

# **NATIONAL UNIVERSITY OF NATURAL MEDICINE**

# COURSE CATALOG

2024-25







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# **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, family relationship or any other category protected under federal, state or local law.

## **NUNM Mission Statement**

To advance education, healthcare, and research in the art and science of natural medicine.

## **NUNM Values**

### Community

We create an interconnected medical ecosystem by building relationships and partnerships within our university and beyond.

### Integrity

We promote a culture of transparency and honest feedback in order to continuously deepen our alignment with our Values.

## Equity

As a healthcare institution of higher education, we work to repair historical health and educational disparities, and to prevent future disparities.

#### Solutions-Focused

We seek to identify root causes and then look for holistic and creative solutions to challenges facing the university.

### Sustainability

We are careful stewards of our resources and foster a university environment in which talents and energies flourish.

# **Purpose**

To improve human health by making the healing power of nature accessible.

# **Vision**

To lead the transformation towards a more equitable healthcare ecosystem that embraces natural medicine for all.

# **Core Themes & Framework for Action IV**

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, strategies, activities and metrics are reflective of NUNM's overarching strategic plan, *Framework for Action IV*, for 2022-2027. The graphic below provides an overview of the core themes and supporting objectives.

## Letter from the President

Welcome, Students!

You have chosen to be part of a diverse and vibrant community centered around natural medicine. We are excited to have you join us!

Since 1956, NUNM has been a leader and an innovator. As the parent institution of naturopathic programs taught across North America, NUNM has educated and trained Naturopathic Physicians, Chinese Medicine practitioners, researchers, and integrative healthcare providers for nearly 70 years. Graduates from our programs are advancing the science and practice of natural health care and research in communities around the world.

Whether we are students, faculty, or staff, each of us at NUNM plays a critical role in achieving our mission, and we are here to uplift one another throughout this journey.

In the months and years ahead, your program's faculty will challenge and support you. Your success depends not only on your commitment to do the hard work required of your courses, but also on your curiosity for personal exploration and growth. In these ways you will empower yourself, find clarity of purpose, communicate authentically, and become your best self. I encourage you to pause at each milestone along the way to reflect and celebrate your growth in knowledge, skills, and character.

Meaningful transformation begins here, I can attest to that. As an alumna ('05) of the ND and CCM programs, I am deeply committed to this university and its mission. As your president, I am honored to welcome you into our community of belonging.

I wish you all the best on your educational journey. If you see me around campus or in a virtual meeting, please say hello.

In Health,

Melanie Henriksen, ND, LAc, CNM

President

## 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.

National University of Natural Medicine is a member institution with NWCCU. NWCCU's most recent action on the institution's accreditation status on July 17, 2017, was to reaffirm accreditation. NUNM's most recent evaluation was Spring 2023 Policies, Regulations, and Financial Review. The next evaluation will be Fall 2024 Evaluation of Institutional Effectiveness.

NWCCU is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA).

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 200, Redmond, WA 98052 425.558.4224 | https://nwccu.org/

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

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

#### CNME

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

# The Accreditation Commission for Acupuncture and Herbal Medicine (ACAHM)

The following programs offered by National University of Natural Medicine are accredited by the Accreditation Commission for Acupuncture and Herbal Medicine (ACAHM):

- (1) Master of Acupuncture
- (2) Master of Acupuncture with a Chinese herbal medicine specialization
- (3) Doctor of Acupuncture with a Chinese herbal medicine specialization
- including a Doctor of Acupuncture with a Chinese herbal medicine specialization degree completion track

ACAHM does not accredit any programs at the undergraduate/bachelor level.

Accreditation status and notes may be viewed on the ACAHM Directory.

ACAHM is recognized by the United States Department of Education as the specialized accreditation agency for institutions/programs preparing acupuncture practitioners. ACAHM is located at 500 Lake Street, Suite 204, Excelsior, Minnesota 55331; phone 952/212-2434; https://acahm.org

Public Disclosure Statement Effective as of 1 July 2024.

Acupuncture licensure regulations vary state to state among the 47 states that offer acupuncture licensure. In almost all of these states, graduates must pass the NCCAOM national board exams to obtain licensure. Graduates of the the MAcCHM and DAcCHM programs of the College of Classical Chinese Medicine are eligible to sit for all four modules of the exam.

California requires passing a separate exam, the California Acupuncture Licensing Exam (CALE), and does not currently recognize the NCCAOM exam. The California Acupuncture Board (CAB) has additional requirements for programs graduating students who wish to practice in California. The DAcCHM and MAcCHM programs satisfy all requirements of the CAB and are thus considered "CAB compliant," so graduates of the DAcCHM and MAcCHM programs are eligible to sit for the CALE.

Because the MAc program does not include Chinese herbal medicine training, MAc graduates are not eligible to practice in some states, including California. Additionally, MAc graduates may sit for the Foundations, Biomedicine, and Acupuncture with Point Location modules of the NCCAOM exam. Graduation from an accredited program such as all of those in the College of Classical Chinese Medicine does not guarantee licensure in a state. Licensure in a given state depends upon the licensure requirements of that state. Students will need to research the licensure regulations for the state in which they intend to practice. https://www.nccaom.org/state-licensure/

The DAcCHM completion track does not by itself confer licensure or certification eligibility, as in this case, the master's degree of DAcCHM-completion students determines eligibility. Prior master's training and degree are required as a prerequisite for the DAcCHM completion program.

Note that state regulations regarding acupuncture licensure evolve frequently. Thus, while NUNM reviews requirements annually (please see https://nunm.edu/nc-sara/), we cannot guarantee the accuracy of this information, so students should always check the state in which they intend to practice for eligibility requirements.

## Requirements for Oregon Licensure

To become licensed to practice acupuncture in Oregon, students need to have obtained a master's or doctoral degree at the first professional degree level from an accredited college and obtained national certification in acupuncture from the NCCAOM. NCCAOM certification involves successfully passing the NCCAOM national exam modules in Foundations of Oriental Medicine, Acupuncture with Point Location, and Biomedicine. NUNM students are eligible to take the exam modules after graduation, but may apply for certification 60 days prior to their graduation date.

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 | OCR@ed.gov

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) 3225 25th Street SE, Salem, OR 97302 503.947.5716 | info.pps@hecc.oregon.gov

# **Equal Opportunity Statement**

NUNM does not discriminate on the basis of age, sex, race, national or ethnic origin, religion, disability, familial status, veteran or current military status, marital status or sexual orientation, gender identity, pregnancy, genetic information, or any other protected class under local, state, or federal law. This policy complies with all federal and local laws, including with the Equal Opportunity Act of 1965, Title IX of the Education Amendments of 1972, Title IV of the Higher Education Act as federally reauthorized in 1998, Sections 503 and 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990.

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.

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.

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.

## 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 handson, 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

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

Summer Quarter Begins (clinic) 7/1/2024 July 4 Holiday (campus & clinics closed) 7/4/2024 **Summer Academic Classes Begin** 7/8/2024 Summer Tuition & Fees Due 7/26/2024 **Summer Academic Classes End** 8/30/2024 Labor Day Holiday (campus & clinics closed) 9/2/2024 New Student Orientation **TBD** White Coat Ceremony **TBD Summer Quarter Ends** 9/14/2024 **Summer Grades Posted** 9/20/2024 Fall **Fall Quarter Begins** 9/16/2024 Last Day to Add or Change Sections 9/27/2024 Fall Tuition & Fees Due 10/4/2024

Last Day to Drop Classes 11/18/2024

Veterans Day (campus & clinics closed) 11/11/2024

Clinic Holiday 1 – Thanksgiving Week Session 11/25-27/2024

Thanksgiving Break, No Academic Classes 11/25-30/2024

Thanksgiving Holiday (campus & clinics closed) 11/28-30/2024

Fall Quarter Ends 12/14/2024

Fall Grades Posted 12/20/2024

Winter Break, No Academic Classes	12/16/2024-1/4/2025
Clinic Holiday 2 – Post-Fall Session	12/16-12/21/2024
Clinic Holiday 2.5 – Pre-Winter Session	n/a
Winter Break, Campus Closed	12/23-12/28/2024
New Year's Holiday (campus & clinics closed)	1/1/2025
Clinic Holiday 3	12/30/24-1/4/2025

# Winter

Winter Quarter Begins	1/6/2025
Last Day to Add or Change Sections	1/17/2025
Martin Luther King Day (campus & clinics closed)	1/20/2025
Winter Tuition & Fees Due	1/24/2025
Last Day to Drop Classes	2/7/2025
Last Day to Petition to Graduate	3/28/2025
Winter Quarter Ends	3/29/2025
Spring Break, No Academic Classes	3/30-4/5/2025
Clinic Holiday 4 – Spring Break Session	3/31-4/5/2025
Clinic Holiday 5 – Spring Break Session	n/a
Friday of Spring Break Holiday (campus & clinics closed)	) 4/4/2025
Winter Grades Posted	4/4/2025

# **Spring**

Spring Quarter Begins	4/7/2025
Last Day to Add or Change Sections	4/18/2025
Spring Tuition & Fees Due	4/25/2025
Last Day to Drop Classes	5/9/2025

Memorial Day (campus & clinics closed) 5/26/2025

Juneteenth (campus & clinics closed) 6/19/2025

Spring Quarter Ends 6/28/2025

Spring Grades Posted 7/4/2025

**Commencement** TBA

## 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 unless additional supporting documentation is provided showing a "P" equals a grad of "C" or higher.

# **Application Process**

Applicants for undergraduate programs in the School of Undergraduate & Graduate 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.
- \$75 Application Fee: This fee is nonrefundable.
- **Transcripts:** Applicants are required to submit official sealed transcripts from each college and/or university attended. Electronic transcripts will be accepted if PDF transcript is delivered from verified/secured source, encrypted/digitally certified and marked official by the issuing institution.
- **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, 2023, for fall 2024. **The preferred application deadline is May 1, 2024.** 

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**

E	nglish Composition	2 courses
N	lath	1 course
N	lust be algebra, calculus or math-based statistics	
G	eneral Biology	Full sequence
	ne academic year of general or principles of biology, including lab. These ourses must be designed for science majors or pre-med students.	(2-3 courses)
G	eneral Chemistry	Full sequence
	ne 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 3.0 or higher is strongly encouraged.
- 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), , Master of Science in Nutrition (MScN), Master of Science in Clinical Research (MSCR), Master of Science in Global Health (MScGH), , programs must have a bachelor's degree (or its equivalent) from an institutionally accredited college or university.

Applicants interested in the Doctor of Acupuncture with a Chinese Herbal Medicine Specialization (DAcCHM), Master of Acupuncture with a Chinese Herbal Medicine Specialization (MAcCHM) and/or the Master of Acupuncture (MAc) program do not need a bachelor's degree in order to apply/enroll in CCM programs at NUNM. Instead, applicants must have the following to apply/enroll in CCM programs:

Applicants must have completed a minimum of 90 semester credits (or 135 quarter credits) of undergraduate coursework, including all current prerequisite courses that align with the foundational knowledge required for our programs (general biology, general chemistry, psychology, & humanities).

Applicants may apply to undertake two programs concurrently, with the exception of the ND/DAcCHM combination. All application and prerequisite coursework requirements must be met for both programs. Students taking online programs may apply for a secondary program after their first year. 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 encouraged. 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.

# **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. Electronic transcripts will be accepted if PDF

transcript is delivered from verified/secured source, encrypted/digitally certified and marked official by the issuing institution. 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 (OPTIONAL): Two recommendation forms can 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 programs: Fall 2024

Early Consideration Scholarship Application Deadline: Feb. 1, 2024

Application Deadline: May 1, 2024

Online MScN program: Winter 2024

Application Deadline: Dec. 8, 2023

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 program dean (or designee), utilizing the transcript evaluation procedures, determines that the learning objectives are met. NUNM does not accept life experience in lieu of prerequisite credits.

### **Co-Requisites for Applicants**

In rare instances, and for students with otherwise strong backgrounds in science courses, a conditional admission due to missing a singular pre-requisite may be offered by the Program Dean based on the applicant's GPA and transcript review. An applicant may be granted the exception to take **only one** outstanding course in the fall (or winter term for the MScN-online cohort) while beginning their NUNM enrollment. To be fully admitted to the program, an approved co-requisite course must be satisfactorily completed prior to the start of NUNM's winter term. If the student fails the co-requisite course or does not complete the registered co-requisite course, the conditional admission will be automatically rescinded. Students whose conditional admission status is rescinded will be placed on a leave of absence until the pre-requisite is met.

Co-requisite is defined as a singular outstanding pre-requisite requirement that a student may be allowed to complete in their first term of enrollment at NUNM.

# **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 & 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

# **Clinical Research (MSCR) 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

# **MAcCHM & MAc & DAcCHM Program Prerequisites**

**General Chemistry** 1 course

**General Biology** 1 course

**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 within the past two years 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. NUNM's institutional TOEFL code is: 4528.
  - 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

Educational Credential Evaluators (ECE)

ECE | NACES Member | Foreign Credential Evaluation Services

Transcripts from accredited Canadian colleges and universities are generally exempt from this requirement. NUNM reserves the right to require outside evaluation in certain cases. Canadian 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 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.
- 3. Only credits recorded on an official transcript of the issuing institution with an equivalent grade of 2.0 or better on a 4.0 scale will be considered for transfer. If an application is received before coursework at another institution has been completed, transfer credit will be considered to be conditional until satisfactory completion of the outstanding coursework.
- 4. Credits accepted for transfer must be determined by NUNM to be substantially equivalent to the courses offered by NUNM. This determination is to be made by the program dean or designee. All requests for transfer credit are considered on a course-by-course basis, and a catalog or course description will be required. Challenge examinations may be required to determine whether coursework is comparable.
- 5. Credits accepted for the transfer of coursework must have been awarded within seven years of the date of admission to NUNM, except that NUNM may, at its discretion, accept older credits if the entering student holds a graduate degree in an academic discipline closely related to the health sciences and has been working in the field.
- 6. The ND, MAcCHM, MAc, DAcCHM degree programs could take a minimum of three years education at NUNM, even with maximum transfer credit awarded, due to differences between programs.
- 7. NUNM does not give transfer credit for life experience.
- 8. Applications for transfer credit must be accompanied by a letter from the applicant's previous program dean stating that the applicant is in good academic and behavioral standing at the time of application.
- 9. Credits will be evaluated preliminarily for transfer before an offer of admission is made. The applicant will receive a copy of the formal transfer credit evaluation with a list of courses that must be taken at NUNM, 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 health care practitioner with a doctoral or master's level degree, may apply for fall or winter admission to the MAcCHM, MAc, DAcCHM 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 non-refundable 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 non-core
  coursework if completed in a doctoral program at a US Department of Education
  accredited institution. This determination will be made by the ND program dean or
  designee.
- Applicants seeking advanced-standing status into the ND program must hold a first
  professional medical degree. Accepted are medical (MD), osteopathic (DO), and
  chiropractic (DC) doctors who have graduated from a US Department of Education
  recognized 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 MAcCHM, MAc,DAcCHM programs, only a limited number of credits from programs with a traditional orientation are transferable. Acupuncture transfer students may receive transfer credit for up to 50% of the total program credit requirements. Of that 50%, no more than 25% of the program clinical training requirements may be accepted as transfer credit.

**Applicants with completed coursework in U.S. institutions**: Only acupuncture 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), Educational Credential Evaluators (ECE) 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 Graduate programs in the School of Undergraduate & Graduate Studies

Master's-level programs within the School of Undergraduate and Graduate Studies (SUGS) at NUNM may accept up to one quarter 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 dean and course catalog for more specific limitations.

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

- Courses being transferred are obtained at a US Department of Education recognized accredited institution.
- Courses being transferred are at the graduate level.
- They are determined by the program dean 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 unless there is supporting documentation from the institution showing a pass (P) grade equals a B- or higher.
- They must be no older than seven (7) years old at the time of admission into the program. (Exceptions 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 to be transferred. The program dean would make this determination.)
- Students must complete an 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 Clinical 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 Undergraduate programs in the School of Undergraduate & Graduate Studies

Studies may transfer credit for courses that are substantially similar to courses offered as part of NUNM's undergraduate programs. Students are required to complete a minimum of 50 credits in the Bachelor of Science in Integrative Health Sciences program and 51 credits in the Bachelor of Science in Nutrition program. All transfer credits must be completed at a US Department of Education recognized accredited institution, and are evaluated for relevance and subject to approval by the program dean.

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

Transfer of credit from NUNM to other institutions is at the discretion of the receiving institution. Credit generally depends on comparability of curricula and may depend on comparability of accreditation. NUNM is a US Department of Education recognized accredited institution. 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

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

## **College of Naturopathic Medicine**

For the ND program, at least half of the required number of elective credits must be taken from courses designated as electives within the ND program. The remainder may come from elective courses offered at NUNM, as long as course prerequisites are met and the course has been approved by the program dean as counting toward the ND program. Approval from the program dean is required in order for a core course from another program to count toward elective credit.

Example: A student in the ND program is required to take a total of 16 elective credits. Eight credits must be from courses within that program. The other eight credits may come from electives approved to count toward that program.

# College of Classical Chinese Medicine and the School of Undergraduate & Graduate Studies

For each program, at least half of the required number of elective credits must be taken from courses designated as counting toward that program. The remainder may come from any elective course offered at NUNM, as long as course prerequisites are met. Approval from the program dean is required in order for a core course from another program to count toward elective credit.

Example: A student in a specific program is required to take a total of 14 elective credits. Seven credits must be come from courses designated as counting toward that program. The other seven credits may come from electives in any program.

#### **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 dean. 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 Course**

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).

## **Certificate Programs**

NUNM offers certificates in several naturopathic and classical Chinese medicine modalities. To be eligible for consideration, applicants must already be enrolled in a degree program at NUNM, be in good academic standing, and meet the certificate program requirements.

## **Homeopathic Medicine Certificate**

Homeopathic medicine, a medical system developed in Germany at the end of the 18th century, is based on the principle of "like cures like." Homeopathic remedies are derived primarily from substances that come from plants and minerals. Clinical observation indicates that it works on a subtle, yet powerful, energetic level, gently acting to promote healing on the physical, mental, emotional and spiritual levels.

The Homeopathy Certificate is open to current naturopathic medicine students, and begins to prepare the recipient to apply for the Homeopathic Academy of Naturopathic Physicians (HANP) credential after they graduate. The certificate requires a student to take all the required coursework in the naturopathic program, as well as three elective courses. There are additional requirements for case analysis, and written papers, to complete this certificate. Students are required to apply to be included in the program, to ensure that they will be able to schedule the necessary classes around their naturopathic schedule while they are pursuing their naturopathic degree. All courses are taught by NUNM homeopathy department faculty. Full certificate requirements are available on campus.

## Naturopathic Childbirth / Midwifery Program Certificate

The Natural Childbirth/Midwifery program at NUNM is a synthesis of the philosophies of both naturopathic medicine and traditional midwifery. NUNMs didactic program prepares students planning to practice naturopathic midwifery and students who, although not pursuing midwifery as a career, plan to care for women and children in their practice. With

dual training in naturopathic medicine and midwifery, naturopathic physicians are uniquely qualified to provide comprehensive health care for women and their families. NUNM's Natural Childbirth Certificate coursework meets the didactic licensure requirements for Oregon, New Hampshire, Montana, Utah and Vermont and is recognized by the Washington State midwifery Board. The coursework can also apply to CPM requirements for licensure in other states. Individuals interested in practicing naturopathic midwifery in other areas should contact their local governing agencies to inquire about these requirements. Additionally, each state requires practical clinical experience which is not included in this certificate program. NUNM does not formally offer clinic training but there are often local opportunities available to student to gain the clinical experience in the private practices of local naturopathic doctors.

#### **Application for the Program**

Students may apply to the program at any time throughout the ND program and must be in good academic standing. Passing of the Reproductive block (CLS7310 , CLS7310T , CLS7310L) is required before starting these elective courses. For those who have already taken/passed the Reproductive Block, it is highly recommended to apply to the program before registering for the first elective as it assures that the electives will be offered. The application may be requested from the Registrar's office. The Natural Childbirth electives are open to all students regardless of acceptance into the certificate program. Students not in the certificate program may enroll for any electives but will not be given priority during registration to ensure availability.

## Requirements for NUNM certificate in Natural Childbirth

- 1. Acceptance into program (application and payment of program fee)
- 2. Completion of CLS7310, CLS7310T, CLS7310L Reproductive Block
- 3. Completion of the following electives
  - 1. NDER 7330E Natural Childbirth II: Pregnancy
  - 2. NDER 7340E Natural Childbirth III: Labor and Delivery
  - 3. NDER 8420E Natural Childbirth IV: Postpartum
  - 4. NDER 8430E: Natural Childbirth V: Neonatology
  - 5. NDER 8440E: Natural Childbirth VI: Special Topics
  - 6. NDER 8441E: Natural Childbirth VII: Legal Aspects

## Certificate of Advanced Studies in Classical Chinese Medicine

Classical Chinese medicine represents one of humanity's richest and uninterrupted streams of traditional knowledge. It is a highly sophisticated clinical system that offers a real alternative for the serious healthcare needs of our time. It is a holistic system of medicine that combines the art and science of human care developed over millennia and is rooted in the ancient tradition of practitioner as medical scholar. The study of classical Chinese

medicine involves merging modern innovations with ancient whole-systems science in order to gain new insights into health and healing for the benefit of patients.

Fully aligned with the CCM mission, this certificate program enables motivated students to delve more deeply into the classical roots of Chinese medicine. It consists of nine Classical Texts courses, Bazi Suanming and two courses in Chinese Cultural Arts. These courses are rarely included in Chinese medicine programs in China or the US, and they are specifically designed to connect the serious student of classical Chinese medicine with the authentic milieu of the ancient scholar practitioner.

## **Qigong Certificate**

The Qigong Certificate program is taught in two levels, with each level having a separate admissions screening process. The first level has an academic focus and the second level trains the student to teach their own qigong classes.

#### Shiatsu Certificate

The Shiatsu Certificate Program consists of six courses (204 hours) taken over two years. It is designed to be pursued concurrently with the MAcCHM, DAcCHM, MAc or ND programs. At the end of the certificate program, students will be fully prepared to use shiatsu as an independent treatment modality.

## **Non-Degree Seeking Students**

A non-degree seeking student is someone who is not enrolled in a degree program, but seeks to take a course at NUNM. Those who wish to enroll in a course, but not a degree program may apply as a non-degree seeking student in the School of Undergraduate & Graduate Studies. Approval is based on space availability, pre-requisite completion, as well as, instructor and program dean approval. Graduates of NUNM who seek to add a certificate program may apply to do so, provided specific requirements are met. Practitioners seeking continuing education units (CEUs) should contact the Office of Advancement.

- Application fee of \$25 (non-refundable). Check payable to NUNM. Current students, NUNM employees and alumni are exempt from the application fee.
- No lab courses may be audited (for example: histology lab).
- Payment is required prior to starting the course.
- Audit fee is 80% of regular tuition for academic courses.
- No refund will be given after the first class meeting.

## **Non-Degree Admission Registration Requirements**

Non-degree seeking students are responsible for submitting all application requirements to the Office of Admissions. To audit or take a course for credit, please complete the

required Non-Degree Seeking Students Registration Form and submit the following supporting supplements:

- Please complete the Certificate of Immunization Form.
- Please provide proof of TB testing.

\*Individuals who have been enrolled at NUNM within the last twelve months are not required to provide proof of TB test.

If you need to take a TB test, testing is available at the NUNM Health Centers – Lair Hill on 3025 South Corbett Avenue. Please submit a copy of the following NUNM TB Test Request Form to the clinic. Lab appointment required. For clinic and lab hours/lab fees, please call 503.552.1551.

Background Check Policy and Request – Please complete a student background check through CastleBranch by following these instructions. Review information policy and submit a complete copy of the Release of Information Form and confirmation receipt from CastleBranch with your registration form.

#### Please confirm:

- Registration form is complete with authorized signatures from the program dean and instructor of the course,
- Certificate of Immunization,
- Proof of TB testing
- Release of Information
- CastleBranch receipt are COMPLETE prior to submitting application to:

#### **Mailing Address:**

NUNM Office of Admissions 49 South Porter St., Portland, OR 97201

#### **Physical Address of Location:**

NUNM Office of Admissions 2828 SW Naito Parkway – Suite 350, Portland, OR 97201

Office hours: Monday – Friday, 9 a.m. to 5 p.m. Telephone: 503.552.1660 | Fax: 503.499.0027

Email: admissions@nunm.edu

## **Scholarships**

Through the generosity of donors, National University of Natural Medicine is pleased to offer the following scholarships to assist students with their cost of education. Visit each scholarship page to learn more about the scholarship and any scholarship–specific application requirements. New students, please contact the Admissions Office for all

incoming student scholarships. Visit https://nunm.edu/scholarships/ for more information.

## **Immunization and Health Screening Policy**

All immunization records are required upon matriculation. Failure to meet this requirement could be grounds for an admissons deferment to the next academic entry point.

As a NUNM health care worker, students and residents must comply with NUNM immunization and health screening requirements which are obligatory by Oregon state law (OAR 409-030-0100 to 409-030-0250). Students and residents must obtain and provide documentation of appropriate immunizations and TB clearance and/or documents of positive serology, as well as a negative 10 panel urine drug screen prior to matriculation (students) or starting a clinical assignment (residents). See Section 11.7 of the Student Handbook for greater detail on NUNM drug testing policy. Students and residents must maintain compliance with all applicable immunization and health screening requirements throughout their programs. Individual requirements may vary depending on training location. Students in programs within the School of Graduate Studies who do not have clinical rotations within the NUNM Clinics/Health Centers will be responsible for meeting immunization requirements for any external clinical rotation sites.

Students from the School of Undergraduate and Graduate Studies who will not be working within the NUNM Clinic System and who wish to claim non-medical exemptions must obtain OHA Exemption and Immunity documentation as well as meet with the CMO and Dean of Students for review of requirements. Students will document acknowledgement that by requesting exemptions they may have limited clinical rotations available and the limitations may delay graduation from their program.

Students and residents who do not meet the initial immunization and health screening requirements by their scheduled start date will not be permitted in the clinical environment until all requirements have been met. Students will have a hold placed on their registration. If it is determined that a student or resident does not meet these requirements at any point in time, it is the responsibility of the Chief Medical Officer, with the support of the program Dean, to remove the student or resident from clinical service until they have met all immunization and health screening requirements.

#### Requirements:

#### I. Immunizations

- 1. Completed Immune Status Form upon matriculation.
- 2. Documentation of Immunity: Incoming students and residents must provide the following documentation of immunity to the relevant vaccine preventable diseases to NUNM prior to student or resident orientation. The deadline for students starting at the beginning of the academic year is the first day of classes. For residents

starting later in the academic year, paperwork must be submitted no later than the official appointment start date.

- 3. Evidence of immunization may be demonstrated through the following:
  - A document appropriately signed or officially stamped and dated by a qualified medical professional or an authorized representative of the local health department, which must include the following.
  - Written documentation by a qualified medical professional indicating the month and year the diagnosis of the disease was confirmed.
  - o Documentation of proof of immunity to the disease via titer; or
  - o The month and year of each dose of each vaccine received; or
  - An official record from the Oregon ALERT Immunization Information System.
- 4. Exemptions: Individual student medical exemptions from specific immunizations will be maintained by the office of the Chief Medical Officer as part of the overall record of the student. Documentation for medical exemption requires a written statement of exemption signed by a qualified medical professional. Medical exemption statements must include the following:
- Student's name
- Birth date
- Medical condition that contraindicates vaccine
- List of vaccines contraindicated
- Approximate time until the condition resolves, if applicable,
- Healthcare provider's signature
- Healthcare provider's contact information including the phone number.

Non-medical exemptions from immunizations are not allowed under Oregon state law for students in healthcare profession programs.

## Specific vaccines required:

#### 1. Measles, Mumps, and Rubella (MMR)

For students and residents born after December 31, 1956, one of the following is required:

- Documentation of TWO properly administered immunizations.
- Immune titers for measles (rubeola), mumps, and rubella.
- Healthcare provider documented disease history.

Students and residents born before 1/1/1957, must meet one of the following requirements:

- Documentation of 1 dose (each or as MMR) of live measles, mumps, and rubella vaccines given after 12 months of age.
- Positive measles and mumps IgG serology.
- Students and residents born before 1/1/1957, are considered immune to Rubella.

#### 2. Varicella

Students and residents must meet one of the following requirements:

- History of varicella infection per physician documentation
- Documentation of 2 doses of live vaccine given after 12 months of age. Recommended interval is 4-8 weeks between doses.
- Varicella titer indicating immunity if the student has previously had the chicken pox.

#### 3. Hepatitis B

Students and residents must meet one of the following requirements:

- Documentation of 3 dose vaccine series.
- Positive anti-HBs serology.

#### 4. Tetanus/Diphtheria/Pertussis

- Documentation of single dose of TDaP vaccine and/or Td booster within the past 10 years. TDaP vaccine can be administered without concern for the length of time since the most recent Td vaccine. If it has been longer than 10 years since the TDaP, a Td or TDaP booster is required.
- Titer demonstrating immunity to all three (diphtheria, tetanus and pertussis).

#### Vaccines recommended but not required

#### 1. Polio

NUNM follows CDC recommendations. The CDC recommends polio vaccine for healthcare workers treating patients who could have polio or have close contact with a person who could be infected with poliovirus.

#### 2. Influenza

Currently, Oregon law (ORS 433.407) states that facilities employing healthcare workers must offer the flu vaccine, but may not require employees or students to be immunized unless a state and federal rule requires it.

#### **Required Screenings**

#### 1. Tuberculosis Screening

Tuberculosis screening must occur at NUNM during orientation prior to student or resident matriculation for those students/residents who will be on NUNM campus for any reason during their training. Screening consists of Interferon Gamma Release Assay (IGRA). The two IGRAs that have been approved by the U.S. Food and Drug Administration are:

- QuantiFERON®-TB Gold In-Tube test
- T-SPOT® TB test

Students testing positive for TB by either of these methods must undergo further testing with a chest x-ray.

Students with a current or prior positive test and positive chest x-ray are required to provide documentation from their health care provider including the following:

- 1. TB test result
- 2. Chest x-ray report
- 3. Determination by the health care provider if this is a latent TB infection or active TB disease
- 4. Treatment; including what it was, when started, when completed, etc.

Students who have active TB disease will be restricted from school and patient contact until certified free of disease, in accordance with CDC and Multnomah County Health Department policy.

For further information about TB testing and compliance, see section 12.16 of the NUNM Student Handbook.

#### 2. 10 Panel Drug Screen

In compliance with ORS 409-030-0100, clinical students and residents must obtain a valid 10-panel urine drug screen and receive a negative result within 30 days of matriculation at NUNM. See section 11.7 of the Student Handbook for detail.

# Student Exemption from TB Testing, Immunizations, and Drug Testing

## **Policy**

This policy outlines the exemption criteria for non-degree seeking online students who are enrolled in programs at NUNM from completing Tuberculosis (TB) testing, immunizations, and drug testing requirements.

#### **Exemption Criteria:**

Non-degree seeking online-only students at NUNM are exempt from the following health-related requirements:

- 1. **Tuberculosis (TB) Testing:** Non-degree seeking online-only students are not required to undergo TB testing, including any related chest X-rays or other diagnostic tests.
- 2. **Immunizations:** Non-degree seeking online-only students are not required to provide documentation of immunizations or vaccinations typically mandated for degree-seeking students.
- 3. **Drug Testing:** Non-degree seeking online-only students are exempt from any drug testing requirements applicable to degree-seeking students.

#### **Exceptions:**

If at any time, there is an exceptions to the type of course a non-degree seeking online student is enrolled in, and that course has a clinical component, the policies mandating compliance with all screening and testing take precedence over this policy.

#### **Procedure**

#### **Verification of Status:**

To qualify for exemption from TB testing, immunizations, and drug testing, students must meet <u>both</u> of the following criteria:

a. Non-Degree Seeking: Students must have been formally classified as non-degree seeking by NUNM's admissions office.

b. Online-Only Enrollment: Students must be enrolled exclusively in online courses or programs and must not be physically present on any of NUNM's campuses.

## **Application for Readmission Policy**

The purpose of this policy is to describe some of NUNM's practices when a student seeks readmission to a program. Not all circumstances are described, and NUNM reserves the right to use its judgment when determining whether to readmit a student who was formerly enrolled.

#### <u>Undergraduate Programs</u>

**Returning after academic suspension:** Undergraduate students who have been academically suspended must apply for readmission. Such students may not apply for readmission 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 academic performance, and a plan of action for successful completion of their NUNM degree.

NUNM may also 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. Student will be 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:** Students expelled for any reason are ineligible for readmission to NUNM.

**Additional considerations:** There is no guarantee of readmission to NUNM. When reviewing an application for readmission, NUNM may take into account any factors and impose any requirements it deems appropriate under the circumstances.

#### Masters and Doctorate Programs

**Returning after academic suspension:** Students who have been academically suspended must apply for readmission. Such students may not apply for readmission for a minimum of one calendar year from time of suspension, unless noted differently in the suspension letter.

Documentation may be required to prove that the circumstances leading to the academic suspension have been remedied. NUNM may impose the following requirements upon readmission for a student who was academically suspended:

- 1. Satisfactory completion of remedial work prior to readmission, including repeating some courses and clinic shifts.
- 2. A meeting with the Center for Academic Success to sign and comply with all conditions of an academic contract.

Return on academic probation for a minimum of one academic year or until all previously failed courses have been resolved, whichever is longer.

**Expelled students:** Students expelled for any reason are ineligible for readmission to NUNM.

**Additional considerations:** There is no guarantee of readmission to NUNM. When reviewing an application for readmission, NUNM may take into account any factors and impose any requirements it deems appropriate under the circumstances.

#### Students who have Withdrawn from an NUNM Program

Students who have withdrawn, either administratively or voluntarily, from NUNM or an NUNM program must wait at least one application cycle to apply for readmission. Withdrawn students are required to follow the same process as first-time applicants. In addition, 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. Satisfactory completion of an entrance exam prior to entering the clinic to assess skill level.
- 2. Satisfactory completion of remedial work, which may include repeating some courses and clinic shifts.
- 3. A meeting with the Center for Academic Success to sign and comply with all conditions of an academic contract if the student was 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 background check. Completing these steps does not guarantee readmission to NUNM. NUNM reserves the right to deny admission to any applicant or impose additional requirements.

Questions regarding this policy may be directed to the director of admissions, academic dean(s) or dean of students.

## **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 2024, tuition for credit courses is as follows:

Tuition	Rate
Undergraduate	\$277 per credit
Graduate	\$522 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 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 does not provide paper statements to students since real-time billing is available online through their Sonis account.

Students with past due balances will receive a mailed statement letting them know their account is past due and a late fee of \$50 is being assessed due to non-payment.

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. 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 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% of the amount paid at the time of processing. Payments made by debit card and/or check will not be charged a fee. There is no fee for online payments through Payclix using this link: http://bit.ly/2Gdu2xu Payments made through Payclix take 7 to 10 days to post as funds must be transfer from Payclix to NUNM. Please ensure your payments made online will meet the deadline for due dates.

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.
- 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 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 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.)

<sup>\*</sup> 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 itinerar

#### **CURRENT ND1 CURRICULUM** BAS 5110L Structure and Function I Lab \$30 BAS 5120L Structure and Function II Lab \$30 BASO 5120L Structure & Function II Lab (online) \$10 BAS 5120T Structure and Function II Tutorial \$0 BAS 5130T Structure and Function III Tutorial \$0 CLE 5110 Clinical Education I \$47 CLEO 5110 Clinical Education I (online) \$57 CLE 5110 Clinic Ed I Tutorial \$0 CLE 5120 Clinic Ed II Tutorial \$0 CLE 5130 Clinic Ed III Tutorial \$0 BAS 5111L Clinical Anatomy I Lab \$10 BAS 5121L Clinical Anatomy II Lab \$10 THR 5120L Therapeutic Modalities I Lab \$65 THR 5131L Therapeutic Modalities II Lab \$50 **REVISED CURRICULUM - ND1** Clinical Anatomy I Lab \$10 \$65 Fundamentals of Hydrotherapy Medical Histology Lab \$60 Clinical Education I \$40 Clinical Anatomy II Lab \$10 \$10 Clinical Anatomy III Lab Fundamentals of Botancial Medicine Tutorial \$50 \$0 Intro to Clinic Synthesis

#### **REVISED CURRICULUM - ND1 ONLINE** \$10 Medical Histology Lab Clinical Education I \$50 SUMMER INTENSIVE THRO5120L Intro to Therapeutics Modalities I Lab \$60 \$50 THRO5131L Therapeutic Modalities II Lab BASO 5131L Clinical Anatomy Surface Palpation I \$0 \$0 BASO 5132L Clinical Anatomy Lab Surface Palpation II **CLEO 5121T Clinical Education Tutorial** \$0 ND2-ND4 CLE 827 Clinical Skills Enhancement Tutorial \$650 CLE 828 ND OSCE Skills Tutorial \$350 CLE 6212 Introduction to Clinic \$0 CLS 6210T Musculoskeletal, Ortho, Exercise Physiology & Rehab Tutorial \$0 CLS 6210L Musculoskeletal, Ortho, Exercise Physiology & Rehab Lab \$10 CLS 6211L Neurology Lab \$0 CLS 6220T Cardiology and Pulmonology Tutorial \$60 CLS 6220L Cardiology and Pulmonology Lab \$25 \$30 CLS 6221L Hematology and Oncology Lab \$0 CLS 6230T Gastroenterology and Proctology Tutorial CLS 6230L Gastroenterology and Proctology Lab \$110 CLS 6231T Urology and Nephrology Tutorial \$70 CLS 7310 Reproductive Lab \$380 CLS 7311T Rheumatology and Clinical Immunology Tutorial \$0 CLS 7320L EENT Lab \$25 CLS 7321L Dermatology and Minor Surgery Lab \$30 CLS 7330T Pediatrics and Geriatrics Tutorial \$0

CLS 7331L Parenteral Therapy and Environmental Medicine Lab	\$120
CLS 7332T Psychology and Mental Health Tutorial	\$10
ND ELECTIVES	
NDEB 5110E Northwest Herbs I	\$40
NDEB 5130E Northwest Herbs II	\$40
NDEB 5210E Herbal Garden Processing	\$50
NDEC 7351E Point of Care Ultrasound	\$56
NDER 7330E NCB II Pregnancy	\$35
NDER 8430E Natural Childbirth V: Neonatology	\$270
NDER 8440E NCB VI Special Topics	\$65
NDET 5120E Bodywork I	\$10
NDET 5130E Bodywork II	\$10
NDET 5140E Bodywork III	\$10
NDET 6215E Advanced Physical Medicine	\$0
NDEB 6230E Advanced Botanical Medicine I	\$40
NDET 6230E Mindful self-compassion (on-ground)	\$5
NDEB 5201E Cascade Mountain Herb Intensive	\$150
RETREATS	
PHL 5130 Naturopathic Medicine Retreat	\$120
PHLO 5130 Naturopathic Medicine Retreat	\$120

## **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)	\$190
CCM Clinic Exit Exam Retake (fee each) (payable before Retake can be taken)	\$75
CCM Makeup Exam (written and quizzes)	no charge
CCM Makeup Lab Exam (payable before Makeup can be taken)	\$75
CCM Remediation Exam or Project (for FR/R grades) (payable before Retake can be taken)	\$75
CM 01E China Trip	Varies
CM 06E Chinese Dietetics	\$100
CM11E Bazi Suanming	\$75
CM 15E, 25E, 35E, 45E, 55E, 65E Shiatsu I-VI (each)	\$7
CM 16E Five-Element Retreat*	\$150
CM 26E Shan Ren Dao Retreat*	Varies
CM 514, 524, 534, 614, 624, 634 Acu-Moxa Techniques I-VI (each)	\$13
CM 515, 525, 535 Palpation and Perception I-III (each)	\$7
CM 518, 528, 538, 618, 628, 638, 718, 728, 738 Qigong Retreats I-IX (each)*	\$315
CM 516 Herbs I	\$75
CM 556, 566, 576 Herbs I-III Practicum (each)	\$5
CM 656, 666, 676 Herbs IV-VI Practicum (each)	\$7
CM 615 Asian Bodywork	\$7
CM 657 Acu-Moxa Anatomy I	\$7

CM 663 Auricular Points	\$7
CM 667 Acu-Moxa Anatomy II	\$7
CM 714, 724 Advanced Acu-Moxa Techniques I-II (each)	\$13
CM 735 Applied Palpation and Perception	\$7
CM 5100E, 5101E, 5102E Non-CCM Qigong Retreat Series I-III (each)*	\$315

# **Graduate Programs: 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.)

CLE 5000 HIPPA, OSHA, Mandatory Reporter Training	\$30
CPR 101 CPR for Wilderness First Aid	\$50
All Cooking and/or Teaching Kitchen Courses (each)	\$100
GSGH 691 Capstone I: Fieldwork Experience	Varies
GSGH 706E Conference in Global Health	\$800
GSGH 714E Wilderness First Aid	Varies
GSGH 821E Tanzania Global Health Experience	Varies
GSGH 832E Thailand Global Health Experience	Varies
GSGH 836E Ghana Global Health Experience	Varies
GSGH 837E Collaborative Global Health Experience	Varies
GSGH 838E India Global Health Experience	Varies
GSN 501E, 510E, 520E, 530E Seasonal Cooking (each)	\$100
GSN 502 Culinary Skills	\$100
GSN 503 Farm to Table	\$100
GSN 506 Healing Foods I Practicum	\$100
GSN 508 Fundamentals of Nutrition Workshop	\$100

GSN 529 Applied Medical Nutrition Therapy	\$90
GSN 538E Cooking Pedagogy	\$100
GSN 542E Cooking and Considering Meat and Seafood	\$100
GSN 543E Personal Chef and Food Service	\$100
GSN 545E Global Cuisine: Foods of the World	\$100
GSN 549E Detoxification and Cleanses	\$100
GSN 551E Therapeutic Diets	\$100
GSN 557E Cooking with Medicinal Herbs	\$100
GSN 558E Food as Medicine Everyday (FAME) Educator Training	\$100
GSN 559E Vegan Diets	\$100
GSN 561E Recipe and Menu Development	\$100
GSN 568E Healing Foods II Practicum	\$100
GSN 571E Introduction to Organic Agriculture	\$35
GSN 577E Nutrition Career Strategies Retreat	Varies
GSN 578E Food Chemistry	\$100
GSN 582E Constitutional Medicine and Seasonal Dietetics	\$100
GSN 838E Israel Culinary and Cultural Immersion Trip	Varies
GSN 839E Croatia Culinary and Cultural Immersion Trip	Varies
GSNO5xxE Virtual Nutrition Clinic Experience Courses	\$100
RES 531 Integrative Medicine Research Seminar	\$800
RES 622E Botanicals: Bench to Bedside	\$100

# **Undergraduate Programs: Lab and Other Fees**

(All lab fees are nonrefundable)

All Cooking and/or Teaching Kitchen Courses (each)	\$100
Undergraduate Makeup Exam (quizzes)	\$25
IM 311 Introduction to Integrative Medicine	\$25
IM 422 Introduction to Botanical Medicine	\$50
NS 312 Anatomy and Physiology Lab	\$65
NS 315, 325 General Chemistry I and II (one-time fee)	\$50
NS 324, 334 Organic Chemistry Lab I and II (one-time fee)	\$100
NS 342E Plants of the Northwest	\$35
NS 432 Physics with Lab	\$60
NU 301 Farm to Table	\$100
NU 313 Fundamentals of Nutrition Workshop	\$100
NU 314 Culinary Skills	\$100
NU 423E Foundations of Cooking Techniques	\$100
NU 431 Whole Food: Rethinking Science and Nutrition	\$100
NU 437E DIY Kitchen Staples	\$100
NU 477E NW Herbs I	\$35

## **Miscellaneous Fees**

Advanced-standing Transcript Evaluation Fee (one-time application fee)	\$75
Audit Fee	50% of the per credit rate
Travel for Non-Credit	50% 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 \$60 plus 50% of Challenge Examination Fee the per credit rate Clinic Private Tutoring (6 weeks) \$1,500 Clinic Rotation Change Fee \$50 CPR Certification Fee (5 hours, CPR 100) \$60 (recertification required every two years) CPR Recertification Fee (CPR 200) \$57 CPR for Wilderness First Aid Fee (CPR 101) \$50 3.0% of the total Credit Card Fee charged Diploma (replacement) \$50 Graduation Fee (fall quarter billing) \$160 HIPAA Training (annual fee) \$30 Independent Study Fee \$464 per credit Late Payment Fee \$50 per quarter NMSA Fee (winter quarter billing, cannot be waived) \$60 NSF Check Returned \$30 per check NSF Payclix Online Fee \$30 On Ground Orientation Fee (one-time fee for all new students) \$50 Parking Fee \$107 per quarter 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 (can be waived to new students who have documentation of testing)	\$95
Tuberculosis Retesting Fee (for students who return from trips in foreign countries during the academic year)	\$95
Tuition Deferment Fee (per deferral)	\$20

# **Application Fees**

Graduate/Professional (nonrefundable)	\$75 all programs
Undergraduate (nonrefundable)	\$50 all programs
Non-Degree (nonrefundable)	\$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

Graduate programs in the School of Undergraduate & Graduate Studies \$300

Undergraduate programs in the School of Undergraduate & Graduate 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, to qualify for the Direct Loan Program funds:
  - Undergraduate programs in the School of Undergraduate & Graduate Studies are defined as 6 credits half-time, 12 credits full time
  - Graduate programs in the School of Undergraduate & Graduate Studies are 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

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. Title IV funds can only be awarded to the program with the highest elective credits required as these elective credits will fulfill the graduation requirements for both programs (students in ND/CCM would have Title IV funding for 16 required elective credits).

Electives taken beyond the program requirement will not be included in determining a student's eligibility for Title IV funds.

# Financial Aid Timeline for the 2024–2025 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 2024–2025 Free Application for Federal Student Aid (FAFSA), available on Dec. 31st, at https://studentaid.gov/h/apply-for-aid/fafsa. 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.

## **Cost of Attendance**

The cost of attendance (COA) is the estimated cost for a student to attend the institution each year. In addition to tuition and fees, you need to budget accordingly for other expenses. These expenses include living expenses, transportation, personal expenses, books, and supplies. Please contact the financial aid office if you need assistance or tools with setting an annual budget financialaid@nunm.edu.

Below is the estimated COA for the 2024-2025 award year.

#### **Doctorate and Masters Programs**

	Estimated Cost
Living expenses (rent, food, and utilities)	\$2740 per month
Transportation (gas, maintenance, and insurance)	\$320 per month
Personal Expenses	\$375 per month
Books & Supplies	\$1000 per term
Loan Fees	\$1000 per term
Professional Licensure or certification (NPLEX 1,	
NPLEX 2, Jurisprudence, clean needling exam & Chinese Medicine boards) **	\$650-\$3395

\*\*Naturopathic Doctorate and Chinese Medicine students (Mac, MACCHM, DACCHM) will have funding available for the cost of obtaining their first professional licensure, or certification. The awarding of funds will depend on the student's year in the program.

#### **Bachelors Programs**

Description	Estimated Cost
Living expenses: Independent or Dependent student not living at home (rent, food, and utilities)	\$2740 per month
Transportation (gas, maintenance, and insurance)	\$320 per month
Personal Expenses	\$375 per month
Books & Supplies	\$367 per term
Loan Fees	\$110 per term

## **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 changes, the Financial Aid Office, as federal regulations require, will recalculate federal, state, and institutional student aid awards.

If the change in enrollment status, before 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 before making changes to their enrollment to ensure there is an understanding of any financial implications that may occur.

## **Scholarships**

NUNM awards scholarships to 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 can apply for one of our Incoming Student Scholarships. Applicants need to complete an application and submit a 1-2 page professional essay describing why they deserve a scholarship. 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 Advancement Department advancement@nunm.edu.

#### **Scholarship Timeline**

Applications open: May 1st, 2024Submission deadline: July 7th, 2024

• Scholarship recipients announced: September 2024

#### How to Apply

Complete the 2024-2025 NUNM Scholarship Application. Include your scholarship–specific essays and all required documents in your submission. Please remove your name from all essay materials.

#### Scholarship Award and Financial Aid

Federal financial aid recipients could have other aid reduced to accommodate any scholarship(s) received. Scholarship funds will be divided into three equal installments and disbursed to the recipient in fall, winter and spring terms. Scholarship recipients must maintain satisfactory academic progress as a condition for receiving a scholarship. Failure to do so will result in cancellation of the scholarship. This policy applies to both internal and external scholarship funding sources.

## When Awarded a Scholarship

All scholarship recipients are expected to write a thank you letter to the donor (when appropriate). Letters should be delivered to the Office of Advancement to send to the donor(s).

## Who is Eligible

All scholarships that are determined by financial need will be based on Free Application for Federal Student Aid (FASFA) needs analysis results. All students receiving financial aid will have all scholarships included as part of their award package. We encourage all students to complete the FAFSA application online with National University of Natural Medicine School Code of B07624. International students applying for need-based scholarship(s) should write a statement of financial need.

## **Federal and State Aid Programs**

## **Pell Grant**

The federal Pell Grant program provides funds to students demonstrating significant financial need as determined by the Student Aid Index (SAI) and cost of attendance. The Pell Grant is 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 application cycle. Interested students should submit their FAFSA application before the priority deadline of February 15th. 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 Oregon undergraduate students 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 https://oregonstudentaid.gov/grants/oregon-opportunity-grant/.

### **Federal Loans**

Many 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 on 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 on dependent status, class level, and annual and cumulative loan limits.

Student borrowers who elect to borrow both Subsidized and Unsubsidized Stafford Loans (if eligible) 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-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 cannot 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 who need to fill the gap between other forms of financial aid and the student's cost of attendance budget. Students should note 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 can request an in-school deferment on this loan. For more information, contact the Financial Aid Office.

## Aggregate Graduate Loan Limits for the Naturopathic Doctorate Degree Program

The maximum amount of student education loans is limited federally to \$40,500 per ninemonth period (academic year), and cannot exceed a maximum borrowing amount of \$224,000—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 naturopathic doctorate degree program.

#### **Aggregate Graduate Loan Limits for Master's Degree Programs**

The maximum amount of student education loans is limited federally to \$20,500 per ninemonth 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 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 before 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) before 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.

The 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 emergencies. Loan requests may range from \$100 to \$1000 depending on the availability of funds. Emergency loans are considered a loan of last resort and available at the discretion of the Office of Financial Aid to students with an acute immediate need. Additional criteria for this loan are 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 before the end of the respective term. For more information, students can make an appointment to meet with the Office 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 adjust 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 must 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.

## **Cost of Attendance Increase**

The U.S. Department of Education grants schools the discretion, known as professional judgment, to modify a student's standard cost of attendance for education-related expenses on a case-by-case basis. Students may request an increase to their cost of attendance for:

- A one-time cost associated with purchasing a computer
- Childcare expenses
- Out-of-pocket medical/dental expenses
- Study abroad expenses

The cost of attendance increase request must thoroughly document all expenses and include the appropriate supporting documentation. The cost of attendance 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 studentaid.gov. Additional information may be obtained by calling the Financial Aid Office.

# Withdrawals- Federal Title IV Aid Recipients

#### Official Withdrawals and Leave of Absence

Students may initiate an official withdrawal or leave of absence by meeting with the Director of Student 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.

Upon receipt of the "Leave/Withdrawal" form, the Office of Financial Aid will complete the Return of Title IV calculation to determine the amount of Title IV aid the student has earned. Any unearned Title IV funds will be returned immediately, but no later than 45 days from the date of determination of withdrawal. Any unearned Title IV funds will be returned immediately. The Office of Financial Aid will notify the student via e-mail indicating the result of the R2T4, including information regarding repayment and exit counseling.

Failure to attend for any quarter is considered a withdrawal, and the student must 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.

#### **Unofficial Withdrawals**

NUNM is not required to take attendance. Therefore, if a student does not initiate the university's withdrawal process, and ceases to attend, the university will assume an unofficial withdrawal. Any federal Title IV aid received will be subject to a Return of Title IV calculation based on the last date of attendance. The student's last date of attendance is the date that reflects when the student ceases to attend all classes or participate in academic activities as determined by the university. Any unearned Title IV funds will be returned immediately, but no later than 45 days from the date of determination of withdrawal.

## **Post-Withdrawal Disbursements**

As determined by the Return of Title IV calculation, a student who withdrawals before the Title IV disbursement, may be eligible for a post-withdrawal disbursement. If a student is eligible for a post-withdrawal disbursement of Title IV grant funds, it must be disbursed within 45 days from the date of determination of withdrawal. For a post-withdrawal disbursement of Title IV loan funds, the Office of Financial Aid will notify the student or parent within 30 days from the date of determination of withdrawal, that they are eligible for a post-withdrawal disbursement. This notification provides the student or parent with a 14-day response period to authorize all or part of the post-withdrawal disbursement of Title IV loan funds. Any post-withdrawal disbursement of Title IV loan funds a student or

parent authorizes must be disbursed within 180 days of the date of determination of withdrawal.

Post-withdrawal disbursements must be applied to the student account first to cover any outstanding institutional charges, before being disbursed to the student or parent. Any resulting credit balance refunds will be disbursed no later than 14 days from the date the credit balance occurred.

For more information, please navigate to the Withdrawals- Federal Title IV Aid Recipients policy in the Academic Policies Section.

## 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. A withdrawing student can 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. Any credit balance on a student's account resulting from the R2T4 calculation must be disbursed as soon as possible and no later than 14 days after the R2T4 calculation occurred.

## Institution's Return of Funds

Upon completion of the R2T4 calculation, the institution will return the unearned aid for which the school is responsible by repaying funds to the sources listed below, in order, up to the total net amount disbursed from each source. Any unearned Title IV funds will be returned immediately, but no later than 45 days from the date of determination of withdrawal. The student will be responsible for resolving any outstanding balance due to the institution resulting from the required return of Title IV aid.

## Student's Return of Funds

Upon completion of the R2T4 calculation, the Office of Financial Aid will notify the student within 30 days from the date of determination of withdrawal of the amount of unearned Title IV funds the student is responsible for returning. Title IV loan funds must be repaid per the conditions of the student's master promissory note. If the student's portion of the unearned aid includes Title IV grants, the student is only required to return the grant amount that exceeds 50% of the original amount received. If the amount the student must

return is less than 50%, then no payment is required. Title IV grants must be repaid within 45 days from the date the institution notifies the student of the overpayment. The institution will return Title IV grant funds on behalf of the student and the student's account will be charged as a result.

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.

# **VA Tuition Assistance Return of Funds**

The following policy pertains only to those funds received through the VA Tuitions Assistance program and outlines NUNM's requirements for returning funds to the VA. This policy may differ from the published institution refund policy and return of funds to students.

Week of Quarter	Tuition Assistance Returned	
Week 1	100% of Tuition Assistance will be returned if the student withdraws within the first week of class but before submission of the first assignment. The student's request will be processed as a drop to return Tuition Assistance funds only, not for Financial Aid attendance or recalculating of aid.	
Week 2	75% of Tuition Assistance received will be returned if the student withdraws after submitting the first assignment and through the end of the second week of classes.	
Week 3-	50% of Tuition Assistance received will be returned if the student withdraws after the second week of classes, but before the end of the fourth week of classes.	
Week 5-	25% of Tuition Assistance received will be returned if the student withdraws after the fourth week of classes, but before the end of the sixth week of classes.	
Beyond Week 6	No Refund	

# **Federal Work-Study Program**

The Federal Work-study Program (FWSP) is federally subsidized 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 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 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**

Federal regulations require schools to monitor the academic progress of each applicant for federal financial assistance and that the school certify that the applicant is making satisfactory academic progress (SAP). The Academic Progress Committee evaluates SAP at the end of each term (including summer term).

Students who meet the 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 time frame. Students who do not meet the minimum standards will find their financial aid eligibility in jeopardy.

#### **Basic Academic Requirements**

- 1. Be admitted and enrolled for the purpose of obtaining a degree;
- 2. Be continually progressing toward your degree;
- 3. Be in good academic standing;
- 4. Complete degree requirements per the published curriculum layout for their program of enrollment

This policy applies to all students within each category of students regardless of program i.e. Title IV recipient, non-Title IV recipient, full-time, part-time, undergraduate, masters and graduate students.

# Satisfactory Academic Progress Policy: Graduate Level

# **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; and
- Maintaining a minimum number of credits each term (excluding summer, unless applicable), unless on an approved deviated track.
  - For School of Graduate Studies degrees, the minimum number of credits per term equals 8 credits per term.
  - For the Masters of Acupuncture with a Chinese Herbal Medicine Specialization (MAcCHM) 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 SAP.
- MAcCHM clinical students who receive two or more failing grades in clinic rotations or entrance/exit exams are considered not making SAP 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 SAP.
- Clinical students who receive two or more failing grades in clinic rotations, or entrance/exit exams are considered not making SAP in a 12-month period.

#### **Graduate Academic Standards**

#### Qualitative Standards

Student are expected to pass all courses each quarter in order to stay in good standing for Federal Direct Student Aid programs. All credits attempted are included in the calculation when determining SAP, even if the attempted credit/course was not funded using Title IV Aid.

#### **Quantitative Standards**

The quantitative component has two parts, (1) Required completion of courses and (2) maximum time frame. Completion of coursework measures the rate of progress toward the degree, based on how many credits were successfully completed out of all credits attempted. A successful attempt is defined as a course in which a passing grade is earned. Students must complete their program(s) of enrollment within the published time frame. The maximum lengths of study depend on the degree(s) you are pursuing. All credits attempted are included in the SAP calculation, even if the attempted credit/course was not funded using Title IV Aid.

#### **Maximum Time Frame**

For graduate students, the maximum time frame is defined as 150 percent of the published length of the program. The published program length is generally 3-5 years for a masters program and 5-7 years for a doctorate program.

## **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 Financial Aid Office will notify the student when the student is not making satisfactory academic progress. Using the qualitative and quantitative measures of progress, a student may be placed in one of the following SAP statuses:

#### Satisfactory Academic Progress Statuses

### Warning Status

Using the qualitative and quantitative measures of progress, a student may be placed in one of the following SAP statuses:

Students who fall below SAP standards will be placed in 'Warning' status

1. **'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.

Note: Students in 'Warning' status may be eligible for financial aid.

#### **Probation Status**

Students who fall below SAP standards will be placed on 'Probation' status.

- 1. **'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
  - o 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)

Note: Students in 'Probation' status may be eligible for financial aid.

- 1. Students will receive a Financial Aid Probation letter and a temporary hold will be placed on their financial aid award package. This hold extends to all types of aid including federal work-study and student employment programs, and any nonfederal or grant aid certifications or awards.
- 2. 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.

- 3. Students are not eligible for financial aid until a current academic contract is on file and/ or a written release has been received from the Registrar's Office.
- 4. Once documentation of a contract has been received the suspension of aid will be lifted, but the student will remain on financial aid probation until all issues have been resolved.
- 5. If at the end of the student's probationary period they have yet to fulfill the contract requirements or receives additional failing grades, they will be placed on 'Suspension' status.

#### **Suspension Status**

Students who fall below SAP standards will be placed on 'Suspension' status.

**'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)
- Fail to fulfill the academic contract, or deemed not making satisfactory academic progress.

Note: Students in 'Suspension' status are NOT eligible for financial aid.

Academic suspension occurs when a student is ineligible to enroll at the university for a specified period of time. Suspension 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. If a student appeals and their suspension is overturned, that student will be placed into a probation status and may re-establish their eligibility for financial aid.

#### Near Maximum Time Frame Status

Once you near completion of your degree(s), you will be placed in 'Near Maximum Time Frame' status. This status means you are approaching the maximum time frame for your degree program. Note: Although you may still be eligible for aid, you may want to plan your coursework to complete your degree within the maximum time frame.

#### Reached Maximum Time Frame Status

Once you have completed all coursework required for your degree(s), you will be placed in 'Reached Maximum Time Frame' status. Note: You are NOT eligible for financial aid and will be required to personally pay for any additional coursework/charges to your

student account. If you have been placed in 'Reached Maximum Time Frame' status, refer to the "Appeals" or "Re-Establishing" sections.

#### **Incompletes**

- Incompletes do not count in the number of courses completed until the course is graded.
- Incomplete grades must be converted to passing grades by the end of week two of the following term, after which time they are automatically converted to failing grades.

#### **Course Repeats**

Students may repeat courses, however, there is a limit to the number of times financial aid will pay for repeat courses. Students may receive Title IV aid for any repeat course as long as the student has never passed the course. Once a student has passed a course, the student may receive Title IV aid for only one retaking of that course. A student may not receive Title IV aid for any second or subsequent repeat of a passed course, and a second or subsequent repeat of a passed course may not be counted toward the student's enrollment status for Title IV purposes.

Repeat courses will be calculated in attempted term and completed credits. Once a student earns a passing grade in a course the repeated course grade replaces the prior grade.

#### Withdrawals

A student may withdraw from courses. A student who withdraws after the add/drop period will receive a W grade on their transcript for the dropped course(s) and withdrawn courses will count toward attempted credits. Withdrawals do not count towards the term or cumulative GPA.

#### **Transfer Credits**

NUNM accepts transfer credits from other institutions. Transfer credits that are accepted by the other institution count towards both attempted and cumulative earned credits. Transfer credits do not count towards term attempted credits.

# **Concurrently Enrolled Students**

Concurrently enrolled students who fail to maintain SAP in one program will need to follow the SAP policies in place for their given situation. Students who fail to maintain SAP in one program and then decide to withdraw from that program may not find their SAP issues amended and will be subject to the decisions of the dean for their program of enrollment.

## **Not for Degree Credits and Audited Coursework**

Courses that are not required for degree completion or audited courses are ineligible for aid.

#### **Notification of Eligibility**

The minimum progress standards will be checked after each term of enrollment (summer, fall, winter, and spring). If you do not meet the minimum requirements AND you have been placed in either 'Suspension' or 'Reached Maximum Time Frame' status, refer to the "Appeals" or "Re-Establishing" sections.

#### **Appeals**

If extenuating circumstances prevent you from meeting the requirements, you may file a Financial Aid Satisfactory Academic Progress (FSAP) Appeal. The appeal requires you to provide information and documentation of extenuating circumstances for specific terms of study. All requests for a FSAP appeal must be done in writing and submitted to the Director of Financial Aid within 10 days from the notice of suspension of aid eligibility. Financial aid appeals are NOT the same as academic appeals. Financial Aid Appeal forms are provided by the Financial Aid Office. Students are ineligible for financial aid while academically suspended from NUNM. Should the Director approve the Financial Aid SAP Appeal, the student will be placed in Financial Aid Probation.

## **Re-Establishing**

If you do not appeal or your appeal is denied, you must enroll in the maximum number of credits required for your program of enrollment in order to demonstrate your ability to maintain satisfactory academic progress within the term you are attempting to reestablish your eligibility. You are personally responsible for paying for all charges incurred during this time. At the end of the term we will review your grades to determine whether you have successfully completed the necessary course requirements to regain your eligibility for federal financial aid.

