature to determine which personalized nutrition plan to implement for each patient condition. *Prerequisite(s): GSN 507, GSN 515, GSN 516 Corequisite(s): GSN 529*

GSN 526 - Lifecycle Nutrition

Credit(s): 3.00

The specific nutritional needs and nutrition-related issues during various stages of the lifecycle are identified. Topics include preconception, pregnancy, lactation, childhood, adolescent, adulthood and geriatric nutrition. *Prerequisite(s): GSN 515, GSN 516*

GSN 528 - Health Coaching

Credit(s): 2.00

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 one-on-one and group coaching are highlighted. Practical application of the material is woven throughout the course.

GSN 529 - Applied Medical Nutrition Therapy

Credit(s): 2.00

In this experiential course, students develop recipes and menus, as well as prepare meals for specific medical conditions. *Corequisite(s): GSN 524. Note: Additional fee required*

GSN 530E - Seasonal Cooking - Spring

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 534 - Cultural Humility and Food Justice

Credit(s): 2.00

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 536 - Gut Microbiome

Credit(s): 2.00

The microbiome/host relationship in human health is widely recognized. Microbiota impact nearly every aspect of human health. Yet, the diversity of microbes between individuals leaves us pondering how to best influence this health system. This course explores the ecology and evolution of the microbiome, how to measure the microbiome, and the relevance of microbial change. Students will examine the current research literature, discuss "-omics", and collect and analyze microbiome data.

GSN 538E - Cooking Pedagogy

Credit(s): 2.00

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.

Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required

GSN 542E - Cooking and Considering Meat and Seafood

Credit(s): 2.00

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.

Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required

GSN 543E - Personal Chef and Food Service

Credit(s): 2.00

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. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 544E - Food Systems: Global and Ecological Issues

Credit(s): 2.00

In this course, students explore global and federal organizations participating in the food system; global food policy and trade agreements; food production, processing and distribution; and food security, food access, food waste, and agricultural sustainability on a global perspective. Students will examine food certification, food labeling, food marketing misinformation, food health claims, organic, GMO, farmed fish, cultural traditions and religious impacts of food choice, and the global malnutrition paradox.

GSN 545E - Global Cuisine: Foods of the World

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 546E - Food Allergies and Intolerances

Credit(s): 2.00

Adverse food reactions have been increased significantly in the past decade. This course addresses the different types of adverse food reactions including food allergies, food sensitivities and food intolerances; and why these reactions have increased in recent times and how to effectively work with clients. Basic immunology is used as a guide to understand the body's

responses and the best ways to approach testing and treatment of adverse food reactions.

Prerequisite(s): GSN 507 or GSNO 584, GSN 516 or GSNO 516

GSN 547E - Fad Diets

Credit(s): 2.00

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

Credit(s): 2.00

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. *Prerequisite(s): GSN 515 or GSNO 515, GSN 517 or GSNO 517*

GSN 549E - Detoxification and Cleanses

Credit(s): 2.00

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. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 550E - Clinical Case Presentation

Credit(s): 2.00

This course provides students the opportunity to study clinical cases, supporting further development of diagnostic thought processes. Case examinations will illustrate important elements of client presentation, the significance of underlying conditions, existing pathology, and consideration of nutritional recommendations. Students will present client case histories for feedback and collaboration by fellow classmates and a clinical faculty member.

Prerequisite(s): GSN 524 or GSNO 586

GSN 551E - Therapeutic Diets

Credit(s): 2.00

A comprehensive examination of commonly prescribed therapeutic diets. Nutrition fundamentals, current research, and popular media views are thoroughly explored. Hands-on preparation sessions provide practical experience with each diet. *Prerequisite(s): GSN 507 or GSNO 584. Note: Additional fee required*

GSN 552E - Nutritional Supplements

Credit(s): 2.00

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. *Prerequisite(s): GSN 507 or GSNO 584*

GSN 554E - Sports Nutrition I

Credit(s): 2.00

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. *Prerequisite(s): GSN 507 or GSNO 584 , GSN 515 or GSNO 515*

GSN 555E - Clinical Biochemistry and Nutrition

Credit(s): 3.00

Learn the science-based and personalized approach to medical nutrition therapy that uses conventional and specialty laboratory tests to screen, diagnose and monitor nutrition-related problems and diseases. Apply clinical nutrition knowledge and nutritional biochemistry to interpret qualitative and quantitative biomarkers that reveal nutrient status, disorders of metabolism, oxidative damage, toxic exposure, neuroendocrine activity, and intestinal dysbiosis. Correlate laboratory findings with other biomarkers to formulate nutrition care plans that address the unique biochemical profiles of patients. *Prerequisite(s): GSN 524 or GSNO 586*

GSN 557E - Cooking with Medicinal Herbs

Credit(s): 2.00

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 Western medicinal herbs. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 558E - Food as Medicine Everyday (FAME) Educator Training

Credit(s): 2.00

Community cooking and nutrition programs have been identified as a key factor in reducing chronic diseases, such as diabetes and obesity. The Food as Medicine Everyday (FAME) series focuses on this need by providing hands-on cooking and community-based nutrition education. Learn how to become a FAME Educator and utilize the FAME curriculum to build and teach a successful FAME series in your own community; including how to navigate location development and marketing; receive FAME Educator trainee competency development plus training materials; and learn how to navigate cooking workshop management and logistics. This class is for those seriously looking to teach the FAME series in their community, thereby helping the Food as Medicine Institute to spread their mission in making whole-foods nutrition education more accessible. *Prerequisite(s): GSN 502 or GSNO 502, GSN 524 or GSNO 586; and instructor approval. Note: Additional fee required*

GSN 559E - Vegan Diets

Credit(s): 2.00

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. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 560E - Sports Nutrition II

Credit(s): 2.00

Building upon the contents 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. *Prerequisite(s): GSN 554E*

GSN 561E - Recipe and Menu Development

Credit(s): 2.00

Learn the steps to developing your own recipes and menus, while taking nutrition and culinary

creativity into consideration. Students will become proficient with ingredient/ flavor pairings, menu modifications, and have a chance to test out their recipes. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 563 - Business of Nutrition

Credit(s): 2.00

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 564E - Nutritional Genetics

Credit(s): 2.00

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. *Prerequisite(s): GSN 507 or GSNO 584 , GSN 516 or GSNO 516*

GSN 565E - Food Anthropology

Credit(s): 2.00

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

Credit(s): 2.00

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(s): GSN 568E*

GSN 568E - Healing Foods II Practicum

Credit(s): 2.00

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(s): GSN 567E. Note: Additional fee required*

GSN 569E - Lifestyle and Wellness

Credit(s): 2.00

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

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 572E - Indian Cooking

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 573E - Childhood Nutrition

Credit(s): 2.00

This course is an exploration of childhood nutrition, addressing nutrient needs vs. children's food preferences; developmental stages; and intrapersonal, interpersonal and environmental barriers to healthy eating for children. Students will investigate physiological, genetic, environmental, and behavioral factors that increase risk for diet-related diseases. The course emphasizes ways to help children build healthy relationship with foods, engage children with their food choices, and provide nutrient-dense foods for families. Hands-on cooking experiences will include how to plan and prepare foods with children as the audience and kitchen participant. *Prerequisite(s): GSN 526 or GSNO 526*

GSN 574E - Food Relationship Coaching

Credit(s): 2.00

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. *Prerequisite(s): GSN 528 or GSNO 528*

GSN 575E - Obesity, Metabolic Syndrome, and Diabetes

Credit(s): 2.00

This is a practical course for those working with an obese population covering etiology; clinical characteristics; nutrition therapy; and prevention strategies for obesity, metabolic syndrome and diabetes. The course investigates the many influences on body weight, adiposity and energy expenditure, and evaluates current research in this area. Practical applications include an exploration of common eating habits and behaviors, barriers to weight loss, and treatment strategies. In addition, the course covers compassionate counseling and ways to help patients build better relationships with food and their bodies. *Prerequisite(s): GSN 515 or GSNO 515 , GSN 516 or GSNO 516*

GSN 577E - Nutrition Career Strategies (weekend format)

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 578E - Food Chemistry

Credit(s): 2.00

In this hands-on experiential course, students explore basic food chemistry concepts as well as industrial food chemistry techniques and practices. They will learn about the chemical properties of nutrients and the effects of various cooking methods. The course is a mixture of lab and lecture. *Prerequisite(s): GSN 507 or GSNO 584. Note: Additional fee required*

GSN 579E - Preparation for Clinic Nutrition Rotation

Credit(s): 2.00

This course provides students with the policies and procedures for practicing at NUNM health centers. Students will be oriented to the NUNM clinic and complete trainings in OSHA, HIPAA, EPIC, and first aid and CPR. Additional topics include clinic guidelines, safety and emergency medical procedures, and professionalism. *Corequisite(s): GSN 524 or GSNO 586, GSN 528 or GSNO 528. Note: Additional fee required*

GSN 580E - Clinic Nutrition Rotation

Credit(s): 2.00

In this clinical immersion experience, students work with patients individually and in a group setting to address nutrition-related concerns. Students will conduct nutrition counseling, nutrition assessment, dietary and menu planning, and case evaluation. *Prerequisite(s): GSN 579E*

GSN 582E - Constitutional Medicine and Seasonal Dietetics

Credit(s): 2.00

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 life cycles. *Note: Additional fee required*

GSN 583E - Nutritional Counseling

Credit(s): 2.00

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. *Prerequisite(s): GSN 515 or GSNO 515*

GSN 589E - Nutritional Immunology

Credit(s): 4.00

This course explores inflammation and immunological responses as underlying causes in many chronic diseases. Nutritional influences on the inflammatory process and immune balance are analyzed in depth. Students will discover how to use nutrition to impact immunological outcomes using real-life clinical cases. Environmental exposures that affect the immune system are also reviewed.

GSN 590 - Professional Development I

Credit(s): 1.00

This course provides students with skills, knowledge and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning.

GSN 591 - Professional Development II

Credit(s): 2.00

This course provides students with a bridge from the academic program to career opportunities in the field of nutrition. *Prerequisite(s): GSN 590*

GSN 592E - Autoimmunity

Credit(s): 3.00

Autoimmune disease prevalence is increasing worldwide. This increase is contributed to both genetic and environmental factors. In this course, students learn autoimmune disease mechanism, staging, diagnosis and treatment. Nutritional, environmental and physiological (e.g., hormones, neurotransmitters, etc.) effects on autoimmunity are explored using real-life clinical cases. This course includes interviews with naturopathic doctors and nutritionists who work with

autoimmune patients. *Prerequisite(s): One of the following: CLS 7311 , CM 699 , RES 702 , GSN 546E or NS 322*

GSN 593E - Introduction to Permaculture

Credit(s): 3.00

This course explores the basic principles and practices of permaculture, offering an opportunity for students to examine ways humanity can live in harmony with Earth's natural systems. Students will increase their understanding of ecology while gaining hands-on experience in mapping, reading the landscape, and the design process. This class is an overview of the permaculture philosophy and will give students the opportunity to integrate this philosophy into their daily lives. *Note: This course does not culminate in a Permaculture Design Certificate (PDC).*

GSN 614E - Advanced Nutritional Biochemistry

Credit(s): 3.00

Learn cutting-edge nutritional biochemistry and systems medicine concepts integrated with clinical nutrition knowledge, and explore the unifying metabolic processes that promote health or cause inflammation, illness and death. Study the interrelationships among the leading chronic diseases and diet composition to advance understanding of disease as the dysregulation of glucose, fatty acid, protein and micronutrient metabolism. Relate the biochemical basis of disease to proactive and preventive nutritional interventions. *Prerequisite(s): GSN 514 or GSNO 514, or equivalent. Note: This course may be taken by students (in advanced standing) in place of GSN 514 with approval of instructor.*

GSN 690 - Capstone Preparation

Credit(s): 1.00

This course assists students in finding an appropriate capstone project, either an internship or directed study. If the capstone experience is to be an internship, students are taught how to properly carry out the activity, make the connection with the host site, and select a mentor to guide the process. If the capstone experience is to be a directed study, students are taught how to properly develop their project proposal and select a mentor to guide the process. *Prerequisite(s): or corequisite: GSN 591*

GSN 691 - Capstone I: Internship

Credit(s): 2.00

This course operationalizes the student's approved capstone project as an internship. The student

may substitute GSN 697 - Capstone I: Directed Study to meet the Capstone I requirement.
Prerequisite(s): GSN 690

GSN 692 - Capstone II: Internship

Credit(s): 2.00

In this course, students continue in their approved capstone project. Students will give an oral presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSN 691. Note: Students who took GSN 697 - Capstone I: Directed Study to meet their capstone requirement should register for GSN 698 - Capstone II: Directed Study to complete their capstone experience.*

GSN 697 - Capstone I: Directed Study

Credit(s): 2.00

This version of Capstone I allows students to design their own capstone project to meet their specific employment goals. They must develop a directed study proposal, obtain the consent of a faculty member to serve as their mentor during the directed study, and then carry out the activities necessary to attain the learning objectives they have developed in the directed study proposal. *Prerequisite(s): GSN 690. Note: May be taken to meet the Capstone I requirement in place of GSN 691*

GSN 698 - Capstone II: Directed Study

Credit(s): 2.00

In this course, students continue in their approved capstone project. Student will give an oral presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSN 697*

GSN 838E - Israel Culinary and Cultural Immersion Trip

Credit(s): 3.00

Students are immersed in the rich culture of Israel by experiencing the local food, customs and traditions. A seven-day excursion will take students to the food markets in Jerusalem, a local farm that grows herbs and spices, and an olive farm. Explore the vast countryside of Israel, including the Dead Sea, Tel Aviv, Nazareth, and the Sea of Galilee, while learning about the health benefits of the local cuisine and lifestyle. *Note: itinerary-specific trip fee applies*

GSN 839E - Croatia Culinary and Cultural Immersion Trip

Credit(s): 4.00

In this course, students are immersed in the Mediterranean diet and culture of Croatia, one of only seven countries recognized by UNESCO as a carrier of the cultural heritage of this dietary pattern. Students will discuss the present-day benefits and challenges of this diet and examine what may be threatening its preservation. Local immersion includes exploring the most famous local food markets, visiting an olive grove and a vineyard, and traveling to the island of Hvar for a multi-day Mediterranean diet experience. *Note: itinerary-specific trip fee applies*

GSNO 502 - Culinary Skills

Credit(s): 2.00

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. *Note: For online MScN cohort students only*

GSNO 503 - Farm to Table

Credit(s): 2.00

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. *Note: For online MScN cohort students only*

GSNO 509 - Community Nutrition and Food Policy

Credit(s): 3.00

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. *Prerequisite(s): GSNO 534. Note: For online MScN cohort students only*

GSNO 514 - Nutritional Biochemistry

Credit(s): 3.00

Learn the molecular, biochemical and metabolic characteristics of dietary nutrients, bioactive

compounds in food, and the gut microbiota, with emphasis on their relationships and contributions to health and disease. Gain the core knowledge and key concepts related to the science of human nutrition, including enzyme kinetics, bioenergetics, the metabolic pathways, and the regulation of metabolism in different physiologic states. *Note: For online MScN cohort students only*

GSNO 515 - Nutritional Assessment

Credit(s): 2.00

Learn clinical and dietary evaluations to determine an individual's nutritional status. Gain proficiency in clinical documentation; taking a medical and nutrition history, charting a SOAP note and determine the nutrition diagnosis matched to medical diagnoses. Perform nutrition physical exam; including dietary analysis, questionnaires and basic anthropometric measurements. Propose recommendations based on individual nutritional needs using evidence-based nutrition practice guidelines. Evaluate laboratory tests from urine, saliva or blood. Communicate nutrition therapy plans with primary care physicians or healthcare teams to ensure clear coordination of care. *Prerequisite(s): GSNO 514, GSNO 516, GSNO 584. Note: For online MScN cohort students only*

GSNO 516 - Pathophysiology

Credit(s): 3.00

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. *Note: For online MScN cohort students only*

GSNO 517 - Psychology of Eating

Credit(s): 2.00

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. *Prerequisite(s): GSNO 516, GSNO 584. Note: For online MScN cohort students only*

GSNO 526 - Lifecycle Nutrition

Credit(s): 3.00

The specific nutritional needs and nutrition-related issues during various stages of the lifecycle are identified. Topics include preconception, pregnancy, lactation, childhood, adolescent and

geriatric nutrition. *Prerequisite(s): GSNO 515, GSNO 516. Note: For online MScN cohort students only*

GSNO 528 - Health Coaching

Credit(s): 2.00

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 one-on-one and group coaching are highlighted. Practical application of the material is woven throughout the course. *Note: For online MScN cohort students only*

GSNO 534 - Cultural Humility and Food Justice

Credit(s): 2.00

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. *Note: For online MScN cohort students only*

GSNO 536 - Gut Microbiome

Credit(s): 2.00

The microbiome/host relationship in human health is widely recognized. Microbiota impact nearly every aspect of human health. Yet, the diversity of microbes between individuals leaves us pondering how to best influence this health system. This course explores the ecology and evolution of the microbiome, how to measure the microbiome, and the relevance of microbial change. Students will examine the current research literature, discuss "-omics", and collect and analyze microbiome data. *Note: For online MScN cohort students only*

GSNO 563 - Business of Nutrition

Credit(s): 2.00

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. *Note: For online MScN cohort students only*

GSNO 584 - Fundamentals of Nutrition

Credit(s): 5.00

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. This course includes a hands-on component emphasizing the objectives of macro- and micronutrient nutrition. Students will learn through a variety of culinary experiments and case-based activities. *Note: For online MScN students only*

GSNO 585 - Healing Foods**Credit(s): 4.00**

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. Students will have hands-on experience preparing foods and meals that showcase their healing properties in creative ways. *Prerequisite(s): GSNO 584. Note: For online MScN students only*

GSNO 586 - Medical Nutrition Therapy**Credit(s): 5.00**

Examine nutritional concepts for specific disease states, including anemia, bone health, cancer, cardiovascular disease, gastrointestinal disorders, hypertension, metabolic dysregulation, and renal disease. Synthesize evidence-based medical and nutrition literature to determine which personalized nutrition plan to implement for each patient condition. Students develop recipes and menus, as well as prepare meals for specific medical conditions. *Prerequisite(s): GSNO 515, GSNO 516. Note: For online MScN students only*

GSNO 590 - Professional Development I**Credit(s): 1.00**

This course provides students with skills, knowledge and perspectives that are germane to professional development in the health sciences. Specifically, it will discuss critical thinking, professional ethics, creativity, oral and written communication, teamwork and leadership, engaging diversity, community engagement, digital literacy, career management, and durable learning. *Note: For online MScN cohort students only*

GSNO 591 - Professional Development II**Credit(s): 2.00**

This course provides students with a bridge from the academic program to career opportunities in the field of nutrition. *Prerequisite(s): GSNO 590. Note: For online MScN cohort students only*

GSNO 690 - Capstone Preparation

Credit(s): 1.00

This course assists students in finding an appropriate capstone project, either an internship or directed study. If the capstone experience is to be an internship, students are taught how to properly carry out the activity, make the connection with the host site, and select a mentor to guide the process. If the capstone experience is to be a directed study, students are taught how to properly develop their project proposal and select a mentor to guide the process. *Prerequisite(s): or corequisite: GSNO 591. Note: For online MScN cohort students only*

GSNO 691 - Capstone I: Internship

Credit(s): 2.00

This course operationalizes the student's approved capstone project as an internship. Students may also substitute GSNO 697 - Capstone I: Directed Study to meet the Capstone I requirement. *Prerequisite(s): GSNO 690. Note: For online MScN cohort students only*

GSNO 692 - Capstone II: Internship

Credit(s): 2.00

In this course, students continue in their approved capstone project. Students will give an oral, virtual presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSNO 691. Note: For online MScN cohort students only*

GSNO 697 - Capstone I: Directed Study

Credit(s): 2.00

This version of Capstone I allows students to design their own capstone project to meet their specific employment goals. Students must develop a directed study proposal, obtain the consent of a faculty member to serve as their mentor during the directed study, and then carry out the activities necessary to attain the learning objectives they have developed in the directed study proposal. *Prerequisite(s): GSNO 690. Note: For online MScN cohort students only. May be taken to meet the Capstone I requirement in place of GSNO 691.*

GSNO 698 - Capstone II: Directed Study

Credit(s): 2.00

In this course, students continue in their approved capstone project. Students will give an oral presentation to the NUNM community at an organized event intended to highlight their work. *Prerequisite(s): GSNO 697. Note: For online MScN cohort students only. May be taken to meet the Capstone II requirement in place of GSNO 692.*

NU 531 - Whole Food: Rethinking the Science of Nutrition

Credit(s): 4.00

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. *Note: Additional fee required*

NU 532 - Nutritional Epidemiology

Credit(s): 4.00

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(s): GSN 516*

Qigong

Qigong literally means "energy work" or "energy cultivation." Personal experience of, awareness of, and sensitivity to qi 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 qigong treatment plans for patients.

The teaching series is designed for CCM students admitted into the Qigong Certificate program.

CM 19E - Teaching Qigong I Practicum

Credit(s): 1.50

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(s): Completion of Qigong I-IX Retreats and Qigong I-IX Practica

CM 29E - Teaching Qigong II Practicum

Credit(s): 1.50

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(s): Completion of Qigong I-IX Retreats and Qigong I-IX Practica

CM 39E - Teaching Qigong III Practicum

Credit(s): 1.50

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(s): Completion of Qigong I-IX Retreats and Qigong I-IX Practica

CM 518 - Qigong I Retreat

Credit(s): 0.50

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. *Note: Additional fee required*

CM 519 - Qigong I Practicum

Credit(s): 1.50

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

Credit(s): 0.50

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). *Prerequisite(s): CM 518, CM 519. Note: Additional fee required*

CM 529 - Qigong II Practicum

Credit(s): 1.50

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). *Prerequisite(s): CM 518, CM 519*

CM 538 - Qigong III Retreat

Credit(s): 0.50

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). *Prerequisite(s): CM 518, CM 519. Note: Additional fee required*

CM 539 - Qigong III Practicum

Credit(s): 1.50

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). *Prerequisite(s): CM 518, CM 519.*

CM 618 - Qigong IV Retreat

Credit(s): 0.50

This qigong module teaches students the third eight-segment 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. *Prerequisite(s): CM 538, CM 539. Note: Additional fee required*

CM 619 - Qigong IV Practicum

Credit(s): 1.50

This qigong module teaches students the third eight-segment 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. *Prerequisite(s): CM 538, CM 539*

CM 628 - Qigong V Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 618, CM 619. Note: Additional fee required*

CM 629 - Qigong V Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 618, CM 619*

CM 638 - Qigong VI Retreat

Credit(s): 0.50

Students review and deepen their practice of the forms and walks learned in the Qigong I-V Retreats and Practica. *Prerequisite(s): CM 628, CM 629. Note: Additional fee required*

CM 639 - Qigong VI Practicum

Credit(s): 1.50

Students review and deepen their practice of the forms and walks learned in the Qigong I-V Retreats and Practica. *Prerequisite(s): CM 628, CM 629*

CM 718 - Qigong VII Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 638, CM 639. Note: Additional fee required*

CM 719 - Qigong VII Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 638, CM 639*

CM 728 - Qigong VIII Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 718, CM 719. Note: Additional fee required*

CM 729 - Qigong VIII Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 718, CM 719*

CM 738 - Qigong IX Retreat

Credit(s): 0.50

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. *Prerequisite(s): CM 728, CM 729. Note: Additional fee required*

CM 739 - Qigong IX Practicum

Credit(s): 1.50

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. *Prerequisite(s): CM 728, CM 729*

CM 5100E - Non-CCM Qigong Retreat I

Credit(s): 1.00

With this series of weekend qigong retreats, the College of Classical Chinese Medicine makes available a synthesis of the Eastern art of cultivation for students in non-CCM programs. 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. *Note: Additional fee required*

CM 5101E - Non-CCM Qigong Retreat II

Credit(s): 1.00

With this series of weekend qigong retreats, the College of Classical Chinese Medicine makes available a synthesis of the Eastern art of cultivation for students in non-CCM programs. 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. *Note: Additional fee required*

CM 5102E - Non-CCM Qigong Retreat III

Credit(s): 1.00

With this series of weekend qigong retreats, the College of Classical Chinese Medicine makes available a synthesis of the Eastern art of cultivation for students in non-CCM programs. 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. *Note: Additional fee required*

Shiatsu

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. 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.

CM 15E - Shiatsu I

Credit(s): 1.50

This introductory course presents two of the cornerstones of Asian/Japanese massage, shiatsu and *Do-In* [a self-massage 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. Note: Additional fee required*

CM 25E - Shiatsu II

Credit(s): 1.50

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(s): CM 15E. Note: Additional fee required*

CM 35E - Shiatsu III

Credit(s): 1.50

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(s): CM 25E. Note: Additional fee required*

CM 45E - Shiatsu IV

Credit(s): 1.50

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(s): CM 35E. Note: Additional fee required*

CM 55E - Shiatsu V

Credit(s): 1.50

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(s): CM 45E. Note: Additional fee required*

CM 65E - Shiatsu VI

Credit(s): 1.50

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(s): CM 55E. Note: Additional fee required*

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." From a Chinese medical perspective, taiji harmonizes the "three treasures," jing, qi and shen (essence, energy and spirit). 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. There are many variations within the world of taiji; a modified Yang style form is the one taught at NUNM. Over three quarters, students learn the sequence of moves along with the principles of movement that accompany them, and an inward-looking focus that emphasizes the cultivation and awareness of qi. *The taiji courses are open to all NUNM students.*

CM 819 - Taiji I Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. This course covers the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. It introduces the student to the concept of *zhuāng gōng* 樁功, the foundational "posting" meditation exercise practiced by the *Zhēn rén* 真人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問. *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures in which the student begins to find motion within stillness and stillness within motion 靜中有動, 動中有靜. It offers an opportunity for the student to engage with the concept of *wúwéi* 無為 or "effortlessness."

This class also touches on the *Tàijí Nèigōng* 太極內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jìn-gù* 皮筋骨 (skin, tendons and bone). This instruction gives students the framework needed to continue cultivating a balance between yin and yang in themselves for the rest of their lives. Students work towards an embodied understanding of the macrocosm-microcosm that can promote the harmony between the mind and body that is necessary for achieving the level of the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM 829 - Taiji II Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. In this course, students continue to study the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. They deepen their practice of *zhuāng gōng* 樁功, the foundational "posting" meditation exercise practiced by the *Zhēn rén* 真

人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問 . *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures that provide a path to experiencing motion within stillness and stillness within motion 靜中有動，動中有靜. Through these practices, students continue to engage with the concept of *wúwéi* 無為 or "effortlessness." Students also further their practice of *Tàijí Nèigōng* 太極 內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jìn-gù* 皮筋骨 (skin, tendons and bone). They continue to cultivate an inner balance of yin and yang, as well as an embodied understanding of the macrocosm-microcosm. The ultimate lifetime goal is to achieve the level of harmony between the mind and body that characterizes the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

CM 839 - Taiji III Practicum

Credit(s): 1.50

Tàijíquán 太極拳 is an exercise used to cultivate the unification of yīn 陰 and yáng 陽 within the self. In this course, students continue to study the concepts and movements of various styles of *Tàijíquán*, in particular the Yang, Chen and Sun styles. They deepen their practice of *zhuāng gōng* 樁功, the foundational "posting" meditation exercise practiced by the *Zhēn rén* 真人 (often called the "immortals") mentioned in the *Huangdi Neijing Suwen* 黃帝內經素問 . *Zhuāng gōng* 樁功 includes moving, standing, sitting and laying postures that provide a path to experiencing motion within stillness and stillness within motion 靜中有動，動中有靜. Through these practices, students continue to engage with the concept of *wúwéi* 無為 or "effortlessness." Students also further their practice of *Tàijí Nèigōng* 太極 內功, or the Internal Art and the concepts of *jīng-qì-shén* 精氣神 (the three treasures) as well as *pí-jìn-gù* 皮筋骨 (skin, tendons and bone). They continue to cultivate an inner balance of yin and yang, as well as an embodied understanding of the macrocosm-microcosm. The ultimate lifetime goal is to achieve the level of harmony between the mind and body that characterizes the *Shàng gōng* 上工 or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence*

Undergrad - Integrative Medicine

IM 311 - Introduction to Integrative Medicine

Credit(s): 3.00

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. *Note: Additional fee required*

IM 321 - Critical Thinking for Pre-Health Professionals

Credit(s): 3.00

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

Credit(s): 3.00

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

Credit(s): 3.00

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 422 - Introduction to Botanical Medicine

Credit(s): 4.00

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. *Note: Additional fee required*

Undergrad - Natural Sciences

NS 311 - Anatomy and Physiology

Credit(s): 4.00

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. *Corequisite(s): NS 312*

NS 312 - Anatomy and Physiology Lab

Credit(s): 1.00

Corequisite(s): NS 311. Note: Additional fee required

NS 321 - Genetics

Credit(s): 4.00

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, oncocytenetics and clinical applications of principles. The importance and implication of genetic disease is also discussed.

NS 322 - Immunology

Credit(s): 4.00

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 324 - Organic Chemistry I with Lab

Credit(s): 3.00

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. *Note: Additional fee required*

NS 334 - Organic Chemistry II with Lab

Credit(s): 3.00

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. *Note: Additional fee required*

NS 341E - Environment and Health

Credit(s): 3.00

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

Credit(s): 3.00

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. *Note: Additional fee required*

NS 343E - Introduction to Permaculture

Credit(s): 3.00

This course explores the basic principles and practice of permaculture, offering an opportunity for students to examine ways humanity can live in harmony with earth's natural systems. Students will increase their understanding of ecology while gaining hands-on experience in mapping, reading the landscape, and the design process. This class is an overview of the permaculture philosophy and will give students the opportunity to integrate this philosophy into their daily

lives. *Note: This course does not culminate in a Permaculture Design Certificate (PDC). Note: Additional fee required*

NS 401 - Biochemistry for Life Sciences

Credit(s): 4.00

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(s): NS 324, NS 334*

NS 411 - Biostatistics for Pre-Health Majors

Credit(s): 3.00

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

Credit(s): 3.00

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 413 - Introduction to Research Methods

Credit(s): 3.00

Students become acquainted with the fundamentals of research through an overview of research questions and methods in the natural, clinical and social sciences. Students will be prepared to act as an educated consumer of research, data and results; and use their knowledge to support their capstone in the spring.

NS 421 - Evidence-Based Practice for Pre-Health Professionals

Credit(s): 3.00

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. *Prerequisite(s): NS 412*

NS 432 - Physics with Lab

Credit(s): 5.00

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. *Note: Additional fee required*

Undergrad - Nutrition

NU 312 - American Food Systems

Credit(s): 3.00

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 322 - Nutritional Anthropology

Credit(s): 3.00

This course examines human nutrition and food systems from behavioral, social, biocultural and evolutionary perspectives, and how these interact in the production of nutritional health at the individual, community and population levels. Two central areas of research in the anthropology of food and nutrition will be addressed. First, long-term evolutionary processes are examined within an ecological framework as significant factors affecting human biology and susceptibility to dietary patterns and diet-related disease. Second, global relations of power and inequity are examined as key factors influencing access to food and patterns of over- and under-nutrition for both populations and individuals. Students will also learn how this information applies to the real world as they conduct an anthropological research project.

NU 331 - Foundations of Community Nutrition

Credit(s): 3.00

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(s): An introduction to nutrition or fundamentals of nutrition course*

NU 411 - Food Security

Credit(s): 3.00

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 412E - Nutrition in the News

Credit(s): 2.00

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

Credit(s): 3.00

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.