# Satisfactory Academic Progress Policy: Undergraduate Level

"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

Undergraduate Financial Aid SAP is based on the following qualitative and quantitative measures:

# **Undergraduate Academic Standards**

#### **Qualitative Standards**

Students are expected to pass all courses each quarter in order to stay in good standing for federal student aid programs. All credits attempted are included in the calculation when determining satisfactory academic progress (SAP), even if the attempted credit/course was not funded using Title IV Aid.

- Grade Point Average: The qualitative measure requires that undergraduate students working towards a bachelor's degree or a second bachelor's degree maintain a minimum cumulative Grade Point Average (GPA) of 2.00. This includes grades attempted and/or transfer coursework accepted by NUNM.
- Completion Rate: The quantitative measure requires that undergraduate students maintain a cumulative completion rate of 67% of the attempted coursework for all attempted credits and/or transfer hours accepted by NUNM. This percentage is determined by dividing the number of hours completed by the total number of hours attempted. Attempted hours are the total number of hours completed plus hours of "W", "I" and "F" (as well as repeated coursework).

#### **Quantitative Standards**

The quantitative component has two parts:

- Required completion of courses
- Maximum time frame

#### **Completion of Coursework**

Completion of coursework measures the rate of progress toward the degree, based on how many credits were completed out of all credits attempted. A successful attempt is defined as a course in which a passing grade is earned.

Students must complete their program(s) of enrollment within the published time frame. The maximum lengths of study depend on the degree being pursued. All credits attempted are included in the SAP calculation, even if the attempted credit/course was not funded using Title IV Aid.

## **Maximum Time Frame to Complete Academic Program**

Students must complete their degree program within 150% of the average length of their program. Undergraduate degree programs require that the attempted credit hours are no more than the degree requirements to complete the program. For example, to obtain a bachelor's degree at NUNM, the maximum is typically 91 credit hours, including all attempted credits and/or transfer coursework. Once a maximum has been met or slightly surpassed, they will receive notification from the Financial Aid Office that their aid eligibility is on hold. Student financial aid holds can only be resolved through the Director of Financial Aid, see the Appeals and Re-establishing section below. Students contemplating degree plan changes should consider the ability to complete a new degree within the required time frame.

# 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

# **Undergraduate Academic Standing**

Academic standing and credit completion are monitored for all students at the end of each term (including summer) by the Registrar's Office, which will notify the student and the Center for Academic Success when the student is not making SAP. Students who do not meet the minimum standards will find their financial aid eligibility in jeopardy.

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 Financial Aid Office will notify the student when the student is not making satisfactory academic progress. Using the qualitative and quantitative measures of progress, a student may be placed in one of the following SAP statuses:

## **Academic Warning**

Academic warning status occurs when a student earns a letter grade of "D" or less in an individual course. A student may still be considered to be in good academic standing if their cumulative GPA is at or above 2.00. A letter grade of "D" is identified as a concern of potential academic problems. 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 2.00 and have a cumulative GPA below 2.00; or
- Earns a term GPA of less than 1.50 and has a cumulative GPA of 2.00 or greater
- Earning of one "F" grade in a term

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 2.25 and have a cumulative GPA of 2.00; and the terms of the academic contract are met.

Students may not register or receive financial aid until a current academic contract is on file in the Registrar's Office. 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.

While on academic probation, if a student receives an additional term GPA of less than 2.00 they will be placed on 'Suspension' status.

# **Academic Suspension**

Students are placed on academic suspension when they:

• Earn a term GPA below 1.50 and a cumulative GPA below 1.75; or

• Earn two or more failing grades "F"

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.

Students who fail to meet the grade point average requirements or the completion rate, or enroll in more than 1.5 times the number of credits required for a degree program, will be placed in Warning, Probation, or Suspension status for the following quarter. Students will be notified via email of their status.

#### **Incompletes**

- Incompletes do not count in the number of courses completed until the course is graded.
- Incomplete grades must be converted to passing grades by the end of week two of the following term, after which time they are automatically converted to failing grades.

#### **Course Repeats**

Students may repeat courses, however, there is a limit to the number of times financial aid will pay for repeat courses. Students may receive Title IV aid for any repeat course as long as the student has never passed the course. Once a student has passed a course, the student may receive Title IV aid for only one retaking of that course. A student may not receive Title IV aid for any second or subsequent repeat of a passed course, and a second or subsequent repeat of a passed course may not be counted toward the student's enrollment status for Title IV purposes.

Repeat courses will be calculated in attempted term and completed credits. Once a student earns a passing grade in a course the repeated course grade replaces the prior grade.

#### **Withdrawals**

A student may withdraw from courses. A student who withdraws after the add/drop period will receive a W grade on their transcript for the dropped course(s) and withdrawn courses will count toward attempted credits. Withdrawals do not count towards the term or cumulative GPA.

#### **Transfer Credits**

NUNM accepts transfer credits from other institutions. Transfer credits that are accepted by the other institution count towards both attempted and cumulative earned credits. Transfer credits do not count towards term attempted credits.

## **Appeals**

The Financial Aid Appeals Committee will consider Appeals based on the following reasons:

- Personal illness or serious injury supported by hospital records, insurance explanation of benefits, receipt of doctors' visits, etc.
- Serious illness or injury of an immediate family member supported by hospital records, insurance explanation of benefits, receipt of doctors' visits, etc.
- Other extenuating circumstances with supporting documentation.
- Financial Aid Appeal, Academic Plan, and Personal Statement form(s) are available by from the NUNM Financial Aid Office.

The completed Financial Aid Satisfactory Academic Progress Appeal, Academic Plan, and Personal Statement forms should be submitted to the NUNM Financial Aid Office. The Financial Aid Appeals Committee will review only complete Appeals and will deny any Appeals submitted without supporting documentation.

The Financial Aid Appeals Committee will establish and publish deadline dates each quarter for the submission of Appeals, although the latest an Appeal will be accepted for consideration for the current quarter is the official record date. Appeals received after this date will be reviewed at the discretion of the Financial Aid Appeals Committee. The decision of the Financial Aid Appeals Committee is final. Students will be notified *via email* regarding the outcome of their appeal.

Students on Financial Aid Suspension, who are meeting academic standing, may continue their coursework at NUNM; however, payment for those courses must be made by the student without financial aid. Students may reestablish financial aid eligibility by regaining GOOD standing based on the Undergraduate Financial Aid Satisfactory Academic Progress standards:

- A minimum Cumulative Grade Point Average (GPA) of 2.000
- A minimum Completion Rate of 67%
- On schedule to complete current program of study within the 150% of the maximum number of hours required for graduation. (136 credits are equal to 1.5 times the minimum number of credits required for a degree program. Multiple withdrawals of courses will impact a student's eligibility to make satisfactory academic progress).

## **Re-Establishing**

If you do not appeal or your appeal is denied, you must enroll in the maximum number of credits required for your program of enrollment in order to demonstrate your ability to maintain satisfactory academic progress within the term you are attempting to reestablish your eligibility. You are personally responsible for paying for all charges incurred during this time. Students may re-establish financial aid eligibility by regaining good standing based on the Undergraduate Satisfactory Academic Progress standards:

- A minimum cumulative GPA of 2.00
- A minimum completion rate of 67%
- On schedule to complete current program of study within 150% of the maximum number of hours required for graduation. (Note: 136 credits are equal to 1.5 times the minimum number of credits required for a degree program. Multiple withdrawals of courses will impact a student's eligibility to make SAP).

# Financial Aid Policy and Drug-Related Convictions

Drug convictions no longer affect federal student aid eligibility. When you complete the FAFSA form, you will be asked whether you had a drug conviction for an offense that occurred while you were receiving federal student aid. If the answer is yes, you will be provided a worksheet. Please do answer the questions on the worksheet; however, your answers won't affect your federal student aid eligibility.

## **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 deans(s). Students must submit a "Petition to Overlap Classes" form for the dean's approval prior to registration.

Students who wish to register for less than the full-time curriculum must 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 dean 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.

# **Elective Credits**

Each program has a number of elective credits required to graduate. The number of elective credits will vary based on the degree program and credits transferred toward the degree.

Master and doctoral students may take elective credit from any NUNM graduate-level degree program as long as they meet the prerequisites. Core classes within a different program may only be taken with approved Course Substitution forms.

Undergraduate students may take any elective course in the undergraduate programs and cross-listed courses in graduate programs as long as they meet the prerequisites and there

is room for them in the course. In addition, undergraduate students can take core courses in other undergraduate programs for elective credit according to their major requirements.

Concurrently enrolled students (students enrolled in more than one degree program) may not apply required/core classes to fulfill any elective requirements. Additionally, Title IV funds can only be awarded to the program with the highest elective credits required as these elective credits will fulfill the graduation requirements for both programs (.. students in ND/CCM would have title IV funding for 16 required elective credits).

These policies follow the Department of Education's policies and regulations that mandate that federal financial aid may only be awarded for courses that count toward a students degree.

# **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 dean of the academic program and the instructor (for which the challenge exam is related) for approval. Once permission is obtained, the dean (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 veteran education 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, obtained consent from the instructor and program dean, 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 second week of the quarter. Audited courses are not eligible for challenge exams. See the Financial Policies in the catalog for fees.

# Returning Students for Auditing or Educational Enhancement

#### 1. Less Than One Year Since Graduation:

a. Account Access: Students returning for audit, educational enhancement or other
affiliated NUNM programs within one year of graduation will be treated as current
students (consistent with those returning from an LOA). Full account access will be
granted or restored. Timeline for access to be determined by the dean based on the
audited material to be covered.

#### 2. Over One Year Since Graduation:

• a. Reapplication: Students returning for audit, educational enhancement or other affiliated NUNM programs more than one year after graduation must reapply to NUNM through the non-degree seeking program.

#### 3. Alumni Access to NPLEX Study Materials

a. In cases where an alumni is returning to NUNM to specifically access NPLEX study
materials housed in Moodle LMS, this student will not need to reapply as a nondegree seeking student even if it has been over a year since graduation. This student
will be given temporary account access to their nunm.edu email in order to access
required Moodle pages and will be enrolled manually.

# **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.

# **Student Identification Policy**

Prior to beginning any program or course, students are assigned a unique ID in the student information system. A unique single sign-on username and password that allows access to key NUNM information systems including the learning management system (LMS) is assigned to each student. The User Identification and Password Policy prohibits students from sharing their password. Students participate in academic coursework in the LMS using their unique login credentials.

# **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 any program**, at the end of each quarter, each student's course performance is reported to the registrar using the following letter grading system. A student's grade-point average will be calculated using the following chart:

Grade	Percentage	Points
A	90-100	4.0
В	80-89	3.0
С	70-79	2.0
D	60-69	1.0
F	59 or less	0.0
W/WF	N/A	Not calculated

• A (SUPERIOR PERFORMANCE): passing

- B (SATISFACTORY PERFORMANCE): passing
- C (MARGINAL PERFORMANCE): passing
- D (UNSATISFACTORY PERFORMANCE): not passing for graduate-level courses, passing for undergraduate
- F (FAILURE): not passing, permanent grade
- FR (FAIL REMEDIATE): marginal performance (temporary grade). (Not available in the School of Undergraduate and 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 (REMEDIATED PASS): grade given for a passed medical clinic rotation, but with required skills remediation ND and CCM programs only
- RC (REMEDIATED 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 and pass a clinical skills enhancement course the following term to attain an adequate level of clinical proficiency. A permanent grade of "F" will be given if the student receives a non-passing grade in the clinical skills enhancement course.

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 dean 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.

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 - 10 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 dean, be allowed to complete the remediation by the last week of the summer term.

## **ND Program**

ND students who earn a 67-69% ("D" range or "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 dean.

## **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.

# 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 dean, can assign remediation work, which can include attendance at weekly clinical skills tutorial labs run by a designated instructor.

#### **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.

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 decision to the appropriate academic dean(s) or designee. The decision 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 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 dean 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 dean 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.

For more information on Satisfactory Academic Progress, please visit the Financial Aid Section of the Catalog .

# 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).

For more information on Satisfactory Academic Progress, please visit the Financial Aid Section of the Catalog .

# **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 three faculty members (appointed each year by program deans), dean of students, and chaired by the registrar (who convenes the meetings). ARAC reviews 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 program dean. The student then has seven calendar days to submit the written appeal and supporting documentation to the dean.

The program dean (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 program dean (or designee) may request an extension beyond the 10 business days to the associate Chief Academic Officer if there is additional information that must be taken under consideration. The program dean (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 program dean (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 program dean's (or designee's) decision is final and no further appeals are available.

## **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 dean. 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 chief academic officer (or designee) of intention to appeal. The student will then have seven calendar days to complete and submit to the chief academic officer (or designee) a written request for review. The chief academic officer (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 chief academic officer (or designee) needs additional time in reviewing the evidence, the chief academic officer (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 chief academic officer (or designee) 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 chief academic officer (or designee) may elect to uphold the decision of the dean, reverse the decision, or request a different resolution.

# **Examinations and Completion of Assignments**

Students are required to complete all examinations and assignments on schedule. 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 dean (or designee) along with supporting documentation. The dean (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 or CCM student is ineligible to take licensing examinations until all required work is completed.

### **DAcCHM 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 winter term of their last year. The Imaginal and Experiential Inquiries I-XIII courses support the choosing of a viable capstone topic. 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.

#### **MSCR 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 Thesis 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 & Graduate Studies Symposium, presenting a brief reflection on their capstone experience. Information about the capstone project is available on the Capstone Moodle course page.

# Taking Graduate Level Courses as an Undergraduate Student Policy & Procedure

### **Policy:**

The following requirements must be met in order for an undergraduate student to take graduate level courses:

- Students must have the status of an undergraduate student.
- Students may take up to 24 graduate credits while classified as undergraduates, some of which may be used toward both bachelor's and master's degree requirements. However, certain program requirements and credit limits vary from program to program. Check with the program offering the graduate course for more information about requirements specific to that program.
- Students will be charged at the undergraduate rate and retain eligibility for undergraduate scholarships during this transition year.
- Students will be considered undergraduates until the bachelor's degree is conferred, at which point they will be officially admitted as master's students, be charged at the graduate tuition rate, and be eligible for graduate assistantships.

# **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 dean. 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 dean(s), the Office of Academic Success and Access, registrar, the Office of financial aid, and the associate 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**

Occasionally a circumstance may arise when a student is unable to be registered for and/or achieve the course competencies within the normal classroom venue (e.g., a course conflict when a student is concurrently enrolled in two programs or being on an approved deviated track). Students who are seeking an Independent Study must first meet with the Director of Student Success to discuss the extenuating circumstances and explore alternative options.

Independent study is not allowed for:

- · Scheduling conflicts with commitments outside of NUNM,
- · Scheduling conflicts with Preceptorship or Internships,
- · Elective courses
- · Courses where participation is essential, (including but not limited to labs, practicums, and/or clinical rotations)

When all other options have been exhausted, including but not limited to postponing a course to another term, permission to overlap, and course substitutions/equivalencies, then

an Independent Study may be granted by meeting with the appropriate program dean(s).

Independent Studies must be completed within the term in which they are registered and are subject to all institutional policies i.e., Add/Drop, Grading, Tuition, Refund, etc.

### **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 offcampus, 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 DAcCHM/MSCR). 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 Office 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 Office 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 and two 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. 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 dean'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 Office of Financial Aid.

• **Week 1-2** – Students may add/drop/change sections/change to audit, and receive a 100% refund. Change to audit requires instructor signature.

- Week 3 Students may drop with instructor and (corresponding program) dean 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) dean 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.

The NUNM enrollment census date is the Monday of week three.

# **Adding/Dropping Clinic Rotations**

To add or drop a clinical rotation, students must contact the 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 registrar. Students are responsible for attending their current clinic shifts until decisions are finalized. All fees concerning clinic rotations will apply (see Financial Policies).

# **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.

Graduate 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 Office of Financial Aid.

### **Veterans Benefits**

Any veteran receiving veteran education benefits while attending National University of Natural Medicine is required to obtain transcripts from all previously attended schools and submit them to the school for review of prior credit. VA-eligible students must provide a Certificate of Eligibility form to the Office of the Registrar. Veteran students who are chapter 31, Vocational Rehabilitation and Employment, or chapter 33, Post-9/11 veteran education benefits will not be imposed with any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet their financial obligations to the institution due to the delayed disbursement funding from the VA. Veterans applying to the National University of Natural Medicine with specific questions about the use of veteran benefits for attending National University of Natural Medicine should contact the Office of the Registrar. For information on using veteran benefits, visit the U.S. Department of Veteran Affairs website, www.benefits.va.gov.

# **Technology Requirements**

The following computing requirements are intended to provide minimum specifications for a successful computing and technology experience at NUNM.

#### Hardware

For on-campus programs, a portable laptop computer is required to take electronic tests in the classroom or participate in other classroom activities. For fully online programs, either a portable laptop computer or a desktop computer is required.

Processor: Intel i5 (equivalent or higher; 8th generation or newer)

Memory (RAM): 4 GB minimum; 8 GB or higher recommended

Required peripherals for online programs:

- Headset with a microphone, or earbuds with a microphone.
- Webcam for video interaction
- Smartphone for taking photos or recording videos

Chromebooks (Chrome OS), iPads (iOS), Android devices, and iPhones do not meet the minimum requirements for all coursework, and these may not be used as a replacement for a computer.

For assistance with selecting a computer that meets these requirements, or verifying that your current computer meets these requirements, you may contact the IT department at ITsupport@nunm.edu

The NUNM Library may have computers available for temporary check-out which meet these requirements. For more information about library resources, contact library@nunm.edu

Financial aid resources are available for assisting with the purchase of a computer that meets these requirements. For questions about financial aid options and eligibility, contact financialaid@nunm.edu

#### Software

Туре	Minimum Supported
Operating System (choose one)	Windows 10 or above MacOS 10.14 or above
Productivity Tools (choose one)	Office 365 (provided by NUNM for current students) Office 2019 (Windows and Mac)
Email and Calendar (choose one)	Outlook Online (Office 365) Outlook 2019 (Windows and Mac)
Video Conferencing/ Collaboration	Microsoft Teams*

<sup>\*</sup>Microsoft has yet to resolve overheating/battery draining issues when using the Microsoft Teams app on Macs. We recommend that Mac users utilize the browser-based version of Teams using the Google Chrome browser.

### Internet speed

- 5 Mbps minimum download speed
- 2 Mbps minimum upload speed

You can test your internet speed at speedtest.net. For users who engage in frequent web conferencing or large file transfers, **25 Mbps download or higher** and **5 Mbps upload or higher** is recommended.

# **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, Noel Snodgrass, DC

Vice Chair, Leah Hollon, ND

Treasurer, Ron Brey, MA

Secretary, Michael Cronin, ND

President, Melanie Henriksen, ND, LAc, CNM

#### **Directors**

Winston Cardwell, ND, MSOM

Daniel Assisi, EdD

Sonja Fung, ND

John Faubion, MBA

Molly Huffman, JD

### **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, Anna Peterson, ND

Staff Representative, Kathleen Dillon, MA

Senior Student Representative, Ryan Hofer

\*Non-voting members

# **Administration**

#### Office of the President

President, Chief Academic Officer and Chief Executive Officer, **Melanie Henriksen**, **ND**, **LAc**, **CNM** 

Executive Vice President of Finance and Administration Chief Financial Officer, **Gerald Bores, MBA** 

Vice President of Academic Excellence & Research, Heather Zwickey, PhD

Associate Vice President of Clinical Education and Administration, **Dee Saunders**, **ND**, **MSiMR** 

Associate Vice President of Advancement and Community Engagement, Carrie Baldwin-Sayre, ND

Chief of Staff and Community Relations, Iris Sobottke, MA, NCC

Associate Director of Helfgott Research Institute, Joshua Goldberg, ND

#### 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

# Office of the Chief Academic Officer/ Provost

Vice President of Academic Excellence & Research, Heather Zwickey, PhD

Chief of Staff and Community Relations, Iris Sobottke, MA, NCC

Academic Support Coordinators, Leah Valletta, MA; Kathleen Dillon, MA

#### **Finance and Administration**

Executive Vice President of Finance and Administration | Chief Financial Officer, **Gerald Bores, MBA** 

Director of Human Resources, Fox McGregor

Human Resources Generalist, Jade McBain

Business Office Mangager, Susan Wilkes

Health Centers Billing Manager, Gina Gossage

Director of Security, Mike Hale

Campus Security Officer, Keith Casper

Director of Facilities, David McAllister

Garden Coordinator, Ellen Donald

Information Technology Manager, Steven Fong

Information Technology Coordinators, Frank Zhang

# **Health Centers Operations**

Chief Medical Officer, TBA

Director of Health Centers, Carolee Barrus

Quality Medicinary Assurance Supervisor, Jennifer Brusewitz, ND

Medicinaries and Store Manager, Jennifer Baier, ND

Medicinary Service Representatives, **Briana Gabel; Teresa Gryder, ND, Lisa Shultz, LAc, Jennifer Kemnitz** 

Store Assistant Manager, Christina Fong

Health Centers Patient Services Manager, Robert D'Almeida

Patient Services Representatives, **Shauna Vincent, Analisia Palos, Jennifer 'Jen' Adams, Linn Noviski** 

Referrals Coordinator, Michelle Gee

Medical Records Coordinator, Elizabeth Olsen

Laboratory Director, Sonia Kapur, PhD, HCLD

Laboratory Technology Specialist, Tammy Vogel, MLT

Laboratory Phlebotomist, Sunny Shrestha

SIBO Center Coordinator, Nichole Alvarado

Health Center Communication Lead Communicator, Belle-Suzanne Raymond

Information Center Coordinator, Linn Novitski

EHR Administration and Compliance Officer, Jeanna Smith, MSN, MATP

Health Center Clinical Services Manager, Esmeralda Castillo

### **Helfgott Research Institute**

Associate Director of Research, Joshua Goldberg, ND

Research Administrator and IRB Liaison, Courtney Jackson

Research Coordinator, Anders Gunderson, MS

Research Investigators, Ryan Bradley, ND, MPH; Lita Buttolph, PhD, DSOM, MS; Nina Callan, ND, MS; Jamie Corroon, ND, MPH; Andrew Erlandsen, ND; Joshua Goldenberg, ND; John Phipps, PhD, MS; Savita Rajurkar, PhD; Erica Sharpe, PhD; Mark Sodders, DSOM (Affiliate); Heather Zwickey, PhD; Anuja Chhabra, PhD; Alexandra Vita, PhD; Iman Ridda, MD, MPH, PhD; Michael Freeman, PhD, MScFMS, MPH; Ben Zimmerman, PhD; Dana Colgan, PhD

# Library

University Librarian, Christina King, DSOM, MLS

Access Services Coordinator, Isabel Crabtree

# Office of Marketing

Director of Marketing and Communications, Mike Andrick

Marketing and Communications Coordinator, Brendon Marti

Marketing Content Specialist, Ashley Villarreal

#### Office of Admissions

Vice President of Academic Excellence and Research, Heather Zwickey, PhD

Associate Director of Adminssions and Recruitment, Hannah Hitz

Admissions Counselors, Nicole McGee, Caleb Eldridge, Rebecca Bohlin

Admissions Coordinator of Communications, Events and Visits, Joel Synder

#### Office of Financial Aid

Director of Financial Aid, Sally Kalstrom

Assistant Director of Financial Aid, Kent Hartman

# Office of Advancement, Continuing Education, Alumni Services and NUNM Press

Associate Vice President of Advancement and Community Engagement, Carrie Baldwin-Sayre, ND

Career Service Manager, Emma Britton

Director of Instructional Design Technology, Justin Fowler, EdD

CE Coordinator, TBA

Managing Editor, NUNM Press, Iris Sobottke, MA, NCC

### Office of Instructional Design and Technology

Director of Instructional Design and Technology, Justin Fowler, EdD

Instructional Technology Coordinators, Jesse Fine, Mathew Wilcox

#### Office of Student Life

Dean of Students, Rachael Allen, MS

Director of Academic Success and Access, Morgan Chicarelli

Diversity, Equity, Inclusion and Belonging Officer, TBD

# Office of the Registrar

Registrar, Kelly Garey

Associate Registrar, Jessica Bineham

Registrar's Office Assistant, Colin Anderson

# **College of Naturopathic Medicine**

Dean, College of Naturopathic Medicine, Kelly Baltazar, ND, DC

Associate Vice President of Clinical Education and Administration, **Dee Saunders, ND, MSiMR** 

Graduate Medical Education Coordinator, Noelle Rivera

# **College of Classical Chinese Medicine**

Dean, College of Classical Chinese Medicine, Andrew McIntyre, MSA

Assistant to the Dean, Jeaneth Villegas, MA

### School of Undergraduate & Graduate Studies

Dean, School of Undergraduate & Graduate Studies, Andrew Erlandsen, ND

Assistant to the Dean, Annie Clarke

# **Faculty**

# **College of Naturopathic Medicine**

### **Full-Time Faculty**

Tammy Ashney, Associate Professor; ND, National College of Natural Medicine, 2009

Amy Bader, ND, National College of Naturopathic Medicine, 2000

**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

Maleah Ermac, Assistant Professor; ND, National College of Natural Medicine, 2010

Megan Golani, Associate Professor; ND, National College of Natural Medicine, 2012

Richard Lok, Assistant Professor; ND, National College of Natural Medicine, 2009

Katherine Patterson, Assistant Professor; ND, National College of Natural Medicine, 2010

Anna Peterson, Associate Professor; ND, National College of Natural Medicine, 2011

Nancy Scarlett, Professor; ND, National College of Naturopathic Medicine, 1997

Tom Walton, Associate Professor; DC, Western States Chiropractic College, 2010

**Kimberly Windstar**, Professor; MEd, California State College, 1982; ND, National College of Naturopathic Medicine, 1991

# **Adjunct Faculty**

**Ryan Bradley**, Director of Helfgott Research Institute; ND, Bastyr, 2003; MPH, University of Washington, 2009

**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

Catherine Darley, ND, Bastyr University, 2002

Elizabeth "Liz" Davidson, ND, National College of Natural Medicine, 2012

**Lysanji Edson**, ND, National College of Naturopathic Medicine, 1996

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

Mary Grabowska, ND, National College of Naturopathic Medicine, 1993; MAcOM, Oregon College of Oriental Medicine, 1994

Beverly Harger, DC

**Sonia Kapur**, PhD, Postgraduate Institute of Medical Education & Research, 1994; MSc, Panjab University, 1986

**Terrance Manning**, ND, National University of Natural Medicine 2016; MA, St. John's College, 2011

Glen Nagel, ND, National College of Naturopathic Medicine, 1993

Jessica Nagelkirk, Assistant Professor; ND, National College of Natural Medicine, 2012

Emma Neiworth Petshow, ND, National University of Natural Medicine, 2018

Elyse Ortiz, ND

Jonathan Ortiz, PhD, American University

**Heidi Peterson**, ND, National College of Naturopathic Medicine, 1999

Rebecca Principe, ND

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 Sperandeo, ND, National College of Naturopathic Medicine, 2013

Jillian Stansbury, ND, National College of Naturopathic Medicine, 1988

**Lisa Taulbee**, ND, National College of Natural Medicine 2010

**Brice Thompson**, ND, National University of Natural Medicine

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**

Andrew McIntyre,

**Kenneth Glowacki**, Associate Professor; MSTOM, DACM, Pacific College of Oriental Medicine, 2002, 2016

Daniel Silver, Assistant Professor; MTCM, Five Branches Institute, 2006

**Brandt Stickley**, Associate 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

Kendra Dale, MSOM, National College of Natural Medicine, 2011

Lauri Elizabeth, MAc, National College of Natural Medicine, 2015

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

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

Andrew "Andy" McIntyre, MSA, Bastyr University, 1994

Paul Messersmith-Glavin, MAcOM, Oregon College of Oriental Medicine, 2004

**Ioshua Paynter**, MSTOM, Pacific College of Oriental Medicine, 2001

Christine Pearson, MSOM, National College of Natural Medicine, 2012

**Youping Qin**, Master of Medicine, Doctor of Medicine (China), Chengdu University of TCM, 1999, 2002

**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

**Brice Thompson**, ND, MSiMR, National University of Natural Medicine, 2018

**Edythe Vickers**, Diploma, Oregon College of Oriental Medicine, 1986; ND, National College of Naturopathic Medicine, 1987

Susan Wilmoth, MAcOM, Oregon College of Oriental Medicine, 2007

# School of Undergraduate & Graduate Studies

### **Full-Time Faculty**

Chelsie Falk, Associate Professor; ND, National College of Natural Medicine, 2013

**Kimberly Queen**, Assistant Professor; DC, University of Western States, 1997; MS, University of Bridgeport, 2015

# Adjunct Faculty — Graduate Studies

David Allderdice, ND, National College of Natural Medicine, 2008

**Alexander Bear**, MScN

**Ryan Bradley**, Director of Helfgott Research Institute; ND, Bastyr University, 2003; MPH, University of Washington, 2009

Emma Britton,

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, 1997

Taleen Der-Gharizian,

Shu Farmer,

Kira Freed, MScN, National University of Natural Medicine

Megan Golani, Associate Professor; ND, National College of Natural Medicine, 2012

Wendy Hodsdon, ND, National College of Natural Medicine, 2007

**Greta Jarvis**, MScN, National University of Natural Medicine

Alina Karki, PhD

Patricia Kaufman, PhD

Andrea McBeth, ND, National University of Natural Medicine, 2017

Thomas Morgan, MA, Portland State University, 1994

John Phipps, PhD, University of Michigan, 2012

Katie Picksworth, ND, National University of Natural Medicine

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

Iman Ridda, MD, MPH, PhD

Ian Rubin, MA, Goddard College, 2006

Nancy Scarlett, ND, National College of Naturopathic Medicine, 1997

Laura Scher, EdM, Harvard Graduate School of Education, 2012

Erica Sharpe, PhD

Amala Soumayanath, PhD, University of London, 1987

**Madeleine Tuson-Turner**, ND, MSiMR, MScGH, National College of Natural Medicine, 2011, 2015, 2016

Heather Zwickey, Professor, PhD, University of Colorado Health Sciences Center, 1998

### **Adjunct Faculty — Undergraduate Studies**

Sherry Bonekat, MS, Concordia University, 2016

**Dulcie Childs**, MS, University of Alabama, 2015

Bracey Dangerfield, 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

Jason Tobin, MFA, University of Texas, 2015

Megan Golani, ND, National College of Natural Medicine, 2012

Dana Johnson, MS, Durham University, 2012

Lindsay Marshall, MA, Oregon State University, 2012

Nancy Scarlett, ND, National College of Naturopathic Medicine, 1997

Nicole Toussaint, PhD, Portland State University, 2013

**Anna Peterson**, ND, National College of Naturopathic Medicine, 1997

Heather Zwickey, Professor, PhD, University of Colorado Health Sciences Center, 1998

### Library

**Christina King**, Instructor; DSOM, National College of Natural Medicine, 2009; MLS, Emporia State University, 2014

# **Academic Programs of Study**

# **College of Naturopathic Medicine**

Cultivating tomorrow's physicians to empower patients and communities through the integration of traditional, innovative, and evidence-informed 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, Washington, Idaho, Rhode Island, New Mexico and Wisconsin. 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- Knowledge for Practice: Apply knowledge of normal human structure, function and development, from the molecular through whole body levels, to distinguish health from disease and explain how physiologic mechanisms are integrated and regulated in the body.
- Patient Care & Procedures- Skills for Practice: Gather essential and accurate
  information about patients and their conditions through history taking, physical
  examination, review of prior data and health records, laboratory data, imaging and
  other tests.

- **Effective Communication:** Communicate effectively and professionally in both verbal and written communications with patients, peers, and the public across a broad range of socioeconomic and cultural backgrounds.
- Ethics and Professionalism: Exemplify the professional values of naturopathic medicine. Demonstrate responsible behaviors expected of naturopathic physicians
- **Practice-Based Learning, Research and Scholarship:** Utilize critical reflection on one's own performance (knowledge, skills and attitudes)

# 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 their 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 their 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 become 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.

### **ND Department Mission Statement**

"Cultivating tomorrow's physicians to empower patients and communities through integration of traditional, innovative, and evidence-informed naturopathic medicine."

### **ND Curriculum Threads**

Ethics, DEIB, Practitioner Cultivation, Evidence Informed Practice, Homeopathy, Nutrition, Pharmacology, and Botanical Medicine

### **ND Program Outcomes & Course Competencies**

**PO1:** Medical Knowledge - Knowledge for Practice: Students apply evidence-informed principles of biomedical, clinical, epidemiological and social-behavioral sciences to guide diagnosis, treatment, and patient care decisions.

- A. Apply knowledge of normal human structure, function and development, from the molecular through whole body levels, to distinguish health from disease and explain how physiologic mechanisms are integrated and regulated at different stages of the lifecycle.
- B. Develop foundational knowledge of the core naturopathic therapeutic modalities. The naturopathic therapeutic modalities are botanical medicine; counseling (lifestyle counseling, health psychology, mind-body medicine); clinical nutrition (includes dietary counseling and nutraceuticals); homeopathic medicine; hydrotherapy; minor office procedures; pharmaceutical agents; and physical medicine (including manipulation, and electrotherapy).
- C. Provide justifications for interventions to diagnose, prevent, treat and manage a specific patient's diseases, injuries, and functional deficits of organ systems.
- D. Describe the epidemiology of common diseases affecting populations, including methods for prevention and early detection of disease and systematic, population-based approaches for reducing the incidence and prevalence of disease.
- E. Explain the impact of the intersectionality of social determinants of health on seeking, receiving, and complying with health care including but not limited to biases, attitudes, and systemic and institutional barriers. Impacts include psychosocial, socioeconomic, environmental, culture, lifestyle, lifecycle stages, and identities.
- **PO 2: Patient Care & Procedures Skills for Practice:** Students are able to conduct a complete and accurate history, physical exam and objective assessment, to arrive at a diagnosis. They provide personalized, compassionate, ethical, holistic patient care expected of an ND within the context of a patient-centered model.

- A. Gather essential and accurate information about patients and their conditions through history taking, physical examination, review of prior data and health records, laboratory data, imaging and other tests.
- B. Critically evaluate historical information, physical examination findings, laboratory data, imaging studies, and other tests required for health screening and diagnosis.
- C. Construct a prioritized differential diagnosis and make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, upto-date scientific evidence, and clinical judgement.
- D. Identify urgent and emergent situations commonly encountered in primary care then intervene and/or refer as appropriate.
- E. Integrate data from a clinical encounter to develop, implement, and revise as indicated, short- and long-term patient management plans consistent with naturopathic principles and the Therapeutic Order; considering each intervention's safety, efficacy, contraindications, actions and interactions of therapies, predicted outcomes, alternatives, costs, and level of evidence.
- F. Develop an individualized treatment plan consistent with naturopathic principles.
- G. Apply personalized healthcare services addressing physical, spiritual, mental, and emotional aspects to patients, families, and communities aimed at preventing health problems, eliminating health disparities and maintaining health.
- **PO 3: Effective Communication:** Students communicate effectively, in person or via technology, to optimize patient relationships and patient care. They consult, collaborate with and refer to other health professionals as appropriate.
- A. Communicate effectively and professionally in both verbal and written communications with patients, peers, and the public across a broad range of socioeconomic and cultural backgrounds .
- B. Effectively share and elicit information from patients and families of diverse backgrounds, languages, cultures and communities.
- C. Formulate mutually agreed upon management plans utilizing shared decision making with patients and their families while supporting advocacy.
- **PO 4: Ethics and Professionalism:** Students act professionally in carrying out responsibilities, adhere to ethical principles, and be sensitive in providing care to a diverse patient population.
- A. Exemplify the professional values of naturopathic medicine
- B. Demonstrate responsible behaviors expected of naturopathic physicians.
- C. Demonstrate awareness of one's limitations in knowledge, skills, and emotions.

- D:.Demonstrate and embody legal and ethical standards, principles, and moral reasoning.
- **PO 5: Career Development and Practice Management:** Students identify opportunities and develop a strategic plan for establishing and maintaining a viable career using their naturopathic medical education.
- A. Develop a viable career plan.
- B. Applies knowledge from coursework to achieve an ethical livelihood
- C. Demonstrate sound financial literacy and time management
- D. Implement time management skills (Develop effective patient, clinical, and time management skills)
- E. For graduates seeking private practice:
  - 1. Create a realistic business plan.
  - 2. Apply basic principles of marketing towards establishment and growth of a patient base.
  - 3. Identify resources for hiring employees, writing contracts, disciplining and firing employees.
  - 4. Implement basic inventory management procedures.
  - 5. Define terms used in employment and facilities contracts.
  - 6. Apply principles of business operations such as regulatory compliance, developing patient care and office forms, purchasing professional and business insurance, using health information technology, implementing a patient scheduling system, and developing clinic policy and procedure manuals.
  - 7. Apply principles and regulations of medical billing and coding to charge appropriately for patient services.
- **PO 6: Systems-Based Practice**: Students demonstrate an awareness of the developing role of naturopathic medicine within larger frameworks of healthcare systems, advocating for optimal patient and community health care.
- A. Practice cost-effective healthcare through evidence-informed management, preventive strategies and lifestyle management, with an aim at alleviating the overall healthcare burden.
- B. Participate effectively within a healthcare team
- **PO 7: Practice-Based Learning, Research, and Scholarship:** Students will critically appraise, assimilate and apply scientific evidence to improve healthcare. Demonstrate an understanding of the strengths and imitations of research and dedicate themselves to ongoing personal reflection and lifelong learning.

- A. Utilize critical reflection on one's own performance (knowledge, skills and attitudes)
- B. Apply the skills of evidence-informed practice to naturopathic patient care.
- C. Demonstrate an understanding of intellectual property and its ethical use.

#### **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 40 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 3 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/MAcCHM, ND/MSCR, MAcCHM/MScN, etc.). Contact the Office of Admissions for more information.

### **ND Course Descriptions- Prior to Fall 2024**

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.

#### **Summer Intensive Courses**

The Summer Intensive meets on ground after completion of the 1<sup>st</sup> year online program. It includes a weekend naturopathic philosophy retreat, as well as a collection of hands-on lab classes that are part of the Clinical Anatomy, Therapeutic Modalities and Clinical Education block courses. These lab classes build on the didactic knowledge learned in the online lecture and tutorial courses and they focus on developing practical skills.

### **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 Revised Curriculum- as of Fall 2024

#### First Year

#### Fall

- BS 510 Medical Physiology I: Exploring the Heart, Circulation, and Musculoskeletal Dynamics Credit(s): 5
- Lecture: 60 | Total Hours: 60
- BS 511 Clinical Biochemistry I: Understanding the Molecular Basis of Health and Disease Credit(s): 4
- Lecture: 48 | Total Hours: 48
- BS 512 Clinical Anatomy I: Integrative Anatomy of Movement and Circulation Credit(s): 2
- Lecture: 24 | Total Hours: 24
- BS 512L Clinical Anatomy I Lab: Integrative Anatomy of Movement and Circulation Credit(s): .5
- Lab: 12 | Total Hours: 12
- BS 514T Case-Based Biomedical Integration I: Connecting Clinical Cases with Biomedical Sciences Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- PH 510 Naturopathic History & Philosophy I Credit(s): 1
- Lecture: 12 | Total Hours: 12
- TH 510T Fundamentals of Hydrotherapy: Water as Medicine Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- TH 507 Fundamentals of Nutrition Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- BS 515L Medical Histology Lab: Microscopic Structures and Diagnostic Techniques Credit(s): .5
- Lab: 12 | Total Hours: 12
- CE 516 Evidence Informed Practice Seminar Credit(s): .5
- Lecture: 6 | Total Hours: 6
- CE 510 Clinic Education I: Building a Scaffolding for Clinical Reasoning and the Approach to Pateint Care **Credit(s):.5**
- Lecture: 6 | Total Hours: 6
- <u>CE 510T Clinic Education I Tutorial : Building a Scaffolding for Clinical Reasoning and the Approach to Pateint Care</u> **Credit(s): 1.5**
- Tutorial: 18 | Total Hours: 18
- BS 513L Advanced Surface Anatomy I Lab: Foundation of Surface Anatomy Credit(s): .5
- Lab: 12 | Total Hours: 12

New First-Year Fall Totals - Lecture: 180 | Lab: 36 | Tutorial: 90 | Clinic: 0 | Total Hours: 306 | Credits: 24

#### Winter

- BS 520 Medical Physiology II: Mastering Metabolism, Nutrient Balance, and Essential Organ Functions **Credit(s): 5**
- Lecture: 60 | Total Hours: 60
- BS 521 Clinical Biochemistry II: Advanced Insights into Molecular Medicine Credit(s): 4
- Lecture: 48 | Total Hours: 48
- BS 522 Clinical Anatomy II: Pathways of Digestion, Respiration, and Defense Credit(s): 2
- Lecture: 24 | Total Hours: 24
- BS 522L Clinical Anatomy II Lab: Pathways of Digestion, Respiration, and Defense Credit(s): .5
- Lab: 12 | Total Hours: 13
- BS 524T Case-Based Biomedical Integration II: Connecting Clinical Cases with Biomedical Sciences Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- PH 520 Naturopathic History & Philosophy II Credit(s): 1
- Lecture: 12 | Total Hours: 12
- PH 522 Social Determinants of Health Credit(s): 2
- Tutorial: 24 | Total Hours: 12
- CS 520 Fundamentals of Pharmacology Credit(s): 2
- Lecture: 24 | Total Hours: 24
- TH 520 Introduction to Foundational Naturopathic Therapeutics Credit(s): 2
- Lecture: 24 | Total Hours: 24
- TH 520T Foundational Naturopathic Therapeutics Tutorial Credit(s): 0.75
- Tutorial: 9 | Total Hours: 9
- TH 521 Physical Medicine Fundamentals Credit(s): 1
- Lecture: 12 | Total Hours: 12
- <u>CE 520 Clinic Education II</u> **Credit(s)**:
- Tutorial: 30 | Total Hours: 30
- BS 523L Advanced Surface Anatomy II Lab: Applied Palpation Techniques **Credit(s)**: .5
- Lab: 12 | Total Hours: 13
- CE 500 Hydrotherapy Clinical Rotation Credit(s): 2.5
- Tutorial: 30 | Total Hours: 30

New First-Year Winter Totals- Lecture: 204 | Lab: 24 | Tutorial: 87 | Clinic: 0 | Total Hours: 315 | Credits: 25.25

#### **Spring**

- BS 530 Medical Physiology III: Unveiling the Secrets of Neuroendocrine Control and Reproductive Health Credit(s): 5
- Lecture: 60 | Total Hours: 60
- BS 531 Clinical Anatomy III: Mastering the Anatomy of Control and Reproduction Credit(s): 2
- Lecture: 24 | Total Hours: 24
- BS 531L Clinical Anatomy III Lab: Mastering the Anatomy of Control and Reproduction Credit(s): .5
- Lab: 12 | Total Hours: 13
- BS 534T Case-Based Biomedical Integration III: Connecting Clinical Cases with Biomedical Sciences Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- PH 530 Naturopathic Medicine Retreat: Experiential Education in Naturopathic Philosophy Credit(s): 1.5
- Tutorial: 18 | Total Hours: 18
- BS 537 Microbiology: Exploring Pathogen Mechanisms and Clinical Implications Credit(s): 2
- Lecture: 24 | Total Hours: 24
- BS 535 Immunology: Mechanisms and Malfunctions Credit(s): 2
- Lecture: 24 | Total Hours: 24
- BS 536 Fundamentals of Botanical Medicine Credit(s): 2
- Lecture: 24 | Total Hours: 24
- BS 536T Fundamentals of Botanical Medicine Tutorial Credit(s): 1.5
- Tutorial: 18 | Total Hours: 19
- CE 530 Clinic Education III Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- BS 533L Advanced Surface Anatomy II Lab: Clinical Integration of Palpation **Credit(s)**: .5
- Lab: 12 | Total Hours: 12
- CE 531 Intro to Clinic Synthesis Credit(s): .25
- Clinic: 12 | Total Hours: 12
- CE 500 Hydrotherapy Clinical Rotation Credit(s): 2.5
- Clinic: 60 | Total Hours: 60

New First-Year Spring Totals - Lecture: 204 | Lab: 24 | Tutorial: 84 | Clinic: 72 | Total Hours: 384 | Credits: 28

New First-Year Totals - Lecture: 588 | Lab: 84 | Tutorial: 261 | Clinic: 72 | Total Hours: 1005 | Credits: 77.25

#### **Second Year**

#### Summer

• CE 500 - Hydrotherapy Clinical Rotation Credit(s): 2.5

New Second-Year Summer Totals - Lecture: 0 | Lab: 0 | Tutorial: 0 | Clinic: 0 | Total Hours: 0 | Credits: 0

#### Fall

- CS 610 Diagnostic Imaging Credit(s): 2
- Lecture: 24 | Total Hours: 24
- BM 611 Botanical Medicine I Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- TH 610 Foundational Naturopathic Therapeutics I Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 612 Pharmacology I Credit(s):
- Lecture: 15 | Total Hours: 15
- CS 613 Clinical Nutrition I Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- BM 614 Healthcare Horizons Seminar Series I Credit(s): .5
- Tutorial: 6 | Total Hours: 6
- <u>CS 615 Clinical Reasoning I: Integration through Problem-Based</u> Learning **Credit(s): 1.67**
- Tutorial: 20 | Total Hours: 20
- CS 616 Musculoskeletal Credit(s): 3.5
- Lecture: 42 | Total Hours: 42
- CS 616T Musculoskeletal: Orthopedic Evaluation Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 617 Rheumatology and Clinical Immunology Credit(s): 3
- Lecture: 36 | Total Hours: 36
- CS 617T Rheumatology and Clinical Immunology Tutorial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 618 Natural Childbirth I Credit(s): 3
- Lecture: 36 | Total Hours: 36
- CS 619 Lab Diagnosis Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- CS 619L Lab Diagnosis Lab Credit(s): 1
- Lab: 24 | Total Hours: 24
- CS 620 Hematology Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- <u>CE 600 Clinic Observation Clerkship</u> Credit(s): .42

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• <u>CE 500 - Hydrotherapy Clinical Rotation</u> Credit(s): 2.5

New Second-Year Fall Totals - Lecture: 240 | Lab: 24 | Tutorial: 74 | Clinic: 10 | Total Hours: 348 | Credits: 27.58

#### Winter

- <u>CS 621 Gastroenterology & Protology</u> Credit(s): 4
- Lecture: 48 | Total Hours: 48
- CS 621T Gastroenterology and Proctology Tutorial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 621L Gastroenterology and Proctology Lab Credit(s): .25
- Lab: 6 | Total Hours: 6
- CS 625 Dermatology Credit(s): .25
- Lecture: 36 | Total Hours: 36
- CS 625T Dermatology Tutorial Credit(s): 1.5
- Tutorial: 18 | Total Hours: 18
- CS 627 Minor Surgery Credit(s): 2
- Lecture: 24 | Total Hours: 24
- <u>CS 627T Minor Surgery Tutorial</u> **Credit(s): 1.5**
- Tutorial: 18 | Total Hours: 18
- BM 624 Botanical Medicine II Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- PH 610 Foundational Naturopathic Therapeutics II Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 622 Pharmacology II Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 623 Clinical Nutrition II Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- CS 626T Clinical Reasoning II: Integration through Problem-Based Learning Credit(s): 1.67
- Tutorial: 20 | Total Hours: 20
- <u>CS 629L Physical Medicine Lab I: Neuromuscular Therapy</u> Techniques **Credit(s): 2**
- Lab: 48 | Total Hours: 48
- CE 628 Clinic Synthesis I Credit(s): .5
- Clinic: 12 | Total Hours: 12
- CE 600 Clinic Observation Clerkship **Credit(s): .42**
- Clinic: 10 | Total Hours: 10
- CE 500 Hydrotherapy Clinical Rotation Credit(s): 2.5
- BM 621 Social Determinants of Health Workshop #1 Credit(s): 2

New Second-Year Winter Totals - Lecture: 174 | Lab: 54 | Tutorial: 86 | Clinic: 22 | Total Hours: 336 | Credits: 24.83

### **Spring**

- CS 636 Cardiology and Pulmonology Credit(s): 5.5
- Lecture: 66 | Total Hours: 66
- CS 636T Cardiology and Pulmonology Tutorial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 636L Cardiology and Pulmonology Lab Credit(s): .5
- Lab: 12 | Total Hours: 12
- CS 633 Metabolic and Endocrine Credit(s): 4

- Lecture: 48 | Total Hours: 48
- CS 633T Metabolic and Endocrine Tutorial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- BM 633 Botanical Medicine III Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- PH 630 Foundational Naturopathic Therapeutics III Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 632 Pharmacology III Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 634 Clinical Nutrition III Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- BM 634 Healthcare Horizons Seminar Series II Credit(s): .5
- Tutorial: 6 | Total Hours: 6
- <u>CS 635T Clinical Reasoning III: Integration through Problem-Based Learning Credit(s): 1.67</u>
- Tutorial: 20 | Total Hours: 20
- CLS 639L Physical Medicine Lab II: Advanced Physical Medicine Techniques Credit(s): .5
- Lab: 12 | Total Hours: 12
- CLS 639T Physical Medicine Tutorial: Exercise Prescription Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 637T MSK Tutorial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- <u>CLE 931 OSCE I</u> **Credit(s): 0**
- CE 600 Clinic Observation Clerkship **Credit(s): .42**
- Clinic: 10 | Total Hours: 10
- CE 500 Hydrotherapy Clinical Rotation Credit(s): 2.5
- CLE 499 NPLEX I Biomedical Sciences Review Credit(s): 0

New Second-Year Spring Totals - Lecture: 180 | Lab: 24 | Tutorial: 122 | Clinic: 10 | Total Hours: 336 | Credits: 26.58

New Second-Year Totals - Lecture: 594 | Lab: 102 | Tutorial: 282 | Clinic: 42 | Total Hours: 1020 | Credits: 79

#### Third Year

#### Summer

• <u>CE 500 - Hydrotherapy Clinical Rotation</u> **Credit(s): 2.5** 

New Third-Year Summer Totals - Lecture: 0 | Lab: 0 | Tutorial: 0 | Clinic: 0 | Total Hours: 0 | Credits: 0

#### Fall

- <u>CS 710 Gynecology and Andrology: Inclusive Sexual and Reproductive</u> Health **Credit(s): 5**
- Lecture: 60 | Total Hours: 60
- <u>CS 710T Gynecology and Andrology: Inclusive Sexual and Reproductive Health Tutorial</u> **Credit(s): 2**
- Tutorial: 24 | Total Hours: 24
- <u>CS 710L Gynecology and Andrology: Inclusive Sexual and Reproductive Health Lab</u> **Credit(s): 1**
- Lab: 24 | Total Hours: 24
- CS 715 Urology and Nephrology Credit(s): 4
- Lecture: 48 | Total Hours: 48
- CS 715T Urology and Nephrology Tutorial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 712 Oncology Lecture Credit(s): 2
- Lecture: 24 | Total Hours: 24
- CS 712T Oncology Tutorial Credit(s): 1
- Tutorial: 12 | Total Hours: 12
- CE 728 Clinic Synthesis II Credit(s): .5
- Clinic: 12 | Total Hours: 12
- BM 714 Healthcare Horizons Seminar Series III Credit(s): .5
- Tutorial: 6 | Total Hours: 6
- <u>CS 716T Clinical Reasoning IV: Integration through Problem-Based Learning Credit(s): 1.67</u>
- Tutorial: 20 | Total Hours: 20
- BM 713 Botanical Medicine IV Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- PH 710 Foundational Naturopathic Therapeutics IV Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 713 Pharmacology IV Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 714 Clinical Nutrition IV Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- CLE 7300 Secondary Intern Rotation Credit(s): 2.5
- Clinic: 60 | Total Hours: 60

New Third-Year Fall Totals - Lecture: 210 | Lab: 24 | Tutorial: 86 | Clinic: 72 | Total Hours: 392 | Credits: 28.67

#### Winter

- <u>CS 720 Mind, Brain, and Behavior</u> Credit(s): 3
- Lecture: 36 | Total Hours: 36
- CS 720T Mind, Brain, and Behavior Tutortial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 723 Addiction Medicine Credit(s): 1
- Lecture: 12 | Total Hours: 12
- CS 725 Pain Management Credit(s): 2

- Lecture: 24 | Total Hours: 24
- CS 726 Neurology Credit(s): 4
- Lecture: 48 | Total Hours: 48
- CS 726T Neurology Tutorial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 726L Neurology Lab Credit(s): .25
- Lab: 6 | Total Hours: 6
- BM 720 Business I Credit(s): 2
- Lecture: 24 | Total Hours: 24
- CLE 939 OSCE II Credit(s): 0
- <u>CS 725T Clinical Reasoning V: Integration through Problem-Based Learning Credit(s): 1.67</u>
- Tutorial: 10 | Total Hours: 10
- BM 723 Botanical Medicine V Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- PH 720 Foundational Naturopathic Therapeutics V Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 722 Pharmacology V Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 724 Clinical Nutrition V Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- CLE 7300 Secondary Intern Rotation Credit(s): 2.5
- Clinic: 60 | Total Hours: 60

New Third-Year Winter Totals - Lecture: 222 | Lab: 6 | Tutorial: 68 | Clinic: 60 | Total Hours: 356 | Credits: 26.92

### Spring

- <u>CS 731 HEENT Credit(s): 3</u>
- Lecture: 36 | Total Hours: 36
- CS 731T HEENT Tutorial Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- CS 733 Pediatrics Credit(s): 2.67
- Lecture: 32 | Total Hours: 32
- CS 733T Pediatrics Tutorial Credit(s): 1.33
- Tutorial: 16 | Total Hours: 16
- <u>CS 735 Geriatrics Credit(s): 1.33</u>
- Lecture: 16 | Total Hours: 16
- CS 735T Geriatrics Tutorial Credit(s): .67
- Tutorial: 8 | Total Hours: 8
- CS 736 Environmental Medicine Credit(s): 2
- Lecture: 24 | Total Hours: 24
- CS 736T Environmental Medicine Tutorial Credit(s): 1
- Tutorial: 12 | Total Hours: 12
- <u>CS 737 Parenteral Therapy</u> Credit(s): 2
- Tutorial: 24 | Total Hours: 24
- BM 734 Social Determinants of Health Workshop #2 Credit(s): .5

- Tutorial: 6 | Total Hours: 6
- <u>CS 738T Clinical Reasoning VI: Integration through Problem-Based Learning Credit(s): 1.67</u>
- Tutorial: 20 | Total Hours: 20
- BM 733 Botanical Medicine VI Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- PH 730 Foundational Naturopathic Thearpeutics VI Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 732 Pharmacology VI Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CS 734 Clinical Nutrition VI Credit(s): 1.5
- Lecture: 18 | Total Hours: 18
- CLE 7300 Secondary Intern Rotation Credit(s): 2.5
- Clinic: 60 | Total Hours: 60

New Third-Year Spring Totals - Lecture: 174 | Lab: 0 | Tutorial: 110 | Clinic: 60 | Total Hours: 344 | Credits: 26.17

New Third-Year Totals - Lecture: 606 | Lab: 30 | Tutorial: 264 | Clinic: 192 | Total Hours: 1092 | Credits: 81.75

#### **Fourth Year**

#### Summer

- CLE 8401 Community Experience (ComEx) Preceptorship Credit(s): 5.00
- Clinic: 156 | Total Hours: 156
- <u>CLE 8400 Primary Intern Rotations</u> Credit(s): 7.5
- Clinic: 180 | Total Hours: 180
- BUS 8400 Jurisprudence Credit(s): 1
- Lecture: 12 | Total Hours: 12
- <u>CS 800 Emergency Medicine: Acute Care in Real-World</u> Scenarios **Credit(s): 1**
- Tutorial: 12 | Total Hours: 12

New Fourth-Year Summer Totals - Lecture: 48 | Lab: 0 | Tutorial: 12 | Clinic: 336 | Total Hours: 396 | Credits: 13.50

#### Fall

- CE 811 Grand Rounds I **Credit(s)**: **1.25**
- Lecture: 15 | Total Hours: 15
- CE 818 Clinic Synthesis III Credit(s): .5
- Clinic: 12 | Total Hours: 12
- <u>CLE 8400 Primary Intern Rotations</u> **Credit(s): 7.5**
- Clinic: 180 | Total Hours: 180
- BM 716 Holism in Practice I Credit(s): 1.25

- Tutorial: 15 | Total Hours: 15
- BM 715 Business II Credit(s): 2
- Lecture: 24 | Total Hours: 24
- <u>CE 812 Case Integration Mentorship I</u> **Credit(s): 1.25**
- Tutorial: 15 | Total Hours: 15

New Fourth-Year Fall Totals - Lecture: 75 | Lab: 0 | Tutorial: 30 | Clinic: 192 | Total Hours: 297 | Credits: 16.8

#### Winter

- CE 822 Grand Rounds II Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CLE 933 OSCE III Credit(s): 0
- CLE 8400 Primary Intern Rotations Credit(s): 7.5
- Clinic: 180 | Total Hours: 180
- BM 724 Holism in Practice II Credit(s): 1.25
- Tutorial: 15 | Total Hours: 15
- CE 823 Case Integration Mentorship II Credit(s): 1.25
- Tutorial: 15 | Total Hours: 15
- BM 725 Business III Credit(s): 1.5
- Lecture: 18 | Total Hours: 18

New Fourth-Year Winter Totals - Lecture: 81 | Lab: 0 | Tutorial: 30 | Clinic: 180 | Total Hours: 291 | Credits: 16.75

### **Spring**

- CE 832 Grand Rounds III Credit(s): 1.25
- Lecture: 15 | Total Hours: 15
- CLE 8400 Primary Intern Rotations Credit(s): 7.5
- Clinic: 240 | Total Hours: 240
- BM 734 Holism in Practice III Credit(s): 1.25
- Tutorial: 15 | Total Hours: 15
- CE 833 Case Integration Mentorship III **Credit(s): 1.25**
- Tutorial: 15 | Total Hours: 15

New Fourth-Year Spring Totals - Lecture: 51 | Lab: 0 | Tutorial: 30 | Clinic: 240 | Total Hours: 321 | Credits: 16.8

New Fourth-Year Totals - Lecture: 255 | Lab: 0 | Tutorial: 102 |

**Clinic: 948 | Total Hours: 1305 | Credits: 63.8** 

New Curriculum Totals - Lecture: 2067 | Lab: 216 | Tutorial:

885 | Clinic: 1254 | Total Hours: 4422 | Credits: 301.75

# ND Four-Year Revised Course Descriptions- as of Fall 2024- Course Descriptions

First Year

Fall

## BS 510 - Medical Physiology I: Exploring the Heart, Circulation, and Musculoskeletal Dynamics

#### Credit(s): 5

Dive into the complexities of medical physiology in this engaging course, designed to lay a foundational understanding of the human body. In this first course of a three-part series, we will explore cellular physiology, histology of primary tissue types, and the structure and function of several organ systems: integumentary, musculoskeletal, cardiovascular, circulatory, and hematologic. Through interactive sessions and case studies, learn how these organ systems sustain life and how they relate to pathophysiology of disease states. The principles of homeostasis will be explored, with an understanding that the interactions between organ systems are fundamental to the maintenance of health and the development of disease

Lecture: 60 | Total Hours: 60

## BS 511 - Clinical Biochemistry I: Understanding the Molecular Basis of Health and Disease

#### Credit(s): 4

Unlock the secrets of human health at the molecular level in this dynamic Clinical Biochemistry course. Explore the intricate world of biomolecules, enzyme kinetics, metabolic pathways, and biochemical regulation through the lens of clinical relevance and real-world applications. Learn how these fundamental concepts underpin medical diagnostics and treatment strategies, equipping you with the knowledge to address complex clinical challenges. Engage in a curriculum that not only deepens your understanding but also empowers you to apply biochemical principles to innovate in the field of medicine.

Lecture: 48 | Total Hours: 48

#### BS 512 - Clinical Anatomy I: Integrative Anatomy of Movement and Circulation

#### Credit(s): 2

Explore the detailed anatomy of the musculoskeletal, integumentary, cardiovascular, and circulatory systems in this first course of a three-part series

that parallels the other biomedical sciences curriculum. This course emphasizes the clinical applications and integrates lectures with case studies to demonstrate the practical relevance of anatomical knowledge in medical practice. Students will gain insights into the anatomical basis of common clinical procedures, pathological conditions, and their relationship with pathophysiology, preparing them for advanced clinical roles.

Lecture: 24 | Total Hours: 24

#### BS 512L - Clinical Anatomy I Lab: Integrative Anatomy of Movement and Circulation

#### Credit(s): .5

This lab course accompanies clinical anatomy, providing hands-on experience with the state-of-the-art Anatomage Table. This revolutionary technology offers students an opportunity to explore human anatomy in a digital format, combining patient data with interactive 3D technology to simulate dissection and functional studies of all body systems. In this first course of a three-part series the emphasis will be on the musculoskeletal, cardiovascular, and circulatory organ systems. Through virtual dissections and identification of key anatomical landmarks students will bridge the gap between theoretical knowledge and practical application.

Lab: 12 | Total Hours: 12

## BS 514T - Case-Based Biomedical Integration I: Connecting Clinical Cases with Biomedical Sciences

#### Credit(s): 2

Dive into the complexities of biomedical sciences through a dynamic, case-based learning course which integrates anatomy, physiology, biochemistry, and histology, focusing on systems such as musculoskeletal, cardiovascular, circulatory, integumentary, and hematologic. Each clinical case presented challenges students to apply multidisciplinary knowledge to diagnose and understand disease processes. By linking theory with practical clinical applications, students will gain a deeper appreciation of the interconnectedness of human body systems and their relevance in medical practice. This course is designed to enhance clinical reasoning and problem-solving skills essential for future healthcare professionals.

Tutorial: 24 | Total Hours: 24

#### PH 510 - Naturopathic History & Philosophy I

#### Credit(s): 1

This lecture and discussion course introduces the philosophical basis of naturopathic medicine and the role of the naturopathic physician in today's world. Students will

examine the roots of naturopathic medicine and the historical development of naturopathic philosophy. Emphasis is placed on the six guiding principles of naturopathic care: first do no harm, the healing power of nature, identify and treat the cause, treat the whole person, the physician as teacher, and prevention

Lecture: 12 | Total Hours: 12

#### TH 510T - Fundamentals of Hydrotherapy: Water as Medicine

#### Credit(s): 2

The physical and chemical properties of water make it a unique medium for natural healing. This dynamic course combines lecture and hands on experience to explore the therapeutic application of water. The unique properties of water, its physiological effects on the body, and a variety of therapeutic techniques are explored academically, and through giving and receiving hydrotherapy treatments.

Tutorial: 24 | Total Hours: 24

#### TH 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 MSCR students.* 

Lecture: 48 | Total Hours: 48

#### BS 515L - Medical Histology Lab: Microscopic Structures and Diagnostic Techniques

#### Credit(s): .5

Embark on a detailed exploration of human tissue types in this histology lab course, designed to complement studies in physiology and anatomy. Students will delve into the microscopic world of the four foundational tissue types: epithelial, connective, muscle, and nervous tissues. The course extends to practical hematologic and immunologic cell identification, enhancing understanding of cellular function and pathology across the body. Through hands-on lab sessions, students will master essential diagnostic skills such as microscopic analysis, urinalysis, and blood smear techniques. This comprehensive introduction not only builds foundational knowledge but also equips students with the analytical skills necessary for recognizing and diagnosing various pathological conditions

Lab: 12 | Total Hours: 12

#### CE 516 - Evidence Informed Practice Seminar

#### Credit(s): .5

This seminar introduces graduate medical students to the principles and practices of evidence-informed healthcare. The course covers essential topics including literature reviews, critical analysis of research studies, understanding research methodologies, and applying evidence to clinical practice. Students will learn to evaluate the quality of research, integrate scientific evidence with clinical expertise, and consider patient values in decision-making. By the end of the course, students will be equipped with the skills necessary to critically appraise research and apply evidence-based approaches to patient care.