NU 423E - Foundations of Cooking Techniques

Credit(s): 3.00

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. *Note: Additional fee required*

NU 431 - Whole Food: Rethinking the Science of Nutrition

Credit(s): 4.00

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. *Note: Additional fee required*

NU 432 - Nutritional Epidemiology

Credit(s): 4.00

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(s): NU 422*

NU 436E - Nutrition for Exercise and Sports

Credit(s): 3.00

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.

NU 437E - DIY Kitchen Staples

Credit(s): 2.00

This course covers how to make commonly purchased, healthy, kitchen staples. Students participate in recipe planning and evaluation, and hands-on preparation of foods (e.g., nut milks, non-dairy cheeses, yogurt, fermented vegetables, hummus/vegetables spreads, crackers and energy bars). This course also reviews ingredients found in packaged foods, including additives and preservatives, and evaluates their role in foods and any health consequences to their consumption. *Note: Additional fee required*

Undergrad - Social Sciences

SS 311 - Self-Care and Self-Management

Credit(s): 3.00

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 312 - Introduction to Medical Anthropology

Credit(s): 3.00

This course 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 321 - Culture, Identity and Emotion

Credit(s): 3.00

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

Credit(s): 3.00

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

Credit(s): 3.00

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 402E - Human Sexuality

Credit(s): 3.00

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.

SS 421 - Ethics and Philosophical Dilemmas

Credit(s): 3.00

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.

SS 422 - Careers: From Undergraduate Degree to Employment

Credit(s): 2.00

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 the health and wellness field (relevant to an undergraduate student's major) 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(s): Completion of 50 undergraduate credits at NUNM*

SS 499 - Undergraduate Capstone

Credit(s): 3.00

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 undergraduate program. Students are expected to draw from their 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 program director), 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(s): Completion of a minimum of 75 undergraduate credits at NUNM, including SS 422. Note: Additional fee required*

Academic Policies

Registration

The Office of the Registrar will notify students regarding registration details. All continuing students will be registered for the upcoming academic year 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 the appropriate school/college director(s). Students must submit a "Petition to Overlap Classes" form for the director's approval prior to registration.

Students who wish to register for less than the full-time curriculum must petition to the Center for Academic Success (see the Deviation Policy).

No student may add or begin classes after the end of the second week of any quarter unless the class does not begin until after the end of the second week.

Eligibility to Register

Matriculated degree-seeking students are eligible to register for NUNM courses. Students who have matriculated into a degree program and have taken a leave from the program may not take core/required program courses as a non-degree student; elective courses are permitted.

A non-degree seeking student is someone who has not matriculated into a degree program at NUNM. Non-degree seeking students must complete a "Non-Degree Seeking" application, which is available through the Office of Admissions. Once approved, the non-degree student must obtain signatures from the faculty member and director of the academic program, as well as meet the prerequisites for the course. Approval is based upon space availability and meeting prerequisite requirements.

Graduates of accredited NUNM programs may apply for entry into certificate programs offered at NUNM, provided they meet the specific requirements.

Practitioners seeking continuing education units (CEUs) should contact the Office of Advancement.

Credit Hour Policy

NUNM is on a quarter system (defined as 12 weeks in fall/winter/spring and 11 weeks in summer) and credits are awarded based upon hours of instruction. 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; students 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. 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 director of the academic program and the instructor (for which the challenge exam is related) for approval. Once permission is obtained, the director (or designee) will facilitate arrangements for the student to take the challenge exam.
- Pay the appropriate fees and submit an "Exam" form, available from the program's academic coordinator, 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, even though auditing means that a student will not be evaluated or receive credit. 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 Participation

NUNM fosters a rigorous and engaging academic educational environment. Students are encouraged to attend all classes, tutorials and labs. Students are responsible for learning the content from any classes that they miss. Due to the nature of practicals classes (e.g., tutorials, labs, etc.), attendance, preparation and active participation are imperative and cannot be made up. NUNM expects a minimum attendance of 80% for all courses.

Each syllabus will define the course attendance requirements and will stipulate the number of permitted class absences. Students absent more than the permitted number may be subject to a reduced grade or failure of the course. Faculty may take into account the level of participation and habitual tardiness when calculating a course grade. Students are responsible for being aware of, and for meeting, their faculty's attendance expectations, which are detailed in each course syllabus.

Students who believe they have a disability that inhibits their attendance and participation in class or clinic are encouraged to contact the Center for Academic Success to discuss potential accommodations.

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 regularly checking their grades online in Moodle and their final grades in SONIS.

Courses that are graded using the "P/F" grading system are not included in a student's GPA.

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 a pass/fail grading system.

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
B	80-89	3.0
C	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
- FR (FAIL REMEDIATE): marginal performance (temporary grade). (Not available in the School of Undergraduate or School of Graduate Studies.)
- P (PASS): satisfactory performance; equivalent to "B" or "C"
- H (HONORS): superior performance; equivalent to "A"; not available for all courses and only for those who started before 2015
- 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) – ND and CCM programs only
- RP (REMEDIED PASS): grade given for a passed medical clinic rotation, but with required skills remediation – ND and CCM programs only

- RC (REMEDIED C): pass remediation exam – ND and CCM programs only
- 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
- NC (NOT COMPLETED): hour requirement or attendance not met

Grade of "R/FR" – ND/CCM only

"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." 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.

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" – ND/CCM only

Students who pass the remediation exam will earn a permanent grade of "RC (remediated "C")/RP (remediated pass)."

Clinical Rotations and "RP" Grades – ND/CCM only

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 director 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 academic suspension 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.

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 academic suspension if further courses are failed.

Grades received in repeated courses replace the grade originally obtained and are used to recalculate cumulative grade point average.

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.

Grades received in repeated courses replace the grade originally obtained and are used to recalculate cumulative grade point average.

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. 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 and may make exceptions to the above criteria.

To request an incomplete grade, the student is responsible for contacting the faculty of the course (ND students should contact the course director for that block) to discuss the circumstances around why the student is unable to complete the course during the term the course is offered. If approved, 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.

A grade of incomplete should be completed within the first two weeks of the next term in which the student is enrolled, with an extension of no more than two quarters. Failure to complete the required course work by the timeline on the contract will result in a failing grade.

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.

If a grade of "I" extends beyond two 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 (refer to the deviation policy in the student handbook). Registration may be denied 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."

Students who believe they have a disability in class or clinic are encouraged to contact the Center for Academic Success to discuss potential accommodations.

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 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 the student handbook for more detail.

Students who believe they have a disability in class or clinic are encouraged to contact the Center for Academic Success to discuss potential accommodations.

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, ND preceptorships, 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 – ND and CCM

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 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 their program's director, 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 "R/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. An "R" grade will be recorded 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 recorded 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.

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 school/college director.

ND Clinical Skills Enhancement Tutorial

Clinical skills enhancement courses are generally scheduled over a nine-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 will be placed on academic suspension.

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 director, can assign remediation work, which can include attendance at weekly clinical skills tutorial labs run by a CCM resident.

CCM Clinical 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 appropriate academic director(s) or designee. 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 director(s) or designee 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 second attempt OSCE exam grade appeal must be submitted to the director of the College of Naturopathic Medicine within two weeks of the posted grade, and will be referred to the Clinic Promotions 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 administers academic advising for all students. Students who are pursuing any track other than the standard published tracks must confer with the Center for Academic Success to ensure all requirements are met. Students who are not making satisfactory academic progress are required to meet with the Center for Academic Success.

The Center for Academic Success is responsible for advising students on the following:

- Academic probation (meet with all students on academic probation)
- Changing tracks (four- to five-year, etc.)
- Leave of absences or withdrawing from a program
- Questions regarding concurrent track options
- Assistance with the grade appeals process
- General questions regarding academic progress and success

Satisfactory Academic Progress

The Academic Progress Committee meets each academic term to determine students' academic progress.

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 criteria for Continued Student Eligibility in the student handbook). These policies are separate from the institution's satisfactory academic progress policies.

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 school/college director and/or the Center for Academic Success. This may include, but is not limited to, classroom attendance, performance on examinations, as well as any other factors that may impact the student's success in the course.

Students who have "reached maximum timeframe status," as outlined in the Academic Progress section of the catalog, are considered not to be making satisfactory academic progress and will no longer be eligible for federal financial aid.

Undergraduate Programs

"Satisfactory Academic Progress" is defined as:

- 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 are considered not making satisfactory academic progress 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

Master Degree Programs

"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 3-5 years (with the MSOM being 6 years); and
- Maintaining a minimum number of credits each term (excluding summer, unless applicable), unless on an approved deviated track.
 - For SGS degrees, the minimum number of credits per term equals 8 credits per term.
 - For the MSOM degree, the minimum number of credits per term equals 11 credits.

Students who earn a term GPA of less than 2.50, and have a cumulative GPA below 2.65, are considered not making satisfactory academic progress.

MSOM and MSiMH clinical students who receive two or more failing grades in clinic rotations or entrance/exit exams are considered not making satisfactory academic progress in a 12-month period.

Doctorate Degree Programs

"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 number of 11 credits each term (excluding summer, unless applicable), unless on an approved deviated track.

Students who earn a term GPA of less than 2.60, and have a cumulative GPA below 2.75, are considered not making satisfactory academic progress.

Clinical students who receive two or more failing grades in clinic rotations, or entrance/exit exams are considered not making satisfactory academic progress in a 12-month period.

Maintaining Active Enrollment for Satisfactory Academic Progress

To maintain an active enrolled student status, a minimum enrollment of one credit is required. Any student who does not enroll in a minimum of one 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).

Master and Doctorate Degrees

Students who have met all course requirements but have outstanding graduation requirements such as a thesis/capstone, clinical hours, clinical proficiency objectives (CPOs), preceptor hours, or other graduation requirements, must register for either one credit of "Thesis/Capstone Completion" or one credit of "Graduation Completion" each term until all graduation requirements are met. Students also must adhere to the maximum length of program requirement. Students are not eligible for financial aid while registered for a thesis/capstone or graduation completion credit.

Master's degree students have a maximum of one academic year to complete their thesis/capstone. ND and DSOM students have a maximum of two academic terms to finish all outstanding requirements.

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 success and access and their program's director to determine if they may continue at NUNM. The director of academic success and access and program's director 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 may 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 Standing

The Registrar's Office monitors student GPAs (both term and cumulative) for academic standing and credit completion at the end of each term (including summer) to determine sufficient progress toward degree completion. The Registrar's Office will notify the student and the Center for Academic Success when the student is not making satisfactory academic progress. Students receiving financial aid should review the financial aid satisfactory academic progress requirements for continued eligibility in the catalog.

Incomplete grades are not calculated as a part of a student's GPA. Academic standing and insufficient credit completion are evaluated separately, as described below.

The following categories are used to describe a student's academic standing when unsatisfactory:

Undergraduate Programs

Academic Warning

Academic warning status occurs when a student earns a term GPA of 2.95, and/or a cumulative GPA of 2.85, or receives two or more grades of "C" in a term. While on a warning status, a student is expected to meet with an academic advisor to develop a plan to address the concern.

Academic Probation

Students are placed on academic probation when they:

- Earn a term GPA of below 2.75 and have a cumulative GPA below 2.80; or
- Earn a failing grade of "D" or "F," including clinical rotations; or
- Fall below full-time status for more than one term (unless on an approved deviated track)

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 and not fail any other courses during the probationary period.

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 they have earned a minimum term GPA of 2.80 and have a cumulative GPA of 2.85; any failed courses or clinic shifts are repeated and passed; 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. See the Criteria for Continued Student Eligibility for Financial Aid SAP policies in the catalog. 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 the current level of standing, and who does not escalate to the next level of standing, will continue on in the current standing and be subject to the same requirements.

Academic Suspension

Students are placed on academic suspension when they:

- Earn a GPA below 2.60 and cumulative GPA below 2.75; or
- Earn two or more failing grades of "D" or "F"; or
- Fail two or more clinic rotations, entrance exams, or exit exams; or
- Fall below full-time status for more than one term (unless on an approved deviated track)

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.

A student has the right to appeal an academic suspension to the Academic Review and Appeals Committee, as outlined in the student handbook.

Master Degrees

Academic Warning

Academic warning status occurs when a student earns a grade of "C." While on a warning status, a student is expected to meet with an academic advisor to develop a plan to address the concern.

Academic Probation

Students are placed on academic probation when they:

- Earn a term GPA of below 2.70 and have a cumulative GPA below 2.75; or
- Earn failing grades of "D" or "F," including clinical rotations; or
- Fall below full-time status for more than one term (unless on an approved deviated track)

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 and not fail any other courses during the probationary period.

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 the Center for Academic Success to discuss strategies for successful completion of their program.

Students are removed from academic probation once they have earned a minimum term GPA of 2.75 and have a cumulative GPA of 2.80; any failed courses or clinic shifts are repeated and passed; 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. See the catalog for Criteria for Continued Student Eligibility for Financial Aid SAP policies. 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 the current level of standing, and who does not escalate to the next level of standing, will continue on in the current standing and be subject to the same requirements.

Academic Suspension

Students are placed on academic suspension when they:

- Earn a term GPA of below 2.60 and have a cumulative GPA below 2.75; or
- Earn two or more failing grades of "D" or "F"; or
- Fail two or more clinic rotations, entrance exams, or exit exams; or
- Fall below full-time status for more than one term (unless on an approved deviated track)

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.

A student has the right to appeal an academic suspension to the Academic Review and Appeals Committee, as outlined in the student handbook.

Doctorate Degrees

Academic Warning

Academic warning status occurs when a student:

- Earns a term GPA of 2.95 and/or a cumulative GPA of 2.85; or
- Earns two or more grades of "C" in a term

While on a warning status, a student is expected to meet with the Center for Academic Success to develop a plan to address the concern.

Academic Probation

Students are placed on academic probation when they:

- Earn a term GPA of below 2.75 and has a cumulative GPA below 2.80; or
- Earn failing grades of "D" or "F," including clinical rotations; or
- Fall below full-time status for more than one term (unless on an approved deviated track)

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 and not fail any other courses during the probationary period.

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 they have earned a minimum term GPA of 2.80 and have a cumulative GPA of 2.85; any failed courses or clinic shifts are repeated and passed; 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. See the catalog for Criteria for Continued Student Eligibility for Financial Aid SAP policies. 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 the current level of standing, and who does not escalate to the next level of standing, will continue on in the current standing and be subject to the same requirements.

Academic Suspension

Students are placed on academic suspension when they:

- Earn a term GPA of below 2.60 and have a cumulative GPA below 2.75; or
- Earn two or more failing grades of "D" or "F"; or
- Fail two or more clinic rotations, entrance exams, or exit exams; or
- Fall below full-time status for more than one term (unless on an approved deviated track)

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.

A student has the right to appeal an academic suspension to the Academic Review and Appeals Committee, as outlined in the student handbook.

Naturopathic students who fail **only** the Structure & Function I lecture, in their first year first-term, will be placed on academic probation due to the balance of credits. However, more than one failing grade and/or not raising GPAs in the second term may result in suspension.

Academic Review and Appeals Committee

Meetings of the Academic Review and Appeals Committee (ARAC) are not legal proceedings, but are an institutional process with a degree-program specific outcome. The committee is composed of four faculty members (appointed each year by school/college director), dean of students, and chaired by the registrar (who convenes the meetings). ARAC hears grade appeal petitions (see Grade Appeal Policy) as well as appeals from suspended students.

A suspended student will have three business days, from the date of the sanction notification, to submit an intention to appeal to the registrar/ARAC chair. The student then has seven calendar days to submit the written appeal and supporting documentation to the registrar/ARAC chair.

An appeal should include the following materials if applicable:

- Letter explaining any extenuating circumstances (including but not limited to health issues, death of family member, etc.)
- Unofficial NUNM transcript
- Copies of exams and /or quiz scores
- Copies of emails between student and instructor if relevant
- Copy of syllabi for failed courses
- Written plan for what you will do differently to succeed

Essential elements reviewed by ARAC during student hearings include, but are not limited to:

- Student progress in courses
- Failure of courses, clinic shifts or OSCE/entrance/exit exams if applicable
- Failure to maintain minimum level GPA
- 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 a required capstone or research project

The committee will review the appeal and make a decision. The decision may be, but 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
- If concurrent degree, suspension from one program
- 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

A student who is academically suspended a second time will be expelled from NUNM, and will forfeit the opportunity to enroll at NUNM. See the student handbook for expulsion details.

Appeal of Academic Suspension

A student may appeal the decision of ARAC. Students suspended will have three business days from the date of the sanction notification to submit an intention to appeal to the appropriate school/college director. The student then has seven calendar days to submit the written appeal and supporting documentation to the director.

The director (or designee) will respond to the written appeal with a final decision within 10 business days, not including weekends and published holidays that the university is closed, based on assessment of the information presented by the committee, the student, and a review of the investigation process and procedure. In an unusual circumstance, the director (or designee) may request an extension beyond the 10 business days to the chief academic officer if there is additional information that must be taken under consideration. The director (or designee) will notify the student with an approximate decision date if it appears that the appeal will take longer than 10 business days. An appeal must contain the basis for the appeal limited to one or more of the following issues:

- Failure of the Academic Review and Appeals Committee (ARAC) 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 director (or designee) may elect to uphold the decision of ARAC; reverse the decision; request a different resolution; or refer the case back to ARAC if there is new information that was previously not available to ARAC for consideration. The director's (or designee's) decision is final and no further appeals are available.

Reapplication and Readmissions Policy

Undergraduate Programs

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:

1. Student must meet with the Center for Academic Success to sign and comply with all conditions of an academic contract; and
2. 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, director of the School of Undergraduate and Graduate Studies, or dean of students.

Master and Doctorate Programs

Students who have been suspended cannot submit an application for readmission to NUNM for a minimum of one 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 but are not limited to 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:

1. Complete remedial work prior to readmission, repeating some courses and/or clinic shifts.
2. Meet with the Center for Academic Success to sign and comply with all conditions of an academic contract.
3. Return on academic probation for a minimum of one 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:

1. Take an entrance exam prior to entering the clinic to assess skill level.

2. Complete remedial work, which may include repeating some courses and/or clinic shifts.
3. 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.
4. 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, school/college director(s) or dean of students.

Honor Council

The Honor Council is a standing committee composed of faculty, residents, students and staff representatives. A minimum of one faculty member (including residents), one student representative, and one staff member is considered a quorum for an Honor Council hearing board. Hearing board members will be pulled from the members of the standing committee. The committee meets monthly when necessary to review written complaints and performance reports referred to them from the dean of students that reflect failure of a student to maintain behavioral standards according to the Honor Code and Code of Conduct. Behavior 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 the dean of students to conduct a formal Code of Conduct investigation. The committee does not accept anonymous reports.

After reviewing all information, the committee will schedule a meeting with the student 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 Offices of Student Life, Registrar, and with the school/college director. 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 the prevention of future similar problems.

Appeal of Conduct Decision; 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 business days from the date disciplinary action was levied against the student by the dean of students, the student must notify the vice president for student engagement and innovation (or designee) of intention to appeal. The student will then have seven calendar days to complete and submit to the vice president (or designee) a written request for review. The vice president (or

designee) will respond with a final decision within 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 vice president (or designee) needs additional time in reviewing the evidence, the vice president (or designee) will notify the student in writing of the deadline extension.

The request must include the following:

1. Name, address (to which appeal information should be mailed) and phone number;
2. Description, date(s) and place(s) of alleged act(s);
3. Date, and by whom, discipline was levied;
4. Disciplinary penalty assigned and circumstances which the vice president for student engagement and innovation feels merit review based on one or more of the following:
 - 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. Failure to appear at an Honor Council or administrative meeting is not grounds for an appeal without an approved excused absence.
5. Objective of the appeal, i.e., reduction of the sanction, severity, or change in the case decision;
6. Signature and date.

The vice president (or designee) may elect to uphold the decision of the director, reverse the decision, or request a different resolution.

Examinations and Completion of Assignments

Students are required to complete all examinations and assignments on schedule. An unapproved absence from an examination will generally be granted a grade of zero. Please note that NUNM does not accommodate a student's desire to take final examinations early due to travel arrangements or other reasons that are not outside of reasonable control.

Students who miss an examination for reasons outside reasonable control must contact the instructor (ND students contact the course director) in charge of the course within 24 hours. The faculty/course director may approve or deny this request. If approved, students will provide documentation of the approval to the Center for Academic Success when scheduling any make-up exams. There may be associated costs with make-up examinations. Students whose applications are denied will not be allowed to take a make-up examination—which may result in failure of the course.

Students whose missed examination applications are denied may submit an appeal to their school/college director (or designee) along with supporting documentation. The director (or designee) may grant or deny this appeal at their discretion. If the appeal is granted, the student will be required to make up an equivalent examination. This examination will be equivalent in content but may be different in structure and style than the originally scheduled examination.

Assignments submitted after the deadline will be graded according to the policy stated on the course syllabus.

Students who believe they have a disability that inhibits their ability to complete examinations or assignments should contact the Center for Academic Success to discuss potential accommodations.

Graduation Requirements

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, if applicable to the student's degree program
- Demonstrate competence in all technical standards
- For clinical degree students, demonstrate satisfactory professionalism for a health professional
- If a transfer student enrolled in a clinical program, at least three years of professional training must be completed as an enrolled student at NUNM
- If a second professional degree student, complete at least two years of professional training enrolled as a student at NUNM
- Satisfy thesis or capstone project if required for degree
- Satisfy all financial obligations to NUNM

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.

DSOM Capstone Project

Students are required to complete the three portions of the doctoral capstone project—written report, project presentation, and professional practice vision statement—by the end of the final term of their last year. The Imaginal and Experiential Inquiries I-XIII courses support the choosing of a viable capstone topic. The Doctoral Capstone Tutorial in the summer of the final year prepares students to write their capstone report. In the Doctoral Capstone Mentorship, the chair of the student's capstone committee guides the completion of their capstone project. Information about the doctoral capstone project, including a timeline of all requirements, is available on the Capstone Moodle course page.

MSiMR Master's Thesis

Students are required to complete a master's thesis by the middle of the final term of their last year. Information about the master's thesis is available on the Capstone Moodle course page.

Undergraduate and Graduate Capstone

Undergraduate and graduate students are required to complete a capstone project by the middle of the final term of their last year. They must also participate in the School of Undergraduate and Graduate Studies Symposium, presenting a brief reflection on their capstone experience. Information about the capstone project is available on the Capstone Moodle course page.

Voluntary Leave of Absence/Withdraw

Students considering a leave of absence from a program/university must contact the Center for Academic Success to begin the process.

Students wishing to take 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 prerequisites. In such instances, the student may be required to enter a new educational track that must be approved by the Center for Academic Success and/or school/college director. The Center for Academic Success will guide students through the new curriculum requirements.

Students who take a leave of absence or withdraw during the term will earn a grade of "W." If the student withdraws with 80% or more completion of the course, the student may be eligible to petition the faculty member for an incomplete grade. See the Incomplete policy in the student handbook. Students who are on a leave of absence or withdrawn cannot participate in any academic activities, including remediating incomplete grades or exams, and/or participating in clinical rotation shifts, including preceptor rotations.

For students concurrently enrolled in two programs, who wish to take a leave from their primary program only and to continue the series of courses in their secondary program for the remainder of the academic year, the following conditions apply:

- There may not be an option of continuing in their secondary degree program at a full-time status, nor adding core (required) courses due to prerequisites and requirements of the program
- Concurrent students who elect to continue in their secondary degree program while on a leave of absence from their primary program may continue to receive Title IV financial aid, however their eligibility may change and students will need to meet with the Office of Financial Aid to discuss changes.

The Center for Academic Success must be advised of a student's intention to return to NUNM prior to 30 days of intended return, and before the beginning of the quarter for which the student plans to register.

If a student 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. 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.

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.

If a student has taken actions that are identified as being a significant risk to the health or safety of oneself or others, 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 rotations 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 the student handbook.

The letter regarding the ILOA will be placed in the student's file with a copy sent to the student's school/college director(s), director of academic success and access, registrar, director of financial aid, administrative dean, and the chief academic officer. 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 Center for Academic Success.

Students who are placed on 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." See the Incomplete policy in the student handbook.

Withdrawal from School

Students may initiate formal withdrawal by meeting with the Center for Academic Success. Students withdrawing from school at any time during the school year must complete an exit interview with the Office of Financial Aid and submit a completed "Leave/Withdrawal" form to the Registrar's Office. Failure to attend for any quarter is considered a withdrawal, and the student will need to submit a new application and application fee for readmission. Students who withdraw from NUNM during the course of a term will earn a grade of "W." A student facing an alleged violation of the Code of Conduct or Honor Code may be permitted to withdraw from NUNM, however, proceedings will continue in their absence.

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; and may not take a leave of absence to complete additional programs.

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 nonstandard track.

To accomplish an independent study, the student must:

1. Complete the "Independent Study" form, which includes getting approval from the school/college director and the course instructor, and having the course instructor define how the course competencies will be achieved
2. File the form with the Registrar's Office prior to the start of the term
3. Pay any requisite fees
4. Complete all course requirements within the normal term, or register for a second quarter (tuition required)

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 guidelines:

- 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, 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 and maintain strict confidentiality. 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 program and on a specific track (i.e., 2-year MScN, 5-year ND, 4-year DSOM/MSiMR). Students are required to follow their educational track and are not allowed to drop required courses and/or take required courses ahead of schedule.

After matriculation, students may request to change tracks to any of the standard educational tracks by contacting the Center for Academic Success. Once processed, students must follow their new educational track. All track requests must be completed by week eight of the quarter prior to the quarter in which the change takes effect.

Due to the timing of some deviations or track changes, a student may lose their full-time status. Adjustments to individual tracks may be required due to course conflicts. Students who deviate from their approved educational track may be required to take a leave of absence or fall under a new course catalog curriculum.

Deviation

A student may request to deviate from a standard educational track for the following reasons:

1. Preapproved and documented disability accommodation (contact the director of academic success and access for more information)
2. Leave of absence/withdrawal
3. Transfer credits
4. Failure of a required course
5. Adding a second program
6. Scheduling conflicts between required courses (including but not limited to a previous deviation, failed courses, being enrolled in multiple programs, etc.)

Future adjustments to individual layouts may be required due to course conflicts created by the original approved curriculum modification(s). Some deviations or curriculum modifications may also result in the student not meeting full-time status; therefore a Petition to Deviate also requires a signature from the Financial Aid Office, since there is a likelihood of award modification.

Students petitioning curriculum modifications or deviations from policy must submit their requests no later than the end of week two the term before the request would take effect.

Exceptions to this will be made if:

- A course is cancelled that was previously confirmed by the institution
- A request is based on information that was not known prior to the deadline (additional documentation may be required)
- A situation that is deemed an emergency by the director of academic success and access and/or designee

Requested changes may not compromise established curriculum policies or affect minimum or maximum required numbers (i.e., clinical rotations, preceptorships/internships, electives).

Deviation requests must be accompanied by the appropriate documentation before approval can be given. Students seeking to deviate from their standard educational track are required to meet with the Center for Academic Success to discuss options and approval; if the reason for the request is outside the identified areas, students may appeal to the Petition Review Board.

Students approved for deviations must maintain institutional and financial aid Satisfactory Academic Progress within their program(s) and the institution (see the Satisfactory Academic Progress section for details).

Deviations or modifications to curriculum may also delay advancement in courses, qualification for licensure board exams, OSCE, etc. NUNM is not liable for delays or financial implications.

Adding of Degree(s)

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. If admitted, the Office of Admissions will inform the student, the Center for Academic Success, and the Registrar's Office. The student will work with the Center for Academic Success to establish a new curriculum layout, if needed.

Students must meet with the Office of Financial Aid, since there is likelihood of award modification. Students who are not making satisfactory academic progress in their original program may not be aid eligible for their new program.

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. See the handbook sections regarding challenge exams and transfer credit petitioning.

Students may pursue no more than two degrees concurrently.

Students who wish to drop a degree will also be required to formally withdraw through the Center for Academic Success (See Leave of Absence/Withdraw Policy).

Adding/Dropping Academic Courses

Students are registered for all core courses and may not deviate from the established curriculum unless they have submitted and received approval via the "Petition to Deviate" process (refer to the student handbook). Students will self-register for electives.

During week one 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 one).

Courses may be officially dropped only by submitting an "Add/Drop" form with proper signatures to the Registrar's Office. No core course can be officially dropped without the school/college director's signature and/or an approved "Petition to Deviate" (refer to the student handbook).

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% refund with a grade of "W" (withdrawal) on the transcript. Change to audit requires instructor signature.

- **Week 2** – Students may add/drop/change sections/change to audit, instructor signature required. Students may drop/change sections and instructor must indicate the grade of "W" (withdrawal). A refund will be administered at 75%.
- **Week 3** – Students may drop with instructor and (corresponding program) director signature required, and instructor must indicate the grade of "W" (withdrawal). A refund will be administered at 50%.
- **Week 4** – Students may drop with instructor and (corresponding program) director signature required, and instructor must indicate the grade of "W" (withdrawal) or "WF" (withdrawal failing). A refund will be administered at 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 of the term will follow the same add/drop policy as outlined above. Non-attendance in any course will earn a grade of "F." All grades are included on student transcripts.

For courses that do not run the full 12-week term (i.e., weekend and short-term courses), students may use the "Add/Drop" form with appropriate signatures to add or drop a weekend/short-term course up to one week before the course begins. Refer to the Financial Policies for the corresponding refund policy. **Lab and retreat fees are non-refundable once the term begins, even when the course occurs later in the term.**

Students who are **withdrawing from the institution** will receive a grade of "W" regardless of the week they withdraw. See the student handbook for more information on the withdrawal process and corresponding refund policy.

Adding/Dropping Clinic Rotations

To add or drop a clinical rotation, students must contact the associate registrar. Students have a 3–5 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. Students who request any changes in their clinic rotations after the deadline must request approval through the "Petition to Deviate" process (refer to the student handbook). 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 (see Financial Policies).

The NUNM enrollment census date is the Monday of week three.

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 credits per quarter. Half-time student status requires enrollment of at least four 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 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.