Lecture: 6 | Total Hours: 6

## CE 510 - Clinic Education I: Building a Scaffolding for Clinical Reasoning and the Approach to Pateint Care

#### Credit(s): .5

In this three-course series, we use an interactive learning environment to build a scaffolding for clinical reasoning and the approach to patient care. This course begins with the foundations of the doctor-patient relationship, then the concepts of building a diagnostic framework and organizing a medical interview are layered in. Through the interviewing process, we will learn medical charting (SOAP notes) and further develop critical thinking skills. Physical exam skills are also taught, which further develop and enhance critical thinking and medical assessment.

Lecture: 6 | Total Hours: 6

## ${\tt CE~510T~-Clinic~Education~I~Tutorial}: Building a Scaffolding for Clinical Reasoning and the Approach to Pateint Care$

**Credit(s): 1.5** 

Tutorial: 18 | Total Hours: 18

#### BS 513L - Advanced Surface Anatomy I Lab: Foundation of Surface Anatomy

#### Credit(s): .5

Explore the foundational elements of surface anatomy, focusing on the muscular, skeletal, and vascular systems. This lab course offers intensive hands-on sessions where students engage in palpation labs to identify key anatomical landmarks. Gain a practical understanding of the human body's structure as a base for advanced medical practice.

Lab: 12 | Total Hours: 12

New First-Year Fall Totals - Lecture: 180 | Lab: 36 | Tutorial: 90 | Clinic: 0 | Total Hours: 306 | Credits: 24

#### Winter

## BS 520 - Medical Physiology II: Mastering Metabolism, Nutrient Balance, and Essential Organ Functions

#### Credit(s): 5

Dive into the complexities of medical physiology in this engaging course, designed to lay a foundational understanding of the human body. In this second course of a three-part series, we will continue our exploration of the structure and function of several organ systems: urinary, respiratory, immunologic, and gastrointestinal. Through interactive sessions and case studies, learn how these organ systems sustain life and how they relate to pathophysiology of disease states. The principles of metabolism will be explored with an emphasis on the role of macronutrients and micronutirents and their role in maintaining homeostasis.

Lecture: 60 | Total Hours: 60

#### BS 521 - Clinical Biochemistry II: Advanced Insights into Molecular Medicine

#### Credit(s): 4

Build on your foundational knowledge with Clinical Biochemistry II, where advanced topics in molecular biology, genetics, and metabolic disorders take center stage. Delve deeper into the complexities of biochemical markers that are pivotal in clinical diagnosis and ongoing patient monitoring. This course offers an immersive exploration of how genetic variations and molecular interactions influence health and disease, preparing you to harness these insights in clinical practice.

Lecture: 48 | Total Hours: 48

#### BS 522 - Clinical Anatomy II: Pathways of Digestion, Respiration, and Defense

#### Credit(s): 2

Explore the detailed anatomy of the urinary, respiratory, immunologic, and gastrointestinal systems in this second course of a three-part series that parallels the other biomedical sciences curriculum. This course emphasizes the clinical applications and integrates lectures with case studies to demonstrate the practical relevance of anatomical knowledge in medical practice. Students will gain insights into the anatomical basis of common clinical procedures, pathological conditions, and their relationship with pathophysiology, preparing them for advanced clinical roles.

Lecture: 24 | Total Hours: 24

#### BS 522L - Clinical Anatomy II Lab: Pathways of Digestion, Respiration, and Defense

#### Credit(s): .5

This lab course accompanies clinical anatomy, providing hands-on experience with the state-of-the-art Anatomage Table. This revolutionary technology offers students an opportunity to explore human anatomy in a digital format, combining patient data with interactive 3D technology to simulate dissection and functional studies of all body systems. In this second course of a three-part series the emphasis will be on the urinary, respiratory, immunologic, and gastrointestinal organ systems. Through virtual dissections and identification of key anatomical landmarks students will bridge the gap between theoretical knowledge and practical application.

Lab: 12 | Total Hours: 13

## BS 524T - Case-Based Biomedical Integration II: Connecting Clinical Cases with Biomedical Sciences

#### Credit(s): 2

Dive into the complexities of biomedical sciences through a dynamic, case-based learning course which integrates anatomy, physiology, and biochemistry, focusing on systems such as urinary, respiratory, immunologic, and gastrointestinal. Each clinical case presented challenges students to apply multidisciplinary knowledge to diagnose and understand disease processes. By linking theory with practical clinical applications, students will gain a deeper appreciation of the interconnectedness of human body systems and their relevance in medical practice. This course is designed to enhance clinical reasoning and problem-solving skills essential for future healthcare professionals.

Tutorial: 24 | Total Hours: 24

#### PH 520 - Naturopathic History & Philosophy II

#### Credit(s): 1

Expanding on Naturopathic History & Philosophy I, this course explores the evolution of naturopathic principles, ethics, professional identity, and contemporary issues in naturopathic medicine

Lecture: 12 | Total Hours: 12

#### PH 522 - Social Determinants of Health

#### Credit(s): 2

This course examines social determinants of health, healthcare disparities, cultural competence, and strategies for promoting health equity and advocacy in patient care.

Tutorial: 24 | Total Hours: 12

#### CS 520 - Fundamentals of Pharmacology

#### Credit(s): 2

This course provides an in-depth foundation in pharmacotherapy, covering pharmacokinetics, pharmacodynamics, and the relevant legislation regulating drug use, including controlled substances. It examines the major drug classes and their mechanisms of action for antimicrobials, CNS agents, and anti-inflammatories. Emphasis is placed on understanding individual variability in drug response, drug interactions, and potential adverse reactions. This curriculum is designed to prepare clincians to effectively and safely integrate pharmaceutical medications within a holistic health framework, enhancing both safety and therapeutic outcomes in clinical practice.

Lecture: 24 | Total Hours: 24

#### TH 520 - Introduction to Foundational Naturopathic Therapeutics

#### Credit(s): 2

This course explores the foundational principles of homeopathy. Students will learn the philosophical concepts underlying homeopathy as well as the techniques used in homeopathic case taking, repertorization and prescribing. Utilization of homeopathy as a holistic system of assessment is emphasized.

Lecture: 24 | Total Hours: 24

#### TH 520T - Foundational Naturopathic Therapeutics Tutorial

#### Credit(s): 0.75

Students will discuss key concepts as well as practice skills in homeopathic intake and repertorization in this active learning class.

Tutorial: 9 | Total Hours: 9

#### **TH 521 - Physical Medicine Fundamentals**

#### Credit(s): 1

This course covers foundational concepts in physical medicine, including functional assessment techniques, and application of manual

therapies, therapeutic exercises, and rehabilitative strategies for musculoskeletal conditions.

Lecture: 12 | Total Hours: 12

#### CE 520 - Clinic Education II

In this second course of the series, we continue to build a scaffolding for clinical reasoning and the approach to patient care. We will further develop medical interviewing and physical examination skills while strongly emphasizing the development of a diagnostic framework leading to a working diagnosis. Critical thinking in medical assessment is paramount in the design of this course.

Tutorial: 30 | Total Hours: 30

#### BS 523L - Advanced Surface Anatomy II Lab: Applied Palpation Techniques

#### Credit(s): .5

This course builds off of Advanced Surface Anatomy I. Advance your skills in precise palpation techniques. In this lab course, students participate in supervised hands-on practice, enhancing their ability to locate and evaluate underlying tissues. The focus this term is on gastrointestinal, respiratory, and immunologic systems. This course is crucial for developing the tactile skills necessary for effective diagnosis and treatment in clinical settings.

Lab: 12 | Total Hours: 13

#### CE 500 - Hydrotherapy Clinical Rotation

#### **Credit(s): 2.5**

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.

Tutorial: 30 | Total Hours: 30

New First-Year Winter Totals- Lecture: 204 | Lab: 24 | Tutorial: 87 | Clinic: 0 | Total Hours:

315 | Credits: 25.25

## BS 530 - Medical Physiology III: Unveiling the Secrets of Neuroendocrine Control and Reproductive Health

#### Credit(s): 5

Dive into the complexities of medical physiology in this engaging course, designed to lay a foundational understanding of the human body. In this third course of a three-part series, we will continue our exploration of embryology as well as the structure and function of several organ systems: nervous, specialized senses, endocrine, and reproductive. Through interactive sessions and case studies, learn how these organ systems sustain life and how they relate to pathophysiology of disease states. The importance of the neuroendocrine system and how it maintains homeostasis by communicating and coordinating with other organ systems will be emphasized.

Lecture: 60 | Total Hours: 60

#### BS 531 - Clinical Anatomy III: Mastering the Anatomy of Control and Reproduction

#### Credit(s): 2

Explore the detailed anatomy of the central and peripheral nervous sytem, specialized sense, endocrine system, and reproductive system in this third course of a three-part series that parallels the other biomedical sciences curriculum. This course emphasizes the clinical applications and integrates lectures with case studies to demonstrate the practical relevance of anatomical knowledge in medical practice. Students will gain insights into the anatomical basis of common clinical procedures, pathological conditions, and their relationship with pathophysiology, preparing them for advanced clinical roles.

Lecture: 24 | Total Hours: 24

## BS 531L - Clinical Anatomy III Lab: Mastering the Anatomy of Control and Reproduction

#### Credit(s): .5

This lab course accompanies clinical anatomy, providing hands-on experience with the state-of-the-art Anatomage Table. This revolutionary technology offers students an opportunity to explore human anatomy in a digital format, combining patient data with interactive 3D technology to simulate dissection and functional studies of all body systems. In this third course of a three-part series the emphasis will be on the central and peripheral nervous system, specialized sense, endocrine system, and reproductive system. Through virtual dissections and identification of key anatomical landmarks students will bridge the gap between theoretical knowledge and practical application.

Lab: 12 | Total Hours: 13

## BS 534T - Case-Based Biomedical Integration III: Connecting Clinical Cases with Biomedical Sciences

#### Credit(s): 2

Dive into the complexities of biomedical sciences through a dynamic, case-based learning course which integrates anatomy, physiology, and biochemistry, focusing on systems such as urinary, respiratory, immunologic, and gastrointestinal. Each clinical case presented challenges students to apply multidisciplinary knowledge to diagnose and understand disease processes. By linking theory with practical clinical applications, students will gain a deeper appreciation of the interconnectedness of human body systems and their relevance in medical practice. This course is designed to enhance clinical reasoning and problemsolving skills essential for future healthcare professionals.

Tutorial: 24 | Total Hours: 24

## PH 530 - Naturopathic Medicine Retreat: Experiential Education in Naturopathic Philosophy

#### **Credit(s): 1.5**

Naturopathic philosophy comes to life in this weekend retreat as students and instructors come together to explore naturopathic medicine in a natural setting. We will identify medicinal plants in nature, as well as experience hydrotherapy, mud therapy, meditation, and various exercise therapies. We will also discuss the tenants of naturopathic medicine and build community in a fun and engaging environment.

Tutorial: 18 | Total Hours: 18

#### BS 537 - Microbiology: Exploring Pathogen Mechanisms and Clinical Implications

#### Credit(s): 2

This course provides a deep dive into the general principles of microbiology, focusing on the structure and biochemical characteristics of pathogens crucial to human health. It offers a comprehensive study of bacteria, viruses, fungi, and parasites with a particular emphasis on those most commonly involved in human infections. Course activities are designed to bridge theoretical knowledge with practical applications, preparing students for clinical challenges in diagnosing and treating microbial infections.

Lecture: 24 | Total Hours: 24

#### BS 535 - Immunology: Mechanisms and Malfunctions

#### Credit(s): 2

This foundational course offers comprehensive exploration of the human immune system, both in health and disease. The curriculum covers key topics such as mechanisms of innate and adapative immunity, focusing on immune cell functions and the histologic organization of immune system structures. Students will gain understanding of how immune responses are orchestrated and what happens when they fail.

Lecture: 24 | Total Hours: 24

#### BS 536 - Fundamentals of Botanical Medicine

#### Credit(s): 2

Discover new depths in the understanding of the intricate relationship of people and nature through the study of botanical medicine. This course sets the foundation for a modern practice of herbal medicine, which has strong roots in the rich history and philosophy of botanical medicine, and also utilizes an evidence-informed approach. We will develop our understanding of plant medicines through multiple lenses, including historical use and traditional preparation methods, knowledge of phytochemistry and modern research on medicinal plant constituents, understanding of basic botany and ecology of plant medicines, and actions, indications, and contraindications of many medicinal plants. The concepts of whole plant medicine and holistic prescribing are emphasized along with safety, efficacy and accessibility.

Lecture: 24 | Total Hours: 24

#### BS 536T - Fundamentals of Botanical Medicine Tutorial

#### **Credit(s): 1.5**

This small group class complements the lecture course with experiential learning activities in botanical medicine. Each student will have the opportunity to develop and understanding of the medicinal qualities of herbs through experiencing the flavor and aroma of various preparations. Students will also make various forms of herbal medicines in class in order to understand, first hand, how herbs are prepared, dosed, and dispensed. Knowledge of phytochemistry is also applied through preparing and evaluating botanical remedies using traditional and modern techniques.

Tutorial: 18 | Total Hours: 19

#### CE 530 - Clinic Education III

#### Credit(s): 2

In this third course of the three-class series, we further refine and practice foundational clinical skills with more complex medical cases. We continue to learn and practice regional physical exam skills to support the development of a working diagnosis and begin formation of treatment plans. Using a patient-centered care model, we practice

delivering difficult medical news, learn how to take a sexual health interview, and talk to patients about sensitive topics. Emphasis is placed of professionalism and reflection as the student builds knwoledge and skills for practice.

Tutorial: 24 | Total Hours: 24

#### BS 533L - Advanced Surface Anatomy II Lab: Clinical Integration of Palpation

#### Credit(s): .5

This course builds off of Advanced Surface Anatomy II. Advance your skills in precise palpation techniques. In this lab course, students participate in supervised hands-on practice, enhancing their ability to locate and evaluate underlying tissues. The focus this term is on neurologic and HEENT systems. Emphasis is placed on accuracy, diagnostic reasoning, and the therapeutic use of palpation in patient care.

Lab: 12 | Total Hours: 12

#### **CE 531 - Intro to Clinic Synthesis**

#### **Credit(s): .25**

The critical element of the development of strong clinicians is synthesizing information learned in the academic setting and bringing it into practical application in the clinical setting. The Clinic Synthesis course series is designed to provide students with practical skill building in creating a diagnostic framework, interviewing, physical examination, diagnostics, resource utilization, and generation of holistic treatment plans. The course series develops a scaffold that helps students develop efficient and effective clinical practice methods with an emphasis on how to specifically operate as a holistic naturopathic practitioner. This introductory course in the series focuses on integrating information learned in the biomedical sciences and clinical education courses.

Clinic: 12 | Total Hours: 12

#### **CE 500 - Hydrotherapy Clinical Rotation**

#### **Credit(s): 2.5**

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.

Clinic: 60 | Total Hours: 60

New First-Year Spring Totals - Lecture: 204 | Lab: 24 | Tutorial: 84 | Clinic: 72 | Total Hours: 384 | Credits: 28

New First-Year Totals - Lecture: 588 | Lab: 84 | Tutorial: 261 | Clinic: 72 | Total

Hours: 1005 | Credits: 77.25

Second Year

Summer

#### CE 500 - Hydrotherapy Clinical Rotation

Credit(s): 2.5

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

New Second-Year Summer Totals - Lecture: 0 | Lab: 0 | Tutorial: 0 | Clinic: 0 | Total Hours: 0 | Credits: 0

Fall

#### CS 610 - Diagnostic Imaging

#### Credit(s): 2

This course covers principles and applications of diagnostic imaging modalities such as X-rays, ultrasound, CT scans, MRI, and nuclear medicine. Students learn to interpret imaging studies and understand their clinical implications in diagnosing and managing various medical conditions.

Lecture: 24 | Total Hours: 24

#### BM 611 - Botanical Medicine I

#### **Credit(s): 1.5**

The Botanical Medicine sieres of courses explore the therapeutic use of botanical medicines in functional disorders and pathological conditions. Throughout this series, we will develop a robust materia medica, and understand how to blend traditional and evidence-based practices in botanical medicine in patient care. This first course focuses on immunomodulating and inflammation modulating botanical medicines and how they are applied in rheumatologic, autoimmune and musculoskeletal disorders.

Lecture: 18 | Total Hours: 18

#### TH 610 - Foundational Naturopathic Therapeutics I

#### Credit(s): 1.25

This series teaches the homeopathic materia medica and skills in the practice of homeopathy including case taking, repertorization, potency selection, case magement and the principles of individualized treatment.

Lecture: 15 | Total Hours: 15

#### CS 612 - Pharmacology I

The first course in the pharmacology series is designed to enhance safe and effective pharmacological management in areas such musculoskeletal disorders, rheumatology, clinical immunology, and hematology. It covers the use of analgesics, muscle relaxants, anti-inflammatories, immunosuppresants, biologics, corticosteroids, anesthetics, anticoagulants, and thrombolytics. The curriculum aims to seamlessly integrate these pharmaceuticals into naturopathic and conventional treatments, preparing students to optimize therapeutic outcomes through a deep understanding of potential drug interactions, adverse effects, and patient-specific considerations in a holistic clinical practice.

Lecture: 15 | Total Hours: 15

#### CS 613 - Clinical Nutrition I

#### **Credit(s): 1.5**

The Clinical Nutrition course series focuses on the role of nutrition in health promotion, disease prevention, and disease-specific therapeutic interventions. Both dietary patterns and nutraceutcal supplementation are covered as forms of therapy. This first course focuses on nutritional strategies to support musculoskeletal health as well as decrease inflammation. A particular emphasis of this course is the role of nutrition in the gut immune axis. Nutritional approaches to various forms of anemia are also covered.

Lecture: 18 | Total Hours: 18

#### BM 614 - Healthcare Horizons Seminar Series I

#### Credit(s): .5

Seminars are interactive sessions where students discuss and analyze current topics, research findings, case studies, or ethical dilemmas related to healthcare practice, public health issues, or integrative medicine concepts.

Tutorial: 6 | Total Hours: 6

#### CS 615 - Clinical Reasoning I: Integration through Problem-Based Learning

#### Credit(s): 1.67

This course employs a problem-based learning model within small groups to enhance clinical reasoning and familiarity with medical evidence. Students engage in case studies that are intricately designed around key organ systems such as the musculoskeletal, rheumatologic, immunologic, and hematologic systems. Through collaborative discussion and active exploration, students address common healthcare challenges, integrating clinical science principles. The course emphasizes the development of critical clinical skills, including patient interviewing, physical examinations, clinical assessments, and medical charting. This dynamic, active learning environment equips students with the essential skills and attitudes needed to excel as medical professionals.

Tutorial: 20 | Total Hours: 20

#### CS 616 - Musculoskeletal

#### Credit(s): 3.5

Information learned in the biomedical sciences will be integrated and applied 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, pain education and neurophysiology, and neurodynamics.

Lecture: 42 | Total Hours: 42

#### CS 616T - Musculoskeletal: Orthopedic Evaluation

#### Credit(s): 2

This course will build off of the information learned in the Musculoskeletal lecture course. The course focuses on orthopedic physical examinations, including joint assessments, range of motion testing, muscle strength evaluations, special orthopedic tests, and clinical reasoning in orthopedic medicine. Students are assessed via a MiniClinical Evaluation Exercise to ensure their competence prior to moving into their Core Clerkship Clinical Rotation.

Tutorial: 24 | Total Hours: 24

#### CS 617 - Rheumatology and Clinical Immunology

#### Credit(s): 3

The Rheumatology and Clinical Immunology 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

Lecture: 36 | Total Hours: 36

#### CS 617T - Rheumatology and Clinical Immunology Tutorial

#### Credit(s): 2

This course is designed to enhance the knowledge and clinical skills in the diagnosis, treatment and pathophysiology of inflammatory and rheumatic diseases. Class format includes clinical science lectures and case-based tutorials with an emphasis on diagnosis and treatment appropriate to naturopathic primary care. Considerations around ethics, cultural competences, diversity and inclusion are central in all class discussions. Students are engaged in an integrative approach, utilizing research and best practice of nutrition, pharmacology, physical medicine, botanical medicine and homeopathy as well as therapeutic doctor patient relationship. Lectures by experts on topics pertaining to their special areas of interest.

Tutorial: 24 | Total Hours: 24

#### CS 618 - Natural Childbirth I

#### Credit(s): 3

This course is required in the naturopathic curriculum, and prepares the student to provide health care appropriate to the special circumstances of pregnancy. Topics include diagnosis of pregnancy, initiating prenatal care, therapeutics for early pregnancy, management of miscarriage, infertility, referrals, overviews of normal labor and birth, and the postpartum care of mothers and infants. The student is prepared to screen for risks and to offer clients informed choices related to hospital or out of hospital birthing options.

Lecture: 36 | Total Hours: 36

#### CS 619 - Lab Diagnosis

#### **Credit(s): 1.5**

Laboratory Diagnosis covers principles of laboratory testing, interpretation of lab results, diagnostic algorithms, and correlations between laboratory findings and clinical conditions across various medical specialties.

Lecture: 18 | Total Hours: 18

#### CS 619L - Lab Diagnosis Lab

#### Credit(s): 1

The Laboratory Diagnosis Lab provides hands-on experience in laboratory and diagnostic skills crucial for modern medical practice. Students will gain practical experience in a range of techniques including phlebotomy, various injection methods, and hangling and analysis of clinical specimens.

Lab: 24 | Total Hours: 24

#### CS 620 - Hematology

#### Credit(s): 1.5

This course provides an overview of hematology. Through clinical science lectures, we develop proficiency in the diagnosis and naturopathic treatment approach to blood disorders such as anemia, bleeding and clotting conditions. The rationale for and successful delivery of screening recommendations, and prognostic information are discussed. Research is presented to appreciate evidence of naturopathic adjunctive treatments for co-managing care within a collaborative, integrative model.

Lecture: 18 | Total Hours: 18

#### CE 600 - Clinic Observation Clerkship

#### Credit(s): .42

The Clinic Observation Clerkship provides students with supervised observation experiences in clinical settings, allowing them to observe patient interactions, healthcare workflows, interprofessional collaboration, and clinical decision-making processes.

#### **CE 500 - Hydrotherapy Clinical Rotation**

#### **Credit(s): 2.5**

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

New Second-Year Fall Totals - Lecture: 240 | Lab: 24 | Tutorial: 74 | Clinic: 10 | Total Hours: 348 | Credits: 27.58

#### Winter

#### CS 621 - Gastroenterology & Protology

#### Credit(s): 4

The gastroenterology and proctology course will begin with a brief overview of structure, function, anatomy, physiology, and wellness. The bulk of the course will be devoted to understanding pathology, disease diagnosis/assessment/differential diagnosis, and management of common gastroenterology and proctology conditions. Emphasis will be placed on a whole-systems approach and the application of naturopathic philosophy to patient care. Supplementary topics such as cultural competency, ethics, evidenceinformed practice, inter-professional practice, jurisprudence, and practitioner cultivation will be integrated throughout each course.

Lecture: 48 | Total Hours: 48

#### CS 621T - Gastroenterology and Proctology Tutorial

#### Credit(s): 2

This case-based course will apply knowledge of anatomy, physiology, pathology, diagnosis, and management of common gastroenterology and proctology conditions by using whole-systems medicine and the application of naturopathic philosophy to patient care. Supplementary topics such as cultural competency, ethics, evidence-informed practice, inter-professional practice, jurisprudence, and practitioner cultivation will be integrated throughout the class. Students are assessed via a Mini-Clinical Evaluation Exercise to ensure their competence prior to moving into their Core Clerkship Clinical Rotation.

Tutorial: 24 | Total Hours: 24

#### CS 621L - Gastroenterology and Proctology Lab

#### Credit(s): .25

The gastroenterology and proctology lab course will include a brief overview of structure, function, anatomy, physiology and wellness. The course will be devoted to diagnosis and assessment through advanced physical exam techniques of common proctology and gastroenterology conditions. Students obtain experience in performing sensitive rectal exams using standardized patients

Lab: 6 | Total Hours: 6

#### **CS 625 - Dermatology**

#### **Credit(s): .25**

The skin is the largest organ of the body and our direct interface with the world. This

course covers acute and chronic skin disorders commonly seen in clinical practice. Benign, pre-malignant and malignant skin tumors, bacterial, viral and superficial fungal infections, eczema, psoriasis and many other autoimmune skin disorders are explored in detail. We learn to provide a variety of diagnostic and treatment options. Naturopathic approaches including nutritional, botanical, hydrotherapy and homeopathic therapies are explored as the foundation of care. Pharmaceutical interventions will be discussed in detail to understand their utility when appropriate and necessary.

Lecture: 36 | Total Hours: 36

#### **CS 625T - Dermatology Tutorial**

#### Credit(s): 1.5

This tutorial class utilizes a small group setting to integrate and expand upon the information learned in the Dermatology lecture course. We use mock cases to demonstrate, practice and learn the importance of history taking, physical exams and medical knowledge when diagnosing and treating patients with skin conditions.

Tutorial: 18 | Total Hours: 18

#### **CS 627 - Minor Surgery**

#### Credit(s): 2

The skin is the largest organ of the body and our direct interface with the world. This course covers basic principles and techniques of minor surgical procedures performed in outpatient settings. Topics include wound management, suturing techniques, excisions, biopsies, toenail removals, cryotherapy, local anesthesia administration, sterile techniques, and post-operative care.

Lecture: 24 | Total Hours: 24

#### **CS 627T - Minor Surgery Tutorial**

#### **Credit(s): 1.5**

In the Minor Surgery Lab, students engage in hands-on practice of minor surgical techniques under supervision. This lab provides opportunities to develop proficiency in surgical skills, instrument handling, wound closure methods, and patient safety protocols. In this lab course, we learn and practice minor surgery office procedures. Suturing techniques, biopsies, toenail removals, cryotherapy, laceration repair, and other procedures are covered.

Tutorial: 18 | Total Hours: 18

#### BM 624 - Botanical Medicine II

## Credit(s): 1.5

The Botanical Medicine sieres of courses explore the therapeutic use of botanical medicines in functional disorders and pathological conditions. Throughout this series, we will develop a robust materia medica, and understand how to blend traditional and evidence-based practices in botanical medicine in patient care. This second course focuses on application of botanical medicines in dermatologic, gastrointestinal and proctologic disorders.

Lecture: 18 | Total Hours: 18

## PH 610 - Foundational Naturopathic Therapeutics II

#### Credit(s): 1.25

This series teaches the homeopathic materia medica and skills in the practice of homeopathy including case taking, repertorization, potency selection, case magement and the principles of individualized treatment.

Lecture: 15 | Total Hours: 15

## CS 622 - Pharmacology II

#### Credit(s): 1.25

Pharmacology II deepens students' pharmacological expertise with a focus on medications pertinent to gastroenterology, proctology, dermatology, and minor surgery. Students will explore the different routes of administration for common gastrointestinal agents, procotological preparations, and dermatological therapies. The course is designed to foster an integrated approach to medication management, enhancing students' ability to prescribe and monitor drug treatments effectively. Emphasis is placed on selecting appropriate therapeutic regimens, understanding drug interactions, and mitigating adverse effects to maximize patient safety and clinical outcomes in both naturopathic and conventional settings.

Lecture: 15 | Total Hours: 15

#### CS 623 - Clinical Nutrition II

#### **Credit(s): 1.5**

The Clinical Nutrition course series focuses on the role of nutrition in health promotion, disease prevention, and disease-specific therapeutic interventions. Both dietary patterns and nutraceutical supplementation are covered as elements of therapy. This second course focuses on nutritional strategies to treat gastrointestinal and dermatologic conditions.

Lecture: 18 | Total Hours: 18

#### CS 626T - Clinical Reasoning II: Integration through Problem-Based Learning

## Credit(s): 1.67

This course employs a problem-based learning model within small groups to enhance clinical reasoning and familiarity with medical evidence. Students engage in case studies that are intricately designed around key organ systems such as the gastrointestinal and dermatologic systems as well as minor surgery application. Through collaborative discussion and active exploration, students address common healthcare challenges, integrating clinical science principles. The course emphasizes the development of critical clinical skills, including patient interviewing, physical examinations, clinical assessments, and medical charting. This dynamic, active learning environment equips students with the essential skills and attitudes needed to excel as medical professionals

Tutorial: 20 | Total Hours: 20

## CS 629L - Physical Medicine Lab I: Neuromuscular Therapy Techniques

#### Credit(s): 2

In Physical Medicine Lab I, students learn and practice neuromuscular therapy techniques aimed at addressing musculoskeletal pain, dysfunction, and soft tissue injuries. This lab includes hands-on training in naturopathic manipulation techniques, manual therapy, myofascial release, and trigger point therapy.

Lab: 48 | Total Hours: 48

#### CE 628 - Clinic Synthesis I

#### Credit(s): .5

The critical element of the development of strong clinicians is synthesizing information learned in the academic setting and bringing it into practical application in the clinical setting. The Clinic Synthesis course series is designed to provide students with practical skill building in creating a diagnostic framework, interviewing, physical examination, diagnostics, resource utilization, and generation of holistic treatment plans. The course series develops a scaffold that helps students develop efficient and effective clinical practice methods with an emphasis on how to specifically operate as a holistic naturopathic practitioner. This second course in the series focuses on advancing skills in interviewing, physical examination and diagnosis in the setting of acute conditions.

Clinic: 12 | Total Hours: 12

#### **CE 600 - Clinic Observation Clerkship**

#### Credit(s): .42

The Clinic Observation Clerkship provides students with supervised observation

experiences in clinical settings, allowing them to observe patient interactions, healthcare workflows, interprofessional collaboration, and clinical decision-making processes.

Clinic: 10 | Total Hours: 10

#### CE 500 - Hydrotherapy Clinical Rotation

## **Credit(s): 2.5**

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.

#### BM 621 - Social Determinants of Health Workshop #1

#### Credit(s): 2

Social Determinants of Health Workshop #1 focuses on developing professional skills, including communication,

patient-centered care, ethical decision-making, legal considerations, practice management, documentation, and interprofessional collaboration. Workshops may include interactive sessions, role-playing, case studies, and discussions on professional standards and responsibilities.

New Second-Year Winter Totals - Lecture: 174 | Lab: 54 | Tutorial: 86 | Clinic: 22 | Total Hours: 336 | Credits: 24.83

Spring

#### CS 636 - Cardiology and Pulmonology

## Credit(s): 5.5

Cardiovascular disease is the leading cause of death in the United States; followed not far behind by chronic and infectious pulmonary disease. What role does naturopathic medicine have in the prevention and treatment of cardiovascular and pulmonary disease? In this course, we will develop the skills and knowledge to diagnose and treat acute and chronic cardiovascular and pulmonary conditions using nutrition, mind-body medicine, homeopathy, botanical medicine, and pharmacology.

Lecture: 66 | Total Hours: 66

#### CS 636T - Cardiology and Pulmonology Tutorial

## Credit(s): 2

In this case-based course, we will explore how to diagnose and treat acute and chronic cardiovascular and pulmonary conditions reviewed in Cardiology and Pulmonology. We will practice our history taking skills and refine critical thinking while developing differential diagnoses. We synthesize this information to develop treatment plans and determine appropriate referrals for patients. We will apply our skills and knowledge at the end of the term in the simulation lab. In this experiential learning activity, we will diagnose and treat acute cardiovascular and pulmonary complaints in standardized patients. Students are assessed via a Mini-Clinical Evaluation Exercise to ensure their competence prior to moving into their Core Clerkship Clinical Rotation.

Tutorial: 24 | Total Hours: 24

## CS 636L - Cardiology and Pulmonology Lab

## Credit(s): .5

How do cardiovascular and pulmonary physical examinations confirm our findings in history taking and support our working diagnosis in our patients? In this course, we will learn how pathology translates into abnormal physical exam findings including a review of cardiac murmurs, irregular heart rates and rhythms, and extra lung sounds. We learn how to use medical equipment to further examine heart and lung function such as electrocardiograms and spirometry. We will apply our skills and knowledge in the murmur lab where we will be auscultating guest patients with heart murmurs. This course complements the material learned in the Cardiology and Pulmonology Lecture and Tutorial courses.

Lab: 12 | Total Hours: 12

#### CS 633 - Metabolic and Endocrine

#### Credit(s): 4

Explore the intricacies of the body's inter- and intracellular messaging systems and how it regulates itself in this fascinating course. We will develop an in-depth understanding of the complex interactions of the body's hormonal system and metabolism, as well as the causes and effects of metabolic and hormonal imbalances. Foundational naturopathic modalities, skillful application of the naturopathic therapeutic order, and evidenceinformed approaches are presented to strengthen our skills in diagnosing and managing endocrine conditions in both a primary care setting as well as in an adjunctive role.

Lecture: 48 | Total Hours: 48

#### CS 633T - Metabolic and Endocrine Tutorial

## Credit(s): 2

Apply what you learn in Metabolism-Endocrinology lecture in this small group tutorial course focused on clinical cases to practice the diagnosis, treatment, and management of metabolic and endocrine conditions. Learn to apply the myriad of modalities available to naturopathic physicians: pharmacology, botanical medicine, nutrition, homeopathy, and lifestyle medicine. Develop an understanding of how to order and interpret labs and imaging, as well as when to refer to a specialist.

Tutorial: 24 | Total Hours: 24

#### BM 633 - Botanical Medicine III

#### Credit(s): 1.5

The Botanical Medicine sieres of courses explore the therapeutic use of botanical medicines in functional disorders and pathological conditions. Throughout this series, we will develop a robust materia medica, and understand how to blend traditional and evidence-based practices in botanical medicine in patient care. This third course focuses on the application of botanical medicines in metabolic, endocrine, cardiologic and pulmonary disorders.

Lecture: 18 | Total Hours: 18

#### PH 630 - Foundational Naturopathic Therapeutics III

#### Credit(s): 1.25

Homeopathy introduces students to the principles and practice of homeopathic medicine. Students learn about homeopathic remedies, potency selection, case taking, repertorization, and the principles of individualized treatment based on the law of similars.

Lecture: 15 | Total Hours: 15

#### CS 632 - Pharmacology III

#### Credit(s): 1.25

Pharmacology III advances students' knowledge on the medications used in cardiology, pulmonology, and endocrinology. Students will delve into cardiovascular drugs, pulmonary treatments, and metabolic and endocrine therapies that are critical for managing conditions such as heart disease, asthma, diabetes, and thyroid disorders. The curriculum promotes and integrative approach to drug use, ensuring students are prepared to select and manage therapies that optimize patient health outcomes while

considering potential drug interactions and side effects. The course aims to equip students with the skills necessary to implement effective, safe, and patient-specific pharmacological interventions in a holistic clinical framework.

Lecture: 15 | Total Hours: 15

#### **CS 634 - Clinical Nutrition III**

## **Credit(s): 1.5**

The Clinical Nutrition course series focuses on the role of nutrition in health promotion, disease prevention, and disease-specific therapeutic interventions. Both dietary patterns and nutraceutical supplementation are covered as elements of therapy. This third course focuses on nutritional strategies to treat metabolic, endocrine, cardiovascular, and pulmonary conditions. The role of diet in cardiovascular disease prevention and the treatment of metabolic syndrome and diabetes are strongly emphasized.

Lecture: 18 | Total Hours: 18

#### BM 634 - Healthcare Horizons Seminar Series II

#### Credit(s): .5

Seminars are interactive sessions where students discuss and analyze current topics, research findings, case studies, or ethical dilemmas related to healthcare practice, public health issues, or integrative medicine concepts.

Tutorial: 6 | Total Hours: 6

#### CS 635T - Clinical Reasoning III: Integration through Problem-Based Learning

#### Credit(s): 1.67

This course employs a problem-based learning model within small groups to enhance clinical reasoning and familiarity with medical evidence. Students engage in case studies that are intricately designed around key organ systems such as the cardiovascular, respiratory, and endocrine systems. Through collaborative discussion and active exploration, students address common healthcare challenges, integrating clinical science principles. The course emphasizes the development of critical clinical skills, including patient interviewing, physical examinations, clinical assessments, and medical charting. This dynamic, active learning environment equips students with the essential skills and attitudes needed to excel as medical professionals.

Tutorial: 20 | Total Hours: 20

#### CLS 639L - Physical Medicine Lab II: Advanced Physical Medicine Techniques

#### Credit(s): .5

In Physical Medicine Lab II, students learn and practice advanced physical medicine

techniques using specialized equipment and modalities. This lab may include training in therapeutic machines, electrotherapy, ultrasound therapy, and other physical modalities.

Lab: 12 | Total Hours: 12

#### **CLS 639T - Physical Medicine Tutorial: Exercise Prescription**

#### Credit(s): 2

Physical Medicine Lab III covers topics related to physical therapy principles, exercise prescription, rehabilitation protocols, and therapeutic interventions for musculoskeletal and neurological conditions. Students learn about patient assessment, treatment planning, and functional rehabilitation strategies.

Tutorial: 24 | Total Hours: 24

#### CS 637T - MSK Tutorial

Credit(s): 2

Tutorial: 24 | Total Hours: 24

**CLE 931 - OSCE I** 

Credit(s): 0

OSCE I is a structured clinical examination that assesses students' clinical skills, communication skills, history-taking abilities, physical examination techniques with a focus on musculoskeletal conditions, nutrition counseling, and patient interaction skills in simulated clinical scenarios. OSCE I is typically designed to evaluate clinical competencies necessary to start the required core clerkship clinical rotations. Successful completion of the OSCE I is required to begin the required core clerkship clinical rotations

#### **CE 600 - Clinic Observation Clerkship**

#### Credit(s): .42

The Clinic Observation Clerkship provides students with supervised observation experiences in clinical settings, allowing them to observe patient interactions, healthcare workflows, interprofessional collaboration, and clinical decision-making processes.

Clinic: 10 | Total Hours: 10

#### CE 500 - Hydrotherapy Clinical Rotation

#### **Credit(s): 2.5**

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.

#### **CLE 499 - NPLEX I Biomedical Sciences Review**

## Credit(s): 0

Prepare for the NPLEX I biomedical sciences exam in this comprehensive review course tailored for naturopathic medical students. Through simulated exams, you'll pinpoint your strengths and areas needing improvement in foundational sciences. This course provides structured content reviews in anatomy, physiology, biochemistry, microbiology, and pathology, ensuring a well-rounded preparation. You will develop a personalized study plan that aligns with your specific needs, enhancing your mastery of each subject

New Second-Year Spring Totals - Lecture: 180 | Lab: 24 | Tutorial: 122 | Clinic: 10 | Total Hours: 336 | Credits: 26.58

New Second-Year Totals - Lecture: 594 | Lab: 102 | Tutorial: 282 | Clinic: 42 | Total

Hours: 1020 | Credits: 79

Third Year

Summer

## **CE 500 - Hydrotherapy Clinical Rotation**

#### **Credit(s): 2.5**

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.

New Third-Year Summer Totals - Lecture: 0 | Lab: 0 | Tutorial: 0 | Clinic: 0 | Total Hours: 0 | Credits: 0

#### CS 710 - Gynecology and Andrology: Inclusive Sexual and Reproductive Health

## Credit(s): 5

This lecture course provides a comprehensive study of the female and male reproductive systems, including common and critical presenting conditions as well as infertility. We will explore presenting symptoms and diagnostics of these conditions in addition to treatment and management with evidence-based, naturopathic modalities. Supplementary topics such as cultural competency, ethics, evidence-informed practice, inter-professional practice, jurisprudence, and practitioner cultivation will be integrated throughout the course.

Lecture: 60 | Total Hours: 60

## CS 710T - Gynecology and Andrology: Inclusive Sexual and Reproductive Health Tutorial

## Credit(s): 2

Reproductive tutorial is a small group course utilizing clinical cases to clarify the diagnosis, treatment and management of gynecological, male reproductive and natural childbirth conditions. Various practical activities include case-taking, case analysis, laboratory interpretation, botanical formulations, nature cure treatment plans, homeopathic case-taking, and discussions of IUD insertion, and endometrial biopsy techniques. Students are assessed via a Mini-Clinical Evaluation Exercise to ensure their competence prior to moving into their Core Clerkship Clinical Rotation.

Tutorial: 24 | Total Hours: 24

#### CS 710L - Gynecology and Andrology: Inclusive Sexual and Reproductive Health Lab

## Credit(s): 1

The course provides an opportunity to learn and perform clinical breast/chest exams, pelvic exams, and male genital exams and various special procedures with standardized patients in the lab. We will also cultivate professionalism during exams and procedures.

Lab: 24 | Total Hours: 24

## CS 715 - Urology and Nephrology

## Credit(s): 4

The Urology and Nephrology course covers the anatomy, physiology, pathology, and clinical management of urinary and renal disorders. Topics include urological conditions, nephrological diseases, renal function tests, renal imaging, and therapeutic interventions.

Lecture: 48 | Total Hours: 48

## **CS 715T - Urology and Nephrology Tutorial**

#### Credit(s): 2

The Urology and Nephrology Tutorial supplements the main course with interactive discussions, case studies, and hands-on learning experiences related to urological and nephrological conditions. Students deepen their understanding of diagnostic approaches, treatment modalities, and patient management strategies.

Tutorial: 24 | Total Hours: 24

## CS 712 - Oncology Lecture

## Credit(s): 2

This course covers diagnostic, etiologic, prognostic, preventive, and epidemiologic information for cancers of common sites. Conventional, alternative and innovative approaches are discussed.

Lecture: 24 | Total Hours: 24

## **CS 712T - Oncology Tutorial**

#### Credit(s): 1

The Oncology Tutorial complements the oncology lecture with in-depth discussions, case presentations, and critical analysis of oncological cases. Students explore diagnostic workups, treatment options, multidisciplinary approaches, and ethical considerations in cancer care.

Tutorial: 12 | Total Hours: 12

#### CE 728 - Clinic Synthesis II

#### Credit(s): .5

Clinic Synthesis II focuses on integrating theoretical knowledge with clinical practice in the context of reproductive medicine, urology, nephrology, oncology, and related

specialties. Students develop clinical reasoning skills, patient management strategies, and interdisciplinary collaboration.

Clinic: 12 | Total Hours: 12

#### BM 714 - Healthcare Horizons Seminar Series III

#### Credit(s): .5

Seminars are interactive sessions where students discuss and analyze current topics, research findings, case studies, or ethical dilemmas related to healthcare practice, public health issues, or integrative medicine concepts.

Tutorial: 6 | Total Hours: 6

#### CS 716T - Clinical Reasoning IV: Integration through Problem-Based Learning

#### Credit(s): 1.67

This course employs a problem-based learning model within small groups to enhance clinical reasoning and familiarity with medical evidence. Students engage in case studies that are intricately designed around key organ systems such as the reproductive, urologic, and nephrologic systems as well as the study of oncology. Through collaborative discussion and active exploration, students address common healthcare challenges, integrating clinical science principles. The course emphasizes the development of critical clinical skills, including patient interviewing, physical examinations, clinical assessments, and medical charting. This dynamic, active learning environment equips students with the essential skills and attitudes needed to excel as medical professionals.

Tutorial: 20 | Total Hours: 20

#### BM 713 - Botanical Medicine IV

## **Credit(s): 1.5**

The Botanical Medicine series of courses explore the therapeutic use of botanical medicines in functional disorders and pathological conditions. Throughout this series, we will develop a robust materia medica, and understand how to blend traditional and evidence-based practices in botanical medicine in patient care. This fourth course focuses on the application of botanical medicines in urologic, nephrologic, and reproductive disorders, as well as the use of herbs as adjuncts in cancer therapy.

Lecture: 18 | Total Hours: 18

## PH 710 - Foundational Naturopathic Therapeutics IV

## Credit(s): 1.25

This series teaches the homeopathic materia medica and skills in the practice of

homeopathy including case taking, repertorization, potency selection, case magement and the principles of individualized treatment.

Lecture: 15 | Total Hours: 15

#### CS 713 - Pharmacology IV

## **Credit(s): 1.25**

Pharmacology IV enhances students' understanding of the pharmacological treatments within the specialties of reproductive health, urology, nephrology, and oncology. Students will gain an understanding of hormonal therapies, chemotherapeutic agents, and supportive care medications. The curriculum is designed to integrate these treatments effectively within both naturopathic and conventional frameworks, emphasizing the safe and effective mangement of medications. Key skills developed include optimizing drug regimens, recognizing and managing potential drug interactions, and minimizing adverse effects to improve patient care and therapeutic outcomes.

Lecture: 15 | Total Hours: 15

#### **CS 714 - Clinical Nutrition IV**

## **Credit(s): 1.5**

The Clinical Nutrition course series focuses on the role of nutrition in health promotion, disease prevention, and disease-specific therapeutic interventions. Both dietary patterns and nutraceutical supplementation are covered as elements of therapy. This fourth course focuses on nutritional strategies to treat reproductive, nephrological, and urololgical conditions, as well as nutritional strategies to support patients undergoing cancer treatment.

Lecture: 18 | Total Hours: 18

#### **CLE 7300 - Secondary Intern Rotation**

#### **Credit(s): 2.5**

Working under the supervision and mentorship of a licensed physician, secondary student interns at NUNM health centers will continue to develop comfort with patient care and develop professionalism through engaging with patient interactions through completion of three core clinical rotations. Required core clinical rotations emphasize the refinement of clinical skills, clinical reasoning and professional identity formation. A major focus is using the history and physical exam to gather information to generate a prioritized differential diagnosis and an evidence-based diagnostic and therapeutic plan. Each rotation includes an element designed to improve the student's capacity for interprofessional collaboration. Students rotate through three separate core clinical rotations prior to advancing in clinic to a primary medical intern and after successfully

completing their Objective Structured Clinical Examination (OSCE) II. The three core clinic rotations are: Primary Care, Nutritional Counseling, and Musculoskeletal Diagnosis and Physical Medicine Management.

Clinic: 60 | Total Hours: 60

New Third-Year Fall Totals - Lecture: 210 | Lab: 24 | Tutorial: 86 | Clinic: 72 | Total Hours: 392 | Credits: 28.67

Winter

#### CS 720 - Mind, Brain, and Behavior

## Credit(s): 3

Mind, Brain, and Behavior delves into the neurobiological and psychological aspects of mental health and behavior. Topics include brain anatomy and function, neurotransmitter systems, mental health disorders, psychological theories, behavioral interventions, and psychopharmacology.

Lecture: 36 | Total Hours: 36

#### CS 720T - Mind, Brain, and Behavior Tutortial

## Credit(s): 2

The Tutorial component complements the main course with interactive discussions, case studies, and hands-on learning experiences related to mental health, neurobiology, and behavioral psychology. It may include Mini-Clinical Evaluation Exercises (Mini-CEX) to assess students' clinical skills in mental health assessments and interventions.

Tutorial: 24 | Total Hours: 24

## CS 723 - Addiction Medicine

#### Credit(s): 1

The Addiction Medicine Seminar focuses on understanding addiction as a complex medical and behavioral disorder. Topics include substance use disorders, addiction physiology, pharmacological treatments, behavioral therapies, relapse prevention, and harm reduction strategies.

Lecture: 12 | Total Hours: 12

#### CS 725 - Pain Management

#### Credit(s): 2

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

Lecture: 24 | Total Hours: 24

#### CS 726 - Neurology

## Credit(s): 4

This course covers the basic neurological exam, diagnosis, management, and naturopathic and conventional treatment of nervous system diseases. Appropriate collaboration with specialists is stressed.

Lecture: 48 | Total Hours: 48

## **CS 726T - Neurology Tutorial**

## Credit(s): 2

The Neurology Tutorial supplements the main neurology course with in-depth discussions, case studies, and practical exercises related to neurological conditions. Students deepen their understanding of neurological assessments, differential diagnoses, treatment plans, and neurological rehabilitation.

Tutorial: 24 | Total Hours: 24

#### CS 726L - Neurology Lab

#### Credit(s): .25

In the Neurology Lab, students engage in hands-on training and diagnostic procedures related to neurological assessments, neurological examinations, neuroimaging interpretation, electrophysiological studies, and neuromuscular assessments under supervision.

Lab: 6 | Total Hours: 6

#### BM 720 - Business I

## Credit(s): 2

Business I covers fundamental principles of business management, healthcare economics, practice management, healthcare ethics, legal considerations, healthcare policy, and professional development in healthcare settings.

Lecture: 24 | Total Hours: 24

#### CLE 939 - OSCE II

## Credit(s): 0

OSCE II is a structured clinical examination that assesses students' clinical skills, communication skills, history-taking abilities, physical examination techniques, and patient interaction skills in simulated clinical scenarios. OSCE II is typically designed to evaluate clinical competencies necessary to become a primary medical intern. Successful completion of the OSCE II is required to become a primary medical intern.

## CS 725T - Clinical Reasoning V: Integration through Problem-Based Learning

## Credit(s): 1.67

This course employs a problem-based learning model within small groups to enhance clinical reasoning and familiarity with medical evidence. Students engage in case studies that are intricately designed around key organ systems such as the neurologic system as well as integration with psychiatric concerns, pain management, and addiction medicine. Through collaborative discussion and active exploration, students address common healthcare challenges, integrating clinical science principles. The course emphasizes the development of critical clinical skills, including patient interviewing, physical examinations, clinical assessments, and medical charting. This dynamic, active learning environment equips students with the essential skills and attitudes needed to excel as medical professionals.

Tutorial: 10 | Total Hours: 10

#### BM 723 - Botanical Medicine V

#### **Credit(s): 1.5**

The Botanical Medicine series of courses explore the therapeutic use of botanical medicines in functional disorders and pathological conditions. Throughout this series, we will develop a robust materia medica, and understand how to blend traditional and evidence-based practices in botanical medicine in patient care. This fifth course focuses on the effects of herbal medicines on the nervous system and how they are applied in mental health, addiction, chronic pain, and neurological disorders.

Lecture: 18 | Total Hours: 18

## PH 720 - Foundational Naturopathic Therapeutics V

## Credit(s): 1.25

Homeopathy introduces students to the principles and practice of homeopathic medicine. Students learn about homeopathic remedies, potency selection, case taking, repertorization, and the principles of individualized treatment based on the law of similars.

Lecture: 15 | Total Hours: 15

## CS 722 - Pharmacology V

## Credit(s): 1.25

Pharmacology V focuses on the pharmacological aspects of neurological, psychiatric, and pain management, integrating medications used in treating brain and behavior disorders, addiction, and chronic pain conditions. Students will gain insights into the use of psychotropic drugs, neurotherapeutics, analgesics, and addiction treatment medications. The curriculum emphasizes a holistic approach to selecting and administering these drugs, aiming to maximize therapeutic benefits while minimizing side effects and interactions. Students will learn to tailor drug therapies to individual needs, using evidence-based practices to enhance outcomes in mental health, neurology, and pain management scenarios. An emphasis is given on the safe and effective use and management of controlled substances.

Lecture: 15 | Total Hours: 15

#### CS 724 - Clinical Nutrition V

## Credit(s): 1.5

The Clinical Nutrition course series focuses on the role of nutrition in health promotion, disease prevention, and disease-specific therapeutic interventions. Both dietary patterns and nutraceutical supplementation are covered as elements of therapy. This fifth course focuses on the role of nutritional medicine in psychiatric and neurological conditions. The gut brain axis is emphasized as an avenue for applying nutritional concepts in a holistic paradigm.

Lecture: 18 | Total Hours: 18

#### CLE 7300 - Secondary Intern Rotation

#### **Credit(s): 2.5**

Working under the supervision and mentorship of a licensed physician, secondary student interns at NUNM health centers will continue to develop comfort with patient

care and develop professionalism through engaging with patient interactions through completion of three core clinical rotations. Required core clinical rotations emphasize the refinement of clinical skills, clinical reasoning and professional identity formation. A major focus is using the history and physical exam to gather information to generate a prioritized differential diagnosis and an evidence-based diagnostic and therapeutic plan. Each rotation includes an element designed to improve the student's capacity for interprofessional collaboration. Students rotate through three separate core clinical rotations prior to advancing in clinic to a primary medical intern and after successfully completing their Objective Structured Clinical Examination (OSCE) II. The three core clinic rotations are: Primary Care, Nutritional Counseling, and Musculoskeletal Diagnosis and Physical Medicine Management.

Clinic: 60 | Total Hours: 60

New Third-Year Winter Totals - Lecture: 222 | Lab: 6 | Tutorial: 68 | Clinic: 60 | Total Hours: 356 | Credits: 26.92

Spring

#### **CS 731 - HEENT**

## Credit(s): 3

Upon completion of this course, students will have the skills required for diagnosing, treating, and referring common and dangerous ophthalmologic and otolaryngeal problems. Emphasis is placed on integrating naturopathic therapeutics as they are informed by naturopathic philosophy and evidence-based medicine.

Lecture: 36 | Total Hours: 36

#### **CS 731T - HEENT Tutorial**

#### Credit(s): 2

The HEENT Tutorial supplements the main course with interactive discussions, case studies, and practical exercises related to head, eyes, ears, nose, and throat assessments. It may include a laboratory component for hands-on training and MiniClinical Evaluation Exercises (Mini-CEX) to assess clinical skills

Tutorial: 24 | Total Hours: 24

#### CS 733 - Pediatrics

## Credit(s): 2.67

Pediatrics focuses on the healthcare needs, developmental milestones, common diseases, and management strategies for pediatric populations. Topics include growth and development, immunizations, and pediatric diseases.

Lecture: 32 | Total Hours: 32

#### **CS 733T - Pediatrics Tutorial**

## **Credit(s): 1.33**

The Pediatrics Tutorial complements the main course with discussions, case studies, and practical sessions related to pediatric healthcare. Students explore agespecific assessments, preventive care, family dynamics, caregiver roles, and ethical considerations.

Tutorial: 16 | Total Hours: 16

## CS 735 - Geriatrics

#### Credit(s): 1.33

Geriatrics focuses on the healthcare needs, common diseases, and management strategies for the geriatric population. Topics include immunizations, age-related changes, geriatric syndromes, and healthcare for older adults.

Lecture: 16 | Total Hours: 16

#### **CS 735T - Geriatrics Tutorial**

## Credit(s): .67

The Geriatrics Tutorial complements the main course with discussions, case studies, and practical sessions related to geriatric healthcare. Students explore agespecific assessments, preventive care, caregiver roles, and ethical considerations.

Tutorial: 8 | Total Hours: 8

#### CS 736 - Environmental Medicine

## Credit(s): 2

This course focuses on the health effects of pollutants in the environment and in the workplace. Students are taught how chemical substances and radiation affect the human organism and how to diagnose and treat the disease conditions that occur from environmental exposures.

Lecture: 24 | Total Hours: 24

#### **CS 736T - Environmental Medicine Tutorial**

#### Credit(s): 1

The Environmental Medicine Tutorial provides additional insights into environmental health issues, risk assessments, exposure assessments, environmental interventions, and advocacy strategies related to environmental health policies and practices.

Tutorial: 12 | Total Hours: 12

## CS 737 - Parenteral Therapy

#### Credit(s): 2

Parenteral Therapy covers the principles and practices of administering medications and fluids via parenteral routes, including intravenous (IV) therapy. Topics include IV catheter insertion, IV medication administration, IV fluid management, infusion pumps, and complications of parenteral therapy.

Tutorial: 24 | Total Hours: 24

#### BM 734 - Social Determinants of Health Workshop #2

## Credit(s): .5

The Social Determinants of Health Workshop #2 focuses on advanced professional skills, including practice

management, financial management, healthcare marketing, professional ethics, legal considerations, leadership development, and strategies for establishing and managing healthcare practices.

Tutorial: 6 | Total Hours: 6

## CS 738T - Clinical Reasoning VI: Integration through Problem-Based Learning

## Credit(s): 1.67

This course employs a problem-based learning model within small groups to enhance clinical reasoning and familiarity with medical evidence. Students engage in case studies that are intricately designed around key organ systems such as the HEENT system, specialized populations of pediatrics and geriatrics, and integrating environmental medicine and parenteral therapy. Through collaborative discussion and active exploration, students address common healthcare challenges, integrating clinical science principles. The course emphasizes the development of critical clinical skills, including patient interviewing, physical examinations, clinical assessments, and medical charting. This dynamic, active learning environment equips students with the essential skills and attitudes needed to excel as medical professionals.

Tutorial: 20 | Total Hours: 20

#### BM 733 - Botanical Medicine VI

#### **Credit(s): 1.5**

The Botanical Medicine series of courses explore the therapeutic use of botanical medicines in functional disorders and pathological conditions. Throughout this series, we will develop a robust materia medica, and understand how to blend traditional and evidence-based practices in botanical medicine in patient care. This sixth course focuses on the application of botanical medicines in conditions of the eyes, ears, nose, and throat, as well as the use of herbs in augmenting biotransformation and elimination of wastes. An additional focus on the use of herbs in geriatric and pediatric populations is also covered.

Lecture: 18 | Total Hours: 18

#### PH 730 - Foundational Naturopathic Thearpeutics VI

#### Credit(s): 1.25

This series teaches the homeopathic materia medica and skills in the practice of homeopathy including case taking, repertorization, potency selection, case magement and the principles of individualized treatment.

Lecture: 15 | Total Hours: 15

## CS 732 - Pharmacology VI

#### Credit(s): 1.25

The final course of the pharmacology series focuses on medications relevant to HEENT disorders, as well as those pertinent to pediatric, geriatric, and environmental health issues. Students will explore pharmacological treatments for a broad range of conditions

affecting diverse age groups, including those caused by allergens and environmental pollutants. The curriculum emphasizes careful selection and management of therapies to address the unique physiological considerations of children and the elderly. Through this course, students will enhance their ability to devise safe, effective, and personalized medication plans that integrate naturopathic and conventional approaches, optimizing health outcomes across the lifespan and within various environmental contexts.

Lecture: 15 | Total Hours: 15

#### CS 734 - Clinical Nutrition VI

## **Credit(s): 1.5**

The Clinical Nutrition course series focuses on the role of nutrition in health promotion, disease prevention, and disease-specific therapeutic interventions. Both dietary patterns and nutraceutical supplementation are covered as elements of therapy. This sixth course focuses on the role of nutritional medicine in conditions of the eyes, ears, nose and throat. There is an additional focus on nutritional considerations in pediatric and geriatric populations.

Lecture: 18 | Total Hours: 18

#### **CLE 7300 - Secondary Intern Rotation**

## **Credit(s): 2.5**

Working under the supervision and mentorship of a licensed physician, secondary student interns at NUNM health centers will continue to develop comfort with patient care and develop professionalism through engaging with patient interactions through completion of three core clinical rotations. Required core clinical rotations emphasize the refinement of clinical skills, clinical reasoning and professional identity formation. A major focus is using the history and physical exam to gather information to generate a prioritized differential diagnosis and an evidence-based diagnostic and therapeutic plan. Each rotation includes an element designed to improve the student's capacity for interprofessional collaboration. Students rotate through three separate core clinical rotations prior to advancing in clinic to a primary medical intern and after successfully completing their Objective Structured Clinical Examination (OSCE) II. The three core clinic rotations are: Primary Care, Nutritional Counseling, and Musculoskeletal Diagnosis and Physical Medicine Management.

Clinic: 60 | Total Hours: 60

New Third-Year Spring Totals - Lecture: 174 | Lab: 0 | Tutorial: 110 | Clinic: 60 | Total

Hours: 344 | Credits: 26.17

New Third-Year Totals - Lecture: 606 | Lab: 30 | Tutorial: 264 | Clinic: 192 | Total

Hours: 1092 | Credits: 81.75

#### Fourth Year

Summer

## 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: 156 | Total Hours: 156

## **CLE 8400 - Primary Intern Rotations**

Credit(s): 7.5

Under the supervision and mentorship of a licensed physician, primary interns complete 13 rotations in either primary or specialty care within the NUNM network of clinics. During each rotation, students build proficiency in medical decision making through the practice of clinical skills including the medical interview, physical exams and laboratory diagnosis. Guided by naturopathic philosophy, principles, and the therapeutic order students provide patient-centered care to a diverse patient population, Specialty shifts include minor surgery, physical medicine, gender affirming health, IV therapy, women's health, community medicine and pain management.

Clinic: 180 | Total Hours: 180

## **BUS 8400 - Jurisprudence**

#### Credit(s): 1

This course surveys medical healthcare law as it applies to naturopathic physicians. This includes licensing and regulation, reporting, informed consent, confidentiality, advance directives, HIPAA, malpractice and provider services agreements

Lecture: 12 | Total Hours: 12

#### CS 800 - Emergency Medicine: Acute Care in Real-World Scenarios

#### Credit(s): 1

This course equips students with the essential knowledge and skills required to recognize

and manage sudden, severe illnesses and traumatic injuries in nonclinical settings. Using simulation labs, problem-based learning, and skills practice, it covers the fundamentals of first aid safety, triage, victim assessment, and basic life support, including healthcare provider-level CPR. Students will learn to identify emergency signs and symptoms across various organ systems. The curriculum integrates Good Samaritan Laws, allopathic treatments, and naturopathic approaches to acute care, ensuring a comprehensive understanding of both conventional and complementary medical practices in emergency situations.

Tutorial: 12 | Total Hours: 12

New Fourth-Year Summer Totals - Lecture: 48 | Lab: 0 | Tutorial: 12 | Clinic: 336 | Total

Hours: 396 | Credits: 13.50

Fall

#### CE 811 - Grand Rounds I

## Credit(s): 1.25

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: 15 | Total Hours: 15

#### CE 818 - Clinic Synthesis III

#### Credit(s): .5

Clinic Synthesis III builds upon previous clinical experiences and integrates theoretical knowledge with advanced clinical practice in diverse healthcare settings. Students further develop clinical reasoning, patient management skills, interprofessional collaboration, and continuity of care within a supervised clinical environment.

Clinic: 12 | Total Hours: 12

#### **CLE 8400 - Primary Intern Rotations**

#### **Credit(s): 7.5**

Under the supervision and mentorship of a licensed physician, primary interns complete 13 rotations in either primary or specialty care within the NUNM network of clinics. During each rotation, students build proficiency in medical decision making through the

practice of clinical skills including the medical interview, physical exams and laboratory diagnosis. Guided by naturopathic philosophy, principles, and the therapeutic order students provide patient-centered care to a diverse patient population, Specialty shifts include minor surgery, physical medicine, gender affirming health, IV therapy, women's health, community medicine and pain management.

Clinic: 180 | Total Hours: 180

#### BM 716 - Holism in Practice I

#### Credit(s): 1.25

With an aim to synthesize the information learned in the clinical medicine and therapeutic modalities courses, the Holism in Practice series utilizes a case-based learning model to demonstrate how the naturopathic philosophical framework and core therapeutics are applied in practice. Students are presented with complex cases where they will pull upon their biomedical knowledge, but must also consider physical, mental, emotional, social, and spiritual aspects of health and well-being. Students will be challenged to utilize the full range of therapeutic skills to create comprehensive, yet practical, holistic treatment plans. Successful implementation of care, as well as therapy selection are emphasized in each case.