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

Chair, **Christoph Kind, ND**

Vice Chair and Secretary, **Adina Matasar, JD**

Treasurer, **B. Winston Cardwell, ND, MSOM**

President, *Ex-Officio*, **Christine L. Girard, ND, MPH***

Directors

Carrie Louise Daenell, ND, MBA

Sonia de Quateli Doi, MD, MA, PhD

Don Drake

Patricia "Patti" Kramer, PhD

Mohan Nair, MS

Anupam Narayan, MBA

James A. Thommes, MD, MBA

Directors Emeriti*

Nancy W. Garbett, MEd

Ellen Goldsmith, MSOM

Michael G. Manes, DLitt

Steven P. Marsden, DVM, ND, MSOM

Corey Resnick, ND

Constituency Representatives*

Faculty Representative, **Megan Golani, ND**

Staff Representative, **Lindsey Johnson**

Senior Student Representative, **Zach Baze**

Junior Student Representative, **vacant**

**Non-voting members*

Administration

Office of the President

President and Chief Executive Officer, **Christine L. Girard, ND, MPH**

Chief of Staff and Strategic Engagement, **Jeremy Anderson-Sloan**

Administrators Emeriti

President Emeritus, **William J. Keppler, PhD (2003–2007)**

President Emeritus, **David J. Schleich, PhD (2007–2019)**

Staff Emerita, **Marilynn Considine (2008–2019)**

Staff Emerita, **Sussanna Czeranko, ND (2008–2019)**

Staff Emerita, **Laurie McGrath (1988–2017)**

Staff Emerita, **Andrea Smith, EdD (1991–2017)**

Office of Institutional Effectiveness

Chief Academic Officer | Vice President of Institutional Effectiveness, **Cheryl Miller, EdD**

Accreditation and Institutional Research Analyst, **Neha Katdare, MBA, MS**

Finance and Administration

Executive Vice President of Finance and Administration | Chief Financial Officer, **Gerald Bores, MBA**

Vice President of Human Resources, **Kathy Stanford, MS**

Human Resources Generalist, **Fox McGregor**

Payroll and Benefits Manager, **Alison Pillette**

Accountant / Student Transactions, **Susan Wilkes**

Accounts Payable Specialist, **Valerie Striplin**

Health Centers Billing and Credentialing Manager, **Gina Gossage**

Health Centers Billing Lead, **Annie Jaouak**

Director of Security, **Spencer Brazes**

Campus Security Officer, **Keith Casper**

Director of Facilities, **David McAllister**

Facilities Lead, **Thomas Coward**

Garden Coordinator, **Ellen Donald**

Information Technology Manager, **Steven Fong**

Information Technology Coordinators, **Dexter Asis, Frank Zhang**

Health Centers Operations

Vice President of Health Centers and Auxiliary Operations, **Nora Sande, MBA**

Chief Medical Officer, **Jessica Nagelkirk, ND**

Director of Health Centers Operations, **Renee "Rae" Wright**

Operations and Privacy Manager, **Sara Cloutier**

Operations Coordinators, **Marjorie Besaw, Mary VanZant**

Medicinary Quality Assurance Supervisor, **Jennifer Brusewitz, ND**

Medicinary Quality Assurance Assistant, **Erin Moreland, MSOM**

Medicinaries and Store Manager, **Jennifer Baier**

Medicinaries Associate Manager, **Dana Herms, ND**

Lead Medicinary Service Representative, **Stephen Jacobsen, MSOM**

Medicinary Service Representatives, **Briana Gabel; Teresa Gryder, ND; Margaret Havlik, ND; Jennifer Kennitz; Audra Lee, MS, MA; Erin Moreland, MSOM; Anna Stoerch**

Store Representative, **Shantelly Miles**

Referral Coordinator, **Gloria Gaxiola**

Patient Services Lead, **Marina Doss**

Patient Services Representatives, **Danielle Allen, Madeline Hare, Janessa Jacobsen**

Medical Records Coordinator, **Robert D'Almeida**

Laboratory Director, **Sonia Kapur, PhD, HCLD**

Laboratory Technician, **Tammy Vogel, MLT**

SIBO Center Laboratory Supervisor, **Audra Lee, MS, MA**

SIBO Center Assistant, **Nichole Alvarado**

Director of Health Centers Programs, **Brooke Linn, PhD**

Patient Services and Outreach Manager, **Ada Grey Catanzarite**

Health Centers Programs Coordinator, **Erika Sanchez**

Information Center Supervisor, **Carolee Barrus**

Information Center Coordinators, **Belle-Suzanne Raymond, Alex Walker**

Senior Epic Site and Report Specialist, **Jeanna Smith, MSN, MATP**

Epic Site Specialist, **Esmeralda Castillo**

Helfgott Research Institute

Director, **Ryan Bradley, ND, MPH**

Department Administrator, **Heather Schiffke, MATCM**

Biostatistician, **Doug Hanes, PhD**

Research Coordinator and IRB Liaison, **Emily Stack**

Research Coordinator, **Lita Buttolph, PhD, MSOM**

Research Investigators, **Cathryn Booth-LaForce, PhD (Affiliate); Lita Buttolph, PhD, DSOM; Carlo Calabrese, ND, MPH (Affiliate); Nini Callan, ND, MS; Jamie Corroon, ND, MPH; Andrew Erlandsen, ND; Joshua Goldenberg, ND; Jeanette Johnstone, PhD (Affiliate); Blake Langley, ND, MSOM; Siobhan Maty, PhD; Andrea McBeth, ND (Affiliate); Andrea Pfalzgraf, MPH, PhD (Affiliate); John Phipps, PhD, MS; Savita Rajurkar, PhD; Jennifer Ryan, ND, MS; Angela Senders, ND, MCR; Erica Sharpe, PhD; Fred Stevens, PhD, PharmD (Affiliate); Deanne Tibbitts, PhD; Heather Zwickey, PhD**

Library

University Librarian, **Noelle Stello, MSLIS**

Associate Librarian, **Christina King, MSOM, MLS**

Evening and Weekend Library Supervisor, **Stacey Civello**

Enrollment Management

Vice President of Enrollment Management, **Beth Woodward, MBA**

Office of Admissions

Director of Admissions, **Ryan Hollister, MA**

Admissions Counselors, **Janela Harris, Halle Sheehan, Sarah Wemple**

Coordinator of Events and Visits, **Tamra Walker**

Recruitment and Admissions Coordinator, **Sonia Ji**

Office of Financial Aid

Director of Financial Aid, **Sally Kalstrom**

Financial Aid and Federal Work-Study Counselor, **Christina Fong**

Office of Advancement, Continuing Education, Alumni Services and NUNM Press

Chief of Staff and Strategic Engagement, **Jeremy Anderson-Sloan**

Fundraising Strategist and Operations Officer, **Ashley Hardt**

Fundraising and Community Engagement Coordinator, **Evan Cooper**

Office of Instructional Design and Technology

Director of Instructional Design and Technology, **Justin Fowler, EdD**

Instructional Technology Coordinators, **Keegan Murphy, Gabby Lopez**

Office of Marketing and Communications

Director of Marketing and Communications, **Sherrie L. Martel**

Content Strategist, **Jaimi Riedl**

Art Director and Lead Photographer, **Vanessa Morrow**

Social Media and Communications Coordinator, **Kate Schoknecht**

Office of Student Life

Vice President for Student Engagement and Innovation, **Glenn C. Smith, EdD**

Dean of Students, **Rachael Allen, MS**

Director of Academic Success and Access, **Morgan Chicarelli**

Director of the Office of Equity and Inclusion, **Ayasha Shamsud-Din, MEd**

Director of Counseling Services, **Adrienne Wolmark, MSS, PhD**

Academic Advisor, **Chris Ballard**

Office of the Registrar

Registrar, **Kelly Garey**

Associate Registrar, **Lindsey Johnson, MM**

Assistant Registrar, **Julia Reisinger**

Registrar's Office Assistant, **Colin Anderson**

Academic Affairs

Administrative Dean, **Charles Kunert, PhD**

Associate Dean of Administration, **Heather Schiffke, MATCM**

College of Naturopathic Medicine

Director, College of Naturopathic Medicine, **Kelly Baltazar, ND, DC**

Director, Graduate Medical Education, **Dee Saunders, ND, MSiMR**

Graduate Medical Education Coordinator, **Noelle Rivera**

Clinical Education Coordinator, **Kate Martinez**

Academic Coordinator, **Melissa Tennyson, PhD**

Administrative Coordinator, **Mickey East**

College of Classical Chinese Medicine

Interim Director, **Andy McIntyre, MSA**

Assistant to the Director, **Jeaneth Villegas, MA**

Administrative Coordinator, **Jennifer Peterson, PhD**

School of Undergraduate and Graduate Studies

Director, **Tim Irving, DC, MS**

Assistant to the Director, **Iris Sobottke, MA**

Department Chair, Nutrition, **Andrew Erlandsen, ND**

Department Chair, Health Sciences, **Heather Zwickey, PhD**

Executive Director, IPSL Global Institute, **Thomas Winston Morgan, MA**

Director of Programs, IPSL Global Institute, **Arianne Newton**

Food as Medicine Institute Coordinator, **Pera Gorson, ND**

Nutrition Operations Coordinator, **Julie Marks, MScN**

Administrative Coordinator, **Harley Roe, MAIS**

Faculty

College of Naturopathic Medicine

Full-Time Faculty

Tammy Ashney, Associate Professor; ND, National College of Natural Medicine, 2009

Kelly Baltazar, Director, College of Naturopathic Medicine; Assistant Professor; ND, Bastyr, 2005; DC, National University of Health Sciences, 2006

Richard Barrett, Professor; ND, National College of Naturopathic Medicine, 1986

Lai Chim Chan, Assistant Professor; ND, National College of Natural Medicine, 2014

Bracey Dangerfield, Assistant Professor; PhD, Maharishi International University, 1992

Shehab El-Hashemy, Professor; ND, Canadian College of Naturopathic Medicine, 2004; MBChB, Faculty of Medicine at Cairo University, 1994; MEd, University of Toronto, 2017

Maleah Ermac, Assistant Professor; ND, National College of Natural Medicine, 2010

Megan Golani, Assistant Professor; ND, National College of Natural Medicine, 2012

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

Anna Peterson, Assistant Professor; ND, National College of Natural Medicine, 2011

Nancy Scarlett, Professor; ND, National College of Naturopathic Medicine, 1997

Tom Walton, Assistant Professor; DC, Western States Chiropractic College, 2010

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

Alicia Bigelow, ND, National College of Naturopathic Medicine, 2004

Ryan Bradley, Director of Helfgott Research Institute; ND, Bastyr, 2003; MPH, University of Washington, 2009

John Brons, Professor; PhD, UCLA, 1978; MAcOM, Oregon College of Oriental Medicine, 1993

Jennifer Brusewitz, ND, National College of Naturopathic Medicine, 2000

Loch Chandler, ND, MSOM, National College of Naturopathic Medicine, 2001

Cole Chatterton, MBA, George Fox University, 2003

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

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

Grant Engrav, JD, Creighton University School of Law, 2013

Leslie Fuller, Assistant Professor; 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

Laura Gouge, ND, National College of Natural Medicine, 2015

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

Keivan Jinnah, ND, MSOM, National College of Naturopathic Medicine, 1998

Sonia Kapur, PhD, Postgraduate Institute of Medical Education & Research, 1994; MSc, Panjab University, 1986

Rosetta Koach, ND, National College of Naturopathic Medicine, 1998

Laura Martell, ND, MSOM, National College of Naturopathic Medicine, 1999

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

Steven Sandberg-Lewis, Professor; ND, National College of Naturopathic Medicine, 1978

Dee Saunders, Director, Graduate Medical Education; Assistant Professor; ND, MSiMR, National College of Natural Medicine, 2015

Allison Siebecker, ND, MSOM, National College of Naturopathic Medicine, 2005

Meghan Sperandio, 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

Amanda Watters, ND, National College of Natural Medicine, 2015

Katherine Zieman, ND, National College of Naturopathic Medicine, 1993

Heather Zwickey, PhD, University of Colorado Health Sciences Center, 1998

College of Classical Chinese Medicine

Faculty Emeriti

Rihui Long, Professor Emeritus, Master of Medicine (China), Chengdu University of TCM, 1984

Full-Time Faculty

David Berkshire, Associate Professor; MAcOM, Oregon College of Oriental Medicine, 2001

Xiaoli Chen, Professor; Master of Medicine, Doctor of Medicine (China), Chengdu University of TCM, 1987, 1994

Kenneth Glowacki, Associate Professor; MSTOM, DACM, Pacific College of Oriental Medicine, 2002, 2016

Joon Hee Lee, Associate Professor; DAOM, Oregon College of Oriental Medicine, 2010; MSOM, Samra University, Los Angeles, 2004

Daniel Silver, Assistant Professor; MTCM, Five Branches Institute, 2006

Brandt Stickley, Assistant Professor; MSTCM, American College of Traditional Chinese Medicine, 2001

Adjunct Faculty

Luke Adler, MATCM, Emperor's College of Traditional Oriental Medicine, 2007

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

Heiner Fruehauf, Founding Professor; PhD, University of Chicago, 1990

Ellen Goldsmith, MSOM, National College of Naturopathic Medicine, 1999

Rebecca Groebner, MAc, National College of Natural Medicine, 2011

Sarah Hammer Stevens, MAcOM, Oregon College of Oriental Medicine, 2014

Brenda Hood, Assistant Professor, PhD, Chinese Academy of Social Science, Beijing, 2006

Harry King, MSOM, Acupuncture & Integrative Medicine College, Berkeley, 2010

Pikshan Ko

Manfred Kubny, PhD, Ludwig-Maximilians University, 1994

Heather Nichole Lambert, ND, MAc, National College of Natural Medicine, 2013

Meiru Liu, PhD, Portland State University, 2017

Greg Livingston, PhD (China), Zhejiang Chinese Medicine University, 2009; MTCM, Five Branches Institute, 1997

Gwen LoVetere, MAcOM, Oregon College of Oriental Medicine, 1994

Andrew "Andy" McIntyre, MSA, Bastyr University, 1994

Bryan McMahan, Bachelor of Medicine (China) — AACRAO accredited MSOM equivalent, Beijing University of Chinese Medicine, 2010

Michael McMahan, MAc, National College of Natural Medicine, 2011

Christine Pearson, MSOM, National College of Natural Medicine, 2012

Younging Qin, Master of Medicine, Doctor of Medicine (China), Chengdu University of TCM, 1999, 2002

Robert Quinn, Assistant Professor; MAcOM, DAOM, Oregon College of Oriental Medicine, 1998, 2008

Laurie Regan, PhD, Harvard University, 1991; ND, National College of Naturopathic Medicine, 1997

Nancy Scarlett, ND, National College of Naturopathic Medicine, 1997

Katherine Souza, ND, MAc, National University of Natural Medicine, 2018

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

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 Undergraduate and Graduate Studies

Full-Time Faculty

Andrew Erlandsen, Associate Professor; ND, National College of Natural Medicine, 2011

Chelsie Falk, Associate Professor; ND, National College of Natural Medicine, 2013

Douglas Hanes, Professor; PhD, University of Michigan, 1999

Kimberly Queen, DC, University of Western States, 1997; MS, University of Bridgeport, 2015

Heather Zwickey, PhD, University of Colorado Health Sciences Center, 1998

Adjunct Faculty — Graduate Studies

David Allderdice, ND, National College of Natural Medicine, 2008

Ryan Bradley, Director of Helfgott Research Institute; ND, Bastyr University, 2003; MPH, University of Washington, 2009

Julie Briley, ND, National College of Natural Medicine, 2011

Jennifer Brusewitz, ND, National College of Naturopathic Medicine, 2000

Elona Casady, MPH, Boston University, 2001

Lauren Chandler, MSW, Portland State University, 2007

Dulcie Childs, MS, University of Alabama, 2015

Andrea DeBarber, PhD, University of Newcastle, Newcastle upon Tyne, UK, 1997

Julie Dodge, MSW, University of Southern California, 1990; DMin, George Fox University, 2016

Zrinka Glavas, MEd, University of Zagreb, 2005; MS, National University of Natural Medicine, 2017

Megan Golani, Assistant Professor; ND, National College of Natural Medicine, 2012

Zandy Gordon, MA, IPSL Institute for Global Learning, 2019

Pera Gorson, ND, National University of Natural Medicine, 2018

Andrew Harmon, MS, National University of Natural Medicine, 2017

Wendy Hodsdon, ND, National College of Natural Medicine, 2007

Charles Kunert, MS, Portland State University, 1972; PhD, University of Oregon, 1985

Siobhan Maty, MPH, Johns Hopkins University, 1996; PhD, University of Michigan, Ann Arbor, 2002

Andrea McBeth, ND, National University of Natural Medicine, 2017

Marne Minard, MS, National University of Natural Medicine, 2017

Thomas Morgan, MA, Portland State University, 1994

Johnathan Nagar

Paul Newton, JD, Santa Clara University School of Law, 1987

John Phipps, PhD, University of Michigan, 2012

Kari Pilolla, MS, San Diego State University, 2002; MS, San Diego State University, 2002; PhD, Oregon State University, 2013

Cory Pressman, MA, Washington State University, 1994

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

Alysa Romano, MEd, MA, Columbia University, 2013

Ian Rubin, MA, Goddard College, 2006

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, ND, National College of Naturopathic Medicine, 2005; MCR, Oregon Health & Science University, 2014

Iris Sobottke, MA, Lewis and Clark College, 2017

Amala Soumayanath, PhD, University of London, 1987

Deanne C. Tibbitts, PhD, Oregon Health & Science University, 2011

Meredith Trump, ND, National University of Natural Medicine, 2016

Madeleine Tuson-Turner, ND, MSiMR, MScGH, National College of Natural Medicine, 2011, 2015, 2016

Wendy Leigh H. White, ND, University of Bridgeport, 2008

Kirsten Wright, ND, MS, National College of Natural Medicine, 2014

Adjunct Faculty — Undergraduate Studies

Sherry Bonekat, MS, Concordia University, 2016

Dulcie Childs, MS, University of Alabama, 2015

Erin Currie, PhD, University of Utah, 2010

Bracey Dangerfield, PhD, Maharishi International University, 1992

Rachael Del Toro, ND, National College of Natural Medicine, 2016

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

Daniel Karmgard, PhD, Florida State University, 1999

Amanda Margolin, MS, Oregon Health & Science University, 2016

Lindsay Marshall, MA, Oregon State University, 2012

Alyssa Ogi, MFA, University of Oregon, 2015

Anna Ritter, PhD, University of Wisconsin, 2012

Nancy Scarlett, ND, National College of Naturopathic Medicine, 1997

Nicole Toussaint, PhD, Portland State University, 2013

Rebecca Tuttle, MD, Baylor College of Medicine, 2012

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

Electives for print ND

ND Electives

16 Credits Required

Naturopathic medicine students may take any ND elective courses listed below. In addition, students may take graduate-level elective courses through the School of Undergraduate and Graduate Studies, and the College of Classical Chinese Medicine. Some core courses may also be eligible for transfer among NUNM graduate programs to satisfy elective requirements; this is dependent upon approval from the two program directors. In all cases, students must satisfy course prerequisites.

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 sufficient student enrollment.

Botanical Medicine

NDEB 5110E - Northwest Herbs I

Credit(s): 2.00

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. *Note: Additional fee required*

NDEB 5130E - Northwest Herbs II

Credit(s): 2.00

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. *Note: Additional fee required*

NDEB 5201E - Cascade Mountain Herbal Intensive

Credit(s): 2.00

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. *Note: Additional fee required*

NDEB 5210E - Herbal Garden Processing

Credit(s): 0.50

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. *Note: Additional fee required*

NDEB 5231E - CASEE Center Herb Walk

Credit(s): 0.50

This field study course is 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.

NDEB 6230E - Advanced Topics in Botanical Medicine I

Credit(s): 3.00

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(s): THR 5131*

NDEB 6310E - Effective Formulas for Top General Practice Conditions

Credit(s): 1.00

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. *Prerequisite(s): CLS 7310, CLS 7311, CLS 7320, CLS 7321*

NDEB 6330E - Botanical Cell Biology, Molecular Mechanisms and Research

Credit(s): 1.00

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(s): THR 5131*

NDEB 6331E - Advanced Topics in Botanical Medicine II

Credit(s): 3.00

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(s): THR 5131*

Clinical

NDEC 5125E - Personal Development as a Physician

Credit(s): 1.50

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 5203E - Advanced Anatomy Techniques in Dissection

Credit(s): 3.00

Students obtain a deeper understanding of anatomy through guided dissection of human cadavers. This course is a unique opportunity to experience the process from the original, undissected cadavers, to fully dissected (as was experienced during the first year). Students will have opportunities to present visible structures to their peers, providing an opportunity to expand their professional growth as well as public speaking skills. *Prerequisite(s): BAS 5121, BAS 5130; open to ND students in year two or higher*

NDEC 6240E - Advanced Electrocardiogram and Spirometric Interpretation

Credit(s): 0.50

This tutorial emphasizes the interpretation and analysis of electrocardiographs and spirometers, 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(s): CLS 6220*

NDEC 6349E - Advanced Medical Biochemistry

Credit(s): 3.00

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. *Prerequisite(s): BAS 5110*

NDEC 7310E - Pharmacology for Clinical Practice

Credit(s): 2.00

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. *Prerequisite(s): CLS 7310, CLS 7311, CLS 7320, CLS 7321*

NDEC 7311E - Pain: Pathophysiology and Management Options

Credit(s): 2.00

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(s): CLS 6210*

NDEC 7313E - Neuroendocrine Immunology

Credit(s): 2.00

This course is primarily intended to help concurrent students (those working toward both their ND and CCM degrees) 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(s): Third-year status in the ND and CCM programs*

NDEC 7320E - Microbiome

Credit(s): 1.00

This course focuses on the importance of the gut microflora to human health. Emphasis is given to traditional naturopathic practices that support healthy gut flora and overall health. Students will also learn about the Human Microbiome Project and the American Gut Project. *Prerequisite(s): THR 5120*

NDEC 7330E - Transgender Health and Gender Transition

Credit(s): 2.00

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(s): CLS 7310*

NDEC 7340E - The Liver in Health and Disease

Credit(s): 2.00

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(s): CLS 6230*

NDEC 7341E - Sleep Health and Disorders

Credit(s): 2.00

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(s): BAS 5130*

NDEC 7342E - Advanced Gastroenterology

Credit(s): 2.00

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(s): CLS 6230*

NDEC 7350E - Auriculomedicine

Credit(s): 2.00

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

Credit(s): 2.50

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. *Note: Additional fee required*

NDEC 8430E - Advanced Gastroenterology Lab

Credit(s): 1.00

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(s): CLS 6230*

Homeopathy

NDEH 7310E - Homeopathy I

Credit(s): 3.00

This course series builds on the core homeopathic curriculum and supports the attainment of the homeopathy certificate. The courses are intended to help students advance their understanding and practical application of homeopathy in a clinical setting. Students will further develop their skills in case analysis, symptom and rubric selection, navigation of the computerized repertory, special functions of the computerized repertory, and familiarity with the reportorial language. *Prerequisite(s): THR 5131*

NDEH 7320E - Homeopathy II

Credit(s): 3.00

This course series builds on the core homeopathic curriculum and supports the attainment of the homeopathy certificate. The courses are intended to help students advance their understanding and practical application of homeopathy in a clinical setting. Students will further develop their skills in case analysis, symptom and rubric selection, navigation of the computerized repertory, special functions of the computerized repertory, and familiarity with the reportorial language. *Prerequisite(s): THR 5131, NDEH 7310E*

Reproductive

NDER 7330E - Natural Childbirth II: Pregnancy

Credit(s): 3.00

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 well-being 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(s): CLS 7310

NDER 7331E - Advanced Gynecology: Special Topics

Credit(s): 2.00

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(s): CLS 7310*

NDER 7340E - Natural Childbirth III: Labor and Delivery

Credit(s): 3.00

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(s): CLS 7310*

NDER 7341E - Advanced Gynecology: Infertility and Endocrinology

Credit(s): 2.50

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(s): CLS 7310*

NDER 8420E - Natural Childbirth IV: Postpartum Management

Credit(s): 3.00

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(s): CLS 7310*

NDER 8430E - Natural Childbirth V: Neonatology

Credit(s): 3.00

This course educates both the generalist naturopathic student as well as those seeking the midwifery certificate 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. *Prerequisite(s): CLS 7310, CLS 7330. Note: Additional fee required*

NDER 8440E - Natural Childbirth VI: Special Topics

Credit(s): 2.00

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(s): CLS 7310*

NDER 8441E - Natural Childbirth VII: Legal Aspects

Credit(s): 1.00

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

Therapeutics

NDET 5120E - Bodywork I: Massage Foundations

Credit(s): 1.00

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. *Note: Additional fee required*

NDET 5121E - Somatic Re-Education I

Credit(s): 1.00

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

NDET 5130E - Bodywork II: Advanced Massage

Credit(s): 1.00

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(s): NDET 5120E. Note: Additional fee required*

NDET 5131E - Somatic Re-Education II

Credit(s): 1.00

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

NDET 5140E - Bodywork III: Energy Work

Credit(s): 1.00

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(s): NDET 5130E. Note: Additional fee required*

NDET 5141E - Somatic Re-Education III

Credit(s): 1.00

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

NDET 6121E - Somatic Re-Education IV

Credit(s): 1.00

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(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

NDET 6140E - Aromatherapy

Credit(s): 1.50

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. *Note: Additional fee required*

NDET 6215E - Race and Disparities in Health Care

Credit(s): 2.00

This course provides an overview of health disparities along racial and ethnic categories. We will seek to understand how political, economic and social contexts shape health, access to healthcare, and the quality of care across racial and ethnic groups. This course also explores the socio-scientific processes that have privileged "innate" difference as explanations for inequality and marginalization; and examine ways in which "race" intersects with other categories of difference, such as gender, class, sexuality and religion to impact one's health and one's access to health care. This course addresses the implications of this framework for understanding health inequality and how we choose to address it. *Note: This course is open to students, staff and faculty.*

NDET 6230E - Mindful Self-Compassion

Credit(s): 2.00

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 (loving-kindness, 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

Credit(s): 2.00

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. *Note: Additional fee required*

NDET 6251E - Advanced Physical Medicine

Credit(s): 3.00

This course provides an opportunity to consolidate and review physical medicine concepts and skills pertaining to the assessment and treatment of common primary care presentations. Students will review and practice cervical, lumbar, and pelvis/SI adjustment; and also further their clinical acumen in assessment and treatment of musculoskeletal conditions that commonly present to family practice. *Prerequisite(s): CLS 6210*

Classical Chinese Medicine Electives

Please refer to the list of Electives found within the CCM Electives page.

Global Health Electives

Please refer to the list of electives found within the MScGH Electives page.

Integrative Medicine Research Electives

Please refer to the list of electives found within the MSiMR Electives page.

Nutrition (MScN) Electives

Please refer to the list of electives found within the MScN Electives page.

Qigong Electives

Please refer to the list of courses found within the Qigong Electives page.

Electives in Ayurvedic Approaches to Medicine

Please refer to the list of courses found within the Ayurveda Electives page.

Electives in Integrative Mental Health

Please refer to the list of courses found within the Integrative Mental Health Electives page.

Core Courses from Other Graduate Programs Eligible for ND Elective Credit

CM 511 - Foundations of Classical Chinese Medicine I

Credit(s): 2.00

This course introduces students to the common principles that underlie all traditional nature sciences, as observed from the specific perspective of classical Chinese medicine. Core concepts 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. *Note: May be taken concurrently with CM 521*

CM 521 - Foundations of Classical Chinese Medicine II

Credit(s): 2.00

The second in a series of three courses on the foundations of classical Chinese medicine, this course introduces students to the basic anatomy and physiology of the body as understood by classical Chinese medicine. Definitions, functions and interactions between the functional systems of the *zàng* and *fù* organs are covered, as are the extraordinary organs and additional unique aspects of Chinese medicine anatomy. *Note: May be taken concurrently with CM 511*

CM 531 - Foundations of Classical Chinese Medicine III

Credit(s): 2.00

This third course of the series introduces students to basic channel anatomy and physiology. Students learn the structures, levels and pathways of the energetic web interpenetrating the body, as well as their functions and interactions. The relationships between the organs and the channels will be considered to elucidate how the two systems work together to support the vitality and working functionality of a human being. *Prerequisite(s): CM 511, CM 521*

CM 516 - Herbs I

Credit(s): 2.00

In the Herbs I-III series, students develop the foundation of Chinese herbology in preparation to become competent practitioners of Chinese herbal medicine. Students learn approximately 180 key herbs including properties, therapeutic actions, preparation and application. Herbs I introduces the history and development of Chinese herbal medical knowledge. Students focus on learning approximately half of 64 core herbs used in Zhang Zhongjing's *Shanghan Zabing Lun*, which is a major, foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Student learn properties and therapeutic actions of individual herbs described in materia medicas and textbooks. In addition, students are introduced to the concept of herb patterns and corresponding pathomechanisms, and gain knowledge of time-tested herbal combinations and formulary employed in classical herbal formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

CM 526 - Herbs II

Credit(s): 2.00

In Herbs II, students learn the second-half of 64 core herbs used in Zhang Zhongjing's *Shanghan Zabing Lun*, which is a major, foundational text of Chinese herbal medicine. Herbs are presented sequentially in groups for their affinity and formulaic relation in classical formulas. Student learn properties and therapeutic actions of individual herbs described in materia medicas and textbooks. In addition, students are introduced to the concept of herb patterns and corresponding pathomechanisms, and gain knowledge of time-tested herbal combinations and formulary employed in classical herbal formulas. *Prerequisite(s): These courses are to be taken in the ordered sequence. Note: Additional fee required*

CM 536 - Herbs III

Credit(s): 2.00

Herbs III completes the exploration of 180 key herbs in the context of the herbal classifications employed by most modern textbooks from China. Students learn the properties, actions,

indications, contraindications, dosage, and preparation of each of these individual herbs.

Prerequisite(s): These courses are to be taken in the ordered sequence.

CM 616 - Herbs IV

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs IV), formulas are grouped for their relation to the historically relevant disease categories of the Shanghan Zabing Lun, with awareness of classical concepts of matching pattern to physiology. Approximately 50 formulas are introduced for core patterns within common use today. *Prerequisite(s): CM 536; these courses are to be taken in the ordered sequence.*

CM 626 - Herbs V

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs V), formulas are presented sequentially in groups centered around the classical use of key medicinals as a means of understanding the synergistic use of herbs in context. Students scaffold understanding of core patterns introduced in the prior term (Herbs IV) in order to deepen and diversify the diagnostic and therapeutic application of a broad array of Chinese herbal formulas as approximately 55 formulas are discussed. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

CM 636 - Herbs VI

Credit(s): 2.00

In this series (Herbs IV-VI), students learn Chinese herbal formulation, a continuation of study begun in the single herbs curriculum. Classical formulas (*jing fang* 經方) provide a foundation for the history and clinical application of herbology, as well as for the understanding and use of modern formulas (*shi fang* 時方). More than 160 formulas are investigated over the course of the series, with a focus on major classical formulas from the canon of Zhang Zhongjing, important formulas listed by the NCCAOM, and all formulas required for California Acupuncture Board licensure. Students learn formula composition, diagnostic parameters, therapeutic approaches, disease patterns of signs and symptoms, biomedical conditions, understood actions and indications, cautions and contraindications, modifications and related formulas with emphasis on case studies and clinical application.

In this term (Herbs VI), formulas continue to be presented sequentially in groups centered around the classical use of key medicinals as a means of understanding the synergistic use of herbs in context. Students scaffold understanding of core patterns introduced in prior terms (Herbs IV and V) with a focus on compact formulas that are readily used in modification to expand the therapeutic scope of Chinese herbal formulas with approximately 55 additional formulas discussed. *Prerequisite(s): These courses are to be taken in the ordered sequence.*

CM 562 - Chinese Diagnostic Techniques I**Credit(s): 1.50**

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 introduces the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. 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 (*shiwu*), are also practiced in class.

CM 572 - Chinese Diagnostic Techniques II**Credit(s): 1.50**

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 introduces the theoretical precepts of classical diagnosis as recorded in the medical classics *Huangdi Neijing* and *Nanjing*. 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 (*shiwèn*), are also practiced in class.

CM 611 - Chinese Organ Systems: Cosmology and Symbolism I

Credit(s): 2.00

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(s): Second-year status*

CM 621 - Chinese Organ Systems: Cosmology and Symbolism II

Credit(s): 2.00

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(s): Second-year status*

CM 631 - Chinese Organ Systems: Cosmology and Symbolism III

Credit(s): 2.00

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(s): Second-year status*

CM 817 - Physiology of Acupuncture

Credit(s): 1.00

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. Attention will be paid to acupuncture point and meridian structure, as it holds the key to one of the most effective means of practice, and provides insight into how acupuncture is likely to have been discovered and developed. Students learn several practical methods related the topics covered. They also gain a better understanding of the biological utility of acupuncture network components, and explore why the physiological mechanisms underlying acupuncture action have been preserved in almost every genera of animal life for over 200 million years of evolution.

GSN 505 - Healing Foods I

Credit(s): 2.00

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. *Prerequisite(s): GSN 507. Corequisite(s): GSN 506*

RES 501 - Journal Club

Credit(s): 1.00

In this course, students present and discuss recently published articles in natural medicine and health-related behaviors. *Note: MSiMR students are required to take two terms of Journal Club.*

RES 502 - Principles of Epidemiology

Credit(s): 3.00

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 520 - Integrative Medicine Research Fundamentals

Credit(s): 1.00

This course provides foundational knowledge to support students through the MSiMR program. The course covers landmark studies in integrative medicine and integrative medicine research concepts. Students learn about researchers, mentors and projects at NUNM and other locations in the vicinity, and develop their individual research interests and program goals.