Tutorial: 15 | Total Hours: 15

#### BM 715 - Business II

#### Credit(s): 2

Business II expands on foundational business concepts and focuses on advanced topics related to healthcare management and entrepreneurship. Topics may include healthcare finance, strategic planning, marketing strategies, healthcare policy analysis, quality improvement initiatives, risk management, leadership development, and innovation in healthcare delivery models.

Lecture: 24 | Total Hours: 24

#### **CE 812 - Case Integration Mentorship I**

## **Credit(s): 1.25**

The purpose of this 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. This series of courses emphasizes skills in navigating medicine considering social, ethical, and legal aspects. This course design, including group process and mentorship, fosters professional growth, clinical competence, and reflective pratice.

Tutorial: 15 | Total Hours: 15

New Fourth-Year Fall Totals - Lecture: 75 | Lab: 0 | Tutorial: 30 | Clinic: 192 | Total Hours:

297 | Credits: 16.8

Winter

#### CE 822 - Grand Rounds II

Credit(s): 1.25

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: 15 | Total Hours: 15

#### CLE 933 - OSCE III

#### Credit(s): 0

OSCE III is a structured clinical examination that assesses students' clinical skills, communication skills, procedural skills, history-taking abilities, physical examination techniques, and patient interaction skills in simulated clinical scenarios. OSCE III is typically designed to evaluate advanced clinical competencies, specialty-specific skills, and readiness for clinical practice in specific healthcare disciplines or subspecialties. Successful completion of the OSCE III is required for graduation.

#### **CLE 8400 - Primary Intern Rotations**

#### **Credit(s): 7.5**

Under the supervision and mentorship of a licensed physician, primary interns complete 13 rotations in either primary or specialty care within the NUNM network of clinics. During each rotation, students build proficiency in medical decision making through the practice of clinical skills including the medical interview, physical exams and laboratory diagnosis. Guided by naturopathic philosophy, principles, and the therapeutic order students provide patient-centered care to a diverse patient population, Specialty shifts include minor surgery, physical medicine, gender affirming health, IV therapy, women's health, community medicine and pain management.

Clinic: 180 | Total Hours: 180

#### BM 724 - Holism in Practice II

## Credit(s): 1.25

With an aim to synthesize the information learned in the clinical medicine and therapeutic modalities courses, the Holism in Practice series utilizes a case-based learning model to demonstrate how the naturopathic philosophical framework and core therapeutics are applied in practice. Students are presented with complex cases where they will pull upon their biomedical knowledge, but must also consider physical, mental, emotional, social, and spiritual aspects of health and well-being. Students will be challenged to utilize the full range of therapeutic skills to create comprehensive, yet practical, holistic treatment plans. Successful implementation of care, as well as therapy selection are emphasized in each case.

Tutorial: 15 | Total Hours: 15

## CE 823 - Case Integration Mentorship II

## Credit(s): 1.25

The purpose of this 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. This series of courses emphasizes skills in navigating medicine considering social, ethical, and legal aspects. This course design, including group process and mentorship, fosters professional growth, clinical competence, and reflective practice.

Tutorial: 15 | Total Hours: 15

## BM 725 - Business III

## Credit(s): 1.5

Business III is an advanced course that focuses on strategic management and leadership in healthcare settings. Topics include healthcare economics, financial management, healthcare policy analysis, regulatory compliance, risk management, quality improvement strategies, leadership styles, organizational behavior, change management, and innovation in healthcare delivery models. Students engage in case studies, projects, and discussions to develop strategic thinking, decision-making skills, and leadership competencies relevant to healthcare management and administration.

Lecture: 18 | Total Hours: 18

New Fourth-Year Winter Totals - Lecture: 81 | Lab: 0 | Tutorial: 30 | Clinic: 180 | Total

Hours: 291 | Credits: 16.75

## Spring

#### CE 832 - Grand Rounds III

## Credit(s): 1.25

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: 15 | Total Hours: 15

## **CLE 8400 - Primary Intern Rotations**

#### **Credit(s): 7.5**

Under the supervision and mentorship of a licensed physician, primary interns complete 13 rotations in either primary or specialty care within the NUNM network of clinics. During each rotation, students build proficiency in medical decision making through the practice of clinical skills including the medical interview, physical exams and laboratory diagnosis. Guided by naturopathic philosophy, principles, and the therapeutic order students provide patient-centered care to a diverse patient population, Specialty shifts include minor surgery, physical medicine, gender affirming health, IV therapy, women's health, community medicine and pain management.

Clinic: 240 | Total Hours: 240

#### BM 734 - Holism in Practice III

#### Credit(s): 1.25

With an aim to synthesize the information learned in the clinical medicine and therapeutic modalities courses, the Holism in Practice series utilizes a case-based learning model to demonstrate how the naturopathic philosophical framework and core therapeutics are applied in practice. Students are presented with complex cases where they will pull upon their biomedical knowledge, but must also consider physical, mental, emotional, social, and spiritual aspects of health and well-being. Students will be challenged to utilize the full range of therapeutic skills to create comprehensive, yet practical, holistic treatment plans. Successful implementation of care, as well as therapy selection are emphasized in each case.

Tutorial: 15 | Total Hours: 15

## **CE 833 - Case Integration Mentorship III**

## Credit(s): 1.25

The purpose of this 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. This series of courses emphasizes skills in navigating medicine considering social, ethical, and legal aspects. This course design, including group process and mentorship, fosters professional growth, clinical competence, and reflective practice.

Tutorial: 15 | Total Hours: 15

New Fourth-Year Spring Totals - Lecture: 51 | Lab: 0 | Tutorial: 30 | Clinic: 240 | Total

Hours: 321 | Credits: 16.8

New Fourth-Year Totals - Lecture: 255 | Lab: 0 | Tutorial: 102 | Clinic: 948 | Total

Hours: 1305 | Credits: 63.8

New Curriculum Totals - Lecture: 2067 | Lab: 216 | Tutorial: 885 | Clinic:

1254 | Total Hours: 4422 | Credits: 301.75

## ND Four-Year Curriculum- Prior to Fall 2024

## First Year

#### Fall

- BAS 5110 Structure and Function I Credit(s): 12.00
- Lecture: 144 | Total Hours: 144
- BAS 5110T Structure and Function I Tutorial Credit(s): 1.83
- Tutorial: 22 | Total Hours: 22
- BAS 5110L Structure and Function I Lab Credit(s): 0.33
- Lab: 8 | Total Hours: 8
- BAS 5111 Clinical Anatomy I Credit(s): 3.00
- Lecture: 36 | Total Hours: 36
- BAS 5111T Clinical Anatomy I Tutorial Credit(s): 1.00
- Tutorial: 12 | Total Hours: 12
- BAS 5111L Clinical Anatomy I Lab Credit(s): 1.50
- Lab: 36 | Total Hours: 36
- <u>CLE 5110 Clinical Education I Credit(s): 1.25</u>
- Clinic: 10 | Lecture: 10 | Total Hours: 20
- CLE 5110T Clinical Education I Tutorial Credit(s): 1.83
- Tutorial: 22 | Total Hours: 22
- PHL 5110 Naturopathic History and Philosophy I Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- PHL 5113 Introduction to Medical Systems Credit(s): 2.00
- 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
- Lecture: 96 | Total Hours: 96
- BAS 5120T Structure and Function II Tutorial Credit(s): 1.38
- Tutorial: 16.50 | Total Hours: 16.50
- BAS 5120L Structure and Function II Lab Credit(s): 0.33
- Lab: 8 | Total Hours: 8
- BAS 5121 Clinical Anatomy II Credit(s): 3.00
- Lecture: 36 | Total Hours: 36
- BAS 5121T Clinical Anatomy II Tutorial Credit(s): 1.00
- Tutorial: 12 | Total Hours: 12
- BAS 5121L Clinical Anatomy II Lab Credit(s): 1.50
- Lab: 36 | Total Hours: 36
- CLE 5121 Clinical Education II Credit(s): 1.25
- Clinic: 10 | Lecture: 10 | Total Hours: 20

- <u>CLE 5121T Clinical Education II Tutorial</u> **Credit(s): 1.83**
- Tutorial: 22 | Total Hours: 22
- PHL 5120 Naturopathic History and Philosophy II Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- THR 5120 Therapeutic Modalities I Credit(s): 6.00
- Lecture: 72 | Total Hours: 72
- THR 5120T Therapeutic Modalities I Tutorial Credit(s): 2.00
- Tutorial: 24 | Total Hours: 24
- THR 5120L Therapeutic Modalities I Lab Credit(s): 1.00
- 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: 390.5 | Credits: 29.29

## **Spring**

- BAS 5130 Structure and Function III Credit(s): 8.00
- Lecture: 96 | Total Hours: 96
- BAS 5130T Structure and Function III Tutorial Credit(s): 0.50
- Tutorial: 6 | Total Hours: 6
- BAS 5131 Microbiology, Public Health and Immunology Credit(s): 3.00
- Lecture: 36 | Total Hours: 36
- BAS 5131T Microbiology, Public Health and Immunology Tutorial Credit(s): 2.00
- Tutorial: 24 | Total Hours: 24
- CLE 5132 Clinical Education III Credit(s): 1.08
- Clinic: 10 | Lecture: 8 | Total Hours: 18
- <u>CLE 5132T Clinic Education III Tutorial</u> **Credit(s): 1.83**
- Tutorial: 22 | Total Hours: 22
- PHL 5130 Naturopathic Medicine Retreat Credit(s): 0.75
- Lab: 18 | Total Hours: 18
- HOM 5131 Intro to Homeopathy Credit(s): 2
- Lecture: 24 | Total Hours: 24
- HOM 5131T Intro to Homeopathy Tutorial Credit(s): 0.67
- Tutorial: 8 | Total Hours: 8
- THR 5131 Therapeutic Modalities II Credit(s): 4
- Lecture: 48 | Total Hours: 48
- THR 5131T Therapeutic Modalities II Tutorial Credit(s): 1.33
- Tutorial: 16 | Total Hours: 16
- THR 5131L Therapeutic Modalities II Lab Credit(s): 0.50
- 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: 1078.5 | Credits: 82.71** 

## **Second Year**

## Fall

- CLS 6210 Musculoskeletal Credit(s): 9.00
- Lecture: 108 | Total Hours: 108
- <u>CLS 6210T Musculoskeletal Tutorial</u> **Credit(s): 6.00**
- Tutorial: 72 | Total Hours: 72
- CLS 6210L Musculoskeletal Lab Credit(s): 3.00
- Lab: 72 | Total Hours: 72
- CLS 6211 Neurology **Credit(s): 5.50**
- Lecture: 66 | Total Hours: 66
- CLS 6211T Neurology Tutorial Credit(s): 1.50
- Tutorial: 18 | Total Hours: 18
- CLS 6211L Neurology Lab Credit(s): 0.25
- 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
- Lecture: 108 | Total Hours: 108
- CLS 6220T Cardiology and Pulmonology Tutorial Credit(s): 4.00
- Tutorial: 48 | Total Hours: 48
- CLS 6220L Cardiology and Pulmonology Lab Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CLS 6221 Hematology and Oncology Credit(s): 6.50
- Lecture: 78 | Total Hours: 78
- CLS 6221T Hematology and Oncology Tutorial Credit(s): 1.50
- Tutorial: 18 | Total Hours: 18
- CLS 6221L Hematology and Oncology Lab Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CLE 6222 Hydrotherapy Rotation Credit(s): 2.00
- 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
- Lecture: 102 | Total Hours: 102
- CLS 6230T Gastroenterology and Proctology Tutorial Credit(s): 2.00
- Tutorial: 24 | Total Hours: 24
- CLS 6230L Gastroenterology and Proctology Lab Credit(s): 0.25

- Lab: 6 | Total Hours: 6
- CLS 6231 Urology and Nephrology Credit(s): 5.50
- Lecture: 66 | Total Hours: 66
- CLS 6231T Urology and Nephrology Tutorial Credit(s): 3.00
- Tutorial: 36 | Total Hours: 36
- CLS 6232 Metabolism and Endocrinology Credit(s): 7.00
- Lecture: 84 | Total Hours: 84
- CLS 6232T Metabolism and Endocrinology Tutorial Credit(s): 3.00
- Tutorial: 36 | Total Hours: 36
- CLE 6212 Introduction to Clinic Credit(s): 0.25
- Lecture: 3 | Total Hours: 3
- CLE 931 Objective Structured Clinical Examination 1 Credit(s): None

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
- Lecture: 132 | Total Hours: 132
- CLS 7310T Reproductive Systems Tutorial (Andrology, Gynecology and Natural Childbirth) Credit(s): 3.00
- Tutorial: 36 | Total Hours: 36
- CLS 7310L Reproductive Systems Lab (Andrology, Gynecology and Natural Childbirth) Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CLS 7311 Rheumatology and Clinical Immunology Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CLS 7311T Rheumatology and Clinical Immunology Tutorial Credit(s): 2.00
- Tutorial: 24 | Total Hours: 24
- CLE 7300 Secondary Rotation Credit(s): 2.50
- Clinic: 60 | Total Hours: 60
- CLE 7311 Community Engagement and Service Learning Credit(s): 2.00
- 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

- Lecture: 60 | Total Hours: 60
- CLS 7320T Eyes, Ears, Nose and Throat (EENT) Tutorial Credit(s): 2.00
- Tutorial: 24 | Total Hours: 24
- CLS 7320L Eyes, Ears, Nose and Throat (EENT) Lab Credit(s): 0.25
- Lab: 6 | Total Hours: 6
- CLS 7321 Dermatology and Minor Surgery Credit(s): 7.50
- Lecture: 90 | Total Hours: 90
- CLS 7321T Dermatology and Minor Surgery Tutorial Credit(s): 2.00
- Tutorial: 24 | Total Hours: 24
- CLS 7321L Dermatology and Minor Surgery Lab Credit(s): 1.00
- Lab: 24 | Total Hours: 24
- BUS 8421 Business II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CLE 7300 Secondary Rotation Credit(s): 2.50
- Clinic: 60 | Total Hours: 60
- CLE 932 Objective Structured Clinical Examination 2 Credit(s): None

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
- Lecture: 48 | Total Hours: 48
- CLS 7332T Psychology and Mental Health Tutorial Credit(s): 3.00
- Tutorial: 36 | Total Hours: 36
- CLS 7330 Pediatrics and Geriatrics Credit(s): 6.00
- Lecture: 72 | Total Hours: 72
- CLS 7330T Pediatrics and Geriatrics Tutorial Credit(s): 2.00
- Tutorial: 24 | Total Hours: 24
- CLS 7331 Parenteral Therapy and Environmental Medicine Credit(s): 3.50
- Lecture: 42 | Total Hours: 42
- <u>CLS 7331T Parenteral Therapy and Environmental Medicine</u> <u>Tutorial</u> **Credit(s): 2.00**
- Tutorial: 24 | Total Hours: 24
- CLS 7331L Parenteral Therapy and Environmental Medicine
  Lab Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CLE 7300 Secondary Rotation Credit(s): 2.50
- 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

- <u>CLE 8400 Primary Rotations</u> **Credit(s): 2.50 credits each** (3 rotations)
- Clinic: 180 | Total Hours: 180
- BUS 8400 Jurisprudence Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CLE 8400T Case Integration Mentorship Tutorial I Credit(s): 1.50
- Tutorial: 18 | Total Hours: 18
- <u>CLE 8401 Community Experience (ComEx)</u>

Preceptorship Credit(s): 5.00 \*\*\*

- Clinic: 120 | Total Hours: 120
- Electives **Credit(s)**: 3.00 \*

Lecture: 36 | Total Hours: 36

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

## Fall

- <u>CLE 8400 Primary Rotations</u> **Credit(s): 2.50 credits each** (3 rotations)
- Clinic: 180 | Total Hours: 180
- <u>CLE 8411 Grand Rounds</u> **Credit(s): 1.50**
- Lecture: 18 | Total Hours: 18
- <u>BUS 7321 Business I</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CLE 8410T Case Integration Mentorship Tutorial II Credit(s): 1.50
- 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: 15.50

## Winter

- CLE 8400 Primary Rotations Credit(s): 2.50 credits each (3 rotations)
- Clinic: 180 | Total Hours: 180
- CLE 8421 Grand Rounds Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CLE 8420T Case Integration Mentorship Tutorial III Credit(s): 1.50
- Tutorial: 18 | Total Hours: 18
- BUS 8430 Business III Credit(s): 1.50
- Lecture: 18 | Total Hours: 18

- Electives **Credit(s): 4.00** \* Lecture: 48 | Total Hours: 48
- <u>CLE 933 Objective Structured Clinical Examination 3</u> **Credit(s): None**

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

## **Spring**

- <u>CLE 8400 Primary Rotations</u> Credit(s): 2.50 credits each (4 rotations) \*\*
- Clinic: 240 | Total Hours: 240
- <u>CLE 8431 Grand Rounds</u> **Credit(s): 1.50**
- Lecture: 18 | Total Hours: 18
- CLE 8430T Case Integration Mentorship Tutorial IV Credit(s): 1.50
- Tutorial: 18 | Total Hours: 18
- <u>CLE 8432 Community Experience (ComEx)</u>

Preceptorship Credit(s): 4.00 \*\*\*

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

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

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

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

## ND Four-Year Course Descriptions- Prior to Fall 2024

First Year

Fall

#### BAS 5110 - Structure and Function I

Credit(s): 12.00

The structure and function of the human body at its many levels of organization, from molecule to organism. In this first course of a three-part series, we will learn about basic tissue types, as well as the biochemistry, cellular physiology, and development of several organ systems: the skin, the nervous system, the musculoskeletal system, the cardiovascular system, and the respiratory system. The principles of homeostasis will be explored, with an understanding that the interactions between organ systems are fundamental to the maintenance of health and the development of disease. *Corequisite(s): BAS 5110T, BAS 5110L*.

Lecture: 144 | Total Hours: 144

#### BAS 5110T - Structure and Function I Tutorial

**Credit(s): 1.83** 

This course explores clinical applications of the basic sciences of anatomy, physiology and biochemistry. We will begin the process of learning the language of medicine as well as the art of medicine, using critical thinking skills and scientific literature to explore clinical cases. The knowledge gained from this course will enhance studies in Clinical Anatomy I, Structure and Function Lecture I and Structure and Function Lab I. *Corequisite(s): BAS 5110, BAS 5110L.* 

Tutorial: 22 | Total Hours: 22

#### BAS 5110L - Structure and Function I Lab

Credit(s): 0.33

Explore the structure and correlating function of the human body at the cellular and subcellular levels using light microscopy and other specialized microscopic methods. We will learn how groups of cells engage to form tissues and organs with specialized functions. Tissues covered in this term include epithelial, connective, skeletal, blood/vascular, muscular, and neurological, as well as various organ systems including integumentary (skin). The knowledge gained from this course enhances studies in Clinical Anatomy I, Structure and Function Lecture I, and Structure and Function Tutorial I. *Corequisite(s): BAS 5110, BAS 5110T* 

Lab: 8 | Total Hours: 8

#### **BAS 5111 - Clinical Anatomy I**

# Credit(s): 3.00

Clinical Anatomy 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

In this course, using clinical cases, students are introduced to the principles of differential diagnosis, medical imaging, and clinical pathology as they relate to clinical anatomy. Point-of-Care Ultrasound is used to visualize anatomical structures which allows students to develop a deeper understanding of anatomy as it applies to structure and function. This course provides students the opportunity to apply knowledge learned in Clinical Anatomy I to clinical cases. *Corequisite(s): BAS 5111, BAS 5111L*.

Tutorial: 12 | Total Hours: 12

# **BAS 5111L - Clinical Anatomy I Lab**

#### Credit(s): 1.50

This course is presented in two parts. Part one includes training in the art of surface palpation to identify anatomical structures on a student partner supplemented by anatomical aides. Surface palpation helps the practitioner acquire the skills to recognize anatomical structures, communicate professionally and honor modesty with patients throughout the process. Part two includes use of digital cadaver dissection, and anatomical models and atlases, allowing students to identify macroscopic internal and external structures of the body. This course provides students with the opportunity to apply knowledge learned in Clinical Anatomy I lecture to hands on application. *Corequisite(s): BAS 5111, BAS 5111T. Note: Additional fee required.* 

Lab: 36 | Total Hours: 36

#### **CLE 5110 - Clinical Education I**

# **Credit(s): 1.25**

In this three-course series, we will explore what it means to be a physician through lecture, small group case-based tutorials, hands-on labs and clinic observation. In the first course of this series, the class begins with developing professional reflection and discussing the doctor patient relationship. We will apply these principles while taking mock patient medical interviews. Through the interviewing process, we will learn medical charting (SOAP notes) and develop critical thinking skills. Physical exam practice will further develop and

enhance critical thinking and medical assessment skills. Students will have the opportunity to reflect on real patient visits through 10 hours of clinic observation. *Note: Additional fee required.* 

Clinic: 10 | Lecture: 10 | Total Hours: 20

#### **CLE 5110T - Clinical Education I Tutorial**

# Credit(s): 1.83

In this three-course series, we will explore what it means to be a physician through small group case-based tutorials and hands-on labs. In the first course of this series, the class will apply the principles of professional reflection and the doctor-patient relationship while taking mock patient medical interviews. Through the interviewing process, we will learn medical charting (SOAP notes) and develop critical thinking skills. Physical exam practice will further develop and enhance critical thinking and medical assessment skills.

Tutorial: 22 | Total Hours: 22

#### PHL 5110 - Naturopathic History and Philosophy I

# Credit(s): 1.00

In this two-course series, we will be exploring the philosophical basis of naturopathic medicine and the role of the naturopathic physician in today's world. We 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. The course also introduces concepts in naturopathic medical ethics in clinical practice.

Lecture: 12 | Total Hours: 12

#### PHL 5113 - Introduction to Medical Systems

# Credit(s): 2.00

This course introduces the U.S. medical system and the developing role of naturopathic medicine within both the U.S. and the global healthcare systems. It also explores the history, philosophy, and influencing factors of major medical systems around the world. Through contrast and comparison, students will gain deeper insights into insurance practices, strategies for delivering quality care, and best practices in the referral and management of patients to practitioners of other forms of healing (ie Ayurveda, Chinese Medicine, Chiropractic, etc.).

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

In this second course of the three-part series, we will continue our exploration of the structure and function of the human body at its many levels of organization, from molecule to organism. We will continue to learn about basic tissue types, as well as the biochemistry, cellular physiology, and development of the gastrointestinal and urinary systems. We will also explore metabolism and the role of vitamins and minerals in maintaining homeostasis. *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

In this course we explore the clinical applications of the basic sciences of anatomy, physiology, and biochemistry. We will continue the process of learning the language of medicine as well as the art of medicine, using critical thinking skills and scientific literature to explore clinical cases. The knowledge gained from this course will enhance studies in Clinical Anatomy II, Structure and Function Lecture II and Structure and Function Lab II. *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

Explore the structure and correlating function of the human body at the cellular and subcellular levels using light microscopy and other specialized microscopic methods. We will learn how groups of cells engage to form tissues and organs with specialized functions. Tissues covered in this term include epithelial, connective, skeletal, blood/vascular, muscular, and neurological, as well as various organ systems including gastrointestinal and urinary. The knowledge gained from this course enhances studies in Clinical Anatomy II, Structure and Function Lecture II and Structure and Function Tutorial II. *Corequisite(s): BAS 5120, BAS 5120T.* 

Lab: 8 | Total Hours: 8

### **BAS 5121 - Clinical Anatomy II**

# Credit(s): 3.00

Clinical Anatomy II covers the anatomy of the internal organs and muscular, skeletal, vascular and nervous elements of the extremities, spinal column and skull. *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

In this course, using clinical cases, students further explore the principles of differential diagnosis, medical imaging, and clinical pathology as they relate to clinical anatomy. Point-of-Care Ultrasound is used to visualize anatomical structures which allows students to develop a deeper understanding of anatomy as it applies to structure and function. This course provides students with the opportunity to apply knowledge learned in Clinical Anatomy II to clinical cases. *Corequisite(s): BAS 5121, BAS 5121L*.

Tutorial: 12 | Total Hours: 12

# BAS 5121L - Clinical Anatomy II Lab

#### Credit(s): 1.50

This course is presented in two parts. Part one includes training in the art of surface palpation to identify anatomical structures on a student partner supplemented by anatomical aides. Surface palpation helps the practitioner acquire the skills to recognize anatomical structures, communicate professionally and honor modesty with patients throughout the process. Part two includes use of digital cadaver dissection, and anatomical

models and atlases, allowing students to identify macroscopic internal and external structures of the body. This course provides students with the opportunity to apply knowledge learned in Clinical Anatomy II lecture to hands on application. *Corequisite(s): BAS 5121, BAS 5121T. Note: Additional fee required.* 

Lab: 36 | Total Hours: 36

#### **CLE 5121 - Clinical Education II**

### Credit(s): 1.25

In this second course of this three-course series, we continue what it means to be a physician through hands-on labs with medical interviewing, medical terminology, medical charting (SOAP notes), and physical exams to add in diagnostic reasoning. We begin to develop working diagnoses and treatment plans meeting specific needs of the patient with regards to determinants of health. Students will have the opportunity to reflect on real patient visits through 10 hours of clinic observation. *Note: Additional fee required.* 

Clinic: 10 | Lecture: 10 | Total Hours: 20

#### **CLE 5121T - Clinical Education II Tutorial**

# Credit(s): 1.83

In this second course of this three-course series, we continue to explore what it means to be a physician through hands-on labs with medical interviewing, medical terminology, medical charting (SOAP notes), and physical exams to aid in diagnostic reasoning. We begin to develop working diagnoses and treatment plans meeting specific needs of the patient with regards to determinants of health.

Tutorial: 22 | Total Hours: 22

#### PHL 5120 - Naturopathic History and Philosophy II

#### Credit(s): 1.00

The second course in this series deepens the exploration of the philosophical basis of naturopathic medicine and the role of the naturopathic physician in today's world and in the medical system. Emphasis is placed on further insights into 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. This course includes applications of concepts in medical ethics introduced in the Fall course.

Lecture: 12 | Total Hours: 12

#### THR 5120 - Therapeutic Modalities I

#### Credit(s): 6.00

The holistic application of natural therapeutics is a major differentiator between

naturopathic medicine and conventional medicine. This class explores the philosophy and clinical application of nutrition, physical medicine, and hydrotherapy as foundational pillars of naturopathic treatment.

Clinical nutrition is approached from both a biochemical, physiologic standpoint and the clinical application of whole-food nutrition. We will learn about a wide array of factors that influence human nutrition including nutritional requirements at each stage of life, how culture, community, and behavioral factors influence food selection, and how to assess nutritional status through history-taking and physical examination.

Physical Medicine utilizes the knowledge of anatomy, physiology and kinesiology to understand how the function of the musculoskeletal system influences health and disease. There is also a particular emphasis placed on understanding tissue injury and healing, as well as the nature of musculoskeletal pain. We will be introduced to various musculoskeletal-based therapies and functional examinations.

Hydrotherapy is a major modality used to enhance vitality. We will explore how applications of hot and cold water as well as other stimuli influences detoxification, circulation, and the immune response. *Corequisite(s): THR 5120T, THR 5120L*.

Lecture: 72 | Total Hours: 72

# THR 5120T - Therapeutic Modalities I Tutorial

# Credit(s): 2.00

This case-based course utilizes a small group setting to integrate and expand upon the information learned in the Therapeutic Modalities I lecture course. We will analyze cases, generate treatment plans and discuss philosophical elements of each modality in order to transform didactic knowledge into dynamic working knowledge and practical application. *Corequisite(s): THR 5120, THR 5120L*.

Tutorial: 24 | Total Hours: 24

#### THR 5120L - Therapeutic Modalities I Lab

#### Credit(s): 1.00

Apply what we have learned about hydrotherapy and physical medicine in Therapeutic Modalities I lecture and tutorial courses. In the hydrotherapy portion, we will review and practice how to perform constitutional hydrotherapy, hot fomentation and other hydrotherapy treatments. In the physical medicine portion, we will review and practice the use of various physiotherapy machines. We will give and receive these treatments enhancing our knowledge of the treatments from both a patient and a clinician perspective. This prepares us for delivering these treatments in our clinical rotations. *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:

390.5 | Credits: 29.29

Spring

#### BAS 5130 - Structure and Function III

Credit(s): 8.00

In this course, we will continue our exploration of the structure and function of the human body at its many levels of organization, from molecule to organism. In this third course of a three-part series, we will continue to explore the biochemistry, cellular physiology, pathology, and development of the reproductive system, as well as the ears, nose and throat. We will also explore the importance of the nervous and endocrine systems in maintaining homeostasis, by communicating and coordinating with other organ systems. *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

This course explores clinical applications of the basic sciences of anatomy, physiology and biochemistry. We will continue the process of learning the language of medicine as well as the art of medicine, using critical thinking skills and scientific literature to explore clinical cases. The knowledge gained from this course will enhance studies in Structure and Function Lecture III. *Corequisite(s): BAS 5130. Note: Additional fee required.* 

Tutorial: 6 | Total Hours: 6

#### BAS 5131 - Microbiology, Public Health and Immunology

Credit(s): 3.00

Why do some microbes cause harm and others improve our health? How have we co-evolved with viruses, bacteria, parasites and mold? This foundational course explores the influence of medically important pathogens and how our immune system responds in a dynamic interplay of survival through adaptation. We examine how our environment affects disease outcomes with emphasis placed on modifiable factors including nutrition, stress, the microbiome, and access to health care. We develop an appreciation for public health's role in disease prevention, data collection, analysis and how naturopathic practitioners effectively collaborate with public health agencies. *Corequisite(s): BAS 5131T.* 

Lecture: 36 | Total Hours: 36

# BAS 5131T - Microbiology, Public Health and Immunology Tutorial

# Credit(s): 2.00

This case-based course utilizes a small group setting to integrate and expand upon the information learned in the Microbiology, Public Health and Immunology lecture course. We analyze cases, generate treatment plans and discuss philosophical elements of each modality, transforming didactic knowledge into dynamic working knowledge and practical application.

Corequisite(s): BAS 5131.

Tutorial: 24 | Total Hours: 24

#### **CLE 5132 - Clinical Education III**

# Credit(s): 1.08

In this third course of the three-class series, we further refine and practice foundational clinical skills with more complex medical cases. We continue to learn and practice regional physical exam skills to support the development of a working diagnosis and begin formation of treatment plans. Using patient centered care, we practice delivering difficult medical news and learn how to take a sexual health interview. We will have the opportunity to continue to reflect on real patient visits through 10 hours of clinic observation. *Note: Additional fee required.* 

Clinic: 10 | Lecture: 8 | Total Hours: 18

# **CLE 5132T - Clinic Education III Tutorial**

#### Credit(s): 1.83

In this third course of the three-class series, we further refine and practice foundational clinical skills with more complex medical cases. We continue to learn and practice regional physical exam skills to support the development of a

working diagnosis and begin formation of treatment plans. Using patient centered care, we practice delivering difficult medical news and learn how to take a sexual health interview.

Tutorial: 22 | Total Hours: 22

#### PHL 5130 - Naturopathic Medicine Retreat

#### Credit(s): 0.75

Naturopathic philosophy comes to life in this weekend retreat as we come together to explore naturopathic medicine in a natural setting. We will identify medicinal plants in nature, as well as experience hydrotherapy, mud therapy, meditation, and various exercise

therapies. We will also discuss the tenants of naturopathic medicine and build community in a fun and engaging environment. *Prerequisite(s):* PHL 5110 PHL 5120

Lab: 18 | Total Hours: 18

### **HOM 5131 - Intro to Homeopathy**

### Credit(s): 2

Naturopathic doctors are trained to offer a broad scope of therapeutic options ranging from nature cure to pharmaceuticals chosen in accordance with The Therapeutic Order. In this class, students will explore the history, philosophy, and foundational concepts of Classical Homeopathy. Students will be introduced to the key skills needed to prescribe effective and safe homeopathic medicines in patient care, including repertorization, remedy selection, medicine dosing, and case management.

Lecture: 24 | Total Hours: 24

#### **HOM 5131T - Intro to Homeopathy Tutorial**

### **Credit(s): 0.67**

This class builds upon the foundations and principles of Classical Homeopathy discussed in HOM5131. This engaging course will support students to build case-taking skills, a working knowledge of the homeopathic repertory, and knowledge of major homeopathic remedies so they may ultimately use this modality effectively and safely as part of a holistic approach to patient care.

Tutorial: 8 | Total Hours: 8

# THR 5131 - Therapeutic Modalities II

# Credit(s): 4

Naturopathic doctors are trained to offer a broad scope of therapeutic options ranging from nature cure to pharmaceuticals chosen in accordance with the therapeutic order. This class explores the history, philosophy, and foundational concepts of botanical medicine, homeopathy, and pharmacology, and explores how each modality is employed as part of a holistic approach to medicine. We will explore the unique elements as well as the commonalities and differences of each modality.

 The botanical medicine portion develops knowledge on a wide range of topics by blending a strong foundation in the traditional practices of herbal medicine with a modern, evidence-informed approach. We will explore plant energetics, phytochemistry, basic botany, and the actions and indications for many botanical medicines.

- The homeopathy portion covers the principles of classic homeopathy and focuses on supporting students build case-taking skills and a working knowledge of the homeopathic repertory and major remedies.
- The pharmacology portion explores the principles of how medications
  physiologically interact with the body. Students will learn about major drug classes
  and start to build knowledge of indications, contraindications, and how drugs are
  prescribed.

Corequisite(s): THR 5131T, THR 5131L. Lecture: 48 | Total Hours: 48

# THR 5131T - Therapeutic Modalities II Tutorial

# **Credit(s): 1.33**

This case-based course utilizes a small group setting to integrate and expand upon the information learned in the Therapeutic Modalities II lecture course. We will analyze cases, generate treatment plans and discuss philosophical elements of each modality in order to transform didactic knowledge into dynamic working knowledge and practical application. *Corequisite(s): THR 5131, THR 5131L.* 

Tutorial: 16 | Total Hours: 16

# THR 5131L - Therapeutic Modalities II Lab

# Credit(s): 0.50

Apply what we learned about botanical medicine in Therapeutic Modalities lecture and tutorial classes. Through a hands-on approach, we will make tinctures, infusions, decoctions, salves, lotions, and other preparations as well as discuss how they are applied therapeutically in our clinical rotations. *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: 1078.5 | Credits: 82.71

# Second Year

Fall

#### CLS 6210 - Musculoskeletal

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 Tutorial

Credit(s): 6.00

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

Tutorial: 72 | Total Hours: 72

# CLS 6210L - Musculoskeletal Lab

Credit(s): 3.00

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. *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

The goal of the Neurology Block Curriculum is to provide students with the fundamental skills required by all physicians to recognize, diagnose, and formulate an initial naturopathic and standard of care treatment plan for patients with common neurologic disorders. The tutorial course is an integral part of the Neurology Block, and it focuses on exploring course material through literature review, group discussion and practicing casetaking. This course is taken concurrently with Neurology lecture and lab. The tutorial course reinforces and expands upon information learned in lecture and lab. *Corequisite(s): CLS 6211, CLS 6211L.* 

Tutorial: 18 | Total Hours: 18

# CLS 6211L - Neurology Lab

#### Credit(s): 0.25

The goal of the Neurology Block Curriculum is to provide students with the fundamental skills required by all physicians to recognize, diagnose, and formulate an initial naturopathic and standard of care treatment plan for patients with common neurologic disorders. This course is an integral part of the Neurology Block, and it focuses on teaching the physical exams used to evaluate nervous system function. This course is taken concurrently with Neurology lecture and tutorial. The lab course expands upon information learned in lecture and provides an experiential educational opportunity within the block. *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

Cardiovascular disease is the leading cause of death in the United States; followed not far behind by chronic and infectious pulmonary disease. What role does naturopathic medicine have in the prevention and treatment of cardiovascular and pulmonary disease? In this course, we will develop the skills and knowledge to diagnose and treat acute and chronic cardiovascular and pulmonary conditions using nutrition, mind-body medicine, homeopathy, botanical medicine, and pharmacology. *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

In this case-based course, we will explore how to diagnose and treat acute and chronic cardiovascular and pulmonary conditions reviewed in Cardiology and Pulmonology. We will practice our history taking skills and refine critical thinking while developing differential diagnoses. We synthesize this information to develop treatment plans and determine appropriate referrals for patients. We will apply our skills and knowledge at the end of the term in the simulation lab. In this experiential learning activity, we will diagnose and treat acute cardiovascular and pulmonary complaints in standardized patients. *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

How do cardiovascular and pulmonary physical examinations confirm our findings in history taking and support our working diagnosis in our patients? In this course, we will learn how pathology translates into abnormal physical exam findings including a review of cardiac murmurs, irregular heart rates and rhythms, and extra lung sounds. We learn how to use medical equipment to further examine heart and lung function such as electrocardiograms and spirometry. We will apply our skills and knowledge in the murmur lab where we will be auscultating guest patients with heart murmurs. This course complements the material learned in the Cardiology and Pulmonology Lecture and Tutorial courses. *Corequisite(s): CLS 6220, CLS 6220T. Note: Additional fee required.* 

Lab: 12 | Total Hours: 12

#### CLS 6221 - Hematology and Oncology

# Credit(s): 6.50

This course provides an overview of hematology and oncology at the level of the second-year medical student. Through clinical science lectures, we develop proficiency in the diagnosis and naturopathic treatment approach to blood disorders such as anemia, bleeding and clotting conditions, leukemia, lymphoma, and solid tumors. Environmental and lifestyle influences of cancer epidemiology are analyzed. The rationale for and successful delivery of screening recommendations, and prognostic information are discussed. Research is presented to appreciate evidence of naturopathic adjunctive treatments for co-managing care within a collaborative, integrative model. *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

This case-based tutorial utilizes a small group setting to integrate and dynamically apply the didactic knowledge gained in the Hematology and Oncology lecture course. We analyze cases, generate naturopathic treatment plans, and discuss philosophical elements of each modality. Ethics, doctor-patient relationship, death and dying, and caring for the caregiver prompt important discussions in this interactive course. *Corequisite(s): CLS 6221, CLS 6221L.* 

Tutorial: 18 | Total Hours: 18

# CLS 6221L - Hematology and Oncology Lab

#### Credit(s): 0.50

In this clinical lab class, we establish proficiency in basic phlebotomy and injection techniques. Students perform blood draws to conduct and analyze laboratory tests including hematocrit, blood antigens, erythrocyte sedimentation rate and microscopic evaluation on blood samples. *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

The gastroenterology and proctology course will begin with a brief overview of structure, function, anatomy, physiology, and wellness. The bulk of the course will be devoted to understanding pathology, disease diagnosis/assessment/differential diagnosis, and management of common gastroenterology and proctology conditions. Emphasis will be placed on a whole-systems approach and the application of naturopathic philosophy to patient care. Supplementary topics such as cultural competency, ethics, evidence-informed practice, inter-professional practice, jurisprudence, and practitioner cultivation will be integrated throughout each course. *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

This case-based course will apply knowledge of anatomy, physiology, pathology, diagnosis, and management of common gastroenterology and proctology conditions by using wholesystems medicine and the application of naturopathic philosophy to patient care. Supplementary topics such as cultural competency, ethics, evidence-informed practice, inter-professional practice, jurisprudence, and practitioner cultivation will be integrated throughout the class. *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

The gastroenterology and proctology lab course will include a brief overview of structure, function, anatomy, physiology and wellness. The course will be devoted to diagnosis and assessment through advanced physical exam techniques of common proctology and gastroenterology conditions. Students obtain experience in performing sensitive rectal

exams using standardized patients. *Corequisite(s): CLS 6230, CLS 6230T. Note: Additional fee required.* 

Lab: 6 | Total Hours: 6

# CLS 6231 - Urology and Nephrology

# **Credit(s): 5.50**

In this course we begin with a review of renal anatomy, physiology and normal function as a prelude to understanding dysfunction and its effects on patients. Next comes a comprehensive exploration of the differential diagnosis, work-up, assessment, evidence-informed treatment and collaborative management of common and critical renal and urinary conditions. Through lectures, classroom activities, case discussions and peer presentations we will explore this vital system from both traditional naturopathic and primary care perspectives. *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

Urology & Nephrology tutorial utilizes information presented in the Lecture and applies it to clinical cases to clarify the diagnosis and evidence informed management of covered conditions. Activities in this tutorial include case-taking on a standardized patient and with peers, case analyses, laboratory interpretation, botanical formulations, application of nature cure modalities, homeopathic repertorization, pharmacology prescribing, and ethics case review. *Corequisite(s): CLS 6231. Note: Additional fee required.* 

Tutorial: 36 | Total Hours: 36

# **CLS 6232 - Metabolism and Endocrinology**

#### Credit(s): 7.00

Explore the intricacies of the body's inter- and intracellular messaging systems and how it regulates itself in this fascinating course. We will develop an in-depth understanding of the complex interactions of the body's hormonal system and metabolism, as well as the causes and effects of metabolic and hormonal imbalances. Foundational naturopathic modalities, skillful application of the naturopathic therapeutic order, and evidence-informed approaches are presented to strengthen our skills in diagnosing and managing endocrine conditions in both a primary care setting as well as in an adjunctive role. *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

Apply what you learn in Metabolism-Endocrinology lecture in this small group tutorial course focused on clinical cases to practice the diagnosis, treatment, and management of metabolic and endocrine conditions. Learn to apply the myriad of modalities available to naturopathic physicians: pharmacology, botanical medicine, nutrition, homeopathy, and lifestyle medicine. Develop an understanding of how to order and interpret labs and imaging, as well as when to refer to a specialist. *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

# 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*.

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

This lecture course provides a comprehensive study of the female and male reproductive systems, including common and critical presenting conditions as well as infertility and natural childbirth. We will explore presenting symptoms and diagnostics of these conditions in addition to treatment and management with evidence-based, naturopathic modalities. Supplementary topics such as cultural competency, ethics, evidence-informed practice, inter-professional practice, jurisprudence, and practitioner cultivation will be integrated throughout the course. *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** 

Reproductive tutorial is a small group course utilizing clinical cases to clarify the diagnosis, treatment and management of gynecological, male reproductive and natural childbirth conditions. Various practical activities include case-taking, case analysis, laboratory interpretation, botanical formulations, nature cure treatment plans, homeopathic case-taking, and discussions of IUD insertion, and endometrial biopsy techniques. *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** 

The course provides an opportunity to learn and perform clinical breast/chest exams, pelvic exams, and male genital exams and various special procedures with standardized patients in the lab. We will also cultivate professionalism during exams and procedures.

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

This course is designed to enhance the knowledge and clinical skills in the diagnosis, treatment and pathophysiology of inflammatory and rheumatic diseases. Class format includes clinical science lectures and case-based tutorials with an emphasis on diagnosis and treatment appropriate to naturopathic primary care. Considerations around ethics, cultural competences, diversity and inclusion are central in all class discussions. Students are engaged in an integrative approach, utilizing research and best practice of nutrition, pharmacology, physical medicine, botanical medicine and homeopathy as well as therapeutic doctor patient relationship. Lectures by experts on topics pertaining to their special areas of interest. *Corequisite(s): CLS 7311. Note: Additional fee required.* 

Tutorial: 24 | Total Hours: 24

# CLE 7300 - Secondary Rotation

#### Credit(s): 2.50

Working under the supervision and mentorship of a licensed physician, Secondary student interns at NUNM health centers will continue to develop comfort with patient care and develop professionalism through engaging with patient interactions. By practicing effective patient communication, students will learn how to support patient care and build a basic knowledge of clinic operations and electronic medical records. Students will practice becoming proficient healthcare providers by participating in collecting patient histories, performing physical exams, and conducting laboratory analysis. *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 Engagement and Service Learning**

#### Credit(s): 2.00

Holism is a central theme in naturopathic medicine. This is a paradigm of medicine that

takes into account all of the factors that influence a person's health and includes the person within their community and social construct. The purpose of this course is to provide a variety of opportunities in community engagement and service learning in order to help students develop a fist-hand understanding of socioeconomic and environmental factors that affect individual and community health. Through authentic community engagement and service, students can better understand the fundamental challenges in health equity, and they will be poised to dismantle barriers as future physicians *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

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. *Corequisite(s): CLS 7320, CLS 7320L.* 

Tutorial: 24 | Total Hours: 24

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

Credit(s): 0.25

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. *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

The skin is the largest organ of the body and our direct interface with the world. This course covers acute and chronic skin disorders commonly seen in clinical practice. Benign, premalignant and malignant skin tumors, bacterial, viral and superficial fungal infections, eczema, psoriasis and many other autoimmune skin disorders are explored in detail. We learn to provide a variety of diagnostic and treatment options. Naturopathic approaches including nutritional, botanical, hydrotherapy and homeopathic therapies are explored as the foundation of care. Pharmaceutical and minor surgical interventions will be discussed in detail to understand their utility when appropriate and necessary. Suturing techniques and other procedures such as biopsies, toenail removals, cryotherapy and laceration repair are also covered. *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

This tutorial class utilizes a small group setting to integrate and expand upon the information learned in the Dermatology/Minor surgery lecture course. We use mock cases to demonstrate, practice and learn the importance of history taking, physical exams and medical knowledge when diagnosing and treating patients with skin conditions. *Corequisite(s): CLS 7321, CLS 7321L.* 

Tutorial: 24 | Total Hours: 24

#### CLS 7321L - Dermatology and Minor Surgery Lab

# Credit(s): 1.00

In this lab course, we learn and practice minor surgery office procedures. Suturing techniques, biopsies, toenail removals, cryotherapy, laceration repair, and other procedures are covered. *Corequisite(s): CLS 7321, CLS 7321T. Note: Additional fee required.* 

Lab: 24 | Total Hours: 24

#### **CLE 7300 - Secondary Rotation**

#### Credit(s): 2.50

Working under the supervision and mentorship of a licensed physician, Secondary student interns at NUNM health centers will continue to develop comfort with patient care and develop professionalism through engaging with patient interactions. By practicing effective patient communication, students will learn how to support patient care and build a basic knowledge of clinic operations and electronic medical records. Students will practice

becoming proficient healthcare providers by participating in collecting patient histories, performing physical exams, and conducting laboratory analysis. *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

#### BUS 8421 - Business II

### Credit(s): 2.00

This course is the second in a three-course series. This second course provides a deeper understanding of how to operate a business by learning about different business systems. Students will learn how to read contracts. Students will learn the components of a business plan. Students will further explore professionalism through CV development and interviewing skills. The course will additionally introduce students to medical billing

• Lecture:24 | Total Hours: 24

# 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*.

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

How does a naturopathic primary care model deepen support for patients and allow for a holistic approach to their mental health? The Psychology and Mental Health course explores research and provides clinical insight for common mental health conditions. Major topics include diagnosis, management and care coordination with a firm foundation in ethics and cultural humility. *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

The Psychology and Mental Health Tutorial has a strong emphasis on case based learning and useful clinical skills in the context of condition management. Tutorial sessions provide students with opportunities to practice and refine case integration skills, physical examination and interpretation of other objective clinical data to develop short-, medium-, and long-term management and treatment plans which includes understanding when to refer patients to an appropriate mental health specialist. *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 CLS 7330 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

In this case-based tutorial class, students will further develop and apply knowledge 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. *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 exposure of both macro and micro toxicants 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. Clinically relevant exposure routes 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 elevated body burden of toxins with specific treatments for both acute and chronic disease. Students will learn the clinical rationale for parenteral therapy; how to perform parenteral therapy techniques and develop therapy protocols; how to treat complications and handle emergencies that can occur during parenteral therapy. *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

Parenteral Therapy and Environmental Medicine block tutorial is a small group course where students will observe and participate in some of the practical aspects of parenteral therapy and environmental medicine. Through demonstrations, hands-on activities, osmolarity and formulation practice, environmental history case taking, and physical exam practice, students will build upon their prior knowledge of anatomy and physiology to assess chronic disease with a new lens. *Corequisite(s): CLS 7331, CLS 7331L*.

Tutorial: 24 | Total Hours: 24

# CLS 7331L - Parenteral Therapy and Environmental Medicine Lab

#### Credit(s): 0.50

This course provides the opportunity for students to practice parenteral therapy. The course focuses on the practical aspects of IV catheter and butterfly needle insertions, considerations in preparations of IV solutions, aseptic technique, and patient communication regarding this procedure. *Corequisite(s): CLS 7331, CLS 7331T. Note: Additional fee required.* 

Lab: 12 | Total Hours: 12

#### **CLE 7300 - Secondary Rotation**

# Credit(s): 2.50

Working under the supervision and mentorship of a licensed physician, Secondary student interns at NUNM health centers will continue to develop comfort with patient care and develop professionalism through engaging with patient interactions. By practicing effective patient communication, students will learn how to support patient care and build a basic knowledge of clinic operations and electronic medical records. Students will practice becoming proficient healthcare providers by participating in collecting patient histories, performing physical exams, and conducting laboratory analysis. *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

Under the supervision and mentorship of a licensed physician, primary interns complete 13 rotations in either primary or specialty care within the NUNM network of clinics. During each rotation, students build proficiency in medical decision making through the practice of clinical skills including the medical interview, physical exams and laboratory diagnosis. Guided by naturopathic philosophy, principles, and the therapeutic order students provide patient-centered care to a diverse patient population, Specialty shifts include minor surgery, physical medicine, gender affirming health, IV therapy, women's health, community medicine and pain management. *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. *Prerequisite(s):* Students must take in their last year of the ND program Lecture: 12 | Total Hours: 12

# **CLE 8400T - Case Integration Mentorship Tutorial I**

### Credit(s): 1.50

In this first quarter of the four-course series, we will begin our work cultivating reflective practitioners, fostering critical thinking, and enhancing clinical judgment through teambased learning, self-awareness and peer evaluation. Through mentorship and evidence-informed knowledge translation, beginning practitioners will gain a deeper appreciation of the structural complexity of medical practice, learn inter-professional communication skills, and solve complex adaptive problems. *Prerequisite(s):* Students must take in their last year of the ND program *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

# **CLE 8400 - Primary Rotations**

# Credit(s): 2.50 credits each

Under the supervision and mentorship of a licensed physician, primary interns complete 13 rotations in either primary or specialty care within the NUNM network of clinics. During each rotation, students build proficiency in medical decision making through the practice of clinical skills including the medical interview, physical exams and laboratory diagnosis. Guided by naturopathic philosophy, principles, and the therapeutic order students provide patient-centered care to a diverse patient population, Specialty shifts include minor surgery, physical medicine, gender affirming health, IV therapy, women's health, community medicine and pain management. *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

#### BUS 7321 - Business I

#### Credit(s): 2.00

This course is the first in a three-course series. This first course is set around defining professional and personal goals, understanding financial literacy, exploring different career paths with the ND degree, and understanding the economics of practice. The course will additionally introduce students to the psychology of business, professionalism and success.

• Lecture: 24 | Total Hours: 24

#### **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. *Prerequisite(s):* Students must take in their last year of the ND program *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: 15.50

Winter

#### **CLE 8400 - Primary Rotations**

# Credit(s): 2.50 credits each

Under the supervision and mentorship of a licensed physician, primary interns complete 13 rotations in either primary or specialty care within the NUNM network of clinics. During each rotation, students build proficiency in medical decision making through the practice of clinical skills including the medical interview, physical exams and laboratory diagnosis. Guided by naturopathic philosophy, principles, and the therapeutic order students provide patient-centered care to a diverse patient population, Specialty shifts include minor surgery, physical medicine, gender affirming health, IV therapy, women's health, community medicine and pain management. *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

In this third, of a four-course series, we will continue our work cultivating reflective practitioners, fostering critical thinking, and enhancing clinical judgment through teambased 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. *Prerequisite(s):* Students must take in their last year of the ND program *Corequisite(s):* CLE 8400.

Tutorial: 18 | Total Hours: 18

#### **BUS 8430 - Business III**

# Credit(s): 1.50

This course is the third in a three-course series. This third course is largely a survey course in which different health professionals will be explaining the business elements of their career paths. The course will also take a deeper look into billing practices and the development of a professional network.

• Lecture: 18 | Total Hours: 18
Electives **Credit(s): 4.00** \*
Lecture: 48 | Total Hours: 48

# **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.* 

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

Under the supervision and mentorship of a licensed physician, primary interns complete 13 rotations in either primary or specialty care within the NUNM network of clinics. During each rotation, students build proficiency in medical decision making through the practice of clinical skills including the medical interview, physical exams and laboratory diagnosis. Guided by naturopathic philosophy, principles, and the therapeutic order students provide patient-centered care to a diverse patient population, Specialty shifts include minor surgery, physical medicine, gender affirming health, IV therapy, women's health, community medicine and pain management. *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. *Prerequisite(s):* Students must take in their last year of the ND program *Corequisite(s):* CLE 8400.

Tutorial: 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

Program Totals - Clinic: 1254 | Tutorial: 746.50 | Lab: 304 | Lecture: 2095 |

Total Hours: 4399.50 | Credits: 301.71

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

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

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

# **ND Year 1 Online Cohort Curriculum Layout**

(with Summer Intensives)

# Fall

- BAS 5110 Structure and Function I Credit(s): 12.00
- Lecture: 144 | Total Hours: 144
- BAS 5110T Structure and Function I Tutorial Credit(s): 1.83
- Tutorial:22 | Total Hours:22
- BAS 5110L Structure and Function I Lab Credit(s): 0.33
- Lab:8 | Total Hours:8
- BAS 5111 Clinical Anatomy I Credit(s): 3.00
- Lecture:36 | Total Hours:36
- BAS 5111T Clinical Anatomy I Tutorial Credit(s): 1.00
- Tutorial: 12 | Total Hours: 12
- BASO 5111L Clinic Anatomy I Lab Credit(s): 0.75
- Lab:18 | Total Hours:18
- PHL 5110 Naturopathic History and Philosophy I Credit(s): 1.00
- Lecture:12 | Total Hours:12
- <u>CLEO 5110 Clinical Education I</u> **Credit(s): 2.38**
- Clinic: 5 | Tutorial: 16 | Lecture: 10 | Total Hours: 31
- PHLO 5113 Intro to Medical Systems Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- HIPAA

# First-Year- Fall -Totals- Clinic:5 | Tutorial:50 | Lab:26 | Lecture:226 | Total:307 | Credits:24.29

#### Winter

- BAS 5120 Structure and Function II Credit(s): 8.00
- Lecture: 96 | Total Hours: 96
- BAS 5120T Structure and Function II Tutorial Credit(s): 1.38
- Tutorial:16.50 | Total Hours:16.50
- BAS 5120L Structure and Function II Lab Credit(s): 0.33
- Lab:8 | Total Hours: 8
- BAS 5121 Clinical Anatomy II Credit(s): 3.00
- Lecture:36 | Total Hours:36
- BAS 5121T Clinical Anatomy II Tutorial Credit(s): 1.00
- Tutorial:12 | Total Hours:12
- BASO 5121L Clinic Anatomy II Lab Credit(s): 0.75
- Lab:18 | Total Hours:18
- PHL 5120 Naturopathic History and Philosophy II Credit(s): 1.00
- Lecture:12 | Total Hours:12
- THR 5120 Therapeutic Modalities I Credit(s): 6.00
- Lecture:72 | Total Hours:72

- THR 5120T Therapeutic Modalities I Tutorial Credit(s): 2.00
- Tutorial:24 | Total Hours:24
- CLEO 5121 Clinic Education II Credit(s): 2.54
- Clinic: 5 | Tutorial: 18 | Lecture: 10 | Total Hours: 33

# First-Year- Winter -Totals- Clinic:5 | Tutorial:70.50 | Lab:26 | Lecture:226 | Total:327.5 | Credits:26

# Spring

- BAS 5130 Structure and Function III Credit(s): 8.00
- Lecture: 96 | Total Hours: 96
- BAS 5130T Structure and Function III Tutorial Credit(s): 0.50
- Tutorial:6 | Total Hours: 6
- THR 5131 Therapeutic Modalities II Credit(s): 4
- Lecture: 48 | Total Hours: 48
- THR 5131T Therapeutic Modalities II Tutorial Credit(s): 1.33
- Tutorial: 16 | Total Hours: 16
- HOM 5131 Intro to Homeopathy Credit(s): 2
- Lecture: 24 | Total Hours: 24
- HOM 5131T Intro to Homeopathy Tutorial Credit(s): 0.67
- Tutorial: 8 | Total Hours: 8
- BAS 5131 Microbiology, Public Health and Immunology Credit(s): 3.00
- Lecture:36 | Total Hours:36
- BAS 5131T Microbiology, Public Health and Immunology Tutorial Credit(s): 2.00
- Tutorial:24 | Total Hours:24
- CLEO 5132 Clinic Education III Credit(s): 2.21
- Clinic: 5 | Tutorial: 16 | Lecture: 8 | Total Hours: 29

# First-Year- Spring -Totals- Clinic:5 | Tutorial:70 | Lab:0 | Lecture:212 | Total:287 | Credits:23.71

# **Summer (Intensives)**

- THRO 5120L Intro to Therapeutic Modalities I Lab Credit(s): 1.00
- Lab:24 | Total Hours:24
- THRO 5131L Therapeutic Modalities II Lab Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- BASO 5131L Clinical Anatomy Surface Palpitation I Credit(s): 0.75
- Lab: 18 | Total Hours: 18
- BASO 5132L Clinical Anatomy Lab Surface Palpitation II Credit(s): 0.75
- Lab:18 | Total Hours:18
- CLEO 5143 Clinical Education Credit(s): 0.63
- Clinic:15
- CLEO 5121T Clinic Education Tutorial Credit(s): 1.33
- Tutorial:16 | Total Hours:16

- PHL 5130 Naturopathic Medicine Retreat Credit(s): 0.75
- Lab:18 | Total Hours:18
- CPR100 CPR Certification
- ND Elective Credit(s):3.00\* (Electives may be taken in any term, this represents a placeholder for ND Elective Credits).

Lecture:36 | Total Hours:36

First-Year- Summer -Totals- Clinic:15 | Tutorial:16 | Lab:90 | Lecture:36 | Total:142 | Credits: 8.71

Total-First-Year-Hours- Clinic:15 | Tutorial:206.50 | Lab:142 | Lecture:700 | Total:1070.50 | Credits:82.71

# **ND Year 1 Online Cohort Course Descriptions**

(with Summer Intensives)

Fall

# BAS 5110 - Structure and Function I

Credit(s): 12.00

The structure and function of the human body at its many levels of organization, from molecule to organism. In this first course of a three-part series, we will learn about basic tissue types, as well as the biochemistry, cellular physiology, and development of several organ systems: the skin, the nervous system, the musculoskeletal system, the cardiovascular system, and the respiratory system. The principles of homeostasis will be explored, with an understanding that the interactions between organ systems are fundamental to the maintenance of health and the development of disease. *Corequisite(s): BAS 5110T, BAS 5110L*.

Lecture:144 | Total Hours: 144

#### BAS 5110T - Structure and Function I Tutorial

Credit(s): 1.83

This course explores clinical applications of the basic sciences of anatomy, physiology and biochemistry. We will begin the process of learning the language of medicine as well as the art of medicine, using critical thinking skills and scientific literature to explore clinical cases. The knowledge gained from this course will enhance studies in Clinical Anatomy I, Structure and Function Lecture I and Structure and Function Lab I. *Corequisite(s): BAS 5110, BAS 5110L.* 

Tutorial:22 | Total Hours:22

#### BAS 5110L - Structure and Function I Lab

Credit(s): 0.33

Explore the structure and correlating function of the human body at the cellular and subcellular levels using light microscopy and other specialized microscopic methods. We will learn how groups of cells engage to form tissues and organs with specialized functions. Tissues covered in this term include epithelial, connective, skeletal, blood/vascular, muscular, and neurological, as well as various organ systems including integumentary (skin). The knowledge gained from this course enhances studies in Clinical Anatomy I, Structure and Function Lecture I, and Structure and Function Tutorial I. *Corequisite(s): BAS 5110, BAS 5110T* 

Lab:8 | Total Hours:8

# BAS 5111 - Clinical Anatomy I

# Credit(s): 3.00

Clinical Anatomy 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

In this course, using clinical cases, students are introduced to the principles of differential diagnosis, medical imaging, and clinical pathology as they relate to clinical anatomy. Point-of-Care Ultrasound is used to visualize anatomical structures which allows students to develop a deeper understanding of anatomy as it applies to structure and function. This course provides students the opportunity to apply knowledge learned in Clinical Anatomy I to clinical cases. *Corequisite(s): BAS 5111, BAS 5111L*.

Tutorial: 12 | Total Hours: 12

# BASO 5111L - Clinic Anatomy I Lab

### Credit(s): 0.75

(Virtual). Surface Anatomy covers the anatomy of the muscular, skeletal, vascular and nervous elements of the extremities, spinal column and skull which are palpable. The lab component includes participation in palpation labs as an aid to learning the interrelationships of the parts of the human body. *Corequisite(s): BAS 5110, BAS 5110T.*Lab:18 | Total Hours:18

# PHL 5110 - Naturopathic History and Philosophy I

#### Credit(s): 1.00

In this two-course series, we will be exploring the philosophical basis of naturopathic medicine and the role of the naturopathic physician in today's world. We 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. The course also introduces concepts in naturopathic medical ethics in clinical practice.

#### CLEO 5110 - Clinical Education I

### Credit(s): 2.38

(Virtual) 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: 5 | Tutorial: 16 | Lecture: 10 | Total Hours: 31

### PHLO 5113 - Intro to Medical Systems

### Credit(s): 2.00

This course introduces the U.S. medical system and the developing role of naturopathic medicine within both the U.S. and the global healthcare systems. It also explores the history, philosophy, and influencing factors of major medical systems around the world. Through contrast and comparison, students will gain deeper insights into insurance practices, strategies for delivering quality care, and best practices in the referral and management of patients to practitioners of other forms of healing (ie Ayurveda, Chinese Medicine, Chiropractic, etc.).

Lecture: 24 | Total Hours: 24

HIPAA

First-Year- Fall -Totals- Clinic:5 | Tutorial:50 | Lab:26 | Lecture:226 | Total:307 | Credits:24.29

Winter

#### BAS 5120 - Structure and Function II

### Credit(s): 8.00

In this second course of the three-part series, we will continue our exploration of the structure and function of the human body at its many levels of organization, from molecule to organism. We will continue to learn about basic tissue types, as well as the biochemistry, cellular physiology, and development of the gastrointestinal and urinary systems. We will also explore metabolism and the role of vitamins and minerals in maintaining homeostasis. *Prerequisite(s): BAS 5110. Corequisite(s): BAS 5120L.* 

Lecture:96 | Total Hours: 96

#### BAS 5120T - Structure and Function II Tutorial

### Credit(s): 1.38

In this course we explore the clinical applications of the basic sciences of anatomy, physiology, and biochemistry. We will continue the process of learning the language of medicine as well as the art of medicine, using critical thinking skills and scientific literature to explore clinical cases. The knowledge gained from this course will enhance studies in Clinical Anatomy II, Structure and Function Lecture II and Structure and Function Lab II. *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

Explore the structure and correlating function of the human body at the cellular and subcellular levels using light microscopy and other specialized microscopic methods. We will learn how groups of cells engage to form tissues and organs with specialized functions. Tissues covered in this term include epithelial, connective, skeletal, blood/vascular, muscular, and neurological, as well as various organ systems including gastrointestinal and urinary. The knowledge gained from this course enhances studies in Clinical Anatomy II, Structure and Function Lecture II and Structure and Function Tutorial II. *Corequisite(s): BAS 5120, BAS 5120T.* 

Lab:8 | Total Hours: 8

### **BAS 5121 - Clinical Anatomy II**

### Credit(s): 3.00

Clinical Anatomy II covers the anatomy of the internal organs and muscular, skeletal, vascular and nervous elements of the extremities, spinal column and skull. *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

In this course, using clinical cases, students further explore the principles of differential diagnosis, medical imaging, and clinical pathology as they relate to clinical anatomy. Point-of-Care Ultrasound is used to visualize anatomical structures which allows students to develop a deeper understanding of anatomy as it applies to structure and function. This course provides students with the opportunity to apply knowledge learned in Clinical Anatomy II to clinical cases. *Corequisite(s): BAS 5121, BAS 5121L*.