RES 530 - Research Methodology

Credit(s): 3.00

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. Methods for randomized trials, observational data collection and analysis, case studies, and reviews will be addressed. Students will develop a preliminary research proposal in this course.

Electives for print CCM

CCM Electives

MSOM: 6 Credits Required

DSOM: 10 Credits Required

MSOM and DSOM students may take any CCM electives listed below. In addition, students may take graduate-level elective courses through the College of Naturopathic Medicine, and the School of Undergraduate and Graduate Studies. Some core course credits may also be eligible for transfer among NUNM graduate programs to satisfy elective requirements; this is dependent upon approval from the two program directors. In all cases, students must satisfy course prerequisites.

MSOM students are also able to take any of the DSOM-specific courses as electives as long as they have met the prerequisites.

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 sufficient student enrollment.

Acu-Moxa

CM 54E - Facial Acupuncture

Credit(s): 2.00

This class introduces facial acupuncture and cupping for the Chinese medicine practitioner. A review of the facial muscles, motor points, and channels that pass through the face will help students to understand the mechanism of action; and safe practices and reasonable expectations are discussed. Pattern differentiation is reviewed using channel theory and five-element theory as it specifically applies to treatment through the regions of the face. Finally, formulating for the specific skincare needs of the patient will be covered. *Note: Additional fee required*

CM 74E - Advanced Point Location and Techniques I

Credit(s): 1.50

Students advance their acupuncture skills through a combined didactic and practical approach to anatomically based point location and needling. *Prerequisite(s): CM 634*

CM 84E - Advanced Point Location and Techniques II

Credit(s): 1.50

These courses combine a didactic and practical approach to anatomically based point location and needling. *Prerequisite(s): CM 74E*

CCM Foundations

CM 01E - China Trip

Credit(s): 5.50

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(s): Second-year standing. Note: Additional fee required

CM 11E - Bazi Suanming I

Credit(s): 1.50

The Bazi Suanming series provides 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. In courses I and II, 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. *Note: Additional fee required*

CM 21E - Bazi Suanming II

Credit(s): 1.50

The Bazi Suanming series provides 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. In courses I and II, 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.

CM 41E - Bazi Suanming III

Credit(s): 1.50

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. In courses III and IV, students develop a deeper understanding of psychological disharmonies and relationship dynamics, respectively.

CM 51E - Bazi Suanming IV

Credit(s): 1.50

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. In courses III and IV,

students develop a deeper understanding of psychological disharmonies and relationship dynamics, respectively.

CM 31E - Qimen Dunjia

Credit(s): 3.00

Qimen dunjia complements the *bazi suanming* in using the heavenly stems and earthly branches to understand a person's strengths and weaknesses, as well as their predisposition to certain types of disease. Originally developed as a system of military strategy, *qimen dunjia* can be used to predict what choices an individual can make to support their health and well-being. It is particularly useful when making lifestyle choices related to location and direction. *Note: Additional fee required*

Classical Texts

CM 17E - Yijing I (I Ching): An Introduction to the Yijing

Credit(s): 2.00

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 seminal text from ancient China. *Note: Open to all NUNM students.*

Clinical Training

- CM 660E - Clinical Observation Elective **Credit(s): 2.00**

CM 700E - Clinical Mentorship Elective

Credit(s): 2.00

Elective clinic rotations are designed to expand the clinical opportunities available to students. They may increase the number of rotations that can be offered at community clinic sites and/or focus on a supervisor's particular area of interest, such as shiatsu, facial acupuncture, or auricular acupuncture. *Prerequisite(s): Third-year status*

CM 800E - Clinical Internship Elective

Credit(s): 2.00

Elective clinic rotations are designed to expand the clinical opportunities available to students. They may increase the number of rotations that can be offered at community clinic sites and/or

focus on a supervisor's particular area of interest, such as shiatsu, facial acupuncture, or auricular acupuncture. *Prerequisite(s): Fourth-year status*

Herbal Studies

CM 06E - Chinese Dietetics

Credit(s): 1.50

Through didactic and hands-on cooking instruction, students learn to use the power of food as medicine through the lens of Chinese medicinal principles. It is a course for people who love food and its power to heal and transform. Topics include the nature and flavor of food, a seasonal overview of eating, cooking with medicinal and common herbs/spices, and creating individualized nutrition plans. The weekend format affords the time to go in-depth and create a restorative experience while developing skills to integrate food recommendations into clinical practice. *Note: Additional fee required*

Mind-Body Medicine

CM 16E - Five-Element Wilderness Retreat

Credit(s): 1.50

This wilderness-based course facilitates the practitioner's journey toward a deeper connection to nature. During a two-day rafting trip in Central Oregon, students learn about the Chinese Five Elements and how nature reflects in human physiology. *Note: Additional fee required*

CM 26E - Shan Ren Dao Retreat

Credit(s): 4.00

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 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. *Note: Additional fee required*

CM 30E - Sound Resonance Therapy for Chinese Medicine

Credit(s): 1.50

This course introduces a variety of sound resonance therapies that are useful adjuncts to the

practice of Chinese medicine. The history of sound therapy in Chinese medicine (theory and practice) is explored, and modern sound resonance therapies are studied through the lens of the Chinese medicine model. There will be discussion of a variety of tuning fork modalities, singing bowl therapy, drumming, as well as vocal toning. *Note: Students will need an introductory set of tuning forks. In a group order, the cost is approximately \$120.*

CM 36E - Embodied Cosmology Retreat

Credit(s): 1.50

This intensive retreat takes Chinese medicine's base in Daoist cosmology and presents it through a series of hands-on, practical tools for facilitating systemic transformation. As we move through life, we often go into contractions to get through the "tight" places the world presents to us. These contractions distort and diminish our internal space. This, according to classical Chinese medicine, is the root cause of physical and emotional dis-ease. In order to move beyond the management of symptoms into the realm of real transformative processes, one must acquire a means for re-accessing these internal spaces. This weekend intensive provides practical instruction that facilitates this potent process. *Note: Additional fee required*

Practice Management

CM 10E - Billing Insurance for Chinese Medical Professionals

Credit(s): 1.00

During this course, students learn how to ethically and sustainably bill insurance. Course topics cover in- and out-of-network billing, benefits, coding, fee schedules, responding to denials, software programs and more. At the end of the course, students should feel confident in their ability to create an insurance bill, submit it for reimbursement, and process payments.

Qigong

CM 19E - Teaching Qigong I Practicum

Credit(s): 1.50

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(s): Completion of Qigong I-IX Retreats and Qigong I-IX Practica*

CM 29E - Teaching Qigong II Practicum

Credit(s): 1.50

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(s): Completion of Qigong I-IX Retreats and Qigong I-IX Practica

CM 39E - Teaching Qigong III Practicum

Credit(s): 1.50

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(s): Completion of Qigong I-IX Retreats and Qigong I-IX Practica

Shiatsu Acupressure Massage

CM 15E - Shiatsu I

Credit(s): 1.50

This introductory course presents two of the cornerstones of Asian/Japanese massage, shiatsu and *Do-In* [a self-massage 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. Note: Additional fee required*

CM 25E - Shiatsu II

Credit(s): 1.50

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(s): CM 15E. Note: Additional fee required

CM 35E - Shiatsu III

Credit(s): 1.50

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(s): CM 25E. Note: Additional fee required*

CM 45E - Shiatsu IV

Credit(s): 1.50

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(s): CM 35E. Note: Additional fee required*

CM 55E - Shiatsu V

Credit(s): 1.50

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(s): CM 45E. Note: Additional fee required*

CM 65E - Shiatsu VI

Credit(s): 1.50

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(s): CM 55E. Note: Additional fee required*

Traditional Arts of Cultivation

CM 13E - Chinese Calligraphy I

Credit(s): 1.00

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.

CM 23E - Chinese Calligraphy II

Credit(s): 1.00

Students learn new symbols and continue the inner cultivation begun in Chinese Calligraphy I. *Prerequisite(s): CM 13E*

CM 33E - Weiqi

Credit(s): 1.00

Students learn the history, philosophy and principles of weiqi (Chinese chess, also known as "Go"). This course develops critical thinking skills as students learn to apply the strategies and techniques of the game to the art of treating disease.

CM 43E - Tea as Medicine: The Dao of Chinese Tea

Credit(s): 1.50

This retreat-style course immerses participants in the tea philosophy of *jing* (purity), *jing* (peace), and *jing* (gratitude) while providing an academic and experiential introduction to China's major tea varietals. Using the Six-Conformation model of classical Chinese medicine diagnosis (*liujing bianzheng*), students learn how to distinguish the medicinal properties of green tea (*l cha*), white tea (*bai cha*), yellow tea (*huang cha*), Oolong tea (*qing cha*), black tea (*hong cha*), and dark tea (*hei cha*). Through tasting teas in multiple grades, students learn how to recognize high quality teas, especially in the highly mythologized and overpriced category of aged Pu'er teas. *Note: Additional fee required*

Traditional Mentorship

CM 12E - Traditional Mentorship Tutorial I

Credit(s): 2.00

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 chosen mentor's own path of learning and knowledge integration. Students take one TMT series as a core requirement in the internship year of study (CM 812/822/832), but may take additional TMTs as electives in either the pre-internship or internship year. *Prerequisite(s): These courses are designed to be taken in sequence*

CM 22E - Traditional Mentorship Tutorial II

Credit(s): 2.00

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 chosen mentor's own path of learning and knowledge integration. Students take one TMT series as a core requirement in the internship year of study (CM 812/822/832), but may take additional TMTs as electives in either the pre-internship or internship year. *Prerequisite(s): These courses are designed to be taken in sequence*

CM 32E - Traditional Mentorship Tutorial III

Credit(s): 2.00

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 chosen mentor's own path of learning and knowledge integration. Students take one TMT series as a core requirement in the internship year of study (CM 812/822/832), but may take additional TMTs as electives in either the pre-internship or internship year. *Prerequisite(s): These courses are designed to be taken in sequence*

Global Health Electives

Please refer to the list of electives found within the MScGH Electives page.

Integrative Medicine Research Electives

Please refer to the list of electives found within the MSiMR Electives page.

Naturopathic Medicine Electives

Please refer to the list of electives found within the ND Electives page.

Nutrition (MScN) Electives

Please refer to the list of electives found within the MScN Electives page.

Electives in Ayurvedic Approaches to Medicine

Please refer to the list of courses found within the Ayurveda Electives page.

Electives in Integrative Mental Health

Please refer to the list of courses found within the Integrative Mental Health Electives page.

Electives for print global health

MScGH Electives

12 Credits Required

While the required 12 credits of electives in the global health program may come from any of the elective courses offered at NUNM, the elective courses listed below are specially designed to enhance your global health program. All MScGH students must travel outside the U.S. as a formal requirement of the program, and they may enroll in a travel course as one of their elective courses to meet this requirement or they may meet the requirement by doing their capstone project outside the U.S. In addition, students may take graduate-level elective courses through the School of Undergraduate and Graduate Studies, College of Naturopathic Medicine, and College of Classical Chinese Medicine. Some core courses may also be eligible for transfer among NUNM graduate programs to satisfy elective requirements; this is dependent upon approval from the two program directors. In all cases, students must satisfy course prerequisites.

If you are a dual-enrolled student studying in a second program, you are required to complete successfully the greater of the two elective requirements in each program.

NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and sufficient student enrollment.

Electives

GSGH 703E - Maternal and Child Health

Credit(s): 2.00

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 - Conference in Global Health

Credit(s): 1.00

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. *Note: Additional fee required*

GSGH 714E - Wilderness First Aid

Credit(s): 2.00

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 (CPR 101) is available. *Note: Additional fee required*

GSGH 717E - Psychology of Connection

Credit(s): 2.00

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 821E - Tanzania Global Health Experience

Credit(s): 6.00

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. *Note: Itinerary-specific trip fee applies*

GSGH 832E - Thailand Global Health Experience

Credit(s): 4.00

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 self-care. 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. *Note: Itinerary-specific trip fee applies*

GSGH 836E - Ghana Global Health Experience

Credit(s): 4.00

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. *Note: Itinerary-specific trip fee applies*

GSGH 837E - Collaborative Global Health Experience

Credit(s): 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 the International Partnership for Service Learning (IPSL) Global Institute at NUNM or 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 Department of Health Sciences chair 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. *Prerequisite(s): Approval of the Department of Health Sciences chair. Note: Itinerary-specific trip fee applies*

GSGH 838E - India Global Health Experience

Credit(s): 4.00

This 14-day intercultural experience trip in India focuses on traditional Indian healthcare systems, mainly Ayurvedic medicine, including traditional detox modalities (Panchakarma) and Ayurvedic cooking with indigenous ingredients, herbal medicine, and lifestyle for enhancing immunity and self-care. Students participate in activities such as getting insights from local

NGOs about tribal healthcare support, role and practice of traditional medicine in remote and austere environments; and visits to tribal sites, organic herb farms, Ayurvedic hospitals and clinics, yoga institutes, medical tourism sites, historic sites, vedic-architecture sites, and other cultural events. There are options for additional study in Ayurvedic medicine, yoga, meditation and movement classes. For students in clinical programs (e.g., ND, MSOM, DSOM), clinical shadowing hours may be applied toward preceptor hours or community education with prior approval. *Note: Itinerary-specific fee applies*

Classical Chinese Medicine Electives

Please refer to the list of electives found within the CCM Electives page.

Integrative Medicine Research Electives

Please refer to the list of electives found within the MSiMR Electives page.

Naturopathic Medicine Electives

Please refer to the list of electives found within the ND Electives page.

Nutrition (MScN) Electives

Please refer to the list of electives found within the MScN Electives page.

Qigong Electives

Please refer to the list of courses found within the Qigong Electives page.

Electives in Ayurvedic Approaches to Medicine

Please refer to the list of courses found within the Ayurveda Electives page.

Electives in Integrative Mental Health

Please refer to the list of courses found within the Integrative Mental Health Electives page.

Electives for print Research

MSiMR Electives

8 Credits Required

While the required 8 credits of electives in the integrative medicine research program may come from any of the elective courses offered at NUNM, the elective courses listed below are specially designed to enhance your MSiMR program. In addition, students may take graduate-level elective courses through the School of Undergraduate and Graduate Studies, College of Naturopathic Medicine, and College of Classical Chinese Medicine. Some core courses may also be eligible for transfer among NUNM graduate programs to satisfy elective requirements; this is dependent upon approval from the two program directors. In all cases, students must satisfy course prerequisites.

If you are a dual-enrolled student studying in a second program, you are required to complete successfully the greater of the two elective requirements in each program.

NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and sufficient student enrollment.

Electives

RES 538E - Teaching Strategies and Course Development

Credit(s): 2.00

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 615E - How to Write and Publish Case Studies

Credit(s): 2.00

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 622E - Botanicals: Bench to Bedside

Credit(s): 2.00

Students in this course read botanical research papers, including basic science, translational and clinical studies. They discuss the challenges and limitations of conducting botanical research and why many large clinical botanical research studies have failed. Students also work in a botanical lab and develop the skills to conduct research on botanicals. *Note: Additional fee required*

RES 803E - Advanced Research Methods

Credit(s): 2.00

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. *Prerequisite(s): Instructor approval required*

RES 806E - Essentials of Integrative Oncology**Credit(s): 2.00**

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.

Classical Chinese Medicine Electives

Please refer to the list of electives found within the CCM Electives page.

Global Health Electives

Please refer to the list of electives found within the MScGH Electives page.

Naturopathic Medicine Electives

Please refer to the list of electives found within the ND Electives page.

Nutrition (MScN) Electives

Please refer to the list of electives found within the MScN Electives page.

Qigong Electives

Please refer to the list of courses found within the Qigong Electives page.