Tutorial:12 | Total Hours:12

### BASO 5121L - Clinic Anatomy II Lab

### Credit(s): 0.75

(Virtual). This series covers the anatomy of the muscular, skeletal, vascular and nervous elements of the extremities, spinal column and skull. The lab component includes participation in Surface Anatomy labs and Cadaver Labs as an aid to learning the interrelationships of the parts of the human body. *Corequisite(s): BAS 5121, BAS 5121T. Note: Additional fee required.* 

Lab:18 | Total Hours:18

### PHL 5120 - Naturopathic History and Philosophy II

### Credit(s): 1.00

The second course in this series deepens the exploration of the philosophical basis of naturopathic medicine and the role of the naturopathic physician in today's world and in the medical system. Emphasis is placed on further insights into 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. This course includes applications of concepts in medical ethics introduced in the Fall course.

Lecture:12 | Total Hours:12

#### THR 5120 - Therapeutic Modalities I

### Credit(s): 6.00

The holistic application of natural therapeutics is a major differentiator between naturopathic medicine and conventional medicine. This class explores the philosophy and clinical application of nutrition, physical medicine, and hydrotherapy as foundational pillars of naturopathic treatment.

Clinical nutrition is approached from both a biochemical, physiologic standpoint and the clinical application of whole-food nutrition. We will learn about a wide array of factors that influence human nutrition including nutritional requirements at each stage of life, how

culture, community, and behavioral factors influence food selection, and how to assess nutritional status through history-taking and physical examination.

Physical Medicine utilizes the knowledge of anatomy, physiology and kinesiology to understand how the function of the musculoskeletal system influences health and disease. There is also a particular emphasis placed on understanding tissue injury and healing, as well as the nature of musculoskeletal pain. We will be introduced to various musculoskeletal-based therapies and functional examinations.

Hydrotherapy is a major modality used to enhance vitality. We will explore how applications of hot and cold water as well as other stimuli influences detoxification, circulation, and the immune response. *Corequisite(s): THR 5120T, THR 5120L*.

Lecture:72 | Total Hours:72

### THR 5120T - Therapeutic Modalities I Tutorial

#### Credit(s): 2.00

This case-based course utilizes a small group setting to integrate and expand upon the information learned in the Therapeutic Modalities I lecture course. We will analyze cases, generate treatment plans and discuss philosophical elements of each modality in order to transform didactic knowledge into dynamic working knowledge and practical application. *Corequisite(s): THR 5120, THR 5120L*.

Tutorial:24 | Total Hours:24

#### **CLEO 5121 - Clinic Education II**

### Credit(s): 2.54

(Virtual) 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: 5 | Tutorial: 18 | Lecture: 10 | Total Hours: 33

First-Year- Winter -Totals- Clinic:5 | Tutorial:70.50 | Lab:26 | Lecture:226 | Total:327.5 | Credits:26

### Spring

#### BAS 5130 - Structure and Function III

### Credit(s): 8.00

In this course, we will continue our exploration of the structure and function of the human body at its many levels of organization, from molecule to organism. In this third course of a three-part series, we will continue to explore the biochemistry, cellular physiology, pathology, and development of the reproductive system, as well as the ears, nose and throat. We will also explore the importance of the nervous and endocrine systems in maintaining homeostasis, by communicating and coordinating with other organ systems. *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

This course explores clinical applications of the basic sciences of anatomy, physiology and biochemistry. We will continue the process of learning the language of medicine as well as the art of medicine, using critical thinking skills and scientific literature to explore clinical cases. The knowledge gained from this course will enhance studies in Structure and Function Lecture III. *Corequisite(s): BAS 5130. Note: Additional fee required.* 

Tutorial:6 | Total Hours: 6

### THR 5131 - Therapeutic Modalities II

### Credit(s): 4

Naturopathic doctors are trained to offer a broad scope of therapeutic options ranging from nature cure to pharmaceuticals chosen in accordance with the therapeutic order. This class explores the history, philosophy, and foundational concepts of botanical medicine, homeopathy, and pharmacology, and explores how each modality is employed as part of a holistic approach to medicine. We will explore the unique elements as well as the commonalities and differences of each modality.

- The botanical medicine portion develops knowledge on a wide range of topics by blending a strong foundation in the traditional practices of herbal medicine with a modern, evidence-informed approach. We will explore plant energetics, phytochemistry, basic botany, and the actions and indications for many botanical medicines.
- The homeopathy portion covers the principles of classic homeopathy and focuses on supporting students build case-taking skills and a working knowledge of the homeopathic repertory and major remedies.
- The pharmacology portion explores the principles of how medications physiologically interact with the body. Students will learn about major drug classes

and start to build knowledge of indications, contraindications, and how drugs are prescribed.

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

Lecture: 48 | Total Hours: 48

### **THR 5131T - Therapeutic Modalities II Tutorial**

Credit(s): 1.33

This case-based course utilizes a small group setting to integrate and expand upon the information learned in the Therapeutic Modalities II lecture course. We will analyze cases, generate treatment plans and discuss philosophical elements of each modality in order to transform didactic knowledge into dynamic working knowledge and practical application. *Corequisite(s): THR 5131, THR 5131L.* 

Tutorial: 16 | Total Hours: 16

### **HOM 5131 - Intro to Homeopathy**

Credit(s): 2

Naturopathic doctors are trained to offer a broad scope of therapeutic options ranging from nature cure to pharmaceuticals chosen in accordance with The Therapeutic Order. In this class, students will explore the history, philosophy, and foundational concepts of Classical Homeopathy. Students will be introduced to the key skills needed to prescribe effective and safe homeopathic medicines in patient care, including repertorization, remedy selection, medicine dosing, and case management.

Lecture: 24 | Total Hours: 24

### **HOM 5131T - Intro to Homeopathy Tutorial**

Credit(s): 0.67

This class builds upon the foundations and principles of Classical Homeopathy discussed in HOM5131. This engaging course will support students to build case-taking skills, a working knowledge of the homeopathic repertory, and knowledge of major homeopathic remedies so they may ultimately use this modality effectively and safely as part of a holistic approach to patient care.

Tutorial: 8 | Total Hours: 8

### BAS 5131 - Microbiology, Public Health and Immunology

Credit(s): 3.00

Why do some microbes cause harm and others improve our health? How have we coevolved with viruses, bacteria, parasites and mold? This foundational course explores the influence of medically important pathogens and how our immune system responds in a dynamic interplay of survival through adaptation. We examine how our environment affects disease outcomes with emphasis placed on modifiable factors including nutrition, stress, the microbiome, and access to health care. We develop an appreciation for public health's role in disease prevention, data collection, analysis and how naturopathic practitioners effectively collaborate with public health agencies. *Corequisite(s): BAS 5131T.* 

Lecture:36 | Total Hours:36

### BAS 5131T - Microbiology, Public Health and Immunology Tutorial

Credit(s): 2.00

This case-based course utilizes a small group setting to integrate and expand upon the information learned in the Microbiology, Public Health and Immunology lecture course. We analyze cases, generate treatment plans and discuss philosophical elements of each modality, transforming didactic knowledge into dynamic working knowledge and practical application.

Corequisite(s): BAS 5131.

Tutorial:24 | Total Hours:24

#### **CLEO 5132 - Clinic Education III**

#### Credit(s): 2.21

(Virtual) 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: 5 | Tutorial: 16 | Lecture: 8 | Total Hours: 29

First-Year- Spring -Totals- Clinic:5 | Tutorial:70 | Lab:0 | Lecture:212 | Total:287 | Credits:23.71

### Summer (Intensives)

### THRO 5120L - Intro to Therapeutic Modalities I Lab

### Credit(s): 1.00

Apply what we have learned about hydrotherapy and physical medicine during the school year in the summer intensive. In the hydrotherapy portion, we will review and practice how to perform constitutional hydrotherapy, hot fomentation and other hydrotherapy treatments. In the physical medicine portion, we will review and practice the use of various physiotherapy machines. We will give and receive these treatments enhancing our knowledge of the treatments from both a patient and a clinician perspective. This prepares us for delivering these treatments in our clinical rotations. *Prerequisite(s): THR 5120, THR 5120T. Note: Additional fee required.* 

Lab:24 | Total Hours:24

### THRO 5131L - Therapeutic Modalities II Lab

### Credit(s): 0.50

(Virtual). This course introduces each major naturopathic therapeutic modality. Therapeutic Modalities II introduces homeopathy, botanical medicine, and pharmacology. History and philosophy, terminology, mechanism of action and general therapeutic applications, indications, contraindications, safety and monitoring for each modality will be covered. Students will analyze evidence for effectiveness of each modality. The role of each modality in the context of naturopathic care and in the greater medical system will also be explored. The Therapeutic Modalities II Lab focuses on experiential education, exploring organoleptics and preparations of botanical medicines. *Corequisite(s): THR 5131, THR 5131T. Note: Additional fee required.* 

Lab: 12 | Total Hours: 12

### BASO 5131L - Clinical Anatomy Surface Palpitation I

#### Credit(s): 0.75

(Virtual). Surface Anatomy covers the anatomy of the muscular, skeletal, vascular and nervous elements of the extremities, spinal column and skull which are palpable. The lab component includes participation in palpation labs as an aid to learning the interrelationships of the parts of the human body.

Lab: 18 | Total Hours: 18

### BASO 5132L - Clinical Anatomy Lab Surface Palpitation II

### Credit(s): 0.75

Surface Anatomy covers the palpable anatomy of the muscular, skeletal, vascular, and

nervous elements of the extremities, spinal column and skull which are palpable. The lab component includes participation in palpation labs as an aid to learning the interrelationships of the parts of the human body. *Corequisite(s): BASO 5131, BASO 5131T.*Lab:18 | Total Hours:18

#### CLEO 5143 - Clinical Education

Credit(s): 0.63

In this course, we will continue to explore what it means to be a physician through clinic observation. Students will have the opportunity to reflect on real patient visits through 15 hours of in-person clinic observation. *Prerequisite(s):* CLEO 5110, CLEO 5121, CLEO 5132

Clinic:15

#### **CLEO 5121T - Clinic Education Tutorial**

Credit(s): 1.33

Apply what we have learned in Clinical Education during the school year and put our physical exam skills into practice. This hands-on class will have us practicing like a doctor as we explore vitals, listen to heart and lungs sounds, complete a skin and abdominal exam, and conduct EENT, thyroid and neurological exams, and chart our medical findings.

Tutorial:16 | Total Hours:16

### PHL 5130 - Naturopathic Medicine Retreat

Credit(s): 0.75

Naturopathic philosophy comes to life in this weekend retreat as we come together to explore naturopathic medicine in a natural setting. We will identify medicinal plants in nature, as well as experience hydrotherapy, mud therapy, meditation, and various exercise therapies. We will also discuss the tenants of naturopathic medicine and build community in a fun and engaging environment. *Prerequisite(s):* PHL 5110 PHL 5120

Lab:18 | Total Hours:18

- CPR100 CPR Certification
- ND Elective Credit(s):3.00\* (Electives may be taken in any term, this represents a placeholder for ND Elective Credits).

Lecture:36 | Total Hours:36

First-Year- Summer -Totals- Clinic:15 | Tutorial:16 | Lab:90 | Lecture:36 | Total:142 | Credits: 8.71

Total-First-Year-Hours- Clinic:15 | Tutorial:206.50 | Lab:142 | Lecture:700 |

Total:1070.50 | Credits:82.71

# **College of Classical Chinese Medicine**

We practice and teach the art, science, and spirit of Classical Chinese Medicine to prepare practitioners capable of restoring health and harmony to individuals and communities.

### 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 effective and fascinating.

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 "informed") the physical realm. 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 to unlock the secrets of true health and happiness.

But the texts are not easy to decipher—the journey requires 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 three CCM programs—the Master of Acupuncture (MAc), the Master of Acupuncture with a Chinese Medicine Specialization (MAcCHM) and the Doctor of Acupuncture with a Chinese Medicine Specialization (DAcCHM). The MAcCHM is fully nested within the DAcCHM, with the latter having an additional 45.5 credits and 552 hours. The MAc is largely nested within the MAcCHM, but has acupuncture-specific courses unique to it beginning in the final term of the second year. Students in all programs gain a strong classical orientation to the medicine. A primary goal of the DAcCHM 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, DAcCHM 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 MAcCHM and DAcCHM; content that is specific to the MAc and the DAcCHM programs are 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.

*MAc:* Instead of the full year of cosmology and symbolism associated with the 12 Chinese organ networks offered in year two of the MAcCHM/DAcCHM tracks, the MAc program includes an abbreviated, one-term course in this area of study in the first year of the program.

*DAcCHM:* 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.

*MAc:* Due to the shorter length of the program, the MAc program includes three qigong practicums and three weekend retreats. These are all completed in the first year of the program.

*DAcCHM:* A key component of cultivation training in the DAcCHM 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.

DAcCHM 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 MAcCHM and DAcCHM programs focus on research literacy and critical thinking, they do 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.

*MAc:* The biomedicine portion of the MAc program begins in the first year.

#### 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.

*DAcCHM:* 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 wholesystems science, and that Chinese medicine can truly flourish only when understood and applied according to its own precepts and tenets.

*MAc:* The MAc program begins its second year of biomedicine in year two of the MAc program.

### 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.

*MAc:* Beginning in the fall of the third 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.

*DAcCHM:* 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.

*DAcCHM:* 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.

*MAc:* The third year of the MAc program includes three summer mentoring rotations, followed by three intern rotations each in the fall, winter, and spring terms.

# 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 respect to the business and practice management aspects of their professional life.

*DAcCHM:* 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

*DAcCHM:* To ensure that DAcCHM 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.

*DAcCHM:* 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, DAcCHM interns have the opportunity to complete one or more rotations at NUNM's multidisciplinary community clinic sites (e.g.,the Garlington Center at Cascadia Behavioral Health and the Volunteers of America—Men's Recovery Center).

### **Electives**

MAcCHM and DAcCHM 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 Undergraduate & 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.

*MAc:* There are no elective requirements in the MAc program.

# Licensing and Certification of Acupuncturists and Oriental Medicine Practitioners

The MAcCHM, DAcCHM and MAc degrees are accredited by the Accreditation Commission for Acupuncture and Herbal Medicine (ACAHM) 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:

ACAHM 500 Lake Street, Suite 204

Excelsior, MN 55331 952.212.2434

NCCAOM

2001 K Street, NW, 3<sup>rd</sup> Fl North Washington, D.C. 20006 888.381.1140 (toll free)

202.381.1140 (direct)

202.381.1141 (fax)

The MAcCHM 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 Acupuncture and Chinese Medicine (DACM)-OCOM Teach-Out

On June 7, 2024 National University of Natural Medicine (NUNM) and Oregon College of Oriental Medicine (OCOM) completed a teach out agreement for the remaining portions of the academic programs where NUNM will provide the appropriate administrative and instructional staff to perform the teach-out, and will maintain all required records of the teach-out students before and after the closure date.

# Doctor of Acupuncture and Chinese Medicine (DACM)-Curriculum

## First Year

### Fall

- AC 511 Shiatsu I Credit(s): 0.75
- AC 523 Tuina I Credit(s): 0.75
- AC 530 Acupuncture Channels and Points I Credit(s): 4
- AC 534 Qigong I Credit(s): 0.5
- AC 537 Taiji Quan I Credit(s): 0.5
- CM 504 Chinese Medical Theory I Credit(s): 4
- IM 501 Western Medical Terminology Credit(s): 2
- IM 502 Anatomy and Physiology I Credit(s): 2.5
- IM 505 Living Anatomy I Credit(s): 2
- PD 504 Introduction to Community Outreach Practicum Credit(s): 0.11
- CL 535 Introduction to Clinic Observation Credit(s): 1

# First Year Fall Totals - Total Hours: 250 | Credits: 18.11

### Winter

- AC 512 Shiatsu II Credit(s): 1.5
- AC 524 Tuina II Credit(s): 1.5
- AC 531 Acupuncture Channels and Points II Credit(s): 4
- AC 535 Qigong II **Credit(s): 1**
- AC 538 Taiji Quan II Credit(s): 1
- AC 554 Accessory Techniques Credit(s): 0.75
- CM 505 Chinese Medical Theory II Credit(s): 4
- IM 503 Anatomy and Physiology II Credit(s): 2.5
- IM 506 Living Anatomy II Credit(s): 2
- CL 538 Clinical Theater I Credit(s): 2

# First Year Winter Totals - Total Hours: 276 | Credits: 17.75

## **Spring**

- AC 513 Shiatsu III Credit(s): 1.5
- AC 525 Tuina III Credit(s): 1.5
- AC 532 Acupuncture Channels and Points III Credit(s): 4
- AC 536 Qigong III Credit(s): 1
- AC 539 Taiji Quan III Credit(s): 1
- CM 506 Chinese Medical Theory III Credit(s): 4
- IM 504 Anatomy and Physiology III Credit(s): 2.5
- IM 507 Living Anatomy III Credit(s): 2
- CL 539 Clinical Theater II Credit(s): 2

# First Year Spring Totals - Total Hours: 258 | Credits: 17.00

### Summer

- AC 526 Shiatsu IV Credit(s): 1
- AC 527 Tuina IV Credit(s): 1
- AC 533 Acupuncture Channels and Points IV Credit(s): 2
- AC 610 Acupuncture Techniques I Credit(s): 1.5
- CM 507 Chinese Medicine Diagnosis Lab Credit(s): 0.75
- CM 519 Introduction to Chinese Herbal Medicine Credit(s): 1
- IM 508 Medical Charting Credit(s): 1
- RE 502 Integrative Medical Research I: Research Literacy Credit(s): 1

# First Year Summer Totals - Total Hours: 120 | Credits: 8.25 First Year Totals - Total Hours: 904 | Credits: 61.11

# **Second Year**

### Fall

- OAC 611 Acupuncture Techniques II Credit(s): 3
- OCM 521 Chinese Herbal Medicine I Credit(s): 4
- <u>CM 532 Pre-Han Classical Texts I: Yi Jing, Dao De Jing, Huang Di Nei Jing Credit(s): 2</u>
- OIM 521 Western Medical Pathology I Credit(s): 2
- OIM 560 Community Health and Chemical Dependency Credit(s): 2
- ORE 602 Integrative Medical Research II Credit(s): 2
- OCL 567 Clinical Rounds I Credit(s): 1

# Second Year Fall Totals - Total Hours: 204 | Credits: 16.00

### Winter

- OAC 612 Acupuncture Techniques III Credit(s): 3
- OCM 522 Chinese Herbal Medicine II Credit(s): 4

- OIM 509 Medical History Taking Credit(s): 2
- OIM 522 Western Medical Pathology II Credit(s): 2
- OIM 643 General Physics Credit(s): 2
- OPD 500 History of Medicine: East and West Credit(s): 2
- OCL 598 Herbal Rounds I Credit(s): 2
- <u>CL 616 Asian Bodywork Clinic</u> Credit(s): 2

# Second Year Winter Totals - Total Hours: 228 | Credits: 17.00

## **Spring**

- OAC 613 Acupuncture Techniques IV Credit(s): 2
- OAC 614 Acupuncture Microsystems (Auricular, Scalp, Hand and Wrist) Credit(s): 3
- OCM 526 Chinese Herbal Medicine III: The Pharmacopoeia Credit(s): 3
- OIM 523 Western Medical Pathology III Credit(s): 2
- OIM 640 Diet and Nutrition Credit(s): 2.5
- OIM 650 Structural Diagnosis Credit(s): 3
- <u>OPD 550 Patient-Practitioner Relationship</u> **Credit(s): 2**
- OCL 611 Chinese Herbal Medicinary Practicum Credit(s): 2

# Second Year Spring Totals - Total Hours: 258 | Credits: 19.50

### Summer

- OCM 527 Chinese Herbal Medicine III: The Pharmacopoeia Review Credit(s): 1
- OCM 528 Chinese Herbal Medicine III: Pao Zhi Credit(s): 1
- OCM 603 Chinese Nutrition Credit(s): 1.5
- OIM 530 Issues in Public Health Credit(s): 1
- OIM 531 Western Pharmacology I Credit(s): 1
- OCL 599 Herbal Rounds II Credit(s): 1
- CL 618 Asian Bodywork Clinic Credit(s): 1

# Second Year Summer Totals - Total Hours: 90 | Credits: 6.50

Second Year Totals - Total Hours: 780 | Credits: 59.00

# **Third Year**

### Fall

- OCM 621 Chinese Herbal Medicine IV: Formulas Credit(s): 4
- OCM 625 Dui Yao Credit(s): 2
- OCM 640 CCM: Acupuncture Therapeutics I (Orthopedics, Traumatology, Pain) Credit(s): 2

- OCM 660 CCM: Herbal Therapeutics I (Orthopedics, Traumatology, Pain) Credit(s): 1
- OIM 532 Western Pharmacology II Credit(s): 1
- OIM 551 Western Clinical Medicine I (Pain) Credit(s): 2
- OIM 660 Comparative Health Professions and Practices Credit(s): 2
- OPD 654 Practice Management II: Billing and Coding Credit(s): 1
- OCL 568 Clinical Rounds II Credit(s):

# Third Year Fall Totals - Total Hours: 228 | Credits: 17.00

### Winter

- OAC 652 Orthopedic Acupuncture Credit(s): 3
- OCM 534 Shang Han Lun Credit(s): 2
- OCM 622 Chinese Herbal Medicine V: Formulas Credit(s): 4
- OCM 641 CCM: Acupuncture Therapeutics II (EENT/Respiratory) Credit(s):
- OCM 661 CCM: Herbal Therapeutics II (EENT/Respiratory) Credit(s): 1
- OIM 533 Western Pharmacology III Credit(s): 1
- OIM 552 Western Clinical Medicine II (EENT/Respiratory) Credit(s): 2
- OIM 652 Integrative Case Management II (EENT/Respiratory) Credit(s): 1
- OPD 655 Practice Management III: Business Planning Credit(s): 1
- OCL 620 Clinic Trainee I Credit(s): 2

## Third Year Winter Totals - Total Hours: 252 | Credits: 19.00

# **Spring**

- OCM 538 Wen Bing Xue Credit(s): 2
- OCM 633 Herbal Prescription Strategies Credit(s): 2
- OCM 642 CCM: Acupuncture Therapeutics III (GI/Hepatobiliary) Credit(s): 2
- OCM 643 CCM: Acupuncture Therapeutics VIII (Dermatology) Credit(s): 1
- OCM 662 CCM: Herbal Therapeutics III (GI/Hepatobiliary) Credit(s): 1
- OCM 663 CCM: Herbal Therapeutics VIII (Dermatology) Credit(s): 0,5
- <u>OIM 553 Western Clinical Medicine III</u>
  - (GI/Hepatobiliary/Dermatology) Credit(s): 2
- OIM 653 Integrative Case Management III (GI/Hepatobiliary/Dermatology) **Credit(s): 1**
- OPD 656 Practice Management IV: Career Planning Credit(s): 1
- OCL 541 Integrative Clinical Theater Credit(s): 1.5
- OCL 621 Clinic Trainee II Credit(s): 2

# Third Year Spring Totals - Total Hours: 234 | Credits: 16.00

### Summer

• OCM 632 - Herbal Prepared Medicine Credit(s): 1

- IM 606 Adult and Child CPR/First Aid/AED Credit(s): 0.67
- OPD 601 Ethics and Jurisprudence Credit(s): 0.5
- OPD 653 Practice Management I: Digital Marketing Credit(s): 1.5
- OCL 622 Clinic Trainee III Credit(s): 2

# Third Year Summer Totals - Total Hours: 92 | Credits: 5.67 Third Year Totals - Total Hours: 806 | Credits: 57.67

## **Fourth Year**

### Fall

- OCM 644 CCM: Acupuncture Therapeutics IV (OB/GYN) Credit(s): 2
- OCM 664 CCM: Herbal Therapeutics IV (OB/GYN) Credit(s): 1
- OIM 554 Western Clinical Medicine IV (OB/GYN): Credit(s): 2
- OIM 654 Integrative Case Management IV (OB/GYN) Credit(s): 1
- OCL 590 Advanced Case Analysis and Clinical Research I Credit(s): 1
- OCL 633 Case Management I Credit(s): 1.5
- OCL 655 Clinic Paired Internship Credit(s): 2.57
- OCL 671 Herbal Internship Credit(s): 2.57

## Fourth Year Fall Totals - Total Hours: 349 | Credits: 18.78

### Winter

- OCM 645 CCM: Acupuncture Therapeutics V (Behavioral Health) Credit(s): 2
- OCM 646 CCM: Acupuncture Therapeutics VI (Pediatrics) Credit(s): 1
- OCM 665 CCM: Herbal Therapeutics V (Behavioral Health) Credit(s): 1
- OCM 666 CCM: Herbal Therapeutics VI (Pediatrics) Credit(s): 1
- OIM 555 Western Clinical Medicine V (Behavioral Health) Credit(s): 2
- OIM 556 Western Clinical Medicine VI (Pediatrics) Credit(s): 0.5
- OIM 655 Integrative Case Management V (Behavioral Health) Credit(s): 0.5
- OCL 591 Advanced Case Analysis and Clinical Research II Credit(s): 1
- OCL 634 Case Management II Credit(s): 1.5
- OCL 656 Clinic Internship I **Credit(s): 2.57**
- OCL 672 Herbal Internship II Credit(s): 2.38

# Fourth Year Winter Totals - Total Hours: 297 | Credits: 17.64

# **Spring**

- OCM 647 CCM: Acupuncture Therapeutics VII (Geriatric Care) Credit(s): 2
- OCM 667 CCM: Herbal Therapeutics VII (Geriatric Care) Credit(s): 1
- OIM 557 Western Clinical Medicine VII (Geriatrics) Credit(s): 2
- OIM 657 Integrative Case Management VII (Geriatrics) Credit(s): 1

- OCL 592 Advanced Case Analysis and Clinical Research III Credit(s): 1
- OCL 635 Case Management III Credit(s): 1.5
- OCL 657 Clinic Internship II Credit(s): 2.38
- OCL 659 Integrative Clinic Credit(s): 2.38

# Fourth Year Spring Totals - Total Hours: 366 | Credits: 21.02

### Summer

- OPD 505 Community Outreach Practicum Credit(s): 0.89
- OCL 593 Advanced Case Analysis and Clinical Research IV Credit(s): 1
- OCL 636 Case Management IV Credit(s): 1.5
- OCL 658 Clinic Internship III Credit(s): 1.58

Fourth Year Summer Totals - Total Hours: 176 | Credits: 8.13 Fourth Year Totals - Total Hours: 1188 | Credits: 65.57

# **Doctor of Acupuncture and Chinese Medicine (DACM)-Course Descriptions**

First Year

Fall

AC 511 - Shiatsu I

Credit(s): 0.75

Originating in Japan, shiatsu is a highly effective system of massage therapy that develops the practitioner's sensitivity, awareness, and responsiveness both in diagnosis and in treatment. Through palpation of the channels

through which qi flows, the practitioner is able to determine the nature and quality of energetic imbalances, and through finger and hand pressure to correct those imbalances and bring the body into greater alignment and

health. Because of its potency for relieving stress and stimulating energy circulation, shiatsu is used to treat specific disorders and is used as a preventative modality. Since shiatsu requires skill in channel palpation, this course provides an important practical support for coursework in point location and channel trajectories. Principles of professional interaction for manual therapy (including respectful touch, appropriate draping, body language, and verbal communication) are introduced at the beginning of Shiatsu I.

AC 523 - Tuina I

Credit(s): 0.75

Tuina, traditional Chinese massage therapy, forms the basis of Chinese physical therapy and is an important modality within Chinese medicine. Over three quarters, students are trained to a level of basic proficiency in the

treatment of structural and soft-tissue injury and dysfunction. Such training is intended to develop the student's physical approach to bodywork, as well as their healing presence and extension of qi toward a healing objective. This is applicable to tuina as an independent modality, as well as to later work with acupuncture needle technique. Students are trained in basic clinical preparatory treatments, including general health, shoulder, neck, abdominal, common cold, and headache protocols during the three quarters. Principles of professional interaction for manual therapy (respectful touch, appropriate draping, body language, and verbal communication) are reviewed at the beginning of Tuina I.

### AC 530 - Acupuncture Channels and Points I

Credit(s): 4

This first course in the Acupuncture Channels and Points course sequence presents the fundamental concepts of acupuncture channel theory and is designed to familiarize students with the role of the channel system as it

functions within the practice of acupuncture. Students are introduced to the general concepts and components of the channel system, including detailed information on the nomenclature, distributing rules, and functions of the channel system. They will then apply this foundation to learning the pathways, functions, and pathologies of the 12 primary channels, the eight extraordinary vessels, the 12 divergent channels, the 15 luo collateral vessels, the 12 muscle-sinew channels, and the six cutaneous regions and their relationship to the zang-fu. In addition to lecture, students will have practical opportunities, including hands-on practice, to learn the pathways of the various channels. *Corequisite(s):* CM504

### AC 534 - Qigong I

### **Credit(s): 0.5**

In Qigong I, students are introduced to the fundamentals of qigong practice and the philosophy that underlies this ancient healing practice integral to the practice of Chinese medicine. Students explore theory through the practice of foundational standing, moving, and seated forms — Shaking, San Yuan Gong (3 Sources Qigong), and Wu Xing Gong (5 Element Qigong).

### AC 537 - Taiji Quan I

### **Credit(s): 0.5**

The practice of taiji quan gives students an understanding and perception of the flow of qi in the body. In Taiji Quan, a set of individual physical poses are performed together as a single, fluid meditative form. In this course,

students learn the basic principles and history of taiji and are introduced to the correct posture and movements of a modified yang-style taiji form.

### CM 504 - Chinese Medical Theory I

### Credit(s): 4

This three-quarter course series provides students with foundation work in the basic theoretical concepts of Chinese medicine. Students explore yin/yang theory; the five phases (wu xing); traditional models for physiologic function, including the zang and fu organs, and the substrates of energy (qi), essence (jing), blood (xue), and fluids (jin/ye); the origins and processes of disease, including the four levels of disease (wen-bing xue) and the six stages of cold-induced disorders (shang-han bing); as well as the fundamentals of diagnostic theory (four methods). The study of selected, relevant portions of Chinese classic texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) is integrated into the study of these theories.

### IM 501 - Western Medical Terminology

### Credit(s): 2

This course helps students build a working medical vocabulary of the most frequently encountered prefixes, suffixes, and word roots encountered in biomedicine. Medical terms are introduced in the context of human

anatomy and physiology to help students understand exactly what they mean, and case studies, vignettes, and activities demonstrate how they're used in clinical practice.

#### IM 502 - Anatomy and Physiology I

### **Credit(s): 2.5**

The purpose of this course is to introduce students to medically relevant terminology and the structures and functions of human cells, tissues and organ systems. Concepts of homeostasis and the interrelationship of organ

system function will be introduced. This is the first course in a three-course sequence. Systems covered include the integumentary, skeletal, muscular, special senses, and nervous systems including nervous histology, physiology, spinal cord and nerves.

### **IM 505 - Living Anatomy I**

### Credit(s): 2

As a practitioner of a physical medicine, an acupuncturist utilizes information from the body's palpable structures, including skeletal structures, muscles, and neurovasculature, to formulate a diagnosis and treatment strategy. Through supervised, hands-on practice, Living Anatomy trains students to recognize, effectively locate, and skillfully palpate the surface structures of the body. *Corequisite(s):* IM502

### PD 504 - Introduction to Community Outreach Practicum

### Credit(s): 0.11

Community Outreach allows students to develop skills and experience in educating and informing the public about Chinese medicine. Participating in Community Outreach events like health fairs and educational forums

will provide students with valuable communication skills that will aid them in developing their practices after graduation.

#### CL 535 - Introduction to Clinic Observation

### Credit(s): 1

This course will provide students with an overview of the skills necessary to practice safely, professionally, and effectively in a clinical medicine setting. Topics covered include professional conduct and the role of the observer

in the clinic, patient-practitioner rapport, medical charting, best practices for safety and risk management, and evidence-informed practice.

First Year Fall Totals - Total Hours: 250 | Credits: 18.11

Winter

#### AC 512 - Shiatsu II

### Credit(s): 1.5

In Shiatsu II, students learn the location, basic functions, terminology, and treatments associated with the classical and extended meridians of the Lung/Large Intestine, Stomach/Spleen, and Heart/Small Intestine. Students are also introduced to the diagnostic areas in the hara and learn how to perform a basic hara diagnosis. In Shiatsu III, students learn the location, basic functions, terminology, and treatments associated with the classical and

extended meridians of the Bladder/Kidney, Pericardium/Triple Heater, Gall Bladder/Liver. Students learn how to apply the principles of shiatsu, including hara diagnosis, in a full-body session. *Prerequisite(s):* AC511

### AC 524 - Tuina II

### Credit(s): 1.5

Tuina II teaches students how to assess and treat diseases of the low back using subjective information, orthopedic exams, and tuina. Tuina III teaches students how to assess and treat diseases of the head, neck, and shoulders using subjective information, orthopedic exams, and tuina. Both courses train students in the development of clinical reasoning skills and the ability to differentiate between diseases. *Prerequisite(s)*: AC523

### AC 531 - Acupuncture Channels and Points II

### Credit(s): 4

This second course in the Acupuncture Channels and Points course sequence begins by providing students with a thorough introduction to acupuncture points, including their historical development, definition, general functions, nomenclature, and their major theoretical and functional point categories. Students also learn how to use both anatomical landmarks and traditional, proportional measurement systems to accurately locate acupuncture points. Then, through a combination of lecture, demonstration, and hands-on practice, students learn to apply this information to locate points of the Lung, Large Intestine, Stomach, Spleen, Heart, Small Intestine channels and Du Mai and understand their applications through a study of their actions, indications, and designated point categories. *Prerequisite(s):* AC530

### AC 535 - Qigong II

### Credit(s): 1

In Qigong II, students build on the knowledge and practice from Qigong I and are introduced to the study and practice of One Thousand Hands Buddha. One Thousand Hands Buddha, from the Liu family lineage, is a seated

qigong form that incorporates the use of elegant mudra (hand positions). It is an excellent form for quieting the heart/mind and providing clarity of thought and purpose and thus is an effective practice to support the study of

Chinese medicine. *Prerequisite(s):* AC534

### AC 538 - Taiji Quan II

### Credit(s): 1

Taiji Quan II and III build on the foundations laid in Taiji Quan I. Through intensive practice and regular instructor feedback of their posture and movement through the forms, students improve their skills, begin to acquire the

ability to experience qi and recognize the symptoms of blockage and opening of qi circulation. *Prerequisite(s):* AC537

### **AC 554 - Accessory Techniques**

### Credit(s): 0.75

Students learn and practice non-needling acupuncture techniques including moxibustion, cupping, and gua sha.

### CM 505 - Chinese Medical Theory II

### Credit(s): 4

This three-quarter course series provides students with foundation work in the basic theoretical concepts of Chinese medicine. Students explore yin/yang theory; the five phases (wu xing); traditional models for physiologic function, including the zang and fu organs, and the substrates of energy (qi), essence (jing), blood (xue), and fluids (jin/ye); the origins and processes of disease, including the four levels of disease (wen-bing xue) and the six stages of cold-induced disorders (shang-han bing); as well as the fundamentals of diagnostic theory (four methods). The study of selected, relevant portions of Chinese classic texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) is integrated into the study of these theories. *Corequisite(s):* CM504

### IM 503 - Anatomy and Physiology II

### Credit(s): 2.5

The purpose of this course is to introduce students to medically relevant terminology and the structures and functions of human cells, tissues and organ systems. Concepts of homeostasis and the interrelationship of organ system function will be introduced. This is the second course in a three-course sequence. Systems covered include a continuation of the nervous system, including brain, cranial nerves, and autonomic nervous system, the endocrine, cardiovascular and immune systems.

### IM 506 - Living Anatomy II

### Credit(s): 2

As a practitioner of a physical medicine, an acupuncturist utilizes information from the body's palpable structures, including skeletal structures, muscles, and neurovasculature, to formulate a diagnosis and treatment strategy. Through supervised, hands-on practice, Living Anatomy trains students to recognize, effectively locate, and skillfully palpate the surface structures of the body. *Corequisite(s):* IM503

#### CL 538 - Clinical Theater I

#### Credit(s): 2

The purpose of this course sequence is to prepare students for clinical internship by having them observe a licensed practitioner treating patients in a clinical theater setting. Over two quarters, in live "clinical theaters" in a classroom setting, students observe real-life patient care as provided by an OCOM faculty member who is a licensed acupuncturist. Students will have the opportunity to observe how an experienced practitioner presents case presentations, establishes rapport, conducts patient histories and examinations, charts

patient progress thoroughly yet concisely, selects appropriate assessment measures to demonstrate patient progress, and arrives at a quick and accurate diagnosis of patients' conditions using Eastern and Western diagnostic procedures. Students will practice comprehensive history taking by recording patient history and exam results for every patient they observe and will have the opportunity to observe patients' tongues to understand how this diagnostic element factors into the instructor's overall diagnosis and treatment. At appropriate times, students will have the opportunity to ask questions regarding each case. *Prerequisite(s):* CL535

First Year Winter Totals - Total Hours: 276 | Credits: 17.75

Spring

#### AC 513 - Shiatsu III

### **Credit(s): 1.5**

In Shiatsu III, students learn the location, basic functions, terminology, and treatments associated with the classical and extended meridians of the Bladder/Kidney, Pericardium/Triple Heater, Gall Bladder/Liver. Students learn how to apply the principles of shiatsu, including hara diagnosis, in a full-body session. *Prerequisite(s):* AC512

#### AC 525 - Tuina III

### **Credit(s): 1.5**

Tuina III teaches students how to assess and treat diseases of the head, neck, and shoulders using subjective information, orthopedic exams, and tuina. Both courses train students in the development of clinical reasoning skills and the ability to differentiate between diseases. *Prerequisite(s):* AC524

### AC 532 - Acupuncture Channels and Points III

#### Credit(s): 4

Through a combination of lecture, demonstration, and hands-on practice, students learn to accurately locate points of the Bladder, Kidney, Pericardium, San Jiao, Gallbladder, and Liver channels and Ren Mai understanding their applications through a study of their actions, indications, and designated point categories. *Prerequisite(s):* AC531

### AC 536 - Qigong III

### Credit(s): 1

Qigong III builds on the knowledge and practice from Qigong I-II and introduces students to

the study and practice of Eight Treasures Qigong (Ba Duan Jin). Eight Treasures is one of the four oldest and most famous qigong methods in China, dating back to the early 12th century. The name Eight Treasures refers to its eight routines, each a treasure in itself. It is a simple standing form that is easy to learn and powerful in its application. It benefits the bones, tendons, organ-energy systems, and seven emotions. *Prerequisite(s):* AC535

### AC 539 - Taiji Quan III

### Credit(s): 1

Taiji Quan II and III build on the foundations laid in Taiji Quan I. Through intensive practice and regular instructor feedback of their posture and movement through the forms, students improve their skills, begin to acquire the ability to experience qi and recognize the symptoms of blockage and opening of qi circulation. *Prerequisite(s):* AC538

### CM 506 - Chinese Medical Theory III

### Credit(s): 4

This three-quarter course series provides students with foundation work in the basic theoretical concepts of Chinese medicine. Students explore yin/yang theory; the five phases (wu xing); traditional models for physiologic function, including the zang and fu organs, and the substrates of energy (qi), essence (jing), blood (xue), and fluids (jin/ye); the origins and processes of disease, including the four levels of disease (wen-bing xue) and the six stages of cold-induced disorders (shang-han bing); as well as the fundamentals of diagnostic theory (four methods). The study of selected, relevant portions of Chinese classic texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) is integrated into the study of these theories. *Prerequisite(s)*: CM505

### IM 504 - Anatomy and Physiology III

#### **Credit(s): 2.5**

This is the third course in a three-course sequence. Systems covered include the respiratory, digestive, urinary and reproductive systems, metabolism and fluid and electrolyte balances, embryology and genetics.

### **IM 507 - Living Anatomy III**

### Credit(s): 2

As a practitioner of a physical medicine, an acupuncturist utilizes information from the body's palpable structures, including skeletal structures, muscles, and neurovasculature, to formulate a diagnosis and treatment strategy. Through supervised, hands-on practice,

Living Anatomy trains students to recognize, effectively locate, and skillfully palpate the surface structures of the body. *Corequisite(s):* IM504

#### CL 539 - Clinical Theater II

### Credit(s): 2

The purpose of this course sequence is to prepare students for clinical internship by having them observe a licensed practitioner treating patients in a clinical theater setting. Over two quarters, in live "clinical theaters" in a classroom setting, students observe real-life patient care as provided by an OCOM faculty member who is a licensed acupuncturist. Students will have the opportunity to observe how an experienced practitioner presents case presentations, establishes rapport, conducts patient histories and examinations, charts patient progress thoroughly yet concisely, selects appropriate assessment measures to demonstrate patient progress, and arrives at a quick and accurate diagnosis of patients' conditions using Eastern and Western diagnostic procedures. Students will practice comprehensive history taking by recording patient history and exam results for every patient they observe and will have the opportunity to observe patients' tongues to understand how this diagnostic element factors into the instructor's overall diagnosis and treatment. At appropriate times, students will have the opportunity to ask questions regarding each case. *Prerequisite(s)*: CL535

First Year Spring Totals - Total Hours: 258 | Credits: 17.00

Summer

#### AC 526 - Shiatsu IV

### Credit(s): 1

In Shiatsu IV, students deepen their understanding of shiatsu theory and diagnosis, incorporate kyo/jitsu diagnostic theory into their repertoire, and develop the clinical competency required to progress into the clinic treating patients under supervision. *Prerequisite(s)*: AC513

#### AC 527 - Tuina IV

### Credit(s): 1

Tuina IV teaches students how to assess and treat diseases of the upper and lower extremities and low back using subjective information, orthopedic exams, and tuina. Students deepen their understanding of tuina theory and diagnosis and they develop the clinical competency required to progress into the clinic treating patients under supervision. *Prerequisite(s)*: AC525

### AC 533 - Acupuncture Channels and Points IV

# Credit(s): 2

Through a combination of lecture, demonstration, and hands-on practice, students learn to accurately locate the most common Extra Points and understand their applications through a study of their actions and indications. Students are also introduced to general principles and methods of acupuncture treatment. Remaining classes are devoted to regional review of the main points on each channel, and a comparison of the actions and indication of major acupuncture points. *Prerequisite(s):* AC532

# AC 610 - Acupuncture Techniques I

# Credit(s): 1.5

This course sequence introduces students to the clinical tools and essential skills of the acupuncturist. Its objective is to provide a solid foundation in needle techniques and to review the related skills of moxibustion, cupping, gua sha. Techniques I is focused on the basic needling techniques, such as needle insertion, techniques to obtain Qi sensation, simple reinforcing and reducing techniques, auxiliary needling techniques etc. Attention is also paid to general issues of patient safety, with emphasis on appropriate needle depths and angles, and learning the basic skills of Clean Needle Technique. *Prerequisite(s):* AC532

### CM 507 - Chinese Medicine Diagnosis Lab

### Credit(s): 0.75

Students will practice the diagnostic skills required of the Chinese medical practitioner — pulse reading, tongue observation, questioning, and palpation. *Prerequisite(s)*: CM506

### CM 519 - Introduction to Chinese Herbal Medicine

### Credit(s): 1

This course begins the Chinese herbal medicine series of individual herbs, substances, and herbal formulas, and introduces the practice of Chinese herbal medicine. It provides a general overview of the concepts of herbal alchemy, herbal energetics including natures and flavors, herbal directional movement, botany, taxonomy, pharmacology, ethics, philosophy, and theoretical application of herbs, and addresses the historical development of Chinese herbal medicine in Asia and the United States. It introduces categories of individual herbs and formulas, preparation of herbal formulas, general precautions, and potential problems with herbs (including herb-drug interactions), and relevant research on Chinese herbs. *Prerequisite(s):* CM504

### **IM 508 - Medical Charting**

# Credit(s): 1

Addressing medical charting from both the clinical and legal perspectives, this course introduces students to the professional standards for medical documentation. Through a combination of lecture, in-class exercises and faculty and peer assessment of charting assignments, students will learn high-quality charting behaviors that minimize risk and maximize patient safety and clinical outcomes.

# RE 502 - Integrative Medical Research I: Research Literacy

## Credit(s): 1

The first of our two-course series in Integrative Medical Research provides foundational skills in research literacy for the Chinese medicine practitioner by introducing the basic research skills required to conduct a literature review, the evidence hierarchy, evidence-based medicine (EBM), key issues in acupuncture research, the academic peer review process, and the nine competencies of research literacy. Through lecture, reading, and inclass exercises, students will learn to formulate searchable questions, efficiently locate evidence, recognize various evidence types, and evaluate the reliability, quality, and clinical relevance of this evidence.

First Year Summer Totals - Total Hours: 120 | Credits: 8.25

First Year Totals - Total Hours: 904 | Credits: 61.11

Second Year

Fall

### OAC 611 - Acupuncture Techniques II

### Credit(s): 3

This course sequence continues to train students to the clinical tools and essential skills of the acupuncturist, Blood-letting techniques, cutaneous (7-star) needling techniques and warm-needling techniques are introduced. Its objective is to provide a solid foundation in needling the different areas of the body and to review the related skills of moxibustion, cupping, gua sha. Appropriate needle depths and angles, maintaining clean fields, and application of aseptic and sterile procedures are continually emphasized as well. Note: Completion of this course sequence also requires successful completion of the Clean Needle Technique (CNT) class sponsored by the Council of Colleges of Acupuncture and Herbal Medicine (CCAHM). There is an additional fee for the CNT class. The CNT course is currently offered online. Students should complete it during the quarter they are enrolled in the

Acupuncture II course. *Prerequisite(s):* AC554, AC610 *Corequisite(s):* CCAHM CNT Certificate Course

#### OCM 521 - Chinese Herbal Medicine I

# Credit(s): 4

This three-quarter sequence is designed to introduce approximately 365 of the most commonly used medicinal substances in Chinese medicine. Included in that study are the names of the substances cross-referenced by botanical, pharmaceutical, common English and Chinese name; substance identification; nature and flavor; major functions, actions, and indications; precautions, herb-drug interactions; preparation methods and relevant research describing physiological action. Chinese Herbal Medicine I: The Pharmacopoeia (4 credits/48 hours) – This quarter begins with the study of the 50 most common medicinal substances from all categories. Once students have achieved mastery of these 50 key medicinals the following herb categories are covered: Acrid Warm to Release the Exterior and Acrid Cool to Release the Exterior, Clear Heat Reduce Fire, Clear Heat Cool the Blood, Clear Heat Dry Damp, Clear Heat Toxins, Downward Draining, Clear Deficiency Heat (135 herbs). *Prerequisite(s):* CM506, CM519

### CM 532 - Pre-Han Classical Texts I: Yi Jing, Dao De Jing, Huang Di Nei Jing

# Credit(s): 2

This course introduces students to the foundational texts of Chinese culture and medicine: the Yi Jing ("The Book of Changes"), the Dao De Jing ("Classic of the Way and Its Virtue"), and the Huang Di Nei Jing ("The Yellow Emperor's Internal Classic"), which has two component parts: the Su Wen ("Basic Questions") and the Ling Shu ("Spiritual Pivot"). By studying these pre-Han classical texts, students will both broaden and deepen their understanding of the theoretical foundations of Chinese medicine and gain an appreciation of their usefulness in the modern clinic.

Attention will be paid both to how these classic texts infuse and inform Chinese medical theory and clinical practice throughout the history of Chinese medicine and the ways in which Chinese medical theory, clinical practice, and terminology has evolved since the time these texts were written.

This required course will focus on basic concepts of Chinese medicine theory and philosophy as exemplified in the Pre-Han texts. Concepts like Yin Yang theory, 3 Treasures, 4 Directions, 5 phases, and other numerologically significant ideas will be discussed in great detail with a lens towards how the perspective presented in these classics provides a fully integrated worldview that has practical applications for the practice of Chinese medicine in the modern clinic. *Prerequisite(s):* CM504, CM505, CM506

### OIM 521 - Western Medical Pathology I

# Credit(s): 2

In this course, students become familiar with Western biomedical approaches to disease development and progression with the goal of cultivating a deeper understanding of disease processes, the ability to communicate with other health professionals, proficiency in reviewing medical documents relevant to patient care, and understanding of when to refer to urgent care. Pathologies of each of the major body and organ systems are covered, including the cardiovascular, neurological, respiratory, musculoskeletal, urogenital, gynecological, endocrine, hematopoietic, skin, gastrointestinal, hepatic and pancreatic systems. Microbiology and immunology are addressed in the context of both acute and chronic diseases, as well.

# **OIM 560 - Community Health and Chemical Dependency**

# Credit(s): 2

Dependence on alcohol and drugs is a major public health issue in our culture. Chinese medicine, in combination with appropriate counseling and support networks, has emerged as the preeminent drugless therapy in the treatment of chemical dependency and the facilitation of detoxification and withdrawal. In this class, students focus on the special physiological, socioeconomic, cultural, and spiritual issues of chemical dependency, and clinical approaches of the chemical dependency acupuncture therapist. Additionally, coursework includes information and training in HIV/AIDS education and models for utilizing Chinese medicine for community health.

# **ORE 602 - Integrative Medical Research II**

# Credit(s): 2

Research in acupuncture and Chinese herbology has become increasingly important for enhancing the credibility of Chinese medicine in the eyes of the biomedical community, the insurance industry, and health care policy analysts. In this course, students will examine the current evidence base for acupuncture and the methodological challenges of designing research that is relevant to clinical practice. Students will learn and practice how to evaluate and design clinical trials. The course also introduces physiological theories of how acupuncture works. *Corequisite(s):* RE502

### OCL 567 - Clinical Rounds I

# Credit(s): 1

Clinical Rounds I and II continue the process of preparing students for clinical internship through observation of a licensed practitioner treating patients in a clinical setting. Over

two quarters, students follow a faculty practitioner treating patients in one of the school's teaching clinics. Under the constant, direct supervision of the faculty practitioner, students will participate in case presentations and take chart notes, recording a patient's history and exam results, as well as assessments and treatments for each patient they observe. Students will have the opportunity to take patients' pulses and observe their tongues to understand how these diagnostic elements factor into the instructor's overall diagnosis and treatment. At appropriate times, students will have the opportunity to ask questions regarding each case. Under the direct supervision of the faculty practitioner, students may participate in direct patient care by administering cupping, gua sha, tuina/shiatsu, and moxibustion as necessary. Finally, as part of the overall strategy for developing the skills required of a successful practitioner, students will be responsible for cleaning and stocking the treatment rooms at the beginning and the end of each shift and preparing the room between patients. *Corequisite(s)*: CL539

Second Year Fall Totals - Total Hours: 204 | Credits: 16.00

Winter

## **OAC 612 - Acupuncture Techniques III**

# Credit(s): 3

This course sequence continues to train students to the clinical tools and essential skills of the acupuncturist, electroacupuncture setting, Five element treatment, holographic theory, motor and trigger points protocol, extraordinary channel theory, Luo vessel treatment, muscle sinew treatment protocol etc. are introduced. The objective is to provide a solid foundation in needle techniques and to review the related skills of moxibustion, cupping, gua sha. Attention is also paid to general issues of patient safety, with emphasis on appropriate needle depths and angles, maintaining clean fields, and application of aseptic and sterile procedures. *Prerequisite(s):* OAC611; CCAHM CNT

#### OCM 522 - Chinese Herbal Medicine II

### Credit(s): 4

This three-quarter sequence is designed to introduce approximately 365 of the most commonly used medicinal substances in Chinese medicine. Included in that study are the names of the substances cross-referenced by botanical, pharmaceutical, common English and Chinese name; substance identification; nature and flavor; major functions, actions, and indications; precautions, herb-drug interactions; preparation methods and relevant research describing physiological action.

Chinese Herbal Medicine II: The Pharmacopoeia - This continues review of the 50 most common medicinal substances and the following categories covered: Aromatic to Transform Damp, Warm Interior,

Regulate Qi, Stop Bleeding, Invigorate Blood and Remove Blood Stasis, Clear Food

Stagnation, Stop Cough and Wheezing, Transform Phlegm, Drain Dampness and Excrete Water, Expel Wind Dampness, Open Orifice Herbs (155 herbs). *Prerequisite(s):* OCM521

# **OIM 509 - Medical History Taking**

# Credit(s): 2

The medical history serves as one of the pillars of medical diagnosis and is traditionally the first step in virtually every clinical encounter. A thorough history allows the clinician to define the patient's problem and, along with the results of physical examination, assists in formulating a diagnosis in most cases.

Through a combination of lecture, demonstration, and practice, this course is designed to develop student confidence in taking a detailed clinical history. Principles of clinical reasoning and interviewing technique are presented in detail, and tips for maintaining clinical focus are discussed. Medical documentation, from both the clinical and legal perspectives, are reviewed, and how the interview informs physical examination and assessment is discussed.

## OIM 522 - Western Medical Pathology II

# Credit(s): 2

In this course, students become familiar with Western biomedical approaches to disease development and progression with the goal of cultivating a deeper understanding of disease processes, the ability to communicate with other health professionals, proficiency in reviewing medical documents relevant to patient care, and understanding of when to refer to urgent care. Pathologies of each of the major body and organ systems are covered, including the cardiovascular, neurological, respiratory, musculoskeletal, urogenital, gynecological, endocrine, hematopoietic, skin, gastrointestinal, hepatic and pancreatic systems. Microbiology and immunology are addressed in the context of both acute and chronic diseases, as well.

#### **OIM 643 - General Physics**

### Credit(s): 2

This course provides an introduction to the fundamental concepts of physics and an understanding of how these principles relate to everyday life. The topics in this course include Newton's laws, properties of matter, heat and

thermodynamics, waves, electricity and magnetism, and fundamental quantum theory. Students will apply these principles using practical examples and facilitated discussions. This course also introduces the concept of biophysics — the science that applies the laws and methods of physics to the study of biological phenomena — through a survey of its applications in modern medicine and a presentation and discussion of some of the more interesting hypotheses currently being researched with regards to biophysics and

acupuncture theory. (Corequisite for students who have not taken General Physics prior to admission.)

### **OPD 500 - History of Medicine: East and West**

### Credit(s): 2

Through lecture and visual presentations, this course offers a historical and cultural perspective on the development of medicine throughout the world. The first six weeks will review the emergence and evolution of traditional East Asian medicine in China and around the world in light of evolving and competing worldviews. During the second six weeks, the course looks at the history of medicine in "animistic" societies and then through other global cultures, especially the ancient Mediterranean, Europe and North America, to see how history, culture, and worldviews shape the perception of health and disease and the practice of medicine in contemporary America. Through the methodology of historical analysis and cultural contextualization this course will further enable each student to assess assumptions and constructs regarding health, disease causation, medicine, the therapeutic relationship, and the healing process. Thus, the emergent practitioner will understand both the content and context of Chinese medical traditions as well as the origins and evolution of the culture in which each patient is embedded.

# OCL 598 - Herbal Rounds I

## Credit(s): 2

These two courses support the student's learning of Chinese herbal medicine by allowing them to observe a clinical faculty member diagnose and treat a patient using Chinese herbs exclusively.

Under the constant, direct supervision of the faculty practitioner, the student will participate in case presentations and take chart notes, recording a patient's history and exam results as well as assessments and treatments for each patient they observe. The student will have the opportunity to take patients' pulses and observe their tongues to understand how these diagnostic elements factor into the instructor's overall diagnosis and treatment. At

appropriate times, students will have the opportunity to ask questions regarding each case.

In Herbal Rounds I students will observe a faculty practitioner interview, diagnose and create a herbal prescription. Herbal Rounds II this observation will take place in an Herbal Internship clinic where the student will observe

clinical interns. (Note: only MACM and DACM students take this course.) *Prerequisite(s):* CL539, CM521

### CL 616 - Asian Bodywork Clinic

# Credit(s): 2

Any student who completes Shiatsu I-IV or Tuina I-IV (through selective or elective) may take Asian Bodywork Clinic as part of their pre-internship clinical requirement instead of Herbal Rounds I-II. In this supervised bodywork clinic, students apply their shiatsu or tuina skills to the treatment of patients. They engage in patient interviews, assessment, charting, and treatment. This experience will enhance their clinical skills as they prepare for clinical internship. *Prerequisite(s):* Prerequisite Shiatsu: AC527, CL539, IM508.

Prerequisite Tuina: AC526, CL539, IM508. *Corequisite(s):* Co-requisite (Shiatsu or Tuina): OIM509

Second Year Winter Totals - Total Hours: 228 | Credits: 17.00

Spring

# **OAC 613 - Acupuncture Techniques IV**

## Credit(s): 2

Students continue to practice and refine the basic skills acquired in Acupuncture Techniques I-III as they learn new acupuncture techniques to utilize in clinical practice. In addition, students begin to combine and apply

these skills to complete acupuncture treatment protocols for some of the more commonly seen conditions in the clinic (e.g., reproductive issues, headache, neck pain, low back pain, stress, gastrointestinal issues). This course is designed to bring students to the required level of proficiency in acupuncture skills for entrance into Clinic Trainee. *Prerequisite(s)*: OAC612

### OAC 614 - Acupuncture Microsystems (Auricular, Scalp, Hand and Wrist)

# Credit(s): 3

Apart from the main channel system, Chinese medicine also utilizes a variety of local, "holographic" microsystems in acupuncture therapy. Through lecture, demonstration and practice, this course introduces the basic theory

behind the three most important acupuncture microsystems of Chinese medicine - auricular, scalp and wrist/ankle acupuncture microsystems — and how they are utilized in treating such conditions as pain, stroke and musculoskeletal disorders. Auricular Acupuncture: Students will learn the Chinese auricular system (the French Nogier system will be introduced in the course of the class). Ear diagnosis class). Ear diagnosis and master points will be discussed along with how to build a point protocol for patients. The National Acupuncture Detoxification Association (NADA) protocol will be introduced, along with its

development in both chemical dependency and mental health treatment settings. *Prerequisite(s):* OAC612

### OCM 526 - Chinese Herbal Medicine III: The Pharmacopoeia

# Credit(s): 3

This three-quarter sequence is designed to introduce approximately 365 of the most commonly used medicinal substances in Chinese medicine. Included in that study are the names of the substances cross-referenced by

botanical, pharmaceutical, common English and Chinese name; substance identification; nature and flavor; major functions, actions, and indications; precautions, herb-drug interactions; preparation methods and relevant research describing physiological action.

Chinese Herbal Medicine III: The Pharmacopoeia (3 credits/36 hours) – This continues review of the 50 most common medicinal substances and the following categories covered: Calm Shen, Nourish Blood, Tonify Qi,

Tonify Yang, Tonify Yin, Expel Parasites, Topical Use Herbs, Subdue Liver Yang and Extinguish Wind (75 herbs). *Prerequisite(s):* OCM522

### OIM 523 - Western Medical Pathology III

# Credit(s): 2

In this course, students become familiar with Western biomedical approaches to disease development and progression with the goal of cultivating a deeper understanding of disease processes, the ability to communicate

with other health professionals, proficiency in reviewing medical documents relevant to patient care, and understanding of when to refer to urgent care. Pathologies of each of the major body and organ systems are

covered, including the cardiovascular, neurological, respiratory, musculoskeletal, urogenital, gynecological, endocrine, hematopoietic, skin, gastrointestinal, hepatic and pancreatic systems. Microbiology and immunology

are addressed in the context of both acute and chronic diseases, as well.

#### **OIM 640 - Diet and Nutrition**

# **Credit(s): 2.5**

This course explores the vital role that diet and nutrition play in an overall approach to patient care. Students study this topic from a modern Western perspective, focusing on developing a broad understanding of the essential elements of nutritional physiology, the roles of vitamins and minerals in health maintenance and as therapeutic supplements, and the use of food as medicinal substances. Clinical applications of nutrition and lifestyle counseling are discussed. *Prerequisite(s):* IM501, IM502, IM503, IM504

### **OIM 650 - Structural Diagnosis**

# Credit(s): 3

Utilizing lecture and hands-on practice, students continue the work begun in Living Anatomy I-III by focusing on differentiating musculoskeletal and neurological disorders using orthopedic and other evaluative procedures. This course provides the student with assessment approaches for musculoskeletal and neurological disorders, which are among the most common conditions seen in acupuncture and Chinese medical practices. *Prerequisite(s):* IM505, IM506, IM507, OIM521

# **OPD 550 - Patient-Practitioner Relationship**

# Credit(s): 2

In a Chinese medicine practice, the core of the healing process is the relationship between the patient and the practitioner. By learning to observe, identify, and understand human emotions and needs, the practitioner is able

to communicate effectively and create a nourishing and safe environment for healing to occur. The following topics are addressed as fundamental skills for good patient-practitioner relationships: ethical practice guidelines

and codes; strategies for resolving ethical dilemmas; personal and professional boundaries and conflict resolution; inclusive treatment; motivational interviewing; screening for mental illness, substance use disorder, and intimate partner violence; suicide prevention; and selfcare and resilience. This class will use a combination of lectures, role plays, and additional class activities to teach students about the fundamentals of the patient-practitioner relationship. *Prerequisite(s):* CL535

### OCL 611 - Chinese Herbal Medicinary Practicum

# Credit(s): 2

During their study of herbal medicine, students have an opportunity to enhance their familiarity with the preparation and dispensing of medicinal substances. Under the guidance of supervisors, students assist in the operation of the college's OCOM Herbal Medicinary and participate in preparing granule and bulk herb formulas. Through this process, students learn identification, sorting, preparation, and storage of individual herbs, as well as combinations of herbs for health conditions. (Note: only MACM and DACM students take this course.) *Prerequisite(s):* CL539, CM519 *Corequisite(s):* CM521

Second Year Spring Totals - Total Hours: 258 | Credits: 19.50

#### Summer

### OCM 527 - Chinese Herbal Medicine III: The Pharmacopoeia - Review

# Credit(s): 1

This class reviews all single herbs and herb categories covered in Chinese Herbal Medicine I-III: The Pharmacopeia. *Prerequisite(s):* OCM526

#### OCM 528 - Chinese Herbal Medicine III: Pao Zhi

# Credit(s): 1

This class introduces students to different Pao Zhi preparations that can give a single herb different functions. Students prepare both single herbs and formulas while simultaneously reviewing the main functions of commonly

used clinical medicinals. The course covers a cross section of herbs from Chinese Herbal Medicine I-III: The Pharmacopeia. *Prerequisite(s):* OCM526

#### **OCM 603 - Chinese Nutrition**

## **Credit(s): 1.5**

Utilizing Chinese dietary principles in conjunction with acupuncture and herbal treatment will enable the practitioner to better aid their patients in achieving "balance" and improved health. This course emphasizes

Chinese classification of foods into categories and combining foods with Chinese herbs to create clinically effective recipes. Foods that are to be eaten or avoided during particular disorders are discussed and a portion of the class involves hands-on preparation of special dishes for specific illnesses. *Prerequisite(s)*: CM506

### OIM 530 - Issues in Public Health

# Credit(s): 1

This course explores cultural and environmental forces that contribute to health and illness among individuals in our society. Topics include the economics of the health care delivery system, disenfranchised populations,

maternal and child health, occupational health, epidemiology, and world health. Particular attention is paid to ways in which the practitioner interfaces with, affects, and is affected by this system.

# OIM 531 - Western Pharmacology I

### Credit(s): 1

This course provides students with a basic understanding of the important pharmaceutical products commonly prescribed today, including their physiological functions,

recommended dosages, prominent effects and

proprietary and generic names. Interaction of pharmaceuticals with herbs and nutrients is addressed. Emphasis placed on the most popular pharmaceuticals prescribed today to treat the most common drug-treated conditions in North America: cardiovascular disease, diabetes, and chronic pain. *Prerequisite(s):* IM501, IM502, IM503, IM504, IM505, IM506, IM507

#### OCL 599 - Herbal Rounds II

# Credit(s): 1

These two courses support the student's learning of Chinese herbal medicine by allowing them to observe a clinical faculty member diagnose and treat a patient using Chinese herbs exclusively.

Under the constant, direct supervision of the faculty practitioner, the student will participate in case presentations and take chart notes, recording a patient's history and exam results as well as assessments and treatments for each patient they observe. The student will have the opportunity to take patients' pulses and observe their tongues to understand how these diagnostic elements factor into the instructor's overall diagnosis and treatment. At

appropriate times, students will have the opportunity to ask questions regarding each case.

In Herbal Rounds I students will observe a faculty practitioner interview, diagnose and create a herbal prescription. Herbal Rounds II this observation will take place in an Herbal Internship clinic where the student will observe

clinical interns. (Note: only MACM and DACM students take this course.) *Prerequisite(s):* CL539, OCM526

### CL 618 - Asian Bodywork Clinic

# Credit(s): 1

Any student who completes Shiatsu I-IV or Tuina I-IV (through selective or elective) may take Asian Bodywork Clinic as part of their pre-internship clinical requirement instead of Herbal Rounds I-II. In this supervised bodywork clinic, students apply their shiatsu or tuina skills to the treatment of patients. They engage in patient interviews, assessment, charting, and treatment. This experience will enhance their clinical skills as they prepare for clinical internship. *Prerequisite(s):* Shiatsu: AC527, CL539, IM508; Tuina: AC526, CL539, IM508 *Corequisite(s):* Co-requisite (Shiatsu or Tuina): OIM50

Second Year Summer Totals - Total Hours: 90 | Credits: 6.50

Second Year Totals - Total Hours: 780 | Credits: 59.00

# Third Year

Fall

#### OCM 621 - Chinese Herbal Medicine IV: Formulas

# Credit(s): 4

In this course sequence, students learn how the individual medicinal substances of Chinese herbal medicine are combined into coherent, clinically specific formulas. Study focuses primarily upon the approximately 150 classical formulas and their variations. These classical formulas are used to determine a recommended strategy, and modified for individual clinical presentations. *Prerequisite(s)*: OCM526

### OCM 625 - Dui Yao

# Credit(s): 2

This course serves as a bridge between the learning of single herb medicinals and herbal formulas. The course provides students with an understanding of how Chinese medicinals combine for greater synergy and how these combinations serve as the building blocks of the most common formulations. Herbal pairs, triads and larger groupings are studied in depth to understand the therapeutic mechanisms and foundational methodologies that are the bedrock of formula science. *Prerequisite(s):* OCM526

# OCM 640 - CCM: Acupuncture Therapeutics I (Orthopedics, Traumatology, Pain)

## Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding.

(Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, AC610, CM506, CM507 *Corequisite(s):* OAC611, OIM521, OIM551

# OCM 660 - CCM: Herbal Therapeutics I (Orthopedics, Traumatology, Pain)

# Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding.

(Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OIM521, OIM522, OIM523 *Corequisite(s):* OCM621, OCM640, OIM551

### OIM 532 - Western Pharmacology II

### Credit(s): 1

This course provides students with a basic understanding of the important pharmaceutical products commonly prescribed today, including their physiological functions, recommended dosages, prominent effects and

proprietary and generic names. Interaction of pharmaceuticals with herbs and nutrients is addressed. Emphasis placed on the most popular pharmaceuticals prescribed today to treat the most common drug-treated conditions in North America: cardiovascular disease, diabetes, and chronic pain. *Prerequisite(s):* OIM521

# OIM 551 - Western Clinical Medicine I (Pain)

### Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of traumatic, musculoskeletal, neuropathic, rheumatological, visceral,

somatic, and other pain. The course will cover many common painful conditions such as headaches, arthritis, neuropathies, chronic pain, carpal tunnel syndrome, fibromyalgia, and sciatica. *Corequisite(s)*: OCM640, OIM521

# **OIM 660 - Comparative Health Professions and Practices**

# Credit(s): 2

The aim of this course is to foster awareness of the range of health care professions in our society and develop an understanding and appreciation of their different philosophies, cultures, and health care practices. Particular attention is paid to exploring the many ways in which health care professionals from diverse professions may collaborate and refer patients in the delivery of cost effective

health care. (This course is for DACM students only.) Prerequisite(s): CL538, OPD550

### OPD 654 - Practice Management II: Billing and Coding

# Credit(s): 1

This course introduces basic billing and cash flow practices within an acupuncture business. This includes an overview of Super Bills, CPT and ICD-10 coding, as well as how to become credentialed with insurance, and billing private insurance, personal injury insurance or workers' compensation insurance for reimbursement. Business written communications are discussed in the context of disputes and appeals for reimbursement. Additionally, budgeting for personal and business income and expenses will be explored. *Corequisite(s):* IM508

### OCL 568 - Clinical Rounds II

Clinical Rounds I and II continue the process of preparing students for clinical internship through observation of a licensed practitioner treating patients in a clinical setting. Over two quarters, students follow a faculty practitioner treating patients in one of the school's teaching clinics.

Under the constant, direct supervision of the faculty practitioner, students will participate in case presentations and take chart notes, recording a patient's history and exam results, as well as assessments and treatments for each patient they observe.

Students will have the opportunity to take patients' pulses and observe their tongues to understand how these diagnostic elements factor into the instructor's overall diagnosis and treatment. At appropriate times, students will have the opportunity to ask questions regarding each case.

Under the direct supervision of the faculty practitioner, students may participate in direct patient care by administering cupping, gua sha, tuina/shiatsu, and moxibustion as necessary.

Finally, as part of the overall strategy for developing the skills required of a successful practitioner, students will be responsible for cleaning and stocking the treatment rooms at the beginning and the end of each shift and preparing the room between patients.

Third Year Fall Totals - Total Hours: 228 | Credits: 17.00

Winter

# OAC 652 - Orthopedic Acupuncture

# Credit(s): 3

Students will learn a comprehensive approach to understanding, diagnosing, treating and managing several orthopedic/musculoskeletal conditions. Students will review specific anatomy, common pathologies, patient exam and orthopedic testing. Chinese medicine and allopathic diagnosis will be differentiated as part of a multifaceted treatment plan. Students will learn to clearly project and report their prognosis and expected measurable outcomes. Treatment strategies will emphasize points selected by anatomical palpation, motor/trigger points, and associated meridian points to increase range of motion and reduce pain. Use of electro-stimulators will be demonstrated and discussed. Students will learn how to chart appropriately, analyze clinical outcomes and report cases. *Prerequisite(s):* AC533, OAC611, OAC612, IM515, IM516, IM517, OIM650

### **OCM 534 - Shang Han Lun**

#### Credit(s): 2

The Shang Han Lun ("Treatise on Cold Damage"), written by Zhang Zhong-Jing during the Han dynasty, is considered the seminal text of Chinese herbal medicine, and its revolutionary theories and formulas continue to

inform clinical practice to this day. Students will study the theories and formulas of the Shang Han Lun within their original context for the treatment of conditions affecting the "six warps (or six stages)" arising from "cold damage," and learn how these formulas and theories can be extended more broadly to other types of theoretical/clinical situations. *Prerequisite(s)*: OCM621

# **OCM 622 - Chinese Herbal Medicine V: Formulas**

### Credit(s): 4

In this course sequence, students learn how the individual medicinal substances of Chinese herbal medicine are combined into coherent, clinically specific formulas. Study focuses primarily upon the approximately 150 classical formulas and their variations. These

classical formulas are used to determine a recommended strategy, and modified for individual clinical presentations. *Prerequisite(s):* OCM526

# OCM 641 - CCM: Acupuncture Therapeutics II (EENT/Respiratory)

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, AC610, CM506, CM507 *Corequisite(s):* OAC612, OIM522, OIM552

# OCM 661 - CCM: Herbal Therapeutics II (EENT/Respiratory)

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding (Note: students in the MAc program do not take Herbal

Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OIM521, OIM522, OIM523 *Corequisite(s):* OCM622, OCM641, OIM552

### OIM 533 - Western Pharmacology III

# Credit(s): 1

This course provides students with a basic understanding of the important pharmaceutical products commonly prescribed today, including their physiological functions, recommended dosages, prominent effects and

proprietary and generic names. Interaction of pharmaceuticals with herbs and nutrients is addressed. Emphasis placed on the most popular pharmaceuticals prescribed today to treat the most common drug-treated conditions in North America: cardiovascular disease, diabetes, and chronic pain. *Prerequisite(s):* OIM521

### **OIM 552 - Western Clinical Medicine II (EENT/Respiratory)**

# Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common eye, ear, nose, throat (EENT) conditions, such as cataracts, glaucoma, macular degeneration, diabetic retinopathy, conjunctivitis, tonsillopharyngitis, rhinosinusitis, otites, and hearing loss, and respiratory conditions such as asthma, chronic obstructive pulmonary disease (COPD), pneumonia, among others. *Corequisite(s):* CM641, OCM522

### **OIM 652 - Integrative Case Management II (EENT/Respiratory)**

### Credit(s): 1

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary

interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into

treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of patients with EENT/Respiratory conditions. *Corequisite(s):* OCM641, OIM522, OIM552 or enrollment DACM Completion Track.

### **OPD 655 - Practice Management III: Business Planning**

# Credit(s): 1

Designed to provide students with the skills required to establish and manage operations within a clinic, this course covers such topics as aligning practice focus with patient needs, types of legal structures, , office setup,

front office procedures, risk management, malpractice insurance, and business written communications (e.g., policies and procedures, operational manuals). Students completing this class will have a basic understanding of planning for and operating an acupuncture practice.

#### OCL 620 - Clinic Trainee I

# Credit(s): 2

In Clinic Trainee I-III, students participate in all facets of patient care, including needling, under the direct

supervision of a clinical supervisor, who is physically present at all times to observe all student-patient interactions.

Students are responsible for greeting patients, explaining their role, conducting patient histories and exams, and

documenting all patient progress and treatment interactions. In concert with the clinical supervisor, students

formulate a diagnosis and devise an appropriate treatment plan after which they are assisted by the supervisor

in treating the patient. Over the course of Clinic Trainee I-III, students will assume a greater role in the diagnosis,

treatment planning, and actual treatment of patients themselves as they prepare for the next phase of their clinical

education, where they will function with greater autonomy in caring for patients. (Note: these courses are for

MACM and DACM students.) *Prerequisite(s):* OAC611, OCL568, CCAHM CNT Certification. *Corequisite(s):* OAC612

Third Year Winter Totals - Total Hours: 252 | Credits: 19.00

# Spring

### OCM 538 - Wen Bing Xue

### Credit(s): 2

This course focuses on the study of Wen Bing Xue ("Warm Pathogen Diseases"), a major school of theory and clinical practice that developed in the Ming and Qing dynasties as a response to epidemic febrile diseases afflicting China at that time.

The course covers the historical development of Wen Bing Xue and its major contributors (Wu You Ke, Ye Tian Shi, Xue Sheng Bai, Wu Ju Tong, and Wang Meng Ying), and presents the etiology, pathogenesis, diagnosis, and treatment of disease within the context of the two main theoretical systems within the Wen Bing Xue school: the Four Levels and San Jiao systems. The major formulas associated with each of these systems are covered, and implications for the applications of Wen Bing theory and herbal formulas to modern diseases are discussed. *Prerequisite(s)*: OCM622

# **OCM 633 - Herbal Prescription Strategies**

# Credit(s): 2

Utilizing case studies, students will explore strategies for writing and modifying herbal prescriptions. They will also learn how to counsel patients regarding herbal formulas, their preparation, potential side effects, and interactions. *Prerequisite(s):* OCM621, OCM622

# OCM 642 - CCM: Acupuncture Therapeutics III (GI/Hepatobiliary)

## Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC612, CM506, CM507 *Corequisite(s):* OAC613, OAC614, OIM523, OIM553

# OCM 643 - CCM: Acupuncture Therapeutics VIII (Dermatology)

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat

(EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding.(Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC612, CM506, CM507

## OCM 662 - CCM: Herbal Therapeutics III (GI/Hepatobiliary)

# Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OIM521, OIM522, OIM523 *Corequisite(s):* OCM642, OIM553

### OCM 663 - CCM: Herbal Therapeutics VIII (Dermatology)

### Credit(s): 0,5

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat

(EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OIM521, OIM523

# OIM 553 - Western Clinical Medicine III (GI/Hepatobiliary/Dermatology)

# Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common gastrointestinal (GI), hepatobiliary, and dermatological conditions such as irritable bowel syndrome, inflammatory bowel disease, hepatitis, acne, cellulitis, eczema, psoriasis, herpes zoster, and skin cancers such as basal cell carcinoma, squamous cell carcinoma, and melanoma. *Corequisite(s):* OCM642, OIM523

# OIM 653 - Integrative Case Management III (GI/Hepatobiliary/Dermatology)

### Credit(s): 1

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of patients with gastrointestinal, hepatobiliary, and dermatological conditions. *Corequisite(s):* OCM642, OCM643, OIM523, OIM553 or enrollment DACM Completion Track

## **OPD 656 - Practice Management IV: Career Planning**

# Credit(s): 1

This course provides students with the skills necessary for taking their first steps into practice —- after graduation and in the years to come. Covering topics such as decision making strategies in business, SMART goal planning, choosing your business/practice team, resume building, and financial statements, students are left with the tools needed to decide for themselves which next steps are right for them as they build towards their future career goals.

# **OCL 541 - Integrative Clinical Theater**

# **Credit(s): 1.5**

This course, specifically designed for students in the four-year DACM program, is structured like Clinical Theater I-II. However, at this stage in their learning, students are expected to participate more fully in discussion of Western medical assessment and therapies and how to integrate this information effectively into patient care as a Chinese medical practitioner. *Prerequisite(s):* OIM523, OIM533, OPD550 *Corequisite(s):* OCL620

#### **OCL 621 - Clinic Trainee II**

## Credit(s): 2

Prerequisite(s): OAC611, OCL568, CCAHM CNT Certification Corequisite(s): OAC612, OCL620

Third Year Spring Totals - Total Hours: 234 | Credits: 16.00

Summer

### **OCM 632 - Herbal Prepared Medicine**

# Credit(s): 1

This portion of the program in traditional Chinese herbal medicine introduces the study and application of prepared powders, pills and tablets, as well as substances for external application (e.g., traditional Chinese medical

liniments). Study focuses on preparations from mainland China as well as products produced in the United States. The concept of quality control is emphasized. *Prerequisite(s)*: OCM621, OCM622

# IM 606 - Adult and Child CPR/First Aid/AED

### Credit(s): 0.67

In these courses, students learn and practice CPR, AED, and First Aid techniques specific to

adults and children, and emergency protocols related to both populations. They are conducted in both lecture and demonstration

format. To earn their certification, participants will demonstrate all skill sets. OCOM can only accept CPR/First Aid/AED certification from the American Heart Association or Red Cross. A copy of the certification needs to be current through graduation if not taking the course at OCOM. (Note: First Aid is a separate course for students who may already have CPR certification, but need First Aid training, which is required at OCOM.)

### **OPD 601 - Ethics and Jurisprudence**

# Credit(s): 0.5

This survey course provides students with a basic knowledge of ethics, jurisprudence (municipal, California, and federal laws), and regulatory compliance issues (OSHA, Labor Code, Health Insurance Portability and Accountability Act of 1966 – HIPAA) related to the practice of Chinese medicine. Topics covered include an overview of the legal system, professional ethics and peer review, national certification, professional licensure, scope of practice, grounds for discipline, disciplinary procedures and sanctions, informed consent, confidentiality, OSHA and HIPAA regulations, record keeping, continuing education, and risk management.

# **OPD 653 - Practice Management I: Digital Marketing**

## **Credit(s): 1.5**

This class will encourage students to explore their career goals and vision for clinical practice and introduce students to the principles of ethical application of marketing techniques and tools to build and sustain a clinical

practice. Through tailored assignments, students develop business written, electronic, and oral communication skills to effectively communicate via Internet marketing, email and letter writing, public relations, and networking. Students will complete this class with a comprehensive understanding of marketing options.

# OCL 622 - Clinic Trainee III

#### Credit(s): 2

In Clinic Trainee I-III, students participate in all facets of patient care, including needling, under the direct supervision of a clinical supervisor, who is physically present at all times to observe all student-patient interactions.

Students are responsible for greeting patients, explaining their role, conducting patient histories and exams, and documenting all patient progress and treatment interactions. In concert with the clinical supervisor, students

formulate a diagnosis and devise an appropriate treatment plan after which they are assisted by the supervisor in treating the patient. Over the course of Clinic Trainee I-III,

students will assume a greater role in the diagnosis,

treatment planning, and actual treatment of patients themselves as they prepare for the next phase of their clinical education, where they will function with greater autonomy in caring for patients. (Note: these courses are for

MACM and DACM students.) *Prerequisite(s):* OCL620 *Corequisite(s):* OCL621

Third Year Summer Totals - Total Hours: 92 | Credits: 5.67

Third Year Totals - Total Hours: 806 | Credits: 57.67

Fourth Year

Fall

# OCM 644 - CCM: Acupuncture Therapeutics IV (OB/GYN)

# Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding.(Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC613, OAC614, CM506, CM507, OIM521, OIM522, OIM523 *Corequisite(s):* OIM544

# OCM 664 - CCM: Herbal Therapeutics IV (OB/GYN)

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including

acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OCM622, OIM521, OIM522, OIM523 *Corequisite(s):* OCM644, OIM554

# **OIM 554 - Western Clinical Medicine IV (OB/GYN):**

# Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common obstetric (OB) and gynecological (GYN) conditions. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM644

# OIM 654 - Integrative Case Management IV (OB/GYN)

### Credit(s): 1

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary

interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into

treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of patients with many common obstetric (OB) and gynecological (GYN) conditions. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM644, OIM554 or enrollment in DACM Completion Track

# OCL 590 - Advanced Case Analysis and Clinical Research I

# Credit(s): 1

This course is designed to help the students develop advanced skills in analyzing cases from both the Chinese medical and biomedical perspectives. Students are expected to access traditional and contemporary literature

in acupuncture and Chinese medicine, as well as biomedical research, including research in epidemiology and treatment, to analyze cases they are seeing in the clinic. Students will research and write up a case study based

on a case from their clinical practice with the goal of preparing the case study for publication. At the end of the course, students will give a brief, formal presentation of their case to their classmates. *Prerequisite(s):* OCL620, ORE620, or enrollment in DACM Completion Track

# OCL 633 - Case Management I

# **Credit(s): 1.5**

This year-long course, which runs concurrently with clinical internship, provides students with an opportunity to develop and refine their clinical patient care and case management skills through regular chart review and case presentations for faculty feedback and group discussion and reflection.

Using the medical-legal case review model as its framework, the course will cover the essential elements of care and case documentation required to establish medical necessity and an appropriate and effective course of treatment for any patient.

Core principles of effective treatment planning, including the effective integration of biomedical information into treatment plans, are addressed. Effective referral to and collaboration with other practitioners to ensure continuity of care are emphasized as fundamental to good clinical outcomes and practice success.

Expert medical testimony, independent medical review and medical-legal reports are discussed in the context of disputes for personal injury, worker's compensation, and insurance claims. Students prepare samples of medicallegal report writing to develop their skills for working in this realm of clinical practice. *Corequisite(s):* OCL655

### OCL 655 - Clinic Paired Internship

### Credit(s): 2.57

In this first experience of clinical internship, DACM and MACM degree program students work in pairs under the supervision of experienced licensed acupuncturists and are responsible for greeting patients, explaining their

role, conducting patient histories and exams, documenting all patient progress and treatment interactions, and proposing to the clinical supervisor a diagnosis and treatment plan for the patient. After the clinical supervisor examines the patient and reviews the diagnosis and treatment plan, the student team is then responsible for explaining the treatment plan to the patient and administering the treatment; the supervisor is present for all needling to ensure proper treatment. *Prerequisite(s):* OCL622

### **OCL 671 - Herbal Internship**

Credit(s): 2.57

In this portion of internship, a small group of DACM and MACM degree program interns and a clinical faculty member diagnose and treat a patient using Chinese herbs exclusively. Ample time is allowed for discussion of cases and herbal treatment options. *Prerequisite(s)*: OCL655

Fourth Year Fall Totals - Total Hours: 349 | Credits: 18.78

Winter

## OCM 645 - CCM: Acupuncture Therapeutics V (Behavioral Health)

# Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC613, OAC614, CM506, CM507, OIM521, OIM522, OIM523 *Corequisite(s):* OIM555

# **OCM 646 - CCM: Acupuncture Therapeutics VI (Pediatrics)**

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case

management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC613, OAC614, CM506, CM507, OIM521, OIM522, OIM523 *Corequisite(s):* OIM556

### OCM 665 - CCM: Herbal Therapeutics V (Behavioral Health)

# Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OCM622, OIM521, OIM522, OIM523 *Corequisite(s):* OCM645, OIM555

### OCM 666 - CCM: Herbal Therapeutics VI (Pediatrics)

#### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are

addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OCM622, OIM521, OIM522, OIM523 *Corequisite(s):* OCM646, OIM556

#### OIM 555 - Western Clinical Medicine V (Behavioral Health)

# Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common behavioral health conditions such as depression, bipolar, suicidal ideation and risk, anxiety, psychoses, post-traumatic stress disorder (PTSD), obsessive and compulsive disorders, autism, addiction, and personality disorders. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM645

# **OIM 556 - Western Clinical Medicine VI (Pediatrics)**

### **Credit(s): 0.5**

This course presents a general overview of the fundamental principles of pediatric patient care in the integrative practice setting, emphasizing some of the unique presentations and considerations for management of this unique population. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM646

### **OIM 655 - Integrative Case Management V (Behavioral Health)**

### Credit(s): 0.5

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of patients with Behavioral Health conditions. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM645, OIM555 or enrollment DACM Completion Track

# OCL 591 - Advanced Case Analysis and Clinical Research II

# Credit(s): 1

This course is designed to help the students develop advanced skills in analyzing cases from both the Chinese medical and biomedical perspectives. Students are expected to access traditional and contemporary literature in acupuncture and Chinese medicine, as well as biomedical research, including research in epidemiology and treatment, to analyze cases they are seeing in the clinic. Students will research and write up a case study based on a case from their clinical practice with the goal of preparing the case study for publication. At the end of the course, students will give a brief, formal presentation of their case to their classmates. *Prerequisite(s):* OCL620, ORE602 or enrollment in DACM Completion Track

# OCL 634 - Case Management II

## **Credit(s): 1.5**

This year-long course, which runs concurrently with clinical internship, provides students with an opportunity to develop and refine their clinical patient care and case management skills through regular chart review and case presentations for faculty feedback and group discussion and reflection.

Using the medical-legal case review model as its framework, the course will cover the essential elements of care and case documentation required to establish medical necessity and an appropriate and effective course of treatment for any patient.

Core principles of effective treatment planning, including the effective integration of biomedical information into treatment plans, are addressed. Effective referral to and collaboration with other practitioners to ensure continuity of care are emphasized as fundamental to good clinical outcomes and practice success.

Expert medical testimony, independent medical review and medical-legal reports are discussed in the context of disputes for personal injury, worker's compensation, and insurance claims. Students prepare samples of medicallegal report writing to develop their skills for working in this realm of clinical practice. *Corequisite(s):* OCL656

### OCL 656 - Clinic Internship I

# Credit(s): 2.57

At this stage of internship, DACM and MACM degree program students progress from working in pairs to assuming individual responsibility for greeting patients, explaining their role, conducting patient histories and exams,

documenting all patient progress and treatment interactions, and proposing to the clinical supervisor a diagnosis and treatment plan for the patient. After the clinical supervisor examines the patient and reviews the diagnosis and treatment plan, the student is responsible for explaining the treatment plan to the patient and administering the treatment, which the supervisor observes, as necessary, to ensure proper treatment. *Corequisite(s):* OCL655

### OCL 672 - Herbal Internship II

# Credit(s): 2.38

In this portion of internship, a small group of DACM degree program interns and a clinical faculty member diagnose and treat a patient using Chinese herbs exclusively. Ample time is allowed for discussion of cases and herbal treatment options. Interns will participate in two sections of Herbal Internship at some point of their internship at OCOM.

This course focuses on the professional skills needed to provide safe and effective Chinese herbal therapy in a clinical setting. During Herbal Internship, students will combine their classroom knowledge and clinical skills in treating patients with Chinese herbs under the supervision of clinical faculty.

Students in Herbal Internship will see up to 4 patients per shift. For every patient seen, one student serves as the Primary Intern, leading the patient interview, recording findings in the patient's chart and managing the patient, while remaining students act as Secondary Interns, observing the interview, asking additional questions as necessary and supporting the Primary intern and the supervisor throughout the case. All students work together with the supervisor to assess, devise an appropriate treatment plan and create a custom herbal formula.

As with other facets of internship at OCOM, students in Herbal Internship are expected to develop and demonstrate proficiency in interviewing, charting, physical examination, diagnosis, treatment planning, making prognoses, case management, referral, and basic Western clinical medicine. These are the necessary skills of a competent, entry level practitioner of Oriental medicine. *Prerequisite(s):* OCL675

Fourth Year Winter Totals - Total Hours: 297 | Credits: 17.64

Spring

## OCM 647 - CCM: Acupuncture Therapeutics VII (Geriatric Care)

# Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are

addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s)*: OCM621, OCM622, OIM521, OIM522, OIM523 *Corequisite(s)*: OIM557

### OCM 667 - CCM: Herbal Therapeutics VII (Geriatric Care)

## Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.)

# **OIM 557 - Western Clinical Medicine VII (Geriatrics)**

### Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common conditions associated with the geriatric population (e.g., Type II Diabetes Mellitus, cardiovascular disease, stroke, dementia and neurodegenerative diseases, and cancer), and the unique considerations for patient care with this population. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM647

### **OIM 657 - Integrative Case Management VII (Geriatrics)**

### Credit(s): 1

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary interventions and clarify medical record keeping

guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of the geriatric patient. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM647, OIM557 or enrollment DACM Completion Track

## OCL 592 - Advanced Case Analysis and Clinical Research III

# Credit(s): 1

This course is designed to help the students develop advanced skills in analyzing cases from both the Chinese medical and biomedical perspectives. Students are expected to access traditional and contemporary literature in acupuncture and Chinese medicine, as well as biomedical research, including research in epidemiology and treatment, to analyze cases they are seeing in the clinic. Students will research and write up a case study based on a case from their clinical practice with the goal of preparing the case study for publication. At the end of the course, students will give a brief, formal presentation of their case to their classmates. *Prerequisite(s):* OCL620, ORE602 or enrollment in DACM Completion Track

### OCL 635 - Case Management III

# **Credit(s): 1.5**

This year-long course, which runs concurrently with clinical internship, provides students with an opportunity to develop and refine their clinical patient care and case management skills through regular chart review and case presentations for faculty feedback and group discussion and reflection.

Using the medical-legal case review model as its framework, the course will cover the essential elements of care and case documentation required to establish medical necessity and an appropriate and effective course of treatment for any patient.

Core principles of effective treatment planning, including the effective integration of biomedical information into treatment plans, are addressed. Effective referral to and collaboration with other practitioners to ensure continuity of care are emphasized as fundamental to good clinical outcomes and practice success.

Expert medical testimony, independent medical review and medical-legal reports are discussed in the context of disputes for personal injury, worker's compensation, and insurance claims. Students prepare samples of medicallegal report writing to develop their skills for working in this realm of clinical practice. *Corequisite(s):* OCL657

### **OCL 657 - Clinic Internship II**

**Credit(s): 2.38** 

DACM and MACM degree program students' skill, autonomy, and confidence increase at this stage as they assume a greater range of clinical responsibilities. Students continue to conduct patient histories and exams, document all patient progress and treatment interactions, and propose to the clinical supervisor a diagnosis and treatment plan for the patient. The clinical supervisor continues to examine the patient, review the diagnosis and treatment plan, and observe and provide guidance as needed to the student, who administers the treatment and explains the treatment plan to the patient. *Prerequisite(s)*: OCL656

## **OCL 659 - Integrative Clinic**

## Credit(s): 2.38

In the Integrative Clinic, DACM students will work in-an integrative health facility such as a hospital, supervised by a clinical faculty member who is experienced in integrative patient assessment and case management. Integrating all the skills they have learned to date, interns in Integrative Clinic will demonstrate the ability to apply basic clinical bio- and integrative medicine in patient care, analyze situations requiring referral or emergency interventions and respond appropriately, and collaborate effectively with other health care providers. (Note: this course is for four year DACM degree program students only.) *Corequisite(s):* OCL655

Fourth Year Spring Totals - Total Hours: 366 | Credits: 21.02

Summer

## **OPD 505 - Community Outreach Practicum**

Credit(s): 0.89

In this independent study, students will complete an average of 10 hours of Community Outreach per year. Students complete their final hours of Community Outreach during their final quarter of internship. *Prerequisite(s)*: OPD504

#### OCL 593 - Advanced Case Analysis and Clinical Research IV

#### Credit(s): 1

This course is designed to help the students develop advanced skills in analyzing cases from both the Chinese medical and biomedical perspectives. Students are expected to access traditional and contemporary literature in acupuncture and Chinese medicine, as well as biomedical research, including research in epidemiology and treatment, to analyze cases they are seeing in the clinic. Students will research and write up a case study based on a case from their clinical practice with the goal of preparing the case study for publication. At

the end of the course, students will give a brief, formal presentation of their case to their classmates. *Prerequisite(s):* OCL620, RE602 or enrollment in DACM Completion Track

## OCL 636 - Case Management IV

## Credit(s): 1.5

This year-long course, which runs concurrently with clinical internship, provides students with an opportunity to develop and refine their clinical patient care and case management skills through regular chart review and case presentations for faculty feedback and group discussion and reflection.

Using the medical-legal case review model as its framework, the course will cover the essential elements of care and case documentation required to establish medical necessity and an appropriate and effective course of treatment for any patient.

Core principles of effective treatment planning, including the effective integration of biomedical information into treatment plans, are addressed. Effective referral to and collaboration with other practitioners to ensure continuity of care are emphasized as fundamental to good clinical outcomes and practice success.

Expert medical testimony, independent medical review and medical-legal reports are discussed in the context of disputes for personal injury, worker's compensation, and insurance claims. Students prepare samples of medicallegal report writing to develop their skills for working in this realm of clinical practice. *Corequisite(s):* OCL658

## OCL 658 - Clinic Internship III

#### Credit(s): 1.58

Building on the skills developed in the previous quarters of internship, DACM and MACM degree program students attain a higher level of knowledge, ability, and independence as clinicians while continuing to assume the complete range of treatment responsibilities under the supervision of a clinic faculty member. This phase of training culminates in DACM (and MACM) degree program student interns achieving the level of clinical ability and independence appropriate for entry into the profession. *Prerequisite(s):* OCL657

Fourth Year Summer Totals - Total Hours: 176 | Credits: 8.13

Fourth Year Totals - Total Hours: 1188 | Credits: 65.57

# Doctor of Acupuncture with a Chinese Herbal Medicine Specialization, DAcCHM

The Doctor of Acupuncture with a Chinese Herbal Medicine Speacialization is a four-year program consisting of 3,930 hours and 266.25 credits. It fully contains the coursework and outcomes of the MAcCHM 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. DAcCHM students also achieve competencies preparing them to integrate the principles and practice of classical Chinese medicine into the broader healthcare system.

# **DAcCHM 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**

DAcCHM 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. DAcCHM students also complete a Collaborative Care Rotation and Collaborative Care Case Presentation. These are organized as follows:

Year of Study	Clinical Component
DAcCHM	
1st	Introduction to Clinic: Students learn the fundamentals of working in the NUNM clinics
1st	Clinical Pre-Observation Rotation: Students get their first experience observing clinical supervisors treating patients in the NUNM clinics
2nd	Clinical Observation Rotation I-III: Students observe experienced practitioners treat patients
3rd	Clinical Mentoring Rotation I-VI: Students become involved in patient diagnosis and treatment under direct clinical supervision
3rd	Clinical Case Presentation I-III: Clinical cases are viewed through multiple lenses
3rd	Clinical Pre-Internship Rotation: Students learn the role and responsibilities of the intern by following the interns soon to graduate
4th	Clinical Internship Rotation I-III: Students (under supervision) assume primary responsibility for diagnosis and treatment of patients; needle insertions are observed
4th	Clinical Internship Rotation IV-IX: Students (under supervision) assume primary responsibility for diagnosis and treatment of patients
4th	Clinical Internship Holiday Requirement (24 hrs): Students (under supervision) assume primary responsibility for diagnosis and treatment of patients
4th	Internship Case Presentation I-II: Presentation and discussion of internship cases with peers and supervisors

4th	Collaborative Care Rotation: DAcCHM/ DSOM students deliver patient-centered care alongside naturopathic primary students.
4th	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 DAcCHM or MAcCHM programs. At the end of the certificate program, students are fully prepared to use shiatsu as an independent treatment modality.

## DAcCHM Four-Year Curriculum

Note: courses marked with an asterisk (\*) are unique to the DAcCHM program, and are not included in the MAcCHM.

## First Year

## Fall

- <u>CM\* 911 Classical Texts I: Introduction to Classical Chinese Language and the Chinese Classical Texts</u> **Credit(s): 3.00**
- Lecture: 36 | Total Hours: 36
- CM 511 Foundations of Classical Chinese Medicine I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 512 Chinese History and Culture I Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 513 Acu-Moxa Points I (Point Actions) Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 514 Acu-Moxa Techniques I (Point Location) Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 515 Palpation and Perception I Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 518 Oigong I Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 519 Qigong I Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 551 The Business of Chinese Medicine I Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 530 Introduction to Clinic **Credit(s): 1.50**
- 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
- Lecture: 36 | Total Hours: 36
- CM 521 Foundations of Classical Chinese Medicine II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM\* 522 Chinese History and Culture II Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 502 Professional Development Credit(s): 1.00
- Lab: 12 | Total Hours: 12
- CM 562 Chinese Diagnostic Techniques I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 523 Acu-Moxa Points II (Point Actions) Credit(s): 2.00
- Lecture: 24 | Total Hours: 24

- CM 524 Acu-Moxa Techniques II (Point Location) Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 525 Palpation and Perception II Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- <u>CM 516 Herbs I</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 556 Herbs I Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 528 Qigong II Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 529 Qigong II Practicum Credit(s): 1.50
- 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
- Lecture: 36 | Total Hours: 36
- CM 531 Foundations of Classical Chinese Medicine III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM\* 532 Chinese History and Culture III Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM\* 595 Imaginal and Experiential Inquiries I Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 572 Chinese Diagnostic Techniques II Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 533 Acu-Moxa Points III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 534 Acu-Moxa Techniques III Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36
- CM 535 Palpation and Perception III Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 526 Herbs II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 566 Herbs II Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 599 Evidence-Informed Practice Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 538 Qigong III Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 539 Oigong III Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 500 Pre-Observation Rotation Credit(s): 1.00
- 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
- Lecture: 24 | Total Hours: 24
- <u>CM 611 Chinese Organ Systems: Cosmology and Symbolism</u> I **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 612 Chinese Pathology I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- <u>CM 613 Acu-Moxa Points IV</u> Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 614 Acu-Moxa Techniques IV Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36
- CM 615 Asian Bodywork Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- <u>CM 536 Herbs III</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 576 Herbs III Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 617 Biomedicine I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- <u>CM 699 Immunology</u> **Credit(s): 3.00**
- Lecture: 36 | Total Hours: 36
- CM 618 Qigong IV Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- <u>CM 619 Qigong IV Practicum</u> **Credit(s): 1.50**
- Lecture: 18 | Total Hours: 18
- <u>CM 600 Clinical Observation</u> **Credit(s): 2.00**
- 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
- Lecture: 24 | Total Hours: 24
- <u>CM 621 Chinese Organ Systems: Cosmology and Symbolism</u>
  <u>II Credit(s): 2.00</u>

- Lecture: 24 | Total Hours: 24
- CM 622 Chinese Pathology II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- <u>CM 623 Acu-Moxa Points V</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 663 Auricular Points Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18
- CM 624 Acu-Moxa Techniques V Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36
- <u>CM 616 Herbs IV</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 656 Herbs IV Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 627 Biomedicine II Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- <u>CM 657 Acu-Moxa Anatomy I</u> Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18
- CM 628 Qigong V Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 629 Qigong V Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 600 Clinical Observation Credit(s): 2.00
- Clinic: 48 | Total Hours: 48

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

## Spring

- <u>CM\* 991 Classical Texts IX: Neijing Seminar</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- <u>CM 631 Chinese Organ Systems: Cosmology and Symbolism</u> III **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 632 Chinese Pathology III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 633 Acu-Moxa Points VI Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 634 Acu-Moxa Techniques VI Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36
- CM 635 Practitioner Cultivation I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- <u>CM 626 Herbs V</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 666 Herbs V Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 637 Biomedicine III Credit(s): 4.00
- Lecture: 48 | Total Hours: 48

- CM 667 Acu-Moxa Anatomy II Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18
- CM 638 Qigong VI Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 639 Qigong VI Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 600 Clinical Observation Credit(s): 2.00
- Clinic: 48 | Total Hours: 48
- CM 671 The Business of Chinese Medicine II Credit(s): 1.00
- 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
- Lecture: 24 | Total Hours: 24
- <u>CM\* 711 Advanced Chinese Organ Systems: Cosmology and Symbolism</u> I **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 712 Clinical Medicine I Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 714 Advanced Acu-Moxa Techniques I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 715 Chinese Medical Psychology I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 636 Herbs VI Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 676 Herbs VI Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 717 Biomedicine IV Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 718 Qigong VII Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 719 Qigong VII Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- <u>CM 710 Clinical Case Presentation I</u> **Credit(s): 1.00**
- Clinic: 24 | Total Hours: 24
- <u>CM 700 Clinical Mentoring Rotations</u> **Credit(s): 2.00 credits each** (2 rotations)
- Clinic: 96 | Total Hours: 96

- CM 751 The Business of Chinese Medicine III Credit(s): 1.50
- 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
- Lecture: 24 | Total Hours: 24
- <u>CM\* 721 Advanced Chinese Organ Systems: Cosmology and Symbolism II Credit(s): 2.00</u>
- Lecture: 24 | Total Hours: 24
- CM 722 Clinical Medicine II Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 724 Advanced Acu-Moxa Techniques II Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- <u>CM 725 Chinese Medical Psychology II</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 727 Biomedicine V Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 777 Clinical and Physical Diagnosis Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 728 Qigong VIII Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 729 Qigong VIII Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 720 Clinical Case Presentation II Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- <u>CM 700 Clinical Mentoring Rotations</u> **Credit(s): 2.00 credits each** (2 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
- Lecture: 24 | Total Hours: 24
- <u>CM\* 731 Advanced Chinese Organ Systems: Cosmology and Symbolism III</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM\* 795 Imaginal and Experiential Inquiries II Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 732 Clinical Medicine III Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 735 Applied Palpation and Perception Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 737 Biomedicine VI Credit(s): 4.00

- Lecture: 48 | Total Hours: 48
- <u>CM 799 Nutrition</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 889 Race and Disparities in Health Care Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 738 Oigong IX Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 739 Qigong IX Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 730 Clinical Case Presentation III Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- <u>CM 700 Clinical Mentoring Rotations</u> **Credit(s): 2.00 credits each** (2 rotations)
- Clinic: 96 | Total Hours: 96
- <u>CM 770 Clinical Pre-Internship Rotation</u> **Credit(s): 1.00**
- 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
- Lecture: 6 | Total Hours: 6
- CM 805 Ethics and Jurisprudence Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- <u>CM 800 Clinical Internship Rotations</u> **Credit(s): 2.00 credits each** (3 rotations)
- Clinic: 144 | Total Hours: 144

Fourth-Year Summer Totals - Clinic: 144 | Lecture: 12 | Total Hours: 156 | Credits: 7

#### Fall

- <u>CM\* 537 CCM View of Biomedicine</u> **Credit(s): 1.00**
- Lecture: 12 | Total Hours: 12
- CM 812 Traditional Mentorship Tutorial I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 815 Practitioner Cultivation II Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM\* 855 Imaginal and Experiential Inquiries IV Credit(s): 0.50

- Lecture: 6 | Total Hours: 6
- <u>CM 817 Physiology of Acupuncture</u> **Credit(s): 1.00**
- Lecture: 12 | Total Hours: 12
- CM 819 Taiji I Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 810 Internship Case Presentation I Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- <u>CM 800 Clinical Internship Rotations</u> **Credit(s): 2.00 credits each** (2 rotations)
- Clinic: 96 | Total Hours: 96

Fourth-Year Fall Totals - Clinic: 120 | Lab: 12 | Lecture: 96 | Total Hours: 228 | Credits: 13.50

## Winter

- CM 822 Traditional Mentorship Tutorial II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- <u>CM 826 Herbs Review/Medicinary Practicum</u> **Credit(s): 1.50**
- Lecture: 18 | Total Hours: 18
- CM 829 Taiji II Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 820 Internship Case Presentation II Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- CM 861 The Business of Chinese Medicine IV Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM\* 862 Healthcare Landscape Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- <u>CM 800 Clinical Internship Rotations</u> **Credit(s): 2.00 credits each** (1 rotation)
- Clinic: 48 | Total Hours: 48
- CM 900 Collaborative Care Rotation Credit(s): 2.50 ^^
- Clinic: 60 | Total Hours: 60

Fourth-Year Winter Totals - Clinic: 132 | Lecture: 120 | Total Hours: 252 | Credits: 15.50

## **Spring**

- CM 993 Doctoral Capstone Mentorship **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 813 Acu-Moxa Board Review Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 832 Traditional Mentorship Tutorial III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM\* 857 Eastern and Western Correspondences Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 839 Taiji III Practicum Credit(s): 1.50

- Lecture: 18 | Total Hours: 18
- <u>CM 800 Clinical Internship Rotations</u> **Credit(s): 2.00 credits each** (2 rotations)
- Clinic: 96 | Total Hours: 96
- CM 930 Collaborative Care Case Presentation Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- CM 871 Community Education Credit(s): 0.50 ^
- Lab: 12 | Total Hours: 12

Fourth-Year Spring Totals - Clinic: 120 | Lab: 24 | Lecture: 78 | Total Hours: 222 | Credits: 12.50

# Fourth-Year Totals - Clinic: 516 | Lab: 36 | Lecture: 306 | Total Hours: 858 | Credits: 48.50

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

Program Totals Before Electives - Clinic: 1068 | Lab: 402 | Lecture: 2340 | Total Hours: 3822 | Credits: 256.75

Program Totals With Electives - Total Hours: 3942 | Credits: 266.75

<sup>^^</sup>May be taken any term in 4th year

# **DAcCHM Four-Year Course Descriptions**

Note: courses marked with an asterisk (\*) are unique to the DAcCHM program, and are not included in the MAcCHM.

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 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 both in their original written form and in literal translations, so that students will gain a deeper understanding of both the vocabulary and the texture of Chinese philosophy, and hence of the unique style of medicine that evolved from it. The first three courses (Classical Texts I-III) introduce the basics of classical Chinese and various language tools and skills that allow students to work with Chinese medical texts written in their original language for academic pursuits or clinical research.

The next three courses (Neijing Seminars) focus on translation of portions of the Huangdi Neijing黃帝內經 with an emphasis on understanding the clinical insights revealed by this seminal text of Chinese medicine. The final three courses (Shanghanlun/Jingui Yaolüe) focus on translation of the Shanghanlun 傷寒論and Jingui Yaolüe 金匱要略.

CM 911 is the first of three introductory Classical Texts courses taught over the first year of the CCM curriculum. Overall, Classical Text I aims to introduce students to pinyin (romanization system for standard Chinese), basic classical Chinese grammar and syntax, etymology of Chinese characters, and basic Chinese medical terminology. This course also introduces students to the key concepts and theories of the Huangdi Neijing 黃帝內經.

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

This course creates a foundation for the study of Chinese medicine by presenting an overview of Chinese history and culture to help students understand the worldview and mindset that created this unique form of medicine. It introduces the basic characteristics of historical China from the dawn of civilization through the classical period. In addition to surveying the major historical developments, the course focuses 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-III 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 focus of this first class is on the Lung, Large Intestine and Stomach channels. The channel 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. *Corequisite(s): Concurrent enrollment in CM 514*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 of CM515, CM525 and CM535. 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 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 financial management, public speaking and networking skills, in addition to learning the elements of a successful business and/or career plan as a licensed East Asian medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

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** 

CM 921 is the second of three introductory Classical Texts courses taught over the first year of the CCM curriculum. In this course, more complex grammatical structures are introduced. Students continue to build their vocabulary in Chinese medical terminology and the ability and confidence in translating simple sentences written in the style of classical Chinese into English. Students are also introduced to different styles of translation of Chinese medical texts. Excerpts from various medical texts, philosophical writings, and classical Chinese poems are used to demonstrate grammatical concepts in class. These example texts are also selected to help students gain a deeper understanding of Chinese medicine as a science and an art that is imbued with cultural, philosophical, and historical references.

Prerequisite(s): These courses are to be taken in the ordered sequence 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 z ang and f u 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

This course continues where Chinese History and Culture I left off, introducing basic characteristics of historical China from the classical period through the 20th century. In addition to surveying the major historical developments, the course focuses 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 of CM512, CM522 and CM532.* 

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 (*shiwen*), 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-III 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 focus of the second class in the series is on the Spleen, Heart, Small Intestine and Bladder channels. The channel 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 Corequisite(s): Concurrent enrollment in CM 524

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 of CM515, CM525 and CM535. 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 of CM516, CM526, CM536, CM616 and CM626.* 

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 of CM556, CM566, CM576, CM656 and CM666. 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

# $\text{CM} \! * \! 931$ - Classical Texts III: Introduction to Classical Chinese Language and the Chinese Classical Texts

## Credit(s): 3.00

CM 931 is the third of three introductory Classical Texts courses taught over the first year of the CCM curriculum. In this course, students have more chance to practice making their own translation and interpretation of classical Chinese texts in class using the grammar skills and vocabulary they acquired in the previous two courses. Different topics in Chinese medicine such as Chinese herbology, channel theory, pulse diagnosis, syndrome differentiations are featured in each weekly lecture. Students are provided with an overview of each topic and study texts from various classics that are relevant to the discussion of the topic. In addition to advancing their proficiency in working with classical Chinese texts, students also have a chance to review important concepts and theories that they have learned in other courses in the Chinese medicine program.

Prerequisite(s): These courses are to be taken in the ordered sequence 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 and CM 521 Lecture: 24 | Total Hours: 24

## CM\* 532 - Chinese History and Culture III

## Credit(s): 1.50

This course explores key concepts and structures of Chinese medicine within the context of larger historical and cultural changes. Students will learn about major medical classics and the philosophical antecedents their authors used to frame their understanding, and how these influenced the development of medical theory. This course considers changes in clinical practice as may be determined and reconstructed through archaeology and inferred textual reference. Students will read modern scholarly work, discuss and interrogate meaning of medical classics, and use this as a basis to inform clinical practice.

Prerequisite(s): These courses are to be taken in the ordered sequence of CM512, CM522 and CM532.

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 (*shiwen*), are also practiced in class.

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

#### CM 533 - Acu-Moxa Points III

## **Credit(s): 2.00**

Acu-Moxa Points and Techniques I-III 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. This class completes the series with the study of the Ren Mai and Du Mai, Kidney, Pericardium, San Jiao, Gall Bladder and Liver channels. The channel 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 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, cuppng, 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 of CM515, CM525 and CM535. 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 of CM516, CM526, CM536, CM616 and CM626. 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 of CM556, CM566, CM576, CM656 and CM666. 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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631.* 

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 of CM612 and CM622.* 

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. *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 of CM516, CM526, CM536, CM616 and CM626.* 

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 herbs and initiates an exploration of "dui yao"—commonly used combinations of herbs and their clinical applications—according to the 6 Phase energetic model of the *Shanghan Lun*. As the final portion of the first-year herbs practicum, this course will further combine the clinical synergy of diagnosis and herbal dynamics in order to prepare students for the transition into formula study and composition. It will also continue to familiarize students with other key topics in classical Chinese herbology including the integration of body and spirit in clinical practice, traditional views on dietetics and paozhi methods. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM556, CM566, CM576, CM656 and CM666. 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737*.

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

This course is the second in a succession of three courses on the topic of the *Huangdi Neijing* (Yellow Emperor's Inner Classic). These classes are intended to give students direct access to the wisdom found in this foundational classic of Chinese medicine. 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 life.

In this second portion of the series, students examine foundational aspects of *Suwen* chapter 5 as well as some other foundational passages of the *Suwen* and *Lingshu*. *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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631*.

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 of CM612 and CM622.* 

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 compatability, 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): These courses are to be taken in the ordered sequence of CM516, CM526, CM536, CM616 and CM626*.

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): These courses are to be taken in the ordered sequence of CM556, CM566, CM576, CM656 and CM666. 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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

This course is the third and final seminar on the *Huangdi Neijing*, *the* "Yellow Emperor's Inner Classic." This class is intended to give students direct access to the wisdom found in this foundational classic of Chinese medicine.

Students read a selection of excerpts in Chinese, comparing and refining their translations, exploring progressively deeper layers of meaning, and discussing how to integrate this wisdom into clinical practice and life.

Students previously reviewed the textual history, commentary tradition, and theoretical content of the *Neijing Suwen*, before attempting translations of various chapters. In this third and final seminar, students translate passages from various chapters from both the *Neijing Suwen* and the *Neijing Lingshu*, dealing with various aspects of Chinese medical physiology, diagnosis and treatment. *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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631*.

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): 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. *Prerequisite(s):* These courses are to be taken in the ordered sequence of CM635 and CM815.

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 of CM516, CM526, CM536, CM616 and CM626.

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 of CM556, CM566, CM576, CM656 and CM666. 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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 commnication techniques used frequently in the field of acupuncture and East Asian medicine. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

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. *Prerequisite(s)*:

Third-year status; These courses are to be taken in the ordered sequence of CM711, CM721 and CM731.

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 addresses disease etiology, pattern differentiation and treatment strategies, including a focus on prognosis, long-term case management, referral and comanagement, 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 and pattern diagnosis) using the classical texts of Chinese medicine as the primary source of guidance. Multiple faculty are involved in delivering 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 of CM712, CM722 and CM732. Corequisite(s): CM710 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; Third-year status; These courses are to be taken in the ordered sequence of CM712, CM722 and CM732. 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; These courses are to be taken in the ordered sequence of CM715 and CM725.* 

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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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. 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; These courses are to be taken in the ordered sequence of CM710, CM720 and CM730.* 

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, as well as creating efficient and sustainable operations systems to promote practitioner and patient success. Special topics include insurance billing basics, technology utilization in a medical practice and local, state and federal laws that pertain to having a successful career as an East Asian Medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

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 of CM712, CM722 and CM732.* 

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; Third-year status 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; These courses are to be taken in the ordered sequence of CM715 and CM725.* 

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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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; These courses are to be taken in the ordered sequence of CM710, CM720 and CM730.* 

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 of CM712, CM722 and CM732.* 

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. *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 dematological 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): Third-year* 

status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637,

CM717, CM727 and CM737.

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. This is a transition course to support students moving into clinical internship. Students will review a case and write a sample Case Report based on CARE guidelines. In addition, students will work in pairs or small groups to assess and treat one another over the course of four visits. Students will be responsible for treatment plans, presenting their findings and monitoring and evaluating change and treatment effectiveness. 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): CM712; Third-year status; These courses are to be taken in the ordered sequence of CM710, CM720 and CM730.* 

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 write their doctoral capstone topic. 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: 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: 12 | Total Hours: 156 | Credits: 7

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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

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): Intern status; These courses are to be taken in the ordered sequence of CM635 and CM815.* 

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, students write their doctoral capstone paper and receive and give peer feedback. 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 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 椿功, 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 椿功 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  $T\grave{a}ij\acute{i}$   $N\grave{e}ig\~{o}ng$  太極 內功, or the Internal Art and the concepts of  $j\~{i}ng$ - $q\`{i}$ - $sh\acute{e}n$  精氣神 (the three treasures) as well as  $p\acute{i}$ - $j\`{i}n$ - $g\grave{u}$  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  $Sh\grave{a}ng$   $g\~{o}ng$  上工 or superior physician that is espoused in the Neijing. Prerequisite(s): These courses are to be taken in the ordered sequence of CM819, CM829 and CM839.

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: 96 | Total Hours: 228 | Credits: 13.50  $\,$ 

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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

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 椿功, 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 椿功 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  $T\grave{a}ij\acute{n}$  N\grave{e}igōng 太極 內功, or the Internal Art and the concepts of  $j\bar{i}ng$ - $q\grave{i}$ - $sh\acute{e}n$  精氣神 (the three treasures) as well as  $p\acute{i}$ - $j\grave{i}n$ - $g\grave{u}$  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  $Sh\grave{a}ng$   $g\bar{o}ng$  上 $\square$  or superior physician that is espoused in the Neijing. Prerequisite(s): These courses are to be taken in the ordered sequence of CM819, CM829 and CM839.

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, as well as career preparation. Students garner practical knowledge of money management, taxes and start-up costs, in addition to exploring financing options for opening a large or small East Asian medicine practice. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551. CM671. CM751 and CM861.* 

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: 120 | Total Hours: 252 | Credits: 15.50

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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

Lecture: 24 | Total Hours: 24

#### 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. Students actively engage in learning to discuss complex classical Chinese medicine concepts with biomedicine practitioners in a language accessible to everyone. 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 椿功, 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 椿功 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* 

 $g\bar{o}ng \perp \perp$  or superior physician that is espoused in the *Neijing. Prerequisite(s): These* courses are to be taken in the ordered sequence of CM819, CM829 and CM839.

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

erequisite(s). / corequisite(s). Cr

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: 24 | Lecture: 78 | Total Hours: 222 | Credits: 12.50

Fourth-Year Totals - Clinic: 516 | Lab: 36 | Lecture: 306 | Total Hours: 858 | Credits: 48.50

^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: 3822 | Credits: 256.75

Program Totals With Electives - Total Hours: 3942 | Credits: 266.75

# Master of Acupuncture and Chinese Medicine (MACM)-OCOM Teach-Out

On June 7, 2024 National University of Natural Medicine (NUNM) and Oregon College of Oriental Medicine (OCOM) completed a teach out agreement for the remaining portions of the academic programs where NUNM will provide the appropriate administrative and instructional staff to perform the teach-out, and will maintain all required records of the teach-out students before and after the closure date.

# Master of Acupuncture and Chinese Medicine (MACM)-OCOM Curriculum

## First Year

#### Fall

- AC 511 Shiatsu I Credit(s): 0.75
- AC 523 Tuina I Credit(s): 0.75
- AC 530 Acupuncture Channels and Points I Credit(s): 4
- AC 534 Qigong I Credit(s): 0.5
- AC 537 Taiji Quan I Credit(s): 0.5
- CM 504 Chinese Medical Theory I Credit(s): 4
- IM 501 Western Medical Terminology Credit(s): 2
- IM 502 Anatomy and Physiology I Credit(s): 2.5
- IM 505 Living Anatomy I Credit(s): 2
- PD 504 Introduction to Community Outreach Practicum Credit(s): 0.11
- CL 535 Introduction to Clinic Observation Credit(s): 1

# First Year Fall Totals - Total Hours: 250 | Credits: 18.11

## Winter

- AC 512 Shiatsu II Credit(s): 1.5
- AC 524 Tuina II Credit(s): 1.5
- AC 531 Acupuncture Channels and Points II Credit(s): 4
- AC 535 Qigong II **Credit(s): 1**
- AC 538 Taiji Quan II Credit(s): 1
- AC 554 Accessory Techniques Credit(s): 0.75
- CM 505 Chinese Medical Theory II Credit(s): 4
- IM 503 Anatomy and Physiology II Credit(s): 2.5
- IM 506 Living Anatomy II Credit(s): 2
- <u>CL 538 Clinical Theater I</u> Credit(s): 2

## First Year Winter Totals - Total Hours: 276 | Credits: 17.75

## **Spring**

- AC 513 Shiatsu III Credit(s): 1.5
- AC 525 Tuina III Credit(s): 1.5
- AC 532 Acupuncture Channels and Points III Credit(s): 4
- AC 536 Qigong III Credit(s): 1
- AC 539 Taiji Quan III Credit(s): 1
- CM 506 Chinese Medical Theory III Credit(s): 4
- IM 504 Anatomy and Physiology III Credit(s): 2.5
- IM 507 Living Anatomy III Credit(s): 2
- CL 539 Clinical Theater II Credit(s): 2

## First Year Spring Totals - Total Hours: 258 | Credits: 17.00

#### Summer

- AC 526 Shiatsu IV Credit(s): 1
- AC 527 Tuina IV Credit(s): 1
- AC 533 Acupuncture Channels and Points IV Credit(s): 2
- AC 610 Acupuncture Techniques I Credit(s): 1.5
- CM 507 Chinese Medicine Diagnosis Lab Credit(s): 0.75
- CM 519 Introduction to Chinese Herbal Medicine Credit(s): 1
- IM 508 Medical Charting Credit(s): 1
- RE 502 Integrative Medical Research I: Research Literacy Credit(s): 1

# First Year Summer Totals - Total Hours: 120 | Credits: 8.25 First Year Totals - Total Hours: 904 | Credits: 61.11

# **Second Year**

#### Fall

- OAC 611 Acupuncture Techniques II Credit(s): 3
- OCM 521 Chinese Herbal Medicine I Credit(s): 4
- OIM 521 Western Medical Pathology I Credit(s): 2
- OIM 560 Community Health and Chemical Dependency Credit(s): 2
- ORE 602 Integrative Medical Research II Credit(s): 2
- OCL 567 Clinical Rounds I Credit(s): 1

# Second Year Fall Totals - Total Hours: 180 | Credits: 14.00

#### Winter

- OAC 612 Acupuncture Techniques III Credit(s): 3
- OCM 522 Chinese Herbal Medicine II Credit(s): 4
- OIM 509 Medical History Taking Credit(s): 2
- OIM 522 Western Medical Pathology II Credit(s): 2
- OIM 643 General Physics Credit(s): 2

- OPD 500 History of Medicine: East and West Credit(s): 2
- CL 616 Asian Bodywork Clinic Credit(s): 2
- OCL 598 Herbal Rounds I Credit(s): 2

## Second Year Winter Totals - Total Hours: 228 | Credits: 17.00

## **Spring**

- OAC 613 Acupuncture Techniques IV Credit(s): 2
- OAC 614 Acupuncture Microsystems (Auricular, Scalp, Hand and Wrist) Credit(s): 3
- OCM 526 Chinese Herbal Medicine III: The Pharmacopoeia Credit(s): 3
- OIM 523 Western Medical Pathology III Credit(s): 2
- OIM 640 Diet and Nutrition Credit(s): 2.5
- OIM 650 Structural Diagnosis Credit(s): 3
- OPD 550 Patient-Practitioner Relationship **Credit(s): 2**
- OCL 611 Chinese Herbal Medicinary Practicum Credit(s): 2

## Second Year Spring Totals - Total Hours: 258 | Credits: 19.50

#### **Summer**

- OCM 527 Chinese Herbal Medicine III: The Pharmacopoeia Review Credit(s): 1
- OCM 528 Chinese Herbal Medicine III: Pao Zhi Credit(s): 1
- OCM 603 Chinese Nutrition Credit(s): 1.5
- OIM 530 Issues in Public Health Credit(s): 1
- OIM 531 Western Pharmacology I Credit(s): 1
- CL 618 Asian Bodywork Clinic Credit(s): 1
- OCL 599 Herbal Rounds II Credit(s): 1

Second Year Summer Totals - Total Hours: 90 | Credits: 6.50

**Second Year Totals - Total Hours: 756 | Credits: 57.00** 

## Third Year

#### Fall

- OCM 621 Chinese Herbal Medicine IV: Formulas Credit(s): 4
- OCM 625 Dui Yao Credit(s): 2
- OCM 640 CCM: Acupuncture Therapeutics I (Orthopedics, Traumatology, Pain) Credit(s): 2
- OCM 660 CCM: Herbal Therapeutics I (Orthopedics, Traumatology, Pain) Credit(s): 1
- OIM 532 Western Pharmacology II Credit(s): 1

- OIM 551 Western Clinical Medicine I (Pain) Credit(s): 2
- OPD 654 Practice Management II: Billing and Coding Credit(s): 1
- OCL 568 Clinical Rounds II Credit(s):

## Third Year Fall Totals - Total Hours: 204 | Credits: 15.00

#### Winter

- OAC 652 Orthopedic Acupuncture Credit(s): 3
- OCM 622 Chinese Herbal Medicine V: Formulas Credit(s): 4
- OCM 641 CCM: Acupuncture Therapeutics II (EENT/Respiratory) Credit(s):
- OCM 661 CCM: Herbal Therapeutics II (EENT/Respiratory) Credit(s): 1
- OIM 533 Western Pharmacology III Credit(s): 1
- OIM 552 Western Clinical Medicine II (EENT/Respiratory) Credit(s): 2
- OIM 652 Integrative Case Management II (EENT/Respiratory) Credit(s): 1
- OPD 655 Practice Management III: Business Planning Credit(s): 1
- OCL 620 Clinic Trainee I Credit(s): 2

## Third Year Winter Totals - Total Hours: 228 | Credits: 17.00

## **Spring**

- OCM 633 Herbal Prescription Strategies Credit(s): 2
- OCM 642 CCM: Acupuncture Therapeutics III (GI/Hepatobiliary) Credit(s): 2
- OCM 643 CCM: Acupuncture Therapeutics VIII (Dermatology) Credit(s): 1
- OCM 662 CCM: Herbal Therapeutics III (GI/Hepatobiliary) Credit(s): 1
- OCM 663 CCM: Herbal Therapeutics VIII (Dermatology) Credit(s): 0,5
- OIM 553 Western Clinical Medicine III
   (GI/Hepatobiliary/Dermatology) Credit(s): 2
- OIM 653 Integrative Case Management III (GI/Hepatobiliary/Dermatology) Credit(s): 1
- OPD 656 Practice Management IV: Career Planning Credit(s): 1
- OCL 621 Clinic Trainee II Credit(s): 2

# Third Year Spring Totals - Total Hours: 174 | Credits: 12.50

#### Summer

- OCM 632 Herbal Prepared Medicine Credit(s): 1
- IM 606 Adult and Child CPR/First Aid/AED Credit(s): 0.67
- OPD 601 Ethics and Jurisprudence **Credit(s)**: **0.5**
- OPD 653 Practice Management I: Digital Marketing Credit(s): 1.5
- OCL 622 Clinic Trainee III Credit(s): 2

# Third Year Summer Totals - Total Hours: 92 | Credits: 5.67 Third Year Totals - Total Hours: 698 | Credits: 50.17

## **Fourth Year**

#### Fall

- OCM 644 CCM: Acupuncture Therapeutics IV (OB/GYN) Credit(s): 2
- OCM 664 CCM: Herbal Therapeutics IV (OB/GYN) Credit(s): 1
- OIM 554 Western Clinical Medicine IV (OB/GYN): Credit(s): 2
- OIM 654 Integrative Case Management IV (OB/GYN) Credit(s): 1
- OCL 633 Case Management I Credit(s): 1.5
- OCL 655 Clinic Paired Internship Credit(s): 2.57
- OCL 671 Herbal Internship Credit(s): 2.57

## Fourth Year Fall Totals - Total Hours: 337 | Credits: 17.8

## Winter

- OCM 645 CCM: Acupuncture Therapeutics V (Behavioral Health) Credit(s): 2
- OCM 646 CCM: Acupuncture Therapeutics VI (Pediatrics) Credit(s): 1
- OCM 665 CCM: Herbal Therapeutics V (Behavioral Health) Credit(s): 1
- OCM 666 CCM: Herbal Therapeutics VI (Pediatrics) Credit(s): 1
- OIM 555 Western Clinical Medicine V (Behavioral Health) Credit(s): 2
- OIM 556 Western Clinical Medicine VI (Pediatrics) Credit(s): 0.5
- OIM 655 Integrative Case Management V (Behavioral Health) Credit(s): 0.5
- OCL 634 Case Management II Credit(s): 1.5
- OCL 656 Clinic Internship I Credit(s): 2.57
- OCL 672 Herbal Internship II Credit(s): 2.38

# Fourth Year Winter Totals - Total Hours: 285 | Credits: 16.64

# **Spring**

- OCM 647 CCM: Acupuncture Therapeutics VII (Geriatric Care) Credit(s): 2
- OCM 667 CCM: Herbal Therapeutics VII (Geriatric Care) Credit(s): 1
- OIM 557 Western Clinical Medicine VII (Geriatrics) Credit(s): 2
- OIM 657 Integrative Case Management VII (Geriatrics) Credit(s): 1
- OCL 635 Case Management III Credit(s): 1.5
- OCL 657 Clinic Internship II Credit(s): 2.38

# Fourth Year Spring Totals - Total Hours: 261 | Credits: 14.64

#### Summer

- OCL 636 Case Management IV Credit(s): 1.5
- OPD 505 Community Outreach Practicum Credit(s): 0.89
- OCL 658 Clinic Internship III Credit(s): 1.58

Fourth Year Summer Totals - Total Hours: 164 | Credits: 7.13 Fourth Year Totals - Total Hours: 1047 | Credits: 56.19

# Master of Acupuncture and Chinese Medicine (MACM)-OCOM Course Descriptions

First Year

Fall

AC 511 - Shiatsu I

Credit(s): 0.75

Originating in Japan, shiatsu is a highly effective system of massage therapy that develops the practitioner's sensitivity, awareness, and responsiveness both in diagnosis and in treatment. Through palpation of the channels

through which qi flows, the practitioner is able to determine the nature and quality of energetic imbalances, and through finger and hand pressure to correct those imbalances and bring the body into greater alignment and

health. Because of its potency for relieving stress and stimulating energy circulation, shiatsu is used to treat specific disorders and is used as a preventative modality. Since shiatsu requires skill in channel palpation, this course provides an important practical support for coursework in point location and channel trajectories. Principles of professional interaction for manual therapy (including respectful touch, appropriate draping, body language, and verbal communication) are introduced at the beginning of Shiatsu I.