Electives in Ayurvedic Approaches to Medicine

Please refer to the list of courses found within the Ayurveda Electives page.

Electives in Integrative Mental Health

Please refer to the list of courses found within the Integrative Mental Health Electives page.

Electives for print MScN

MScN Electives

Nutrition (MScN)—14 Credits Required

Accelerated Nutrition (BScN\MScN)—6 Undergrad Credits Required | 12 Grad Credits Required

While the required elective credits in the nutrition program may come from any of the elective courses offered at NUNM, the elective courses listed below are specially designed to enhance your nutrition program. In addition, students may take graduate-level elective courses through the School of Undergraduate and Graduate Studies, College of Naturopathic Medicine, and College of Classical Chinese Medicine. Some core courses may also be eligible for transfer among NUNM graduate programs to satisfy elective requirements; this is dependent upon approval from the two program directors/chairs. In all cases, students must satisfy course prerequisites.

If you are a dual-enrolled student studying in a second program, you are required to complete successfully the greater of the two elective requirements in each program.

NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and sufficient student enrollment.

Electives

GSN 501E - Seasonal Cooking - Summer

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 510E - Seasonal Cooking - Fall

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 520E - Seasonal Cooking - Winter

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 530E - Seasonal Cooking - Spring

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 538E - Cooking Pedagogy

Credit(s): 2.00

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.

Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required

GSN 542E - Cooking and Considering Meat and Seafood

Credit(s): 2.00

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.

Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required

GSN 543E - Personal Chef and Food Service

Credit(s): 2.00

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. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 544E - Food Systems: Global and Ecological Issues

Credit(s): 2.00

In this course, students explore global and federal organizations participating in the food system; global food policy and trade agreements; food production, processing and distribution; and food security, food access, food waste, and agricultural sustainability on a global perspective. Students will examine food certification, food labeling, food marketing misinformation, food health claims, organic, GMO, farmed fish, cultural traditions and religious impacts of food choice, and the global malnutrition paradox.

GSN 545E - Global Cuisine: Foods of the World

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 546E - Food Allergies and Intolerances

Credit(s): 2.00

Adverse food reactions have been increased significantly in the past decade. This course addresses the different types of adverse food reactions including food allergies, food sensitivities and food intolerances; and why these reactions have increased in recent times and how to effectively work with clients. Basic immunology is used as a guide to understand the body's responses and the best ways to approach testing and treatment of adverse food reactions. *Prerequisite(s): GSN 507 or GSNO 584, GSN 516 or GSNO 516*

GSN 547E - Fad Diets

Credit(s): 2.00

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

Credit(s): 2.00

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. *Prerequisite(s): GSN 515 or GSNO 515 , GSN 517 or GSNO 517*

GSN 549E - Detoxification and Cleanses

Credit(s): 2.00

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. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 550E - Clinical Case Presentation

Credit(s): 2.00

This course provides students the opportunity to study clinical cases, supporting further development of diagnostic thought processes. Case examinations will illustrate important elements of client presentation, the significance of underlying conditions, existing pathology, and consideration of nutritional recommendations. Students will present client case histories for feedback and collaboration by fellow classmates and a clinical faculty member. *Prerequisite(s): GSN 524 or GSNO 586*

GSN 551E - Therapeutic Diets

Credit(s): 2.00

A comprehensive examination of commonly prescribed therapeutic diets. Nutrition fundamentals, current research, and popular media views are thoroughly explored. Hands-on preparation sessions provide practical experience with each diet. *Prerequisite(s): GSN 507 or GSNO 584. Note: Additional fee required*

GSN 552E - Nutritional Supplements

Credit(s): 2.00

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. *Prerequisite(s): GSN 507 or GSNO 584*

GSN 554E - Sports Nutrition I

Credit(s): 2.00

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. *Prerequisite(s): GSN 507 or GSNO 584 , GSN 515 or GSNO 515*

GSN 555E - Clinical Biochemistry and Nutrition

Credit(s): 3.00

Learn the science-based and personalized approach to medical nutrition therapy that uses conventional and specialty laboratory tests to screen, diagnose and monitor nutrition-related problems and diseases. Apply clinical nutrition knowledge and nutritional biochemistry to interpret qualitative and quantitative biomarkers that reveal nutrient status, disorders of metabolism, oxidative damage, toxic exposure, neuroendocrine activity, and intestinal dysbiosis. Correlate laboratory findings with other biomarkers to formulate nutrition care plans that address the unique biochemical profiles of patients. *Prerequisite(s): GSN 524 or GSNO 586*

GSN 557E - Cooking with Medicinal Herbs

Credit(s): 2.00

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 Western medicinal herbs. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 558E - Food as Medicine Everyday (FAME) Educator Training

Credit(s): 2.00

Community cooking and nutrition programs have been identified as a key factor in reducing chronic diseases, such as diabetes and obesity. The Food as Medicine Everyday (FAME) series focuses on this need by providing hands-on cooking and community-based nutrition education. Learn how to become a FAME Educator and utilize the FAME curriculum to build and teach a

successful FAME series in your own community; including how to navigate location development and marketing; receive FAME Educator trainee competency development plus training materials; and learn how to navigate cooking workshop management and logistics. This class is for those seriously looking to teach the FAME series in their community, thereby helping the Food as Medicine Institute to spread their mission in making whole-foods nutrition education more accessible. *Prerequisite(s): GSN 502 or GSNO 502, GSN 524 or GSNO 586; and instructor approval. Note: Additional fee required*

GSN 559E - Vegan Diets

Credit(s): 2.00

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. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 560E - Sports Nutrition II

Credit(s): 2.00

Building upon the contents 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. *Prerequisite(s): GSN 554E*

GSN 561E - Recipe and Menu Development

Credit(s): 2.00

Learn the steps to developing your own recipes and menus, while taking nutrition and culinary creativity into consideration. Students will become proficient with ingredient/ingredient pairings, menu modifications, and have a chance to test out their recipes. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required*

GSN 564E - Nutritional Genetics

Credit(s): 2.00

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. *Prerequisite(s): GSN 507 or GSNO 584 , GSN 516 or GSNO 516*

GSN 565E - Food Anthropology

Credit(s): 2.00

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

Credit(s): 2.00

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(s): GSN 568E*

GSN 568E - Healing Foods II Practicum

Credit(s): 2.00

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(s): GSN 567E. Note: Additional fee required*

GSN 569E - Lifestyle and Wellness

Credit(s): 2.00

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

Credit(s): 2.00

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.

Note: Additional fee required

GSN 572E - Indian Cooking

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 573E - Childhood Nutrition

Credit(s): 2.00

This course is an exploration of childhood nutrition, addressing nutrient needs vs. children's food preferences; developmental stages; and intrapersonal, interpersonal and environmental barriers to healthy eating for children. Students will investigate physiological, genetic, environmental, and behavioral factors that increase risk for diet-related diseases. The course emphasizes ways to help children build healthy relationship with foods, engage children with their food choices, and provide nutrient-dense foods for families. Hands-on cooking experiences will include how to plan and prepare foods with children as the audience and kitchen participant. *Prerequisite(s): GSN 526 or GSNO 526*

GSN 574E - Food Relationship Coaching

Credit(s): 2.00

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.

Prerequisite(s): GSN 528 or GSNO 528

GSN 575E - Obesity, Metabolic Syndrome, and Diabetes

Credit(s): 2.00

This is a practical course for those working with an obese population covering etiology; clinical characteristics; nutrition therapy; and prevention strategies for obesity, metabolic syndrome and diabetes. The course investigates the many influences on body weight, adiposity and energy expenditure, and evaluates current research in this area. Practical applications include an exploration of common eating habits and behaviors, barriers to weight loss, and treatment strategies. In addition, the course covers compassionate counseling and ways to help patients build better relationships with food and their bodies. *Prerequisite(s): GSN 515 or GSNO 515 , GSN 516 or GSNO 516*

GSN 577E - Nutrition Career Strategies (weekend format)

Credit(s): 2.00

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. *Note: Additional fee required*

GSN 578E - Food Chemistry

Credit(s): 2.00

In this hands-on experiential course, students explore basic food chemistry concepts as well as industrial food chemistry techniques and practices. They will learn about the chemical properties of nutrients and the effects of various cooking methods. The course is a mixture of lab and lecture. *Prerequisite(s): GSN 507 or GSNO 584. Note: Additional fee required*

GSN 579E - Preparation for Clinic Nutrition Rotation

Credit(s): 2.00

This course provides students with the policies and procedures for practicing at NUNM health centers. Students will be oriented to the NUNM clinic and complete trainings in OSHA, HIPAA, EPIC, and first aid and CPR. Additional topics include clinic guidelines, safety and emergency

medical procedures, and professionalism. *Corequisite(s): GSN 524 or GSNO 586 , GSN 528 or GSNO 528. Note: Additional fee required*

GSN 580E - Clinic Nutrition Rotation

Credit(s): 2.00

In this clinical immersion experience, students work with patients individually and in a group setting to address nutrition-related concerns. Students will conduct nutrition counseling, nutrition assessment, dietary and menu planning, and case evaluation. *Prerequisite(s): GSN 579E*

GSN 582E - Constitutional Medicine and Seasonal Dietetics

Credit(s): 2.00

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 life cycles. *Note: Additional fee required*

GSN 583E - Nutritional Counseling

Credit(s): 2.00

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. *Prerequisite(s): GSN 515 or GSNO 515*

GSN 589E - Nutritional Immunology

Credit(s): 4.00

This course explores inflammation and immunological responses as underlying causes in many chronic diseases. Nutritional influences on the inflammatory process and immune balance are analyzed in depth. Students will discover how to use nutrition to impact immunological outcomes using real-life clinical cases. Environmental exposures that affect the immune system are also reviewed.

GSN 592E - Autoimmunity

Credit(s): 3.00

Autoimmune disease prevalence is increasing worldwide. This increase is contributed to both genetic and environmental factors. In this course, students learn autoimmune disease mechanism, staging, diagnosis and treatment. Nutritional, environmental and physiological (e.g., hormones, neurotransmitters, etc.) effects on autoimmunity are explored using real-life clinical cases. This course includes interviews with naturopathic doctors and nutritionists who work with autoimmune patients. *Prerequisite(s): One of the following: CLS 7311 , CM 699 , RES 702 , GSN 546E or NS 322*

GSN 593E - Introduction to Permaculture

Credit(s): 3.00

This course explores the basic principles and practices of permaculture, offering an opportunity for students to examine ways humanity can live in harmony with Earth's natural systems. Students will increase their understanding of ecology while gaining hands-on experience in mapping, reading the landscape, and the design process. This class is an overview of the permaculture philosophy and will give students the opportunity to integrate this philosophy into their daily lives. *Note: This course does not culminate in a Permaculture Design Certificate (PDC).*

GSN 614E - Advanced Nutritional Biochemistry

Credit(s): 3.00

Learn cutting-edge nutritional biochemistry and systems medicine concepts integrated with clinical nutrition knowledge, and explore the unifying metabolic processes that promote health or cause inflammation, illness and death. Study the interrelationships among the leading chronic diseases and diet composition to advance understanding of disease as the dysregulation of glucose, fatty acid, protein and micronutrient metabolism. Relate the biochemical basis of disease to proactive and preventive nutritional interventions. *Prerequisite(s): GSN 514 or GSNO 514, or equivalent. Note: This course may be taken by students (in advanced standing) in place of GSN 514 with approval of instructor.*

GSN 838E - Israel Culinary and Cultural Immersion Trip

Credit(s): 3.00

Students are immersed in the rich culture of Israel by experiencing the local food, customs and traditions. A seven-day excursion will take students to the food markets in Jerusalem, a local farm that grows herbs and spices, and an olive farm. Explore the vast countryside of Israel, including the Dead Sea, Tel Aviv, Nazareth, and the Sea of Galilee, while learning about the health benefits of the local cuisine and lifestyle. *Note: itinerary-specific trip fee applies*

GSN 839E - Croatia Culinary and Cultural Immersion Trip

Credit(s): 4.00

In this course, students are immersed in the Mediterranean diet and culture of Croatia, one of only seven countries recognized by UNESCO as a carrier of the cultural heritage of this dietary pattern. Students will discuss the present-day benefits and challenges of this diet and examine what may be threatening its preservation. Local immersion includes exploring the most famous local food markets, visiting an olive grove and a vineyard, and traveling to the island of Hvar for a multi-day Mediterranean diet experience. *Note: itinerary-specific trip fee applies*

Classical Chinese Medicine Electives

Please refer to the list of electives found within the CCM Electives page.

Global Health Electives

Please refer to the list of electives found within the MScGH Electives page.

Integrative Medicine Research Electives

Please refer to the list of electives found within the MSiMR Electives page.

Naturopathic Medicine Electives

Please refer to the list of electives found within the ND Electives page.

Qigong Electives

Please refer to the list of courses found within the Qigong Electives page.

Electives in Ayurvedic Approaches to Medicine

Please refer to the list of courses found within the Ayurveda Electives page.

Electives in Integrative Mental Health

Please refer to the list of courses found within the Integrative Mental Health Electives page.

Electives for print undergrad**Undergraduate Electives**

Integrative Health Sciences (BSiHS)—8 Credits Required

Nutrition (BScN)—5 Credits Required

Accelerated Nutrition (BScN\MScN)—6 Undergrad Credits Required | 12 Grad Credits Required

Undergraduate students may take any elective courses listed below. Core courses in other NUNM undergraduate programs can also be taken for elective credit. In addition, cross-listed courses in graduate programs may be taken for elective credit. In all cases, students must satisfy course prerequisites.

NOTE: Elective courses may not be offered every year. All elective courses are scheduled based on faculty availability and sufficient student enrollment.

Natural Sciences

NS 341E - Environment and Health

Credit(s): 3.00

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

Credit(s): 3.00

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. *Note: Additional fee required*

NS 343E - Introduction to Permaculture

Credit(s): 3.00

This course explores the basic principles and practice of permaculture, offering an opportunity for students to examine ways humanity can live in harmony with earth's natural systems. Students will increase their understanding of ecology while gaining hands-on experience in mapping, reading the landscape, and the design process. This class is an overview of the permaculture philosophy and will give students the opportunity to integrate this philosophy into their daily

lives. *Note: This course does not culminate in a Permaculture Design Certificate (PDC). Note: Additional fee required*

Nutrition

NU 412E - Nutrition in the News

Credit(s): 2.00

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 423E - Foundations of Cooking Techniques

Credit(s): 3.00

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. *Note: Additional fee required*

NU 436E - Nutrition for Exercise and Sports

Credit(s): 3.00

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.

NU 437E - DIY Kitchen Staples

Credit(s): 2.00

This course covers how to make commonly purchased, healthy, kitchen staples. Students participate in recipe planning and evaluation, and hands-on preparation of foods (e.g., nut milks, non-dairy cheeses, yogurt, fermented vegetables, hummus/vegetables spreads, crackers and energy bars). This course also reviews ingredients found in packaged foods, including additives and preservatives, and evaluates their role in foods and any health consequences to their consumption. *Note: Additional fee required*

Social Sciences, Arts and Humanities

SS 402E - Human Sexuality

Credit(s): 3.00

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.

Cross-Listed Electives

- IM 441E - Aromatherapy (for description, refer to NDET 6140E)
- IM 443E - Collaborative Global Health Experience (for description, refer to GSGH 837E)
- IM 444E - Microbiome (for description, refer to NDEC 7320E)
- NS 402E - Ethnobotany Intensive (for description, refer to NDEB 6200E)
- NU 425E - Seasonal Cooking – Winter (for description, refer to GSN 520E)
- NU 430E - Food Relationship Coaching (for description, refer to GSN 574E)
- NU 434E - Seasonal Cooking – Spring (for description, refer to GSN 530E)
- NU 435E - Eating Disorders and Intuitive Eating (for description, refer to GSN 548E)
- NU 439E - Introduction to Organic Agriculture (for description, refer to GSN 571E)
- NU 440E - Nutritional Genetics (for description, refer to GSN 564E)
- NU 445E - Seasonal Cooking – Summer (for description, refer to GSN 501E)