AC 523 - Tuina I

Credit(s): 0.75

Tuina, traditional Chinese massage therapy, forms the basis of Chinese physical therapy and is an important modality within Chinese medicine. Over three quarters, students are trained to a level of basic proficiency in the

treatment of structural and soft-tissue injury and dysfunction. Such training is intended to develop the student's physical approach to bodywork, as well as their healing presence and extension of qi toward a healing objective. This is applicable to tuina as an independent modality, as well as to later work with acupuncture needle technique. Students are trained in basic clinical preparatory treatments, including general health, shoulder, neck, abdominal, common cold, and headache protocols during the three quarters. Principles of professional interaction for manual therapy (respectful touch, appropriate draping, body language, and verbal communication) are reviewed at the beginning of Tuina I.

#### AC 530 - Acupuncture Channels and Points I

Credit(s): 4

This first course in the Acupuncture Channels and Points course sequence presents the fundamental concepts of acupuncture channel theory and is designed to familiarize students with the role of the channel system as it

functions within the practice of acupuncture. Students are introduced to the general concepts and components of the channel system, including detailed information on the nomenclature, distributing rules, and functions of the channel system. They will then apply this foundation to learning the pathways, functions, and pathologies of the 12 primary channels, the eight extraordinary vessels, the 12 divergent channels, the 15 luo collateral vessels, the 12 muscle-sinew channels, and the six cutaneous regions and their relationship to the zang-fu. In addition to lecture, students will have practical opportunities, including hands-on practice, to learn the pathways of the various channels. *Corequisite(s):* CM504

#### AC 534 - Qigong I

#### **Credit(s): 0.5**

In Qigong I, students are introduced to the fundamentals of qigong practice and the philosophy that underlies this ancient healing practice integral to the practice of Chinese medicine. Students explore theory through the practice of foundational standing, moving, and seated forms — Shaking, San Yuan Gong (3 Sources Qigong), and Wu Xing Gong (5 Element Qigong).

#### AC 537 - Taiji Quan I

#### **Credit(s): 0.5**

The practice of taiji quan gives students an understanding and perception of the flow of qi in the body. In Taiji Quan, a set of individual physical poses are performed together as a single, fluid meditative form. In this course,

students learn the basic principles and history of taiji and are introduced to the correct posture and movements of a modified yang-style taiji form.

#### CM 504 - Chinese Medical Theory I

## Credit(s): 4

This three-quarter course series provides students with foundation work in the basic theoretical concepts of Chinese medicine. Students explore yin/yang theory; the five phases (wu xing); traditional models for physiologic function, including the zang and fu organs, and the substrates of energy (qi), essence (jing), blood (xue), and fluids (jin/ye); the origins and processes of disease, including the four levels of disease (wen-bing xue) and the six stages of cold-induced disorders (shang-han bing); as well as the fundamentals of diagnostic theory (four methods). The study of selected, relevant portions of Chinese classic texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) is integrated into the study of these theories.

### **IM 501 - Western Medical Terminology**

# Credit(s): 2

This course helps students build a working medical vocabulary of the most frequently encountered prefixes, suffixes, and word roots encountered in biomedicine. Medical terms are introduced in the context of human

anatomy and physiology to help students understand exactly what they mean, and case studies, vignettes, and activities demonstrate how they're used in clinical practice.

#### IM 502 - Anatomy and Physiology I

# **Credit(s): 2.5**

The purpose of this course is to introduce students to medically relevant terminology and the structures and functions of human cells, tissues and organ systems. Concepts of homeostasis and the interrelationship of organ

system function will be introduced. This is the first course in a three-course sequence. Systems covered include the integumentary, skeletal, muscular, special senses, and nervous systems including nervous histology, physiology, spinal cord and nerves.

### **IM 505 - Living Anatomy I**

### Credit(s): 2

As a practitioner of a physical medicine, an acupuncturist utilizes information from the body's palpable structures, including skeletal structures, muscles, and neurovasculature, to formulate a diagnosis and treatment strategy. Through supervised, hands-on practice, Living Anatomy trains students to recognize, effectively locate, and skillfully palpate the surface structures of the body. *Corequisite(s):* IM502

### PD 504 - Introduction to Community Outreach Practicum

# Credit(s): 0.11

Community Outreach allows students to develop skills and experience in educating and informing the public about Chinese medicine. Participating in Community Outreach events like health fairs and educational forums

will provide students with valuable communication skills that will aid them in developing their practices after graduation.

#### CL 535 - Introduction to Clinic Observation

### Credit(s): 1

This course will provide students with an overview of the skills necessary to practice safely, professionally, and effectively in a clinical medicine setting. Topics covered include professional conduct and the role of the observer

in the clinic, patient-practitioner rapport, medical charting, best practices for safety and risk management, and evidence-informed practice.

First Year Fall Totals - Total Hours: 250 | Credits: 18.11

Winter

#### AC 512 - Shiatsu II

### **Credit(s): 1.5**

In Shiatsu II, students learn the location, basic functions, terminology, and treatments associated with the classical and extended meridians of the Lung/Large Intestine, Stomach/Spleen, and Heart/Small Intestine. Students are also introduced to the diagnostic areas in the hara and learn how to perform a basic hara diagnosis. In Shiatsu III, students learn the location, basic functions, terminology, and treatments associated with the classical and

extended meridians of the Bladder/Kidney, Pericardium/Triple Heater, Gall Bladder/Liver. Students learn how to apply the principles of shiatsu, including hara diagnosis, in a full-body session. *Prerequisite(s):* AC511

#### AC 524 - Tuina II

### **Credit(s): 1.5**

Tuina II teaches students how to assess and treat diseases of the low back using subjective information, orthopedic exams, and tuina. Tuina III teaches students how to assess and treat diseases of the head, neck, and shoulders using subjective information, orthopedic exams, and tuina. Both courses train students in the development of clinical reasoning skills and the ability to differentiate between diseases. *Prerequisite(s):* AC523

#### AC 531 - Acupuncture Channels and Points II

#### Credit(s): 4

This second course in the Acupuncture Channels and Points course sequence begins by providing students with a thorough introduction to acupuncture points, including their historical development, definition, general functions, nomenclature, and their major theoretical and functional point categories. Students also learn how to use both anatomical landmarks and traditional, proportional measurement systems to accurately locate

acupuncture points. Then, through a combination of lecture, demonstration, and hands-on practice, students learn to apply this information to locate points of the Lung, Large Intestine, Stomach, Spleen, Heart, Small Intestine channels and Du Mai and understand their applications through a study of their actions, indications, and designated point categories. *Prerequisite(s):* AC530

### AC 535 - Qigong II

# Credit(s): 1

In Qigong II, students build on the knowledge and practice from Qigong I and are introduced to the study and practice of One Thousand Hands Buddha. One Thousand Hands Buddha, from the Liu family lineage, is a seated

qigong form that incorporates the use of elegant mudra (hand positions). It is an excellent form for quieting the heart/mind and providing clarity of thought and purpose and thus is an effective practice to support the study of

Chinese medicine. *Prerequisite(s):* AC534

## AC 538 - Taiji Quan II

### Credit(s): 1

Taiji Quan II and III build on the foundations laid in Taiji Quan I. Through intensive practice and regular instructor feedback of their posture and movement through the forms, students improve their skills, begin to acquire the

ability to experience qi and recognize the symptoms of blockage and opening of qi circulation. *Prerequisite(s):* AC537

### **AC 554 - Accessory Techniques**

#### Credit(s): 0.75

Students learn and practice non-needling acupuncture techniques including moxibustion, cupping, and gua sha.

# CM 505 - Chinese Medical Theory II

### Credit(s): 4

This three-quarter course series provides students with foundation work in the basic theoretical concepts of Chinese medicine. Students explore yin/yang theory; the five phases (wu xing); traditional models for physiologic function, including the zang and fu organs, and the substrates of energy (qi), essence (jing), blood (xue), and fluids (jin/ye); the origins and processes of disease, including the four levels of disease (wen-bing xue) and the six stages of cold-induced disorders (shang-han bing); as well as the fundamentals of diagnostic

theory (four methods). The study of selected, relevant portions of Chinese classic texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) is integrated into the study of these theories. *Corequisite(s):* CM504

# IM 503 - Anatomy and Physiology II

# Credit(s): 2.5

The purpose of this course is to introduce students to medically relevant terminology and the structures and functions of human cells, tissues and organ systems. Concepts of homeostasis and the interrelationship of organ system function will be introduced. This is the second course in a three-course sequence. Systems covered include a continuation of the nervous system, including brain, cranial nerves, and autonomic nervous system, the endocrine, cardiovascular and immune systems.

#### **IM 506 - Living Anatomy II**

# Credit(s): 2

As a practitioner of a physical medicine, an acupuncturist utilizes information from the body's palpable structures, including skeletal structures, muscles, and neurovasculature, to formulate a diagnosis and treatment strategy. Through supervised, hands-on practice, Living Anatomy trains students to recognize, effectively locate, and skillfully palpate the surface structures of the body. *Corequisite(s):* IM503

#### CL 538 - Clinical Theater I

### Credit(s): 2

The purpose of this course sequence is to prepare students for clinical internship by having them observe a licensed practitioner treating patients in a clinical theater setting. Over two quarters, in live "clinical theaters" in a classroom setting, students observe real-life patient care as provided by an OCOM faculty member who is a licensed acupuncturist. Students will have the opportunity to observe how an experienced practitioner presents case presentations, establishes rapport, conducts patient histories and examinations, charts patient progress thoroughly yet concisely, selects appropriate assessment measures to demonstrate patient progress, and arrives at a quick and accurate diagnosis of patients' conditions using Eastern and Western diagnostic procedures. Students will practice comprehensive history taking by recording patient history and exam results for every patient they observe and will have the opportunity to observe patients' tongues to understand how this diagnostic element factors into the instructor's overall diagnosis and treatment. At appropriate times, students will have the opportunity to ask questions regarding each case. *Prerequisite(s):* CL535

First Year Winter Totals - Total Hours: 276 | Credits: 17.75

# Spring

#### AC 513 - Shiatsu III

# **Credit(s): 1.5**

In Shiatsu III, students learn the location, basic functions, terminology, and treatments associated with the classical and extended meridians of the Bladder/Kidney, Pericardium/Triple Heater, Gall Bladder/Liver. Students learn how to apply the principles of shiatsu, including hara diagnosis, in a full-body session. *Prerequisite(s):* AC512

#### AC 525 - Tuina III

# Credit(s): 1.5

Tuina III teaches students how to assess and treat diseases of the head, neck, and shoulders using subjective information, orthopedic exams, and tuina. Both courses train students in the development of clinical reasoning skills and the ability to differentiate between diseases. *Prerequisite(s):* AC524

# AC 532 - Acupuncture Channels and Points III

### Credit(s): 4

Through a combination of lecture, demonstration, and hands-on practice, students learn to accurately locate points of the Bladder, Kidney, Pericardium, San Jiao, Gallbladder, and Liver channels and Ren Mai understanding their applications through a study of their actions, indications, and designated point categories. *Prerequisite(s):* AC531

### AC 536 - Qigong III

### Credit(s): 1

Qigong III builds on the knowledge and practice from Qigong I-II and introduces students to the study and practice of Eight Treasures Qigong (Ba Duan Jin). Eight Treasures is one of the four oldest and most famous qigong methods in China, dating back to the early 12th century. The name Eight Treasures refers to its eight routines, each a treasure in itself. It is a simple standing form that is easy to learn and powerful in its application. It benefits the bones, tendons, organ-energy systems, and seven emotions. *Prerequisite(s):* AC535

### AC 539 - Taiji Quan III

### Credit(s): 1

Taiji Quan II and III build on the foundations laid in Taiji Quan I. Through intensive practice and regular instructor feedback of their posture and movement through the forms, students improve their skills, begin to acquire the ability to experience qi and recognize the symptoms of blockage and opening of qi circulation. *Prerequisite(s):* AC538

### CM 506 - Chinese Medical Theory III

# Credit(s): 4

This three-quarter course series provides students with foundation work in the basic theoretical concepts of Chinese medicine. Students explore yin/yang theory; the five phases (wu xing); traditional models for physiologic function, including the zang and fu organs, and the substrates of energy (qi), essence (jing), blood (xue), and fluids (jin/ye); the origins and processes of disease, including the four levels of disease (wen-bing xue) and the six stages of cold-induced disorders (shang-han bing); as well as the fundamentals of diagnostic theory (four methods). The study of selected, relevant portions of Chinese classic texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) is integrated into the study of these theories. *Prerequisite(s)*: CM505

### IM 504 - Anatomy and Physiology III

### **Credit(s): 2.5**

This is the third course in a three-course sequence. Systems covered include the respiratory, digestive, urinary and reproductive systems, metabolism and fluid and electrolyte balances, embryology and genetics.

#### **IM 507 - Living Anatomy III**

### Credit(s): 2

As a practitioner of a physical medicine, an acupuncturist utilizes information from the body's palpable structures, including skeletal structures, muscles, and neurovasculature, to formulate a diagnosis and treatment strategy. Through supervised, hands-on practice, Living Anatomy trains students to recognize, effectively locate, and skillfully palpate the surface structures of the body. *Corequisite(s):* IM504

#### CL 539 - Clinical Theater II

#### Credit(s): 2

The purpose of this course sequence is to prepare students for clinical internship by having

them observe a licensed practitioner treating patients in a clinical theater setting. Over two quarters, in live "clinical theaters" in a classroom setting, students observe real-life patient care as provided by an OCOM faculty member who is a licensed acupuncturist. Students will have the opportunity to observe how an experienced practitioner presents case presentations, establishes rapport, conducts patient histories and examinations, charts patient progress thoroughly yet concisely, selects appropriate assessment measures to demonstrate patient progress, and arrives at a quick and accurate diagnosis of patients' conditions using Eastern and Western diagnostic procedures. Students will practice comprehensive history taking by recording patient history and exam results for every patient they observe and will have the opportunity to observe patients' tongues to understand how this diagnostic element factors into the instructor's overall diagnosis and treatment. At appropriate times, students will have the opportunity to ask questions regarding each case. *Prerequisite(s):* CL535

First Year Spring Totals - Total Hours: 258 | Credits: 17.00

Summer

#### AC 526 - Shiatsu IV

# Credit(s): 1

In Shiatsu IV, students deepen their understanding of shiatsu theory and diagnosis, incorporate kyo/jitsu diagnostic theory into their repertoire, and develop the clinical competency required to progress into the clinic treating patients under supervision. *Prerequisite(s):* AC513

#### AC 527 - Tuina IV

### Credit(s): 1

Tuina IV teaches students how to assess and treat diseases of the upper and lower extremities and low back using subjective information, orthopedic exams, and tuina. Students deepen their understanding of tuina theory and diagnosis and they develop the clinical competency required to progress into the clinic treating patients under supervision. *Prerequisite(s)*: AC525

# AC 533 - Acupuncture Channels and Points IV

### Credit(s): 2

Through a combination of lecture, demonstration, and hands-on practice, students learn to accurately locate the most common Extra Points and understand their applications through a study of their actions and indications. Students are also introduced to general principles and methods of acupuncture treatment. Remaining classes are devoted to regional review of

the main points on each channel, and a comparison of the actions and indication of major acupuncture points. *Prerequisite(s):* AC532

### AC 610 - Acupuncture Techniques I

### **Credit(s): 1.5**

This course sequence introduces students to the clinical tools and essential skills of the acupuncturist. Its objective is to provide a solid foundation in needle techniques and to review the related skills of moxibustion, cupping, gua sha. Techniques I is focused on the basic needling techniques, such as needle insertion, techniques to obtain Qi sensation, simple reinforcing and reducing techniques, auxiliary needling techniques etc. Attention is also paid to general issues of patient safety, with emphasis on appropriate needle depths and angles, and learning the basic skills of Clean Needle Technique. *Prerequisite(s):* AC532

### CM 507 - Chinese Medicine Diagnosis Lab

# Credit(s): 0.75

Students will practice the diagnostic skills required of the Chinese medical practitioner — pulse reading, tongue observation, questioning, and palpation. *Prerequisite(s):* CM506

#### CM 519 - Introduction to Chinese Herbal Medicine

### Credit(s): 1

This course begins the Chinese herbal medicine series of individual herbs, substances, and herbal formulas, and introduces the practice of Chinese herbal medicine. It provides a general overview of the concepts of herbal alchemy, herbal energetics including natures and flavors, herbal directional movement, botany, taxonomy, pharmacology, ethics, philosophy, and theoretical application of herbs, and addresses the historical development of Chinese herbal medicine in Asia and the United States. It introduces categories of individual herbs and formulas, preparation of herbal formulas, general precautions, and potential problems with herbs (including herb-drug interactions), and relevant research on Chinese herbs. *Prerequisite(s)*: CM504

### **IM 508 - Medical Charting**

### Credit(s): 1

Addressing medical charting from both the clinical and legal perspectives, this course introduces students to the professional standards for medical documentation. Through a combination of lecture, in-class exercises and faculty and peer assessment of charting assignments, students will learn high-quality charting behaviors that minimize risk and maximize patient safety and clinical outcomes.

### RE 502 - Integrative Medical Research I: Research Literacy

### Credit(s): 1

The first of our two-course series in Integrative Medical Research provides foundational skills in research literacy for the Chinese medicine practitioner by introducing the basic research skills required to conduct a literature review, the evidence hierarchy, evidence-based medicine (EBM), key issues in acupuncture research, the academic peer review process, and the nine competencies of research literacy. Through lecture, reading, and inclass exercises, students will learn to formulate searchable questions, efficiently locate evidence, recognize various evidence types, and evaluate the reliability, quality, and clinical relevance of this evidence.

First Year Summer Totals - Total Hours: 120 | Credits: 8.25

First Year Totals - Total Hours: 904 | Credits: 61.11

Second Year

Fall

# OAC 611 - Acupuncture Techniques II

### Credit(s): 3

This course sequence continues to train students to the clinical tools and essential skills of the acupuncturist, Blood-letting techniques, cutaneous (7-star) needling techniques and warm-needling techniques are introduced. Its objective is to provide a solid foundation in needling the different areas of the body and to review the related skills of moxibustion, cupping, gua sha. Appropriate needle depths and angles, maintaining clean fields, and application of aseptic and sterile procedures are continually emphasized as well. Note: Completion of this course sequence also requires successful completion of the Clean Needle Technique (CNT) class sponsored by the Council of Colleges of Acupuncture and Herbal Medicine (CCAHM). There is an additional fee for the CNT class. The CNT course is currently offered online. Students should complete it during the quarter they are enrolled in the Acupuncture II course. *Prerequisite(s):* AC554, AC610 *Corequisite(s):* CCAHM CNT Certificate Course

#### OCM 521 - Chinese Herbal Medicine I

# Credit(s): 4

This three-quarter sequence is designed to introduce approximately 365 of the most commonly used medicinal substances in Chinese medicine. Included in that study are the names of the substances cross-referenced by botanical, pharmaceutical, common English

and Chinese name; substance identification; nature and flavor; major functions, actions, and indications; precautions, herb-drug interactions; preparation methods and relevant research describing physiological action. Chinese Herbal Medicine I: The Pharmacopoeia (4 credits/48 hours) – This quarter begins with the study of the 50 most common medicinal substances from all categories. Once students have achieved mastery of these 50 key medicinals the following herb categories are covered: Acrid Warm to Release the Exterior and Acrid Cool to Release the Exterior, Clear Heat Reduce Fire, Clear Heat Cool the Blood, Clear Heat Dry Damp, Clear Heat Toxins, Downward Draining, Clear Deficiency Heat (135 herbs). *Prerequisite(s):* CM506, CM519

### OIM 521 - Western Medical Pathology I

# Credit(s): 2

In this course, students become familiar with Western biomedical approaches to disease development and progression with the goal of cultivating a deeper understanding of disease processes, the ability to communicate with other health professionals, proficiency in reviewing medical documents relevant to patient care, and understanding of when to refer to urgent care. Pathologies of each of the major body and organ systems are covered, including the cardiovascular, neurological, respiratory, musculoskeletal, urogenital, gynecological, endocrine, hematopoietic, skin, gastrointestinal, hepatic and pancreatic systems. Microbiology and immunology are addressed in the context of both acute and chronic diseases, as well.

### **OIM 560 - Community Health and Chemical Dependency**

### Credit(s): 2

Dependence on alcohol and drugs is a major public health issue in our culture. Chinese medicine, in combination with appropriate counseling and support networks, has emerged as the preeminent drugless therapy in the treatment of chemical dependency and the facilitation of detoxification and withdrawal. In this class, students focus on the special physiological, socioeconomic, cultural, and spiritual issues of chemical dependency, and clinical approaches of the chemical dependency acupuncture therapist. Additionally, coursework includes information and training in HIV/AIDS education and models for utilizing Chinese medicine for community health.

### **ORE 602 - Integrative Medical Research II**

### Credit(s): 2

Research in acupuncture and Chinese herbology has become increasingly important for enhancing the credibility of Chinese medicine in the eyes of the biomedical community, the insurance industry, and health care policy analysts. In this course, students will examine the current evidence base for acupuncture and the methodological challenges of designing

research that is relevant to clinical practice. Students will learn and practice how to evaluate and design clinical trials. The course also introduces physiological theories of how acupuncture works. *Corequisite(s):* RE502

#### OCL 567 - Clinical Rounds I

# Credit(s): 1

Clinical Rounds I and II continue the process of preparing students for clinical internship through observation of a licensed practitioner treating patients in a clinical setting. Over two quarters, students follow a faculty practitioner treating patients in one of the school's teaching clinics. Under the constant, direct supervision of the faculty practitioner, students will participate in case presentations and take chart notes, recording a patient's history and exam results, as well as assessments and treatments for each patient they observe.

Students will have the opportunity to take patients' pulses and observe their tongues to understand how these diagnostic elements factor into the instructor's overall diagnosis and treatment. At appropriate times, students will have the opportunity to ask questions regarding each case. Under the direct supervision of the faculty practitioner, students may participate in direct patient care by administering cupping, gua sha, tuina/shiatsu, and moxibustion as necessary. Finally, as part of the overall strategy for developing the skills required of a successful practitioner, students will be responsible for cleaning and stocking the treatment rooms at the beginning and the end of each shift and preparing the room between patients. *Corequisite(s):* CL539

Second Year Fall Totals - Total Hours: 180 | Credits: 14.00

Winter

### OAC 612 - Acupuncture Techniques III

#### Credit(s): 3

This course sequence continues to train students to the clinical tools and essential skills of the acupuncturist, electroacupuncture setting, Five element treatment, holographic theory, motor and trigger points protocol, extraordinary channel theory, Luo vessel treatment, muscle sinew treatment protocol etc. are introduced. The objective is to provide a solid foundation in needle techniques and to review the related skills of moxibustion, cupping, gua sha. Attention is also paid to general issues of patient safety, with emphasis on appropriate needle depths and angles, maintaining clean fields, and application of aseptic and sterile procedures. *Prerequisite(s):* OAC611; CCAHM CNT

### **OCM 522 - Chinese Herbal Medicine II**

### Credit(s): 4

This three-quarter sequence is designed to introduce approximately 365 of the most commonly used medicinal substances in Chinese medicine. Included in that study are the names of the substances cross-referenced by botanical, pharmaceutical, common English and Chinese name; substance identification; nature and flavor; major functions, actions, and indications; precautions, herb-drug interactions; preparation methods and relevant research describing physiological action.

Chinese Herbal Medicine II: The Pharmacopoeia - This continues review of the 50 most common medicinal substances and the following categories covered: Aromatic to Transform Damp, Warm Interior,

Regulate Qi, Stop Bleeding, Invigorate Blood and Remove Blood Stasis, Clear Food Stagnation, Stop Cough and Wheezing, Transform Phlegm, Drain Dampness and Excrete Water, Expel Wind Dampness, Open Orifice Herbs (155 herbs). *Prerequisite(s):* OCM521

# **OIM 509 - Medical History Taking**

### Credit(s): 2

The medical history serves as one of the pillars of medical diagnosis and is traditionally the first step in virtually every clinical encounter. A thorough history allows the clinician to define the patient's problem and, along with the results of physical examination, assists in formulating a diagnosis in most cases.

Through a combination of lecture, demonstration, and practice, this course is designed to develop student confidence in taking a detailed clinical history. Principles of clinical reasoning and interviewing technique are presented in detail, and tips for maintaining clinical focus are discussed. Medical documentation, from both the clinical and legal perspectives, are reviewed, and how the interview informs physical examination and assessment is discussed.

# OIM 522 - Western Medical Pathology II

# Credit(s): 2

In this course, students become familiar with Western biomedical approaches to disease development and progression with the goal of cultivating a deeper understanding of disease processes, the ability to communicate with other health professionals, proficiency in reviewing medical documents relevant to patient care, and understanding of when to refer to urgent care. Pathologies of each of the major body and organ systems are covered, including the cardiovascular, neurological, respiratory, musculoskeletal, urogenital, gynecological, endocrine, hematopoietic, skin, gastrointestinal, hepatic and pancreatic systems. Microbiology and immunology are addressed in the context of both acute and chronic diseases, as well.

### **OIM 643 - General Physics**

### Credit(s): 2

This course provides an introduction to the fundamental concepts of physics and an understanding of how these principles relate to everyday life. The topics in this course include Newton's laws, properties of matter, heat and

thermodynamics, waves, electricity and magnetism, and fundamental quantum theory. Students will apply these principles using practical examples and facilitated discussions. This course also introduces the concept of biophysics — the science that applies the laws and methods of physics to the study of biological phenomena — through a survey of its applications in modern medicine and a presentation and discussion of some of the more interesting hypotheses currently being researched with regards to biophysics and acupuncture theory. (Corequisite for students who have not taken General Physics prior to admission.)

### OPD 500 - History of Medicine: East and West

### Credit(s): 2

Through lecture and visual presentations, this course offers a historical and cultural perspective on the development of medicine throughout the world. The first six weeks will review the emergence and evolution of traditional East Asian medicine in China and around the world in light of evolving and competing worldviews. During the second six weeks, the course looks at the history of medicine in "animistic" societies and then through other global cultures, especially the ancient Mediterranean, Europe and North America, to see how history, culture, and worldviews shape the perception of health and disease and the practice of medicine in contemporary America. Through the methodology of historical analysis and cultural contextualization this course will further enable each student to assess assumptions and constructs regarding health, disease causation, medicine, the therapeutic relationship, and the healing process. Thus, the emergent practitioner will understand both the content and context of Chinese medical traditions as well as the origins and evolution of the culture in which each patient is embedded.

#### CL 616 - Asian Bodywork Clinic

### Credit(s): 2

Any student who completes Shiatsu I-IV or Tuina I-IV (through selective or elective) may take Asian Bodywork Clinic as part of their pre-internship clinical requirement instead of Herbal Rounds I-II. In this supervised bodywork clinic, students apply their shiatsu or tuina skills to the treatment of patients. They engage in patient interviews, assessment, charting, and treatment. This experience will enhance their clinical skills as they prepare for clinical internship. *Prerequisite(s):* Prerequisite Shiatsu: AC527, CL539, IM508.

Prerequisite Tuina: AC526, CL539, IM508. *Corequisite(s):* Co-requisite (Shiatsu or Tuina): OIM509

#### OCL 598 - Herbal Rounds I

### Credit(s): 2

These two courses support the student's learning of Chinese herbal medicine by allowing them to observe a clinical faculty member diagnose and treat a patient using Chinese herbs exclusively.

Under the constant, direct supervision of the faculty practitioner, the student will participate in case presentations and take chart notes, recording a patient's history and exam results as well as assessments and treatments for each patient they observe. The student will have the opportunity to take patients' pulses and observe their tongues to understand how these diagnostic elements factor into the instructor's overall diagnosis and treatment. At

appropriate times, students will have the opportunity to ask questions regarding each case.

In Herbal Rounds I students will observe a faculty practitioner interview, diagnose and create a herbal prescription. Herbal Rounds II this observation will take place in an Herbal Internship clinic where the student will observe

clinical interns. (Note: only MACM and DACM students take this course.) *Prerequisite(s):* CL539, CM521

Second Year Winter Totals - Total Hours: 228 | Credits: 17.00

Spring

### OAC 613 - Acupuncture Techniques IV

### Credit(s): 2

Students continue to practice and refine the basic skills acquired in Acupuncture Techniques I-III as they learn new acupuncture techniques to utilize in clinical practice. In addition, students begin to combine and apply

these skills to complete acupuncture treatment protocols for some of the more commonly seen conditions in the clinic (e.g., reproductive issues, headache, neck pain, low back pain, stress, gastrointestinal issues). This course is designed to bring students to the required level of proficiency in acupuncture skills for entrance into Clinic Trainee. *Prerequisite(s)*: OAC612

### OAC 614 - Acupuncture Microsystems (Auricular, Scalp, Hand and Wrist)

### Credit(s): 3

Apart from the main channel system, Chinese medicine also utilizes a variety of local, "holographic" microsystems in acupuncture therapy. Through lecture, demonstration and practice, this course introduces the basic theory

behind the three most important acupuncture microsystems of Chinese medicine - auricular, scalp and wrist/ankle acupuncture microsystems — and how they are utilized in treating such conditions as pain, stroke and musculoskeletal disorders. Auricular Acupuncture: Students will learn the Chinese auricular system (the French Nogier system will be introduced in the course of the class). Ear diagnosis class). Ear diagnosis and master points will be discussed along with how to build a point protocol for patients. The National Acupuncture Detoxification Association (NADA) protocol will be introduced, along with its development in both chemical dependency and mental health treatment settings. *Prerequisite(s)*: OAC612

### OCM 526 - Chinese Herbal Medicine III: The Pharmacopoeia

# Credit(s): 3

This three-quarter sequence is designed to introduce approximately 365 of the most commonly used medicinal substances in Chinese medicine. Included in that study are the names of the substances cross-referenced by

botanical, pharmaceutical, common English and Chinese name; substance identification; nature and flavor; major functions, actions, and indications; precautions, herb-drug interactions; preparation methods and relevant research describing physiological action.

Chinese Herbal Medicine III: The Pharmacopoeia (3 credits/36 hours) – This continues review of the 50 most common medicinal substances and the following categories covered: Calm Shen, Nourish Blood, Tonify Oi,

Tonify Yang, Tonify Yin, Expel Parasites, Topical Use Herbs, Subdue Liver Yang and Extinguish Wind (75 herbs). *Prerequisite(s):* OCM522

# OIM 523 - Western Medical Pathology III

### Credit(s): 2

In this course, students become familiar with Western biomedical approaches to disease development and progression with the goal of cultivating a deeper understanding of disease processes, the ability to communicate

with other health professionals, proficiency in reviewing medical documents relevant to patient care, and understanding of when to refer to urgent care. Pathologies of each of the major body and organ systems are

covered, including the cardiovascular, neurological, respiratory, musculoskeletal, urogenital, gynecological, endocrine, hematopoietic, skin, gastrointestinal, hepatic and pancreatic systems. Microbiology and immunology

are addressed in the context of both acute and chronic diseases, as well.

### OIM 640 - Diet and Nutrition

### Credit(s): 2.5

This course explores the vital role that diet and nutrition play in an overall approach to patient care. Students study this topic from a modern Western perspective, focusing on developing a broad understanding of the essential elements of nutritional physiology, the roles of vitamins and minerals in health maintenance and as therapeutic supplements, and the use of food as medicinal substances. Clinical applications of nutrition and lifestyle counseling are discussed. *Prerequisite(s):* IM501, IM502, IM503, IM504

### **OIM 650 - Structural Diagnosis**

### Credit(s): 3

Utilizing lecture and hands-on practice, students continue the work begun in Living Anatomy I-III by focusing on differentiating musculoskeletal and neurological disorders using orthopedic and other evaluative procedures. This course provides the student with assessment approaches for musculoskeletal and neurological disorders, which are among the most common conditions seen in acupuncture and Chinese medical practices. *Prerequisite(s):* IM505, IM506, IM507, OIM521

# **OPD 550 - Patient-Practitioner Relationship**

# Credit(s): 2

In a Chinese medicine practice, the core of the healing process is the relationship between the patient and the practitioner. By learning to observe, identify, and understand human emotions and needs, the practitioner is able

to communicate effectively and create a nourishing and safe environment for healing to occur. The following topics are addressed as fundamental skills for good patient-practitioner relationships: ethical practice guidelines

and codes; strategies for resolving ethical dilemmas; personal and professional boundaries and conflict resolution; inclusive treatment; motivational interviewing; screening for mental illness, substance use disorder, and intimate partner violence; suicide prevention; and self-care and resilience. This class will use a combination of lectures, role plays, and additional class activities to teach students about the fundamentals of the patient-practitioner relationship. *Prerequisite(s)*: CL535

### OCL 611 - Chinese Herbal Medicinary Practicum

### Credit(s): 2

During their study of herbal medicine, students have an opportunity to enhance their familiarity with the preparation and dispensing of medicinal substances. Under the guidance of supervisors, students assist in the operation of the college's OCOM Herbal Medicinary and participate in preparing granule and bulk herb formulas. Through this

process, students learn identification, sorting, preparation, and storage of individual herbs, as well as combinations of herbs for health conditions. (Note: only MACM and DACM students take this course.) *Prerequisite(s):* CL539, CM519 *Corequisite(s):* CM521

Second Year Spring Totals - Total Hours: 258 | Credits: 19.50

Summer

#### OCM 527 - Chinese Herbal Medicine III: The Pharmacopoeia - Review

### Credit(s): 1

This class reviews all single herbs and herb categories covered in Chinese Herbal Medicine I-III: The Pharmacopeia. *Prerequisite(s):* OCM526

### OCM 528 - Chinese Herbal Medicine III: Pao Zhi

### Credit(s): 1

This class introduces students to different Pao Zhi preparations that can give a single herb different functions. Students prepare both single herbs and formulas while simultaneously reviewing the main functions of commonly

used clinical medicinals. The course covers a cross section of herbs from Chinese Herbal Medicine I-III: The Pharmacopeia. *Prerequisite(s):* OCM526

#### OCM 603 - Chinese Nutrition

### **Credit(s): 1.5**

Utilizing Chinese dietary principles in conjunction with acupuncture and herbal treatment will enable the practitioner to better aid their patients in achieving "balance" and improved health. This course emphasizes

Chinese classification of foods into categories and combining foods with Chinese herbs to create clinically effective recipes. Foods that are to be eaten or avoided during particular disorders are discussed and a portion of the class involves hands-on preparation of special dishes for specific illnesses. *Prerequisite(s)*: CM506

#### **OIM 530 - Issues in Public Health**

# Credit(s): 1

This course explores cultural and environmental forces that contribute to health and illness among individuals in our society. Topics include the economics of the health care delivery system, disenfranchised populations,

maternal and child health, occupational health, epidemiology, and world health. Particular

attention is paid to ways in which the practitioner interfaces with, affects, and is affected by this system.

### OIM 531 - Western Pharmacology I

### Credit(s): 1

This course provides students with a basic understanding of the important pharmaceutical products commonly prescribed today, including their physiological functions, recommended dosages, prominent effects and proprietary and generic names. Interaction of pharmaceuticals with herbs and nutrients is addressed. Emphasis placed on the most popular pharmaceuticals prescribed today to treat the most common drug-treated conditions in North America: cardiovascular disease, diabetes, and chronic pain. *Prerequisite(s):* IM501, IM502, IM503, IM504, IM505, IM506,

### CL 618 - Asian Bodywork Clinic

### Credit(s): 1

IM507

Any student who completes Shiatsu I-IV or Tuina I-IV (through selective or elective) may take Asian Bodywork Clinic as part of their pre-internship clinical requirement instead of Herbal Rounds I-II. In this supervised bodywork clinic, students apply their shiatsu or tuina skills to the treatment of patients. They engage in patient interviews, assessment, charting, and treatment. This experience will enhance their clinical skills as they prepare for clinical internship. *Prerequisite(s):* Shiatsu: AC527, CL539, IM508; Tuina: AC526, CL539, IM508 *Corequisite(s):* Co-requisite (Shiatsu or Tuina): OIM50

#### OCL 599 - Herbal Rounds II

### Credit(s): 1

These two courses support the student's learning of Chinese herbal medicine by allowing them to observe a clinical faculty member diagnose and treat a patient using Chinese herbs exclusively.

Under the constant, direct supervision of the faculty practitioner, the student will participate in case presentations and take chart notes, recording a patient's history and exam results as well as assessments and treatments for each patient they observe. The student will have the opportunity to take patients' pulses and observe their tongues to understand how these diagnostic elements factor into the instructor's overall diagnosis and treatment. At

appropriate times, students will have the opportunity to ask questions regarding each case.

In Herbal Rounds I students will observe a faculty practitioner interview, diagnose and create a herbal prescription. Herbal Rounds II this observation will take place in an Herbal Internship clinic where the student will observe

clinical interns. (Note: only MACM and DACM students take this course.) *Prerequisite(s):* CL539, OCM526

Second Year Summer Totals - Total Hours: 90 | Credits: 6.50

Second Year Totals - Total Hours: 756 | Credits: 57.00

Third Year

Fall

#### OCM 621 - Chinese Herbal Medicine IV: Formulas

# Credit(s): 4

In this course sequence, students learn how the individual medicinal substances of Chinese herbal medicine are combined into coherent, clinically specific formulas. Study focuses primarily upon the approximately 150 classical formulas and their variations. These classical formulas are used to determine a recommended strategy, and modified for individual clinical presentations. *Prerequisite(s)*: OCM526

#### OCM 625 - Dui Yao

## Credit(s): 2

This course serves as a bridge between the learning of single herb medicinals and herbal formulas. The course provides students with an understanding of how Chinese medicinals combine for greater synergy and how these combinations serve as the building blocks of the most common formulations. Herbal pairs, triads and larger groupings are studied in depth to understand the therapeutic mechanisms and foundational methodologies that are the bedrock of formula science. *Prerequisite(s):* OCM526

### OCM 640 - CCM: Acupuncture Therapeutics I (Orthopedics, Traumatology, Pain)

# Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent

care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding.

(Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, AC610, CM506, CM507 *Corequisite(s):* OAC611, OIM521, OIM551

### OCM 660 - CCM: Herbal Therapeutics I (Orthopedics, Traumatology, Pain)

# Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding.

(Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OIM521, OIM522, OIM523 *Corequisite(s):* OCM621, OCM640, OIM551

### OIM 532 - Western Pharmacology II

#### Credit(s): 1

This course provides students with a basic understanding of the important pharmaceutical products commonly prescribed today, including their physiological functions, recommended dosages, prominent effects and

proprietary and generic names. Interaction of pharmaceuticals with herbs and nutrients is addressed. Emphasis placed on the most popular pharmaceuticals prescribed today to treat the most common drug-treated conditions in North America: cardiovascular disease, diabetes, and chronic pain. *Prerequisite(s)*: OIM521

### OIM 551 - Western Clinical Medicine I (Pain)

### Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of traumatic, musculoskeletal, neuropathic, rheumatological, visceral, somatic, and other pain. The course will cover many common painful conditions such as headaches, arthritis, neuropathies, chronic pain, carpal tunnel syndrome, fibromyalgia, and sciatica. *Corequisite(s)*: OCM640, OIM521

#### OPD 654 - Practice Management II: Billing and Coding

### Credit(s): 1

This course introduces basic billing and cash flow practices within an acupuncture business. This includes an overview of Super Bills, CPT and ICD-10 coding, as well as how to become credentialed with insurance, and billing private insurance, personal injury insurance or workers' compensation insurance for reimbursement. Business written communications are discussed in the context of disputes and appeals for reimbursement. Additionally, budgeting for personal and business income and expenses will be explored. *Corequisite(s):* IM508

#### OCL 568 - Clinical Rounds II

Clinical Rounds I and II continue the process of preparing students for clinical internship through observation of a licensed practitioner treating patients in a clinical setting. Over two quarters, students follow a faculty practitioner treating patients in one of the school's teaching clinics.

Under the constant, direct supervision of the faculty practitioner, students will participate in case presentations and take chart notes, recording a patient's history and exam results, as well as assessments and treatments for each patient they observe.

Students will have the opportunity to take patients' pulses and observe their tongues to understand how these diagnostic elements factor into the instructor's overall diagnosis and treatment. At appropriate times, students will have the opportunity to ask questions regarding each case.

Under the direct supervision of the faculty practitioner, students may participate in direct patient care by administering cupping, gua sha, tuina/shiatsu, and moxibustion as necessary.

Finally, as part of the overall strategy for developing the skills required of a successful practitioner, students will be responsible for cleaning and stocking the treatment rooms at the beginning and the end of each shift and preparing the room between patients.

Third Year Fall Totals - Total Hours: 204 | Credits: 15.00

Winter

### OAC 652 - Orthopedic Acupuncture

### Credit(s): 3

Students will learn a comprehensive approach to understanding, diagnosing, treating and managing several orthopedic/musculoskeletal conditions. Students will review specific anatomy, common pathologies, patient exam and orthopedic testing. Chinese medicine and allopathic diagnosis will be differentiated as part of a multifaceted treatment plan. Students will learn to clearly project and report their prognosis and expected measurable outcomes. Treatment strategies will emphasize points selected by anatomical palpation, motor/trigger points, and associated meridian points to increase range of motion and reduce pain. Use of electro-stimulators will be demonstrated and discussed. Students will learn how to chart appropriately, analyze clinical outcomes and report cases. *Prerequisite(s):* AC533, OAC611, OAC612, IM515, IM516, IM517, OIM650

### OCM 622 - Chinese Herbal Medicine V: Formulas

### Credit(s): 4

In this course sequence, students learn how the individual medicinal substances of Chinese herbal medicine are combined into coherent, clinically specific formulas. Study focuses primarily upon the approximately 150 classical formulas and their variations. These classical formulas are used to determine a recommended strategy, and modified for individual clinical presentations. *Prerequisite(s):* OCM526

#### OCM 641 - CCM: Acupuncture Therapeutics II (EENT/Respiratory)

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin

Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, AC610, CM506, CM507 *Corequisite(s):* OAC612, OIM522, OIM552

# OCM 661 - CCM: Herbal Therapeutics II (EENT/Respiratory)

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OIM521, OIM522, OIM523 *Corequisite(s):* OCM622, OCM641, OIM552

### **OIM 533 - Western Pharmacology III**

### Credit(s): 1

This course provides students with a basic understanding of the important pharmaceutical products commonly prescribed today, including their physiological functions, recommended dosages, prominent effects and

proprietary and generic names. Interaction of pharmaceuticals with herbs and nutrients is addressed. Emphasis placed on the most popular pharmaceuticals prescribed today to treat the most common drug-treated conditions in North America: cardiovascular disease, diabetes, and chronic pain. *Prerequisite(s):* OIM521

#### OIM 552 - Western Clinical Medicine II (EENT/Respiratory)

#### Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common eye, ear, nose, throat (EENT) conditions, such as cataracts, glaucoma, macular degeneration, diabetic retinopathy, conjunctivitis, tonsillopharyngitis, rhinosinusitis, otites, and hearing loss, and respiratory conditions such as asthma, chronic obstructive pulmonary disease (COPD), pneumonia, among others. *Corequisite(s)*: CM641, OCM522

### **OIM 652 - Integrative Case Management II (EENT/Respiratory)**

# Credit(s): 1

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary

interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into

treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of patients with EENT/Respiratory conditions. *Corequisite(s):* OCM641, OIM522, OIM552 or enrollment DACM Completion Track.

### OPD 655 - Practice Management III: Business Planning

### Credit(s): 1

Designed to provide students with the skills required to establish and manage operations within a clinic, this course covers such topics as aligning practice focus with patient needs, types of legal structures, , office setup,

front office procedures, risk management, malpractice insurance, and business written communications (e.g., policies and procedures, operational manuals). Students completing this class will have a basic understanding of planning for and operating an acupuncture practice.

#### **OCL 620 - Clinic Trainee I**

### Credit(s): 2

In Clinic Trainee I-III, students participate in all facets of patient care, including needling, under the direct

supervision of a clinical supervisor, who is physically present at all times to observe all student-patient interactions.

Students are responsible for greeting patients, explaining their role, conducting patient

histories and exams, and

documenting all patient progress and treatment interactions. In concert with the clinical supervisor, students

formulate a diagnosis and devise an appropriate treatment plan after which they are assisted by the supervisor

in treating the patient. Over the course of Clinic Trainee I-III, students will assume a greater role in the diagnosis,

treatment planning, and actual treatment of patients themselves as they prepare for the next phase of their clinical

education, where they will function with greater autonomy in caring for patients. (Note: these courses are for

MACM and DACM students.) *Prerequisite(s):* OAC611, OCL568, CCAHM CNT Certification. *Corequisite(s):* OAC612

Third Year Winter Totals - Total Hours: 228 | Credits: 17.00

# Spring

### **OCM 633 - Herbal Prescription Strategies**

### Credit(s): 2

Utilizing case studies, students will explore strategies for writing and modifying herbal prescriptions. They will also learn how to counsel patients regarding herbal formulas, their preparation, potential side effects, and interactions. *Prerequisite(s):* OCM621, OCM622

### OCM 642 - CCM: Acupuncture Therapeutics III (GI/Hepatobiliary)

# Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary

to facilitate clinical understanding (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC612, CM506, CM507 *Corequisite(s):* OAC613, OAC614, OIM523, OIM553

# OCM 643 - CCM: Acupuncture Therapeutics VIII (Dermatology)

# Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding.(Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC612, CM506, CM507

# OCM 662 - CCM: Herbal Therapeutics III (GI/Hepatobiliary)

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary

to facilitate clinical understanding (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OIM521, OIM522, OIM523 *Corequisite(s):* OCM642, OIM553

# OCM 663 - CCM: Herbal Therapeutics VIII (Dermatology)

# Credit(s): 0,5

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OIM521, OIM522, OIM523

### OIM 553 - Western Clinical Medicine III (GI/Hepatobiliary/Dermatology)

### Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common gastrointestinal (GI), hepatobiliary, and dermatological conditions such as irritable bowel syndrome, inflammatory bowel disease, hepatitis, acne, cellulitis, eczema, psoriasis, herpes zoster, and skin cancers such as basal cell carcinoma, squamous cell carcinoma, and melanoma. *Corequisite(s):* OCM642, OIM523

#### OIM 653 - Integrative Case Management III (GI/Hepatobiliary/Dermatology)

### Credit(s): 1

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers.

Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated

for a patient, 2) define medically necessary interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of patients with gastrointestinal, hepatobiliary, and dermatological conditions. *Corequisite(s):* OCM642, OCM643, OIM523, OIM553 or enrollment DACM Completion Track

#### **OPD 656 - Practice Management IV: Career Planning**

### Credit(s): 1

This course provides students with the skills necessary for taking their first steps into practice —- after graduation and in the years to come. Covering topics such as decision making strategies in business, SMART goal planning, choosing your business/practice team, resume building, and financial statements, students are left with the tools needed to decide for themselves which next steps are right for them as they build towards their future career goals.

#### **OCL 621 - Clinic Trainee II**

### Credit(s): 2

Prerequisite(s): OAC611, OCL568, CCAHM CNT Certification Corequisite(s): OAC612, OCL620

Third Year Spring Totals - Total Hours: 174 | Credits: 12.50

Summer

### **OCM 632 - Herbal Prepared Medicine**

# Credit(s): 1

This portion of the program in traditional Chinese herbal medicine introduces the study and application of prepared powders, pills and tablets, as well as substances for external application (e.g., traditional Chinese medical

liniments). Study focuses on preparations from mainland China as well as products produced in the United States. The concept of quality control is emphasized. *Prerequisite(s)*: OCM621, OCM622

### IM 606 - Adult and Child CPR/First Aid/AED

### Credit(s): 0.67

In these courses, students learn and practice CPR, AED, and First Aid techniques specific to

adults and children, and emergency protocols related to both populations. They are conducted in both lecture and demonstration

format. To earn their certification, participants will demonstrate all skill sets. OCOM can only accept CPR/First Aid/AED certification from the American Heart Association or Red Cross. A copy of the certification needs to be current through graduation if not taking the course at OCOM. (Note: First Aid is a separate course for students who may already have CPR certification, but need First Aid training, which is required at OCOM.)

### OPD 601 - Ethics and Jurisprudence

### Credit(s): 0.5

This survey course provides students with a basic knowledge of ethics, jurisprudence (municipal, California, and federal laws), and regulatory compliance issues (OSHA, Labor Code, Health Insurance Portability and Accountability Act of 1966 – HIPAA) related to the practice of Chinese medicine. Topics covered include an overview of the legal system, professional ethics and peer review, national certification, professional licensure, scope of practice, grounds for discipline, disciplinary procedures and sanctions, informed consent, confidentiality, OSHA and HIPAA regulations, record keeping, continuing education, and risk management.

### **OPD 653 - Practice Management I: Digital Marketing**

### **Credit(s): 1.5**

This class will encourage students to explore their career goals and vision for clinical practice and introduce students to the principles of ethical application of marketing techniques and tools to build and sustain a clinical

practice. Through tailored assignments, students develop business written, electronic, and oral communication skills to effectively communicate via Internet marketing, email and letter writing, public relations, and networking. Students will complete this class with a comprehensive understanding of marketing options.

#### OCL 622 - Clinic Trainee III

#### Credit(s): 2

In Clinic Trainee I-III, students participate in all facets of patient care, including needling, under the direct supervision of a clinical supervisor, who is physically present at all times to observe all student-patient interactions.

Students are responsible for greeting patients, explaining their role, conducting patient histories and exams, and documenting all patient progress and treatment interactions. In concert with the clinical supervisor, students

formulate a diagnosis and devise an appropriate treatment plan after which they are assisted by the supervisor in treating the patient. Over the course of Clinic Trainee I-III,

students will assume a greater role in the diagnosis,

treatment planning, and actual treatment of patients themselves as they prepare for the next phase of their clinical education, where they will function with greater autonomy in caring for patients. (Note: these courses are for

MACM and DACM students.) Prerequisite(s): OCL620 Corequisite(s): OCL621

Third Year Summer Totals - Total Hours: 92 | Credits: 5.67

Third Year Totals - Total Hours: 698 | Credits: 50.17

Fourth Year

Fall

### OCM 644 - CCM: Acupuncture Therapeutics IV (OB/GYN)

# Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal

(GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding.(Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC613, OAC614, CM506, CM507, OIM521, OIM522, OIM523 *Corequisite(s):* OIM544

### OCM 664 - CCM: Herbal Therapeutics IV (OB/GYN)

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat

(EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease

categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal

formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of

referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OCM622, OIM521, OIM522, OIM523 *Corequisite(s):* OCM644, OIM554

### OIM 554 - Western Clinical Medicine IV (OB/GYN):

# Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common obstetric (OB) and gynecological (GYN) conditions. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM644

#### OIM 654 - Integrative Case Management IV (OB/GYN)

### Credit(s): 1

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary

interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into

treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of patients with many common obstetric (OB) and gynecological (GYN) conditions. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM644, OIM554 or enrollment in DACM Completion Track

### OCL 633 - Case Management I

# Credit(s): 1.5

This year-long course, which runs concurrently with clinical internship, provides students with an opportunity to develop and refine their clinical patient care and case management skills through regular chart review and case presentations for faculty feedback and group discussion and reflection.

Using the medical-legal case review model as its framework, the course will cover the essential elements of care and case documentation required to establish medical necessity and an appropriate and effective course of treatment for any patient.

Core principles of effective treatment planning, including the effective integration of biomedical information into treatment plans, are addressed. Effective referral to and collaboration with other practitioners to ensure continuity of care are emphasized as fundamental to good clinical outcomes and practice success.

Expert medical testimony, independent medical review and medical-legal reports are discussed in the context of disputes for personal injury, worker's compensation, and insurance claims. Students prepare samples of medicallegal report writing to develop their skills for working in this realm of clinical practice. *Corequisite(s):* OCL655

### **OCL 655 - Clinic Paired Internship**

# Credit(s): 2.57

In this first experience of clinical internship, DACM and MACM degree program students work in pairs under the supervision of experienced licensed acupuncturists and are responsible for greeting patients, explaining their

role, conducting patient histories and exams, documenting all patient progress and treatment interactions, and proposing to the clinical supervisor a diagnosis and treatment plan for the patient. After the clinical supervisor examines the patient and reviews the diagnosis and treatment plan, the student team is then responsible for explaining the treatment plan to the patient and administering the treatment; the supervisor is present for all needling to ensure proper treatment. *Prerequisite(s)*: OCL622

### OCL 671 - Herbal Internship

### Credit(s): 2.57

In this portion of internship, a small group of DACM and MACM degree program interns and a clinical faculty member diagnose and treat a patient using Chinese herbs exclusively. Ample time is allowed for discussion of cases and herbal treatment options. *Prerequisite(s):* OCL655

Fourth Year Fall Totals - Total Hours: 337 | Credits: 17.8

### Winter

# OCM 645 - CCM: Acupuncture Therapeutics V (Behavioral Health)

### Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC613, OAC614, CM506, CM507, OIM521, OIM522, OIM523 *Corequisite(s):* OIM555

### **OCM 646 - CCM: Acupuncture Therapeutics VI (Pediatrics)**

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* AC533, OAC613, OAC614, CM506, CM507, OIM521, OIM522, OIM523 *Corequisite(s):* OIM556

### OCM 665 - CCM: Herbal Therapeutics V (Behavioral Health)

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OCM622, OIM521, OIM522, OIM523 *Corequisite(s):* OCM645, OIM555

# OCM 666 - CCM: Herbal Therapeutics VI (Pediatrics)

### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s):* OCM621, OCM622, OIM521, OIM522, OIM523 *Corequisite(s):* OCM646, OIM556

### OIM 555 - Western Clinical Medicine V (Behavioral Health)

# Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common behavioral health conditions such as depression, bipolar, suicidal ideation and risk, anxiety, psychoses, post-traumatic stress disorder (PTSD), obsessive and compulsive disorders, autism, addiction, and personality disorders. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM645

# **OIM 556 - Western Clinical Medicine VI (Pediatrics)**

# Credit(s): 0.5

This course presents a general overview of the fundamental principles of pediatric patient care in the integrative practice setting, emphasizing some of the unique presentations and considerations for management of this unique population. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM646

# **OIM 655 - Integrative Case Management V (Behavioral Health)**

# **Credit(s): 0.5**

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of patients with Behavioral Health conditions. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM645, OIM555 or enrollment DACM Completion Track

# OCL 634 - Case Management II

#### **Credit(s): 1.5**

This year-long course, which runs concurrently with clinical internship, provides students with an opportunity to develop and refine their clinical patient care and case management skills through regular chart review and case presentations for faculty feedback and group discussion and reflection.

Using the medical-legal case review model as its framework, the course will cover the essential elements of care and case documentation required to establish medical necessity and an appropriate and effective course of treatment for any patient.

Core principles of effective treatment planning, including the effective integration of biomedical information into treatment plans, are addressed. Effective referral to and collaboration with other practitioners to ensure continuity of care are emphasized as fundamental to good clinical outcomes and practice success.

Expert medical testimony, independent medical review and medical-legal reports are discussed in the context of disputes for personal injury, worker's compensation, and insurance claims. Students prepare samples of medicallegal report writing to develop their skills for working in this realm of clinical practice. *Corequisite(s):* OCL656

#### OCL 656 - Clinic Internship I

# Credit(s): 2.57

At this stage of internship, DACM and MACM degree program students progress from working in pairs to assuming individual responsibility for greeting patients, explaining their role, conducting patient histories and exams,

documenting all patient progress and treatment interactions, and proposing to the clinical supervisor a diagnosis and treatment plan for the patient. After the clinical supervisor examines the patient and reviews the diagnosis and treatment plan, the student is responsible for explaining the treatment plan to the patient and administering the treatment, which the supervisor observes, as necessary, to ensure proper treatment. *Corequisite(s):* OCL655

# OCL 672 - Herbal Internship II

#### Credit(s): 2.38

In this portion of internship, a small group of DACM degree program interns and a clinical faculty member diagnose and treat a patient using Chinese herbs exclusively. Ample time is allowed for discussion of cases and herbal treatment options. Interns will participate in two sections of Herbal Internship at some point of their internship at OCOM.

This course focuses on the professional skills needed to provide safe and effective Chinese herbal therapy in a clinical setting. During Herbal Internship, students will combine their classroom knowledge and clinical skills in treating patients with Chinese herbs under the supervision of clinical faculty.

Students in Herbal Internship will see up to 4 patients per shift. For every patient seen, one student serves as the Primary Intern, leading the patient interview, recording findings in the patient's chart and managing the patient, while remaining students act as Secondary Interns, observing the interview, asking additional questions as necessary and supporting the Primary intern and the supervisor throughout the case. All students work together with the supervisor to assess, devise an appropriate treatment plan and create a custom herbal formula.

As with other facets of internship at OCOM, students in Herbal Internship are expected to develop and demonstrate proficiency in interviewing, charting, physical examination, diagnosis, treatment planning, making prognoses, case management, referral, and basic Western clinical medicine. These are the necessary skills of a competent, entry level practitioner of Oriental medicine. *Prerequisite(s):* OCL675

Fourth Year Winter Totals - Total Hours: 285 | Credits: 16.64

Spring

# OCM 647 - CCM: Acupuncture Therapeutics VII (Geriatric Care)

# Credit(s): 2

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.) *Prerequisite(s)*: OCM621, OCM622, OIM521, OIM522, OIM523 *Corequisite(s)*: OIM557

# OCM 667 - CCM: Herbal Therapeutics VII (Geriatric Care)

#### Credit(s): 1

The six-quarter Chinese Clinical Medicine (CCM) course sequence covers a variety of topics in the areas of orthopedics/traumatology/pain; internal medicine; eye, ear, nose, and throat (EENT); respiratory; gastrointestinal (GI); hepatobiliary; dermatological; obstetric (OB); gynecological (GYN); pediatric; and geriatric disorders.

Students study the disease process from the perspective of Chinese medicine and the strategies used to arrest that process, restore health, and support the system to prevent illness in the future. Chinese medicine disease categories are studied according to their pathophysiology and most common presenting patterns to facilitate accurate Chinese medical diagnosis. Treatment strategies, including acupuncture point prescriptions and herbal formulas, are discussed along with concepts of treatment planning, case

management, and continuity of care. Emergency care and urgent care considerations are addressed where appropriate as part of the larger issue of referral and collaborative care. Classical texts (e.g., Huang Di Nei Jing, Shang Han Lun, Jin Gui Yao Lue, Wen Bing Xue) and modern, biomedical concepts are referenced as necessary to facilitate clinical understanding. (Note: students in the MAc program do not take Herbal Therapeutics I-VIII.)

#### **OIM 557 - Western Clinical Medicine VII (Geriatrics)**

# Credit(s): 2

This course presents the pathology, clinical assessment, and management (including pharmacotherapy) of many common conditions associated with the geriatric population (e.g., Type II Diabetes Mellitus, cardiovascular disease, stroke, dementia and neurodegenerative diseases, and cancer), and the unique considerations for patient care with this population. *Prerequisite(s)*: OIM522, OIM523 *Corequisite(s)*: OCM647

# **OIM 657 - Integrative Case Management VII (Geriatrics)**

#### Credit(s): 1

This course will enhance your understanding of and ability to manage patient cases through evidence-informed decision-making and coordination with other medical providers. Using a combination of lecture, demonstration, and case-based web learning, this course will: 1) develop student competency in determining whether integrative care is indicated for a patient, 2) define medically necessary interventions and clarify medical record keeping guidelines for complex cases, 3) enhance student ability to understand clinical lab data, radiographic and diagnostic study reports and integrate this information into treatment plans, and 4) familiarize students with common integrative treatment modalities, procedures and treatment plans to improve their care of the geriatric patient. *Prerequisite(s):* OIM522, OIM523 *Corequisite(s):* OCM647, OIM557 or enrollment DACM Completion Track

#### OCL 635 - Case Management III

#### **Credit(s): 1.5**

This year-long course, which runs concurrently with clinical internship, provides students with an opportunity to develop and refine their clinical patient care and case management skills through regular chart review and case presentations for faculty feedback and group discussion and reflection.

Using the medical-legal case review model as its framework, the course will cover the essential elements of care and case documentation required to establish medical necessity and an appropriate and effective course of treatment for any patient.

Core principles of effective treatment planning, including the effective integration of biomedical information into treatment plans, are addressed. Effective referral to and

collaboration with other practitioners to ensure continuity of care are emphasized as fundamental to good clinical outcomes and practice success.

Expert medical testimony, independent medical review and medical-legal reports are discussed in the context of disputes for personal injury, worker's compensation, and insurance claims. Students prepare samples of medicallegal report writing to develop their skills for working in this realm of clinical practice. *Corequisite(s):* OCL657

#### OCL 657 - Clinic Internship II

# Credit(s): 2.38

DACM and MACM degree program students' skill, autonomy, and confidence increase at this stage as they assume a greater range of clinical responsibilities. Students continue to conduct patient histories and exams, document all patient progress and treatment interactions, and propose to the clinical supervisor a diagnosis and treatment plan for the patient. The clinical supervisor continues to examine the patient, review the diagnosis and treatment plan, and observe and provide guidance as needed to the student, who administers the treatment and explains the treatment plan to the patient. *Prerequisite(s)*: OCL656

Fourth Year Spring Totals - Total Hours: 261 | Credits: 14.64

Summer

#### OCL 636 - Case Management IV

#### **Credit(s): 1.5**

This year-long course, which runs concurrently with clinical internship, provides students with an opportunity to develop and refine their clinical patient care and case management skills through regular chart review and case presentations for faculty feedback and group discussion and reflection.

Using the medical-legal case review model as its framework, the course will cover the essential elements of care and case documentation required to establish medical necessity and an appropriate and effective course of treatment for any patient.

Core principles of effective treatment planning, including the effective integration of biomedical information into treatment plans, are addressed. Effective referral to and collaboration with other practitioners to ensure continuity of care are emphasized as fundamental to good clinical outcomes and practice success.

Expert medical testimony, independent medical review and medical-legal reports are discussed in the context of disputes for personal injury, worker's compensation, and insurance claims. Students prepare samples of medicallegal report writing to develop their skills for working in this realm of clinical practice. *Corequisite(s):* OCL658

# **OPD 505 - Community Outreach Practicum**

# Credit(s): 0.89

In this independent study, students will complete an average of 10 hours of Community Outreach per year. Students complete their final hours of Community Outreach during their final quarter of internship. *Prerequisite(s):* OPD504

# OCL 658 - Clinic Internship III

# Credit(s): 1.58

Building on the skills developed in the previous quarters of internship, DACM and MACM degree program students attain a higher level of knowledge, ability, and independence as clinicians while continuing to assume the complete range of treatment responsibilities under the supervision of a clinic faculty member. This phase of training culminates in DACM (and MACM) degree program student interns achieving the level of clinical ability and independence appropriate for entry into the profession. *Prerequisite(s):* OCL657

Fourth Year Summer Totals - Total Hours: 164 | Credits: 7.13

Fourth Year Totals - Total Hours: 1047 | Credits: 56.19

# Master of Acupuncture with a Chinese Herbal Medicine Specialization, MAcCHM

The Master of Acupuncture with a Chinese Herbal Medicine Specialization 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.

# **MAcCHM 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**

MAcCHM 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 assessement, 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
МАсСНМ	MAcCHM/ 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 DAcCHM or MAcCHM programs. At the end of the certificate program, students are fully prepared to use shiatsu as an independent treatment modality.

# **MAcCHM Four-Year Curriculum**

# First Year

# Fall

- CM 511 Foundations of Classical Chinese Medicine I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 512 Chinese History and Culture I Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 513 Acu-Moxa Points I (Point Actions) Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 514 Acu-Moxa Techniques I (Point Location) Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 515 Palpation and Perception I Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 518 Qigong I Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 519 Qigong I Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- <u>CM 530 Introduction to Clinic</u> **Credit(s): 1.50**
- Lecture: 18 | Total Hours: 18
- CM 551 The Business of Chinese Medicine I Credit(s): 1.50
- 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
- Lecture: 12 | Total Hours: 12
- CM 521 Foundations of Classical Chinese Medicine II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 562 Chinese Diagnostic Techniques I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 523 Acu-Moxa Points II (Point Actions) Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 524 Acu-Moxa Techniques II (Point Location) Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 525 Palpation and Perception II Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 516 Herbs I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 556 Herbs I Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 528 Qigong II Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 529 Oigong II Practicum Credit(s): 1.50

• 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
- Lecture: 24 | Total Hours: 24
- CM 572 Chinese Diagnostic Techniques II Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 533 Acu-Moxa Points III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- <u>CM 534 Acu-Moxa Techniques III</u> **Credit(s): 2.00**
- Lab: 24 | Lecture: 12 | Total Hours: 36
- CM 535 Palpation and Perception III Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- <u>CM 526 Herbs II</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 566 Herbs II Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- <u>CM 599 Evidence-Informed Practice</u> Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 538 Qigong III Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 539 Qigong III Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 500 Pre-Observation Rotation Credit(s): 1.00
- 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 <u>I</u> Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 612 Chinese Pathology I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 613 Acu-Moxa Points IV Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 614 Acu-Moxa Techniques IV Credit(s): 2.00

- Lab: 24 | Lecture: 12 | Total Hours: 36
- CM 615 Asian Bodywork Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 536 Herbs III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 576 Herbs III Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 617 Biomedicine I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- <u>CM 699 Immunology</u> **Credit(s): 3.00**
- Lecture: 36 | Total Hours: 36
- CM 618 Oigong IV Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 619 Qigong IV Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- <u>CM 600 Clinical Observation</u> **Credit(s): 2.00**
- Clinic: 48 | Total Hours: 48

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

# Winter

- <u>CM 621 Chinese Organ Systems: Cosmology and Symbolism</u> <u>II Credit(s): 2.00</u>
- Lecture: 24 | Total Hours: 24
- CM 622 Chinese Pathology II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 623 Acu-Moxa Points V Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 663 Auricular Points Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18
- CM 624 Acu-Moxa Techniques V Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36
- <u>CM 616 Herbs IV</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 656 Herbs IV Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 627 Biomedicine II Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 657 Acu-Moxa Anatomy I Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18
- CM 628 Qigong V Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 629 Qigong V Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 600 Clinical Observation Credit(s): 2.00
- Clinic: 48 | Total Hours: 48

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

# **Spring**

- <u>CM 631 Chinese Organ Systems: Cosmology and Symbolism</u> III **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 632 Chinese Pathology III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 633 Acu-Moxa Points VI Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- <u>CM 634 Acu-Moxa Techniques VI</u> Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36
- <u>CM 635 Practitioner Cultivation I</u> **Credit(s): 1.50**
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 626 Herbs V Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 666 Herbs V Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 637 Biomedicine III Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 667 Acu-Moxa Anatomy II Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18
- CM 638 Qigong VI Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 639 Qigong VI Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 600 Clinical Observation Credit(s): 2.00
- Clinic: 48 | Total Hours: 48
- CM 671 The Business of Chinese Medicine II **Credit(s): 1.00**
- 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
- Lecture: 48 | Total Hours: 48
- CM 714 Advanced Acu-Moxa Techniques I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24

- <u>CM 715 Chinese Medical Psychology I</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 717 Biomedicine IV Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- <u>CM 636 Herbs VI</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 676 Herbs VI Practicum Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 718 Qigong VII Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 719 Qigong VII Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 710 Clinical Case Presentation I Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- CM 700 Clinical Mentoring Rotations Credit(s): 2.00 credits each (2 rotations)
- Clinic: 96 | Total Hours: 96
- CM 751 The Business of Chinese Medicine III Credit(s): 1.50
- 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
- Lecture: 48 | Total Hours: 48
- CM 724 Advanced Acu-Moxa Techniques II Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 725 Chinese Medical Psychology II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 727 Biomedicine V Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 777 Clinical and Physical Diagnosis Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 728 Qigong VIII Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- CM 729 Oigong VIII Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 720 Clinical Case Presentation II Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- <u>CM 700 Clinical Mentoring Rotations</u> **Credit(s): 2.00 credits each** (2 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
- Lecture: 48 | Total Hours: 48
- CM 735 Applied Palpation and Perception Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 737 Biomedicine VI Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- <u>CM 799 Nutrition</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 889 Race and Disparities in Health Care Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 738 Qigong IX Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12
- <u>CM 739 Qigong IX Practicum</u> **Credit(s): 1.50**
- Lecture: 18 | Total Hours: 18
- <u>CM 730 Clinical Case Presentation III</u> **Credit(s): 1.00**
- Clinic: 24 | Total Hours: 24
- <u>CM 700 Clinical Mentoring Rotations</u> Credit(s): 2.00 credits each (2 rotations)
- Clinic: 96 | Total Hours: 96
- CM 770 Clinical Pre-Internship Rotation Credit(s): 1.00
- 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
- Lecture: 12 | Total Hours: 12
- <u>CM 800 Clinical Internship Rotations</u> **Credit(s): 2.00 credits each** (3 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
- Lecture: 24 | Total Hours: 24
- <u>CM 815 Practitioner Cultivation II</u> **Credit(s): 1.50**

- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 817 Physiology of Acupuncture Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 819 Taiji I Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 810 Internship Case Presentation I Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- <u>CM 800 Clinical Internship Rotations</u> **Credit(s): 2.00 credits each** (2 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
- Lecture: 24 | Total Hours: 24
- <u>CM 826 Herbs Review/Medicinary Practicum</u> **Credit(s): 1.50**
- Lecture: 18 | Total Hours: 18
- CM 829 Taiji II Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 820 Internship Case Presentation II Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- <u>CM 800 Clinical Internship Rotations</u> **Credit(s): 2.00 credits each** (2 rotations)
- Clinic: 96 | Total Hours: 96
- CM 861 The Business of Chinese Medicine IV Credit(s): 1.50
- Lecture: 18 | Total Hours: 18

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

# Spring

- <u>CM 832 Traditional Mentorship Tutorial III</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 813 Acu-Moxa Board Review Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 839 Taiji III Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18
- CM 830 Internship Case Presentation III Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- <u>CM 800 Clinical Internship Rotations</u> **Credit(s): 2.00 credits each** (2 rotations)
- Clinic: 96 | Total Hours: 96
- CM 871 Community Education Credit(s): 0.50 ^
- 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

# **MAcCHM Four-Year Course Descriptions**

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

This course creates a foundation for the study of Chinese medicine by presenting an overview of Chinese history and culture to help students understand the worldview and mindset that created this unique form of medicine. It introduces the basic characteristics of historical China from the dawn of civilization through the classical period. In addition to surveying the major historical developments, the course focuses 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-III 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 focus of this first class is on the

Lung, Large Intestine and Stomach channels. The channel 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. *Corequisite(s): Concurrent enrollment in CM 514*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 of CM515, CM525 and CM535. 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 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 financial management, public speaking and networking skills, in addition to learning the elements of a successful business and/or career plan as a licensed East Asian medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

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 z ang and f ang 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 (*shiwen*), 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-III 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 focus of the second class in the series is on the Spleen, Heart, Small Intestine and Bladder channels. The channel 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 Corequisite(s): Concurrent enrollment in CM 524* 

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 of CM515, CM525 and CM535. 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 of CM516, CM526, CM536, CM616 and CM626.* 

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 of CM556, CM566, CM576, CM656 and CM666. 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 and 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 (*shiwen*), are also practiced in class.

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

#### CM 533 - Acu-Moxa Points III

# Credit(s): 2.00

Acu-Moxa Points and Techniques I-III 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. This class completes the series with the study of the Ren Mai and Du Mai, Kidney, Pericardium, San Jiao, Gall Bladder and Liver channels. The channel 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 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, cuppng, 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 of CM515, CM525 and CM535. 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 of CM516, CM526, CM536, CM616 and CM626. 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 of CM556, CM566, CM576, CM656 and CM666. 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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631*.

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 of CM612 and CM622.* 

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. *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 of CM516, CM526, CM536, CM616 and CM626.* 

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 herbs and initiates an exploration of "dui yao"—commonly used combinations of herbs and their clinical applications—according to the 6 Phase energetic model of the *Shanghan Lun*. As the final portion of the first-year herbs practicum, this course will further combine the clinical synergy of diagnosis and herbal dynamics in order to prepare students for the transition into formula study and composition. It will also continue to familiarize students with other key topics in classical Chinese herbology including the integration of body and spirit in clinical practice, traditional views on dietetics and paozhi methods. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM556, CM566, CM576, CM656 and CM666. 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737*.

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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631.* 

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 of CM612 and CM622.* 

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 compatability, 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): These courses are to be taken in the ordered sequence of CM516, CM526, CM536, CM616 and CM626*.

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): These courses are to be taken in the ordered sequence of CM556, CM566, CM576, CM656 and CM666. 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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

#### 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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631*.

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.

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. *Prerequisite(s):* These courses are to be taken in the ordered sequence of CM635 and CM815.

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 of CM516, CM526, CM536, CM616 and CM626.* 

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 of CM556, CM566, CM576, CM656 and CM666. 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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 commnication techniques used frequently in the field of acupuncture and East Asian medicine. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

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 addresses disease etiology, pattern differentiation and treatment strategies, including a focus on prognosis, long-term case management, referral and comanagement, 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 and pattern diagnosis) using the classical texts of Chinese medicine as the primary source of guidance. Multiple faculty are involved in delivering 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 of CM712, CM722 and CM732. Corequisite(s): CM710 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; Third-year status; These courses are to be taken in the ordered sequence of CM712, CM722 and CM732. 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; These courses are to be taken in the ordered sequence of CM715 and CM725.* 

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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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. 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; These courses are to be taken in the ordered sequence of CM710, CM720 and CM730.* 

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, as well as creating efficient and sustainable operations systems to promote practitioner and patient success. Special topics include insurance billing basics, technology utilization in a medical practice and local, state and federal laws that pertain to having a successful career as an East Asian Medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

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 of CM712, CM722 and CM732.* 

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; Third-year status 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; These courses are to be taken in the ordered sequence of CM715 and CM725.* 

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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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; These courses are to be taken in the ordered sequence of CM710, CM720 and CM730.* 

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 of CM712, CM722 and CM732.* 

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. *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 dematological 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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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 gigong 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. This is a transition course to support students moving into clinical internship. Students will review a case and write a sample Case Report based on CARE guidelines. In addition, students will work in pairs or small groups to assess and treat one another over the course of four visits. Students will be responsible for treatment plans, presenting their findings and monitoring and evaluating change and treatment effectiveness. 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): CM712; Third-year status; These courses are to be taken in the ordered sequence of CM710, CM720 and CM730.* 

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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

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): Intern status; These courses are to be taken in the ordered sequence of CM635 and CM815.* 

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 椿功, 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 椿功 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 Tàiji  $N\`eig\=ong$  太極 內功, or the Internal Art and the concepts of  $j\=ing-q\ilealiga$ -sh'en 精氣神 (the three treasures) as well as  $p\'ei-j\ilealiga$ -p'ei-p'ei p'ei p'e

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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

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 椿功, 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 椿功 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  $T\grave{a}ij\acute{n}N\grave{e}ig\~{o}ng$  太極 內功, or the Internal Art and the concepts of  $j\~{i}ng$ - $q\`{i}$ - $sh\acute{e}n$  精氣神 (the three treasures) as well as  $p\acute{i}$ - $j\`{i}n$ - $g\grave{u}$  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  $Sh\grave{a}ng$   $g\~{o}ng$  上 $\bot$  or superior physician that is espoused in the Neijing. Prerequisite(s): These courses are to be taken in the ordered sequence of CM819, CM829 and CM839.

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, as well as career preparation. Students garner practical knowledge of money management, taxes and start-up costs, in addition to exploring financing options for opening a large or small East Asian medicine practice. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

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 椿功, 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 椿功 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*  $g\bar{o}ng \perp \bot$  or superior physician that is espoused in the *Neijing*. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM819, CM829 and CM839*.

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

<sup>^</sup> 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

# Master of Acupuncture, MAc

NUNM's Master of Acupuncture (MAc) degree is a **three- or four-year immersion in the classical foundations of acupuncture**, a **highly sophisticated and effective form of medicine**. The curriculum emphasizes scholarship and practice designed to transmit the art, science, and spirit of Chinese medicine to develop clinical practitioners rooted in the ancient tradition of the medical scholar.

#### Our students develop a deep understanding of the wisdom of the ancient

**healers.** They also receive holistic education in Western biomedical sciences during their training in the clinical application of major modalities (e.g., acupuncture, moxibustion, Asian bodywork, qigong, and nutrition).

Our curriculum emphasizes personal and professional cultivation to optimize our students' proficiency as practitioners, and to support their health as they progress through their clinical training.

Our programs are the most comprehensive training in classical Chinese medicine offered in the U.S. The MAc degree is accredited by the Accreditation Commission for Acupuncture and Herbal Medicine (ACAHM) and qualifies graduates to apply for licensure and to take most of the AOM examinations administered by NCCAOM — used in most states as the basis for licensure.

## **Elective Requirement**

In order to keep the total credit load for the MAc program as low as possible, there are no elective requirements for the program.

#### **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 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, 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.

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 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.

In order to complete the clinical portion of their program, students must pass the Clinic Exit Examination, offered in the final term of the final year.

# **MAc Learning Outcomes**

- 1. Apply the fundamental principles of classical Chinese medicine to patient care. (*clinical rotation evaluations, clinic exit examination, case reports*)
- 2. Craft and perform individualized acupuncture treatments in which the component parts (e.g., acupuncture, bodywork, lifestyle recommendations) are applied according to consistent treatment principles. (clinical rotation evaluations, clinic exit examination, case reports)
- 3. Design a plan for establishing a sustainable medical career. (Final business plan)
- 4. Integrate evidence-based biomedical analysis into the practice of acupuncture. *(clinical rotation evaluations, clinic exit examination, case reports)*
- 5. Discuss the role of an acupuncturist in patient-centered care within the healthcare system. *(clinical rotation evaluations, clinic exit examination, case reports)*
- 6. Describe the theory and practices of Chinese acupuncture to peers, patients and the public. (community education requirement, clinical rotation evaluations, case reports)

# **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
MAc	MAc/ ND	
1st	1st	Introduction to Clinic: Students learn the fundamentals of working in the NUNM clinics
1st	1st	Clinical Pre-Observation Rotation: Waived due to exposure to the clinic in the ND program
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 DAcCHM, MAc or MAcCHM programs. At the end of the certificate program, students are fully prepared to use shiatsu as an independent treatment modality.

# MAc Three-Year On-Ground Curriculum

# First Year

### Fall

- CM 511 Foundations of Classical Chinese Medicine I Credit(s): 2.00
- Lecture 24 | Total Hours: 24
- <u>CM 611 Chinese Organ Systems: Cosmology and Symbolism</u> <u>I Credit(s): 2.00</u>
- Lecture: 24 | Total Hours: 24
- CM 513 Acu-Moxa Points I (Point Actions) Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 514 Acu-Moxa Techniques I (Point Location) Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 515 Palpation and Perception I Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 617 Biomedicine I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 518 Oigong I Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12 Credits / Units: 0.5
- CM 519 Oigong I Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18 Credits / Units: 1.5
- CM 551 The Business of Chinese Medicine I Credit(s): 1.50
- Lecture: 18 | Total Hours: 18 Credits / Units: 1.5
- CM 530 Introduction to Clinic **Credit(s): 1.50**
- Clinic: 18 | Total Hours: 18

# First Year Fall Totals- Clinic: 18 | Lab: 36 | Lecture: 156 | Total Hours: 210 | Credits: 15.25

First Year Fall Totals - Clinic: 0 | Lab: 36 | Lecture: 156 | Total Hours: 192 | Credits: 15.25

# Winter

- CM 500 Pre-Observation Rotation Credit(s): 1.00
- Clinic: 24 | Total Hours: 24 Credits / Units: 1
- CM 521 Foundations of Classical Chinese Medicine II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 501 Professional Development 1 Credit(s): 0.75
- Lab:18 | Total Hours:18
- CM 562 Chinese Diagnostic Techniques I **Credit(s): 1.50**
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 523 Acu-Moxa Points II (Point Actions) Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 524 Acu-Moxa Techniques II (Point Location) Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5

- CM 525 Palpation and Perception II Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 627 Biomedicine II Credit(s): 4.00
- Lecture: 48 | Total Hours: 48 Credits / Units: 4
- CM 528 Qigong II Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12 Credits / Units: 0.5
- CM 529 Qigong II Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18 Credits / Units: 1.5

# First Year Winter Totals- Clinic: 24 | Lab: 66 | Lecture: 150 | Total Hours: 240 | Credits: 16.25

First Year Winter Totals- Clinic: 24 | Lab: 66 | Lecture: 150 | Total Hours: 240 | Credits: 16.25

# **Spring**

- CM 531 Foundations of Classical Chinese Medicine III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 572 Chinese Diagnostic Techniques II Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 533 Acu-Moxa Points III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 534 Acu-Moxa Techniques III Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36 Credits / Units: 2
- CM 535 Palpation and Perception III Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 637 Biomedicine III Credit(s): 4.00
- Lecture: 48 | Total Hours: 48 Credits / Units: 4
- CM 599 Evidence-Informed Practice Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 538 Oigong III Retreat **Credit(s): 0.50**
- Lab: 12 | Total Hours: 12 Credits / Units: 0.5
- CM 539 Qigong III Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18 Credits / Units: 1.5

# First Year Spring Totals- Clinic: 0 | Lab: 60 | Lecture: 174 | Total Hours: 234 | Credits: 17

First Year Spring Totals- Clinic: 0 | Lab: 60 | Lecture: 174 | Total Hours: 234 | Credits: 17

# First Year Totals- Clinic: 42 | Lab: 162 | Lecture: 480 | Total Hours: 684 | Credits: 48.50

First Year Totals- Clinic: 42 | Lab: 162 | Lecture: 480 | Total Hours: 684 | Credits: 48.50

# **Second Year**

# Fall

- CM 612 Chinese Pathology I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 712 Clinical Medicine I Credit(s): 3
- Lecture: 36 | Total Hours: 36 Credits / Units: 3
- CM 613 Acu-Moxa Points IV Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- <u>CM 614 Acu-Moxa Techniques IV</u> Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36 Credits / Units: 2
- CM 615 Asian Bodywork Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 717 Biomedicine IV Credit(s): 4.00
- Lecture: 48 | Total Hours: 48 Credits / Units: 4
- CM 710 Clinical Case Presentation I Credit(s): 1
- Clinic: 24 | Total Hours: 24 Credits / Units: 1
- CM 600 Clinical Observation Credit(s): 2.00
- Clinic: 48 | Total Hours: 48 Credits / Units: 2

Second Year Fall Totals- Clinic: 72 | Lab: 36 | Lecture: 156 | Total Hours: 264 | Credits: 17.50

Second Year Fall Totals- Clinic: 72 | Lab: 36 | Lecture: 156 | Total Hours: 264 | Credits: 17.50

#### Winter

- CM 622 Chinese Pathology II Credit(s): 2.00
- CM 722 Clinical Medicine II Credit(s): 3
- CM 623 Acu-Moxa Points V Credit(s): 2.00
- CM 663 Auricular Points Credit(s): 1.25
- CM 624 Acu-Moxa Techniques V Credit(s): 2.00
- CM 727 Biomedicine V Credit(s): 4.00
- CM 657 Acu-Moxa Anatomy I Credit(s): 1.25
- CM 777 Clinical and Physical Diagnosis Credit(s): 1.50
- CM 720 Clinical Case Presentation II Credit(s): 1
- CM 600 Clinical Observation Credit(s): 2.00
- CM 994 Clinic Internship Entrance Exam-Practical Credit(s):

Second Year Winter Totals- Clinic: 72 | Lab: 48 | Lecture: 180 | Total Hours: 300 | Credits: 20.00

Second Year Winter Totals- Clinic: 72 | Lab: 48 | Lecture: 180 | Total Hours: 300 | Credits: 20.00

# Spring

- CM 632 Chinese Pathology III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24

- CM 732 Clinical Medicine III Credit(s): 3
- Lecture: 36 | Total Hours: 36
- CM 633 Acu-Moxa Points VI Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- <u>CM 634 Acu-Moxa Techniques VI</u> Credit(s): 2.00
- Lab 24: Lecture 12: Total Hours: 36
- CM 635 Practitioner Cultivation I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 737 Biomedicine VI Credit(s): 4.00
- Lecture: 48 | Total Hours: 48
- CM 667 Acu-Moxa Anatomy II Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18
- <u>CM XX Advanced Cosmology and Symbolism Acupuncture Applications</u> <u>1</u> Credit(s): 1.5
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 730 Clinical Case Presentation III Credit(s): 1
- Clinic: 24 | Total Hours: 24
- <u>CM 600 Clinical Observation</u> **Credit(s): 2.00**
- Clinic: 48 | Total Hours: 48
- <u>CM 995 Clinic Internship Entrance Exam-Written</u> **Credit(s):**
- CM 671 The Business of Chinese Medicine II Credit(s): 1.00
- Lecture: 12 | Total Hours: 12

Second Year Spring Totals- Clinic: 72 | Lab: 54 | Lecture: 192 | Total Hours: 318: Credits: 21.25

Second Year Totals- Clinic: 216 | Lab: 138 | Lecture: 528 | Total Hours: 882 | Credits: 58.75

## Third Year

#### Summer

- <u>CM 805 Ethics and Jurisprudence</u> **Credit(s): 1.00**
- Lecture: 12 | Total Hours: 12
- <u>CM YY Advanced Cosmology and Symbolism Acupuncture Applications</u> <u>II **Credit(s): 3**</u>
- Lab: 24 | Lecture: 24 | Total Hours: 48
- CM 700 Clinical Mentoring Rotations Credit(s): 2.00 credits each
- 3 Rotations Clinic 144: Total Hours 144

Third Year Summer Totals- Clinic: 144 | Lab: 24 | Lecture: 36 | Total Hours: 204 | Credits: 10

# Fall

- <u>CM 714 Advanced Acu-Moxa Techniques I</u> **Credit(s): 1.50**
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 817 Physiology of Acupuncture Credit(s): 1.00
- Lecture: 12 | Total Hours: 12
- CM 810 Internship Case Presentation I Credit(s): 1.00
- 3 Rotations Clinic 144: Total Hours 144
- CM 800 Clinical Internship Rotations Credit(s): 2.00 credits each
- Clinic: 48 | Total Hours: 48
- CM 812 Traditional Mentorship Tutorial I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 751 The Business of Chinese Medicine III Credit(s): 1.50
- Lecture: 18 | Total Hours: 18

Third Year Fall Totals- Clinic: 168 | Lab: 24 | Lecture: 78 | Total Hours: 270 | Credits: 14.50

## Winter

- <u>CM 724 Advanced Acu-Moxa Techniques II</u> **Credit(s): 1.50**
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 810 Internship Case Presentation I Credit(s): 1.00
- Clinic: 24 | Total Hours: 24
- CM 800 Clinical Internship Rotations Credit(s): 2.00 credits each
- 3 Rotations Clinic: 144 | Total Hours: 144
- CM 822 Traditional Mentorship Tutorial II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 861 The Business of Chinese Medicine IV Credit(s): 1.50
- Lecture: 18 | Total Hours: 18

Third Year Winter Totals- Clinic: 168 | Lab: 12 | Lecture: 54 | Total Hours: 234 | Credits: 12.00

# **Spring**

- CM 735 Applied Palpation and Perception Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24
- CM 799 Nutrition **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24
- CM 889 Race and Disparities in Health Care Credit(s): 2.00
- Lecture: 24 | Total Hours: 24
- CM 810 Internship Case Presentation I **Credit(s)**: **1.00**
- Clinic: 24 | Total Hours: 24
- CM 800 Clinical Internship Rotations Credit(s): 2.00 credits each
- 3 Rotations Clinic 144: Total Hours 144
- CM 813 Acu-Moxa Board Review Credit(s): 1.00
- Lecture:12 | Total Hours: 12
- CM 871 Community Education Credit(s): 0.50

• Lab: 6 | Total Hours: 6

• CM 832 - Traditional Mentorship Tutorial III Credit(s): 2.00

• Lecture: 24 | Total Hours: 24

Third Year Spring Totals- Clinic: 168 | Lab: 18 | Lecture: 96 | Total Hours: 282 | Credits: 15.75

Third Year Totals: Clinic: 648 | Lab: 78 | Lecture: 264 | Total

Hours: 990 | Credits: 52.25

# **MAc Three-Year On-Ground Course Descriptions**

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 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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631*.

Lecture: 24 | Total Hours: 24

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

Credit(s): 2.00

Acu-Moxa Points and Techniques I-III 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 focus of this first class is on the Lung, Large Intestine and Stomach channels. The channel 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. *Corequisite(s): Concurrent enrollment in CM 514* 

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

# 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 **Credits / Units:** 1.5

#### 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 of CM515, CM525 and CM535. Note: Additional fee required* 

Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5

#### 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

# 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 Credits / Units: 0.5

#### 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 Credits / Units: 1.5

#### 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 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 financial management, public speaking and networking skills, in addition to learning the elements of a successful business and/or career plan as a licensed East Asian medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

Lecture: 18 | Total Hours: 18 **Credits / Units:** 1.5

#### 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* 

Clinic: 18 | Total Hours: 18

First Year Fall Totals- Clinic: 18 | Lab: 36 | Lecture: 156 | Total Hours: 210 | Credits: 15.25

First Year Fall Totals - Clinic: 0 | Lab: 36 | Lecture: 156 | Total Hours: 192 | Credits: 15.25

Winter

### 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 **Credits / Units:** 1

### 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  $z\grave{a}ng$  and  $f\^{u}$  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 **Credits / Units:** 2

### CM 501 - Professional Development 1

### Credit(s): 0.75

Exploration of expectations and themes in CCM programs that will support student self-awareness and professional development, thereby promoting their academic success. Topics include history of the program, critical thinking, professional personae, self-cultivation, and stress reduction strategies. Course replaces CM505: Intro to CCM.

Lab:18 | Total Hours:18

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 (*shiwen*), are also practiced in class.

Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5

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

### Credit(s): 2.00

Acu-Moxa Points and Techniques I-III 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 focus of the second class in the series is on the Spleen, Heart, Small Intestine and Bladder channels. The channel 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 Corequisite(s): Concurrent enrollment in CM 524

Lecture: 24 | Total Hours: 24 Credits / Units: 2

### 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 Credits / Units: 1.5

#### 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 of CM515, CM525 and CM535. Note: Additional fee required* 

Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5

#### 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 48 | Total Hours: 48 Credits / Units: 4

### 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 **Credits / Units:** 0.5

### 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 Credits / Units: 1.5

First Year Winter Totals- Clinic: 24 | Lab: 66 | Lecture: 150 | Total Hours: 240 | Credits: 16.25

First Year Winter Totals- Clinic: 24 | Lab: 66 | Lecture: 150 | Total Hours: 240 | Credits: 16.25

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 and CM 521* 

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

#### 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 (*shiwen*), are also practiced in class.

Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5

#### CM 533 - Acu-Moxa Points III

### Credit(s): 2.00

Acu-Moxa Points and Techniques I-III 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. This class completes the series with the study of the Ren Mai and Du Mai, Kidney, Pericardium, San Jiao, Gall Bladder and Liver channels. The channel 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 523. Corequisite(s): Concurrent enrollment in CM 534* 

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

### 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, cuppng, 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 Credits / Units: 2

### 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 of CM515, CM525 and CM535. Note: Additional fee required* 

Lab: 12 | Lecture: 12 | Total Hours: 24 **Credits / Units:** 1.5

#### 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 48 | Total Hours: 48 Credits / Units: 4

#### 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 **Credits / Units:** 2

#### **CM 538 - Qigong III Retreat**

### Credit(s): 0.50

This gigong 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 Credits / Units: 0.5

### 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 **Credits / Units:** 1.5

First Year Spring Totals- Clinic: 0 | Lab: 60 | Lecture: 174 | Total Hours: 234 | Credits: 17

First Year Spring Totals- Clinic: 0 | Lab: 60 | Lecture: 174 | Total Hours: 234 | Credits: 17

First Year Totals- Clinic: 42 | Lab: 162 | Lecture: 480 | Total Hours: 684 | Credits: 48.50

First Year Totals- Clinic: 42 | Lab: 162 | Lecture: 480 | Total Hours: 684 | Credits: 48.50

#### Second Year

Fall

### 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 of CM612 and CM622.* 

Lecture: 24 | Total Hours: 24 Credits / Units: 2

#### CM 712 - Clinical Medicine I

#### Credit(s): 3

The Clinical Medicine I-III series builds upon foundational material in the development of

clinical reasoning. It addresses disease etiology, pattern differentiation and treatment strategies, including a focus on prognosis, long-term case management, referral and comanagement, 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 and pattern diagnosis) using the classical texts of Chinese medicine as the primary source of guidance. Multiple faculty are involved in delivering 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): Prerequisite(s): Third-year status; These courses are to be taken in the ordered sequence of CMA712, CMA722 and CMA732 Corequisite(s): Corequisite(s): CMA710

Lecture: 36 | Total Hours: 36 **Credits / Units:** 3

#### 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 **Credits / Units:** 2

### 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 **Credits / Units:** 2

### 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. *Note: Additional fee required* 

Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5

#### 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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 48 | Total Hours: 48 Credits / Units: 4

#### CM 710 - Clinical Case Presentation I

### Credit(s): 1

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. 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): Prerequisite(s): Third-year status; These courses are to be taken in the ordered sequence of CM7A10, CMA720 and CMA730.* 

Clinic: 24 | Total Hours: 24 **Credits / Units:** 1

#### 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 **Credits / Units:** 2

Second Year Fall Totals- Clinic: 72 | Lab: 36 | Lecture: 156 | Total Hours: 264 | Credits: 17.50

Second Year Fall Totals- Clinic: 72 | Lab: 36 | Lecture: 156 | Total Hours: 264 | Credits: 17.50

Winter

### 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 of CM612 and CM622.* 

#### CM 722 - Clinical Medicine II

### Credit(s): 3

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 of CMA712, CMA722 and CMA732.* 

#### 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 compatability, 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 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 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 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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

### 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 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 720 - Clinical Case Presentation II

### Credit(s): 1

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): Prerequisite(s): Third-year status; These courses are to be taken in the ordered sequence of CMA710, CMA720 and CMA730.* 

#### 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 994 - Clinic Internship Entrance Exam-Practical

Second Year Winter Totals- Clinic: 72 | Lab: 48 | Lecture: 180 | Total Hours: 300 | Credits: 20.00

Second Year Winter Totals- Clinic: 72 | Lab: 48 | Lecture: 180 | Total Hours: 300 | Credits: 20.00

Spring

### 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 732 - Clinical Medicine III

#### Credit(s): 3

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): Prerequisite(s): Third-year status; These courses are to be taken in the ordered sequence of CMA712, CMA722 and CMA732.* 

Lecture: 36 | Total Hours: 36

#### 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. Prerequisite(s): These courses are to be taken in the ordered sequence of CM635 and CM815.

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 dematological 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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

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 XX - Advanced Cosmology and Symbolism Acupuncture Applications 1

#### **Credit(s): 1.5**

Classical Chinese medical arts are rooted in the rich historical and cultural roots of China. The system and practice of zhēn jiǔ針灸, needing and moxibustion, are fundamentally informed by the symbolic and cosmological world view of the ancient forebearers of Chinese medicine. This world view informs us today in how we can best understand the deep organizational framework of the 經絡 jīng luò, meridian and 穴xué, point system we use today.

In these classes, we will explore the Chinese anatomical understanding of the meridian and points system. We will introduce the symbolic representations used in the yijing易經, the Classic of Changes, and how this informs the application and practice of zhēn jiǔ針灸, needing and moxibustion. We will also pay attention to classical anatomy to better understand the rich tapestry of how the 經絡jīng luò, meridian and 穴xué, point system works.

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

#### CM 730 - Clinical Case Presentation III

### Credit(s): 1

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. This is a transition course to support students moving into clinical internship. Students will review a case and write a sample Case Report based on CARE guidelines. In addition, students will work in pairs or small groups to assess and treat one another over the course of four visits. Students will be responsible for treatment plans, presenting their findings and monitoring and evaluating change and treatment effectiveness. 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): Prerequisite(s): CMA712; Third-year status; These courses are to be taken in the ordered sequence of CMA710, CMA720 and CMA730.* 

Clinic: 24 | Total Hours: 24

#### 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 995 - Clinic Internship Entrance Exam-Written**

The Clinic Internship Exam is a comprehensive exam assessing student understanding of core course material up until the spring of the third year. Successful passage qualifies the student to enter the clinic as an Intern.

#### 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 commnication techniques used frequently in the field of acupuncture and East Asian medicine. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

Lecture: 12 | Total Hours: 12

Second Year Spring Totals- Clinic: 72 | Lab: 54 | Lecture: 192 | Total Hours: 318: Credits: 21.25

Second Year Totals- Clinic: 216 | Lab: 138 | Lecture: 528 | Total Hours: 882 | Credits: 58.75

Third 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 YY - Advanced Cosmology and Symbolism Acupuncture Applications II

### Credit(s): 3

Classical Chinese medical arts are rooted in the rich historical and cultural roots of China. The system and practice of zhēn jiǔ針灸, needing and moxibustion, are fundamentally informed by the symbolic and cosmological world view of the ancient

forebearers of Chinese medicine. This world view informs us today in how we can best understand the deep organizational framework of the  $mathack{\%}$  ing luò, meridian and  $mathack{\%}$  xué, point system we use today.

In these classes, we will explore the Chinese anatomical understanding of the meridian and points system. We will introduce the symbolic representations used in the *yì jīng*易經, the *Classic of Changes*, and how this informs the application and practice of zhēn jiǔ針灸, needing and moxibustion. We will also pay attention to classical anatomy to better understand the rich tapestry of how the 經絡jīng luò, meridian and 穴xué, point system works.

Lab: 24 | Lecture: 24 | Total Hours: 48

### **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* 

3 Rotations Clinic 144: Total Hours 144

Third Year Summer Totals-Clinic: 144 | Lab: 24 | Lecture: 36 | Total Hours: 204 | Credits: 10

Fall

#### 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; Third-year status;* 

These courses are to be taken in the ordered sequence of CM712, CM722 and CM732. Note: Additional fee required

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 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* 

3 Rotations Clinic 144: Total Hours 144

#### 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 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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

Lecture: 24 | Total Hours: 24

#### 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, as well as creating efficient and sustainable operations systems to promote practitioner and patient success. Special topics include insurance billing basics, technology utilization in a medical practice and local, state and federal laws that pertain to having a successful career as an East Asian Medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

Lecture: 18 | Total Hours: 18

Third Year Fall Totals- Clinic: 168 | Lab: 24 | Lecture: 78 | Total Hours: 270 | Credits: 14.50

Winter

#### 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; Third-year status Note: Additional fee required* 

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

#### 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

3 Rotations Clinic: 144 | Total Hours: 144

### 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 to be taken in the* ordered sequence of CM812, CM822 and CM832.

Lecture: 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, as well as career preparation. Students garner practical knowledge of money management, taxes and startup costs, in addition to exploring financing options for opening a large or small East Asian medicine practice. *Prerequisite(s): These courses are to be taken in the ordered sequence of* CM551, CM671, CM751 and CM861.

Lecture: 18 | Total Hours: 18

Third Year Winter Totals- Clinic: 168 | Lab: 12 | Lecture: 54 | Total Hours: 234 | Credits: 12.00

### **Spring**

### 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. *Prerequisite(s): CM 535, CM 615. Note: Additional fee required* 

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

#### 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 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* 

3 Rotations Clinic 144: Total Hours 144

#### 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 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: 6 | Total Hours: 6

### 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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

Lecture: 24 | Total Hours: 24

Third Year Spring Totals- Clinic: 168 | Lab: 18 | Lecture: 96 | Total Hours: 282 | Credits: 15.75

Third Year Totals: Clinic: 648 | Lab: 78 | Lecture: 264 | Total Hours: 990 | Credits: 52.25

## MAc Four-Year On-Ground Curriculum

### First Year

### Fall

- CM 511 Foundations of Classical Chinese Medicine I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 617 Biomedicine I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 513 Acu-Moxa Points I (Point Actions) Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 514 Acu-Moxa Techniques I (Point Location) Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 515 Palpation and Perception I Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 518 Qigong I Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12 Credits / Units: 0.5
- CM 519 Qigong I Practicum Credit(s): 1.50
- Lecture: 18 | Total Hours: 18 Credits / Units: 1.5
- CM 551 The Business of Chinese Medicine I Credit(s): 1.50
- Lecture: 18 | Total Hours: 18 Credits / Units: 1.5
- <u>CM 530 Introduction to Clinic</u> **Credit(s): 1.50**
- Clinic: 18 | Total Hours: 18 Credits / Units: 0.75

First Year Fall Totals - Clinic: 18 | Lab: 36 | Lecture: 132 | Total Hours: 186 | Credits: 13.25

#### Winter

- CM 521 Foundations of Classical Chinese Medicine II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 501 Professional Development 1 Credit(s): 0.75
- Lab: 18 | Total Hours: 18 Credits / Units: 0.75
- CM 525 Palpation and Perception II Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 562 Chinese Diagnostic Techniques I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 627 Biomedicine II Credit(s): 4.00
- Lecture: 48 | Total Hours: 48 Credits / Units: 4
- CM 523 Acu-Moxa Points II (Point Actions) Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 524 Acu-Moxa Techniques II (Point Location) Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 528 Qigong II Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12 Credits / Units: 0.5
- CM 529 Qigong II Practicum Credit(s): 1.50

- Lecture: 18 | Total Hours: 18 Credits / Units: 1.5
- CM 500 Pre-Observation Rotation Credit(s): 1.00
- Clinic: 24 | Total Hours: 24 Credits / Units: 1

First Year Winter Totals- Clinic: 24 | Lab: 66 | Lecture: 150 | Total Hours: 240 | Credits: 16.25

# **Spring**

- CM 531 Foundations of Classical Chinese Medicine III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 535 Palpation and Perception III Practicum Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- <u>CM 599 Evidence-Informed Practice</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- <u>CM 572 Chinese Diagnostic Techniques II</u> **Credit(s): 1.50**
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- CM 637 Biomedicine III Credit(s): 4.00
- Lecture: 48 | Total Hours: 48 Credits / Units: 4
- CM 533 Acu-Moxa Points III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- <u>CM 534 Acu-Moxa Techniques III</u> Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36 Credits / Units: 2
- CM 538 Qigong III Retreat Credit(s): 0.50
- Lab: 12 | Total Hours: 12 Credits / Units: 0.5
- <u>CM 539 Qigong III Practicum</u> **Credit(s): 1.50**
- Lecture: 18 | Total Hours: 18 Credits / Units: 1.5

First Year Spring Totals - Clinic: 0 | Lab: 60 | Lecture: 174 | Total Hours: 234 | Credits: 17

First Year Totals - Clinic: 42 | Lab: 162 | Lecture: 456 | Total Hours: 660 | Credits: 46.50

### Second Year

### Fall

- CM 611 Chinese Organ Systems: Cosmology and Symbolism I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 612 Chinese Pathology I Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 717 Biomedicine IV Credit(s): 4.00
- Lecture: 48 | Total Hours: 48 Credits / Units: 4
- CM 613 Acu-Moxa Points IV Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2

- CM 614 Acu-Moxa Techniques IV Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36 Credits / Units: 2
- CM 615 Asian Bodywork Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5
- <u>CM 710 Clinical Case Presentation I</u> **Credit(s): 1**
- Clinic: 24 | Total Hours: 24 Credits / Units: 1
- CM 600 Clinical Observation Credit(s): 2.00
- Clinic: 48 | Total Hours: 48 Credits / Units: 2

Second Year Fall Totals- Clinic: 72 | Lab: 36 | Lecture: 144 | Total Hours: 252 | Credits: 16.50

### Winter

- CM 622 Chinese Pathology II Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 657 Acu-Moxa Anatomy I Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18 Credits / Units: 1.25
- CM 727 Biomedicine V Credit(s): 4.00
- Lecture: 48 | Total Hours: 48 Credits / Units: 4
- <u>CM 623 Acu-Moxa Points V</u> **Credit(s): 2.00**
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 663 Auricular Points Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18 Credits / Units: 1.25
- CM 624 Acu-Moxa Techniques V Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36 Credits / Units: 2
- CM 720 Clinical Case Presentation II Credit(s): 1
- Clinic: 24 | Total Hours: 24 Credits / Units: 1
- CM 600 Clinical Observation Credit(s): 2.00
- Clinic: 48 | Total Hours: 48 Credits / Units: 2

Second Year Winter Totals - Clinic: 72 | Lab: 36 | Lecture: 132 | Total Hours: 240 | Credits: 15.50

# **Spring**

- CM 632 Chinese Pathology III Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2
- CM 635 Practitioner Cultivation I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.50
- CM 667 Acu-Moxa Anatomy II Credit(s): 1.25
- Lab: 6 | Lecture: 12 | Total Hours: 18 Credits / Units: 1.25
- CM 671 The Business of Chinese Medicine II **Credit(s): 1.00**
- Lecture: 12 | Total Hours: 12 Credits / Units: 1
- CM 737 Biomedicine VI Credit(s): 4.00
- Lecture: 48 | Total Hours: 48 Credits / Units: 4
- CM 633 Acu-Moxa Points VI Credit(s): 2.00
- Lecture: 24 | Total Hours: 24 Credits / Units: 2

- CM 634 Acu-Moxa Techniques VI Credit(s): 2.00
- Lab: 24 | Lecture: 12 | Total Hours: 36 Credits / Units: 2
- CM 730 Clinical Case Presentation III Credit(s): 1
- Clinic: 24 | Total Hours: 24 Credits / Units: 1
- CM 600 Clinical Observation Credit(s): 2.00
- Clinic: 48 | Total Hours: 48 Credits / Units: 2

Second Year Spring Totals - Clinic: 72 | Lab: 42 | Lecture: 144 | Total Hours: 258 | Credits: 16.75

Second Year Totals- Clinic: 216 | Lab: 114 | Lecture: 420 | Total Hours: 750 | Credits: 48.75

### Third Year

### Fall

- <u>CM 712 Clinical Medicine I</u> **Credit(s): 3**
- Lecture: 36 | Hours: 36
- CM 751 The Business of Chinese Medicine III Credit(s): 1.50
- Lecture: 18 | Hours: 18
- CM 714 Advanced Acu-Moxa Techniques I Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Hours: 24
- CM 700 Clinical Mentoring Rotations Credit(s): 2.00 credits each
- Clinic: 48 | Hours: 48

Third Year Fall Totals- Clinic: 48 | Lab: 12 | Lecture: 66 | Hours: 126 | Credits: 8

### Winter

- CM 722 Clinical Medicine II Credit(s): 3
- Lecture: 36 | Hours: 36
- CM 724 Advanced Acu-Moxa Techniques II Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Hours: 24
- CM 700 Clinical Mentoring Rotations Credit(s): 2.00 credits each
- Clinic: 48 | Hours: 48
- CM 994 Clinic Internship Entrance Exam-Practical **Credit(s)**:

Third Year Winter Totals- Clinic: 48 | Lab: 24 | Lecture: 60 | Hours: 132 | Credits 8

# **Spring**

- <u>CM 732 Clinical Medicine III</u> **Credit(s): 3**
- Lecture: 36 | Hours: 36
- CM 735 Applied Palpation and Perception Credit(s): 1.50
- Lab: 12 | Lecture: 12 | Hours: 24
- CM 700 Clinical Mentoring Rotations Credit(s): 2.00 credits each

- Clinic: 48 | Hours: 48
- <u>CM XX Advanced Cosmology and Symbolism Acupuncture Applications</u> <u>1 Credit(s)</u>: 1.5
- Lab: 12 | Lecture: 12 | Hours: 24
- <u>CM 995 Clinic Internship Entrance Exam-Written Credit(s):</u>

Third Year Spring Totals- Clinic: 48 | Lab: 24 | Lecture: 60 | Hours: 132 | Credits: 8

Third Year Totals- Clinic: 144 | Lab: 60 | Lecture: 186 | Hours: 390 | Credits: 24

### **Fourth Year**

### Summer

- CM 805 Ethics and Jurisprudence Credit(s): 1.00
- Lecture: 12 | Hours: 12
- <u>CM YY Advanced Cosmology and Symbolism Acupuncture Applications</u> <u>II **Credit(s): 3**</u>
- Lab: 24 | Lecture: 24 | Hours: 48
- CM 800 Clinical Internship Rotations Credit(s): 2.00 credits each
- 3 Rotations Clinic: 144 | Hours: 144

Fourth Year Summer Totals- Clinic: 144 | Lab: 24 | Lecture: 36 | Hours: 204 | Credits: 10

### Fall

- CM 817 Physiology of Acupuncture Credit(s): 1.00
- Lecture: 12 | Hours: 12
- CM 812 Traditional Mentorship Tutorial I **Credit(s)**: 2.00
- Lecture: 24 | Hours: 24
- CM 810 Internship Case Presentation I Credit(s): 1.00
- Clinic: 24 | Hours: 24
- CM 800 Clinical Internship Rotations Credit(s): 2.00 credits each
- 2 Rotations Clinic: 96 | Hours: 96

Fourth Year Fall Totals- Clinic: 120 | Lab: 12 | Lecture: 48 | Hours: 180 | Credits: 9.5

#### Winter

- <u>CM 822 Traditional Mentorship Tutorial II</u> **Credit(s): 2.00**
- Lecture: 24 | Hours: 24
- CM 861 The Business of Chinese Medicine IV **Credit(s): 1.50**
- Lecture: 18 | Hours: 18
- CM 800 Clinical Internship Rotations Credit(s): 2.00 credits each

• 3 Rotations Clinic: 144 | Hours: 144

Fourth Year Winter Totals- Clinic: 120 | Lab: 0 | Lecture: 42 | Hours: 162 |

Credits: 8.5

# Spring

- <u>CM 813 Acu-Moxa Board Review</u> Credit(s): 1.00
- Lecture: 12 | Hours: 12
- CM 800 Clinical Internship Rotations Credit(s): 2.00 credits each
- 3 Rotations Clinic: 144 | Hours: 144
- <u>CM 799 Nutrition Credit(s): 2.00</u>
- Lecture: 24 | Hours: 24
- CM 899 Race and Diversity in Healthcare Credit(s): 2
- Lecture: 24 | Hours: 24
- CM 871 Community Education Credit(s): 0.50
- Lecture: 12 | Hours: 12
- CM 832 Traditional Mentorship Tutorial III Credit(s): 2.00
- Lecture: 24 | Hours: 24
- <u>CM 996 Clinic Exit Exam</u> **Credit(s)**:

Fourth Year Spring Totals- Clinic: 120 | Lab: 12 | Lecture: 84 | Hours: 216 |

Credits: 12.5

Fourth Year Totals- Clinic: 504 | Lab: 48 | Lecture: 210 | Hours:

762 | Credits: 40.5

# **MAc Four-Year On-Ground Course Descriptions**

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 **Credits / Units:** 2

#### 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737*.

Lecture: 24 | Total Hours: 24 Credits / Units: 2

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

### Credit(s): 2.00

Acu-Moxa Points and Techniques I-III 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 focus of this first class is on the Lung, Large Intestine and Stomach channels. The channel 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. *Corequisite(s): Concurrent enrollment in CM 514* 

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

### 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 Credits / Units: 1.5

### 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 of CM515, CM525 and CM535. Note: Additional fee required* 

Lab: 12 | Lecture: 12 | Total Hours: 24 **Credits / Units:** 1.5

### **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 Credits / Units: 0.5

### 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 Credits / Units: 1.5

#### 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 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 financial management, public speaking and networking skills, in addition to learning the elements of a successful business and/or career plan as a licensed East Asian medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

Lecture: 18 | Total Hours: 18 **Credits / Units:** 1.5

#### 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* 

Clinic: 18 | Total Hours: 18 Credits / Units: 0.75

First Year Fall Totals - Clinic: 18 | Lab: 36 | Lecture: 132 | Total Hours: 186 | Credits: 13.25

Winter

#### 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 z ang and f u 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 Credits / Units: 2

#### CM 501 - Professional Development 1

#### Credit(s): 0.75

Exploration of expectations and themes in CCM programs that will support student self-awareness and professional development, thereby promoting their academic success. Topics include history of the program, critical thinking, professional personae, self-cultivation, and stress reduction strategies. Course replaces CM505: Intro to CCM.

Lab: 18 | Total Hours: 18 Credits / Units: 0.75

#### 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 of CM515, CM525 and CM535. Note: Additional fee required* 

Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5

#### 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 (*shiwen*), are also practiced in class.

Lab: 12 | Lecture: 12 | Total Hours: 24 **Credits / Units:** 1.5

#### 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 48 | Total Hours: 48 Credits / Units: 4

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

#### Credit(s): 2.00

Acu-Moxa Points and Techniques I-III 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 focus of the second class in the series is on the Spleen, Heart, Small Intestine and Bladder channels. The channel 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 Corequisite(s): Concurrent enrollment in CM 524

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

# 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 **Credits / Units:** 1.5

#### **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 **Credits / Units:** 0.5

#### 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 Credits / Units: 1.5

#### 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 Credits / Units: 1

First Year Winter Totals- Clinic: 24 | Lab: 66 | Lecture: 150 | Total Hours: 240 | Credits: 16.25

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 and CM 521* 

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

# 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 of CM515, CM525 and CM535. Note: Additional fee required* 

Lab: 12 | Lecture: 12 | Total Hours: 24 **Credits / Units:** 1.5

#### 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 Credits / Units: 2

# 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 (*shiwen*), are also practiced in class.

Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.5

#### 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): Second-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 48 | Total Hours: 48 Credits / Units: 4

#### CM 533 - Acu-Moxa Points III

# Credit(s): 2.00

Acu-Moxa Points and Techniques I-III 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. This class completes the series with the study of the Ren Mai and Du Mai, Kidney, Pericardium, San Jiao, Gall Bladder and Liver channels. The channel 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 523. Corequisite(s): Concurrent enrollment in CM 534* 

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

# 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, cuppng, 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 **Credits / Units:** 2

# 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 **Credits / Units:** 0.5

#### 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 Credits / Units: 1.5

First Year Spring Totals - Clinic: 0 | Lab: 60 | Lecture: 174 | Total Hours: 234 | Credits: 17

First Year Totals - Clinic: 42 | Lab: 162 | Lecture: 456 | Total Hours: 660 | Credits: 46.50

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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631*.

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

#### 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 of CM612 and CM622.* 

Lecture: 24 | Total Hours: 24 **Credits / Units:** 2

# 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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 48 | Total Hours: 48 Credits / Units: 4

#### 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 **Credits / Units:** 2

#### 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 **Credits / Units:** 2

#### 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. *Note: Additional fee required* 

Lab: 12 | Lecture: 12 | Total Hours: 24 **Credits / Units:** 1.5

#### CM 710 - Clinical Case Presentation I

# Credit(s): 1

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. 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):*Prerequisite(s): Third-year status; These courses are to be taken in the ordered sequence of CM7410. CM4720 and CM4720.

CM7A10, CMA720 and CMA730.

Clinic: 24 | Total Hours: 24 **Credits / Units:** 1

#### 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 **Credits / Units:** 2

Second Year Fall Totals- Clinic: 72 | Lab: 36 | Lecture: 144 | Total Hours: 252 | Credits: 16.50

Winter

# 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 of CM612 and CM622.* 

Lecture: 24 | Total Hours: 24 Credits / Units: 2

## 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 **Credits / Units:** 1.25

#### 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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 48 | Total Hours: 48 Credits / Units: 4

# 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 compatability, 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 **Credits / Units:** 2

#### 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 **Credits / Units:** 1.25

#### 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 **Credits / Units:** 2

#### CM 720 - Clinical Case Presentation II

# Credit(s): 1

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): Prerequisite(s): Third-year status; These courses are to be taken in the ordered sequence of CMA710, CMA720 and CMA730.* 

Clinic: 24 | Total Hours: 24 Credits / Units: 1

#### 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 **Credits / Units:** 2

Second Year Winter Totals - Clinic: 72 | Lab: 36 | Lecture: 132 | Total Hours: 240 | Credits: 15.50

# Spring

# 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 **Credits / Units:** 2

#### 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. *Prerequisite(s):* These courses are to be taken in the ordered sequence of CM635 and CM815.

Lab: 12 | Lecture: 12 | Total Hours: 24 Credits / Units: 1.50

#### 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 **Credits / Units:** 1.25

#### 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 commnication techniques used frequently in the field of acupuncture and East Asian medicine. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

Lecture: 12 | Total Hours: 12 **Credits / Units:** 1

#### 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 dematological 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): Third-year status; These courses are to be taken in the ordered sequence of CM617, CM627, CM637, CM717, CM727 and CM737.* 

Lecture: 48 | Total Hours: 48 Credits / Units: 4

#### 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 **Credits / Units:** 2

# 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 **Credits / Units:** 2

#### CM 730 - Clinical Case Presentation III

# Credit(s): 1

In the Clinical Case Presentation series, students apply and integrate the concepts and information learned in their academic courses to clinical scenarios. This is a transition course to support students moving into clinical internship. Students will review a case and write a sample Case Report based on CARE guidelines. In addition, students will work in pairs or small groups to assess and treat one another over the course of four visits. Students will be responsible for treatment plans, presenting their findings and monitoring and evaluating change and treatment effectiveness. 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): Prerequisite(s): CMA712; Third-year status; These courses are to be taken in the ordered sequence of CMA710, CMA720 and CMA730.* 

Clinic: 24 | Total Hours: 24 Credits / Units: 1

#### 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 Credits / Units: 2

Second Year Spring Totals - Clinic: 72 | Lab: 42 | Lecture: 144 | Total Hours: 258 | Credits: 16.75

Second Year Totals- Clinic: 216 | Lab: 114 | Lecture: 420 | Total Hours: 750 | Credits: 48.75

Third Year

Fall

#### CM 712 - Clinical Medicine I

# Credit(s): 3

The Clinical Medicine I-III series builds upon foundational material in the development of clinical reasoning. It addresses disease etiology, pattern differentiation and treatment strategies, including a focus on prognosis, long-term case management, referral and comanagement, 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 and pattern diagnosis) using the classical texts of Chinese medicine as the primary source of guidance. Multiple faculty are involved in delivering 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): Prerequisite(s): Third-year status; These courses are to be taken in the ordered sequence of CMA712, CMA722 and CMA732 Corequisite(s): Corequisite(s): CMA710

Lecture: 36 | Hours: 36

#### 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, as well as creating efficient and sustainable operations systems to promote practitioner and patient success. Special topics include insurance billing basics, technology utilization in a medical practice and local, state and federal laws that pertain to having a successful career as an East Asian Medicine provider. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

Lecture: 18 | Hours: 18

# 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; Third-year status; These courses are to be taken in the ordered sequence of CM712, CM722 and CM732. Note: Additional fee required* 

Lab: 12 | Lecture: 12 | 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: 48 | Hours: 48

Third Year Fall Totals- Clinic: 48 | Lab: 12 | Lecture: 66 | Hours: 126 | Credits: 8

#### Winter

#### CM 722 - Clinical Medicine II

# Credit(s): 3

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 of CMA712, CMA722 and CMA732.* 

Lecture: 36 | Hours: 36

#### 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; Third-year status Note: Additional fee required* 

Lab: 12 | Lecture: 12 | 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: 48 | Hours: 48

#### CM 994 - Clinic Internship Entrance Exam-Practical

Third Year Winter Totals- Clinic: 48 | Lab: 24 | Lecture: 60 | Hours: 132 | Credits 8

# Spring

#### CM 732 - Clinical Medicine III

# Credit(s): 3

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): Prerequisite(s): Third-year status; These courses are to be taken in the ordered sequence of CMA712, CMA722 and CMA732.* 

Lecture: 36 | Hours: 36

# 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. *Prerequisite(s): CM 535, CM 615. Note: Additional fee required* 

Lab: 12 | Lecture: 12 | 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: 48 | Hours: 48

## CM XX - Advanced Cosmology and Symbolism Acupuncture Applications 1

#### **Credit(s): 1.5**

Classical Chinese medical arts are rooted in the rich historical and cultural roots of China. The system and practice of zhēn jiǔ針灸, needing and moxibustion, are fundamentally informed by the symbolic and cosmological world view of the ancient

forebearers of Chinese medicine. This world view informs us today in how we can best understand the deep organizational framework of the  $mathack{\%}$  ing luò, meridian and  $mathack{\%}$  xué, point system we use today.

In these classes, we will explore the Chinese anatomical understanding of the meridian and points system. We will introduce the symbolic representations used in the yijing易經, the Classic of Changes, and how this informs the application and practice of zhēn jiǔ針灸, needing and moxibustion. We will also pay attention to classical anatomy to better understand the rich tapestry of how the 經絡jīng luò, meridian and 穴xué, point system works.

Lab: 12 | Lecture: 12 | Hours: 24

#### CM 995 - Clinic Internship Entrance Exam-Written

The Clinic Internship Exam is a comprehensive exam assessing student understanding of core course material up until the spring of the third year. Successful passage qualifies the student to enter the clinic as an Intern.

Third Year Spring Totals-Clinic: 48 | Lab: 24 | Lecture: 60 | Hours: 132 | Credits: 8

Third Year Totals- Clinic: 144 | Lab: 60 | Lecture: 186 | Hours: 390 | Credits: 24

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 | Hours: 12

# CM YY - Advanced Cosmology and Symbolism Acupuncture Applications II

Credit(s): 3

Classical Chinese medical arts are rooted in the rich historical and cultural roots of China. The system and practice of zhēn jiǔ針灸, needing and moxibustion, are fundamentally informed by the symbolic and cosmological world view of the ancient forebearers of Chinese medicine. This world view informs us today in how we can best understand the deep organizational framework of the 經絡 jīng luò, meridian and 穴xué, point system we use today.

In these classes, we will explore the Chinese anatomical understanding of the meridian and points system. We will introduce the symbolic representations used in the yì jīng易經, the *Classic of Changes*, and how this informs the application and practice of zhēn jiǔ針灸, needing and moxibustion. We will also pay attention to classical anatomy to better understand the rich tapestry of how the 經絡jīng luò, meridian and 穴xué, point system works.

Lab: 24 | Lecture: 24 | Hours: 48

# 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* 

3 Rotations Clinic: 144 | Hours: 144

Fourth Year Summer Totals-Clinic: 144 | Lab: 24 | Lecture: 36 | Hours: 204 | Credits: 10

Fall

# 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 | 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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

Lecture: 24 | Hours: 24

## 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 | 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

2 Rotations Clinic: 96 | Hours: 96

Fourth Year Fall Totals- Clinic: 120 | Lab: 12 | Lecture: 48 | Hours: 180 | Credits: 9.5

#### 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 to be taken in the ordered sequence of CM812, CM822 and CM832.* 

Lecture: 24 | Hours: 24

#### CM 861 - The Business of Chinese Medicine IV

# Credit(s): 1.50

The final business course focuses on financial knowledge and skills, as well as career preparation. Students garner practical knowledge of money management, taxes and start-up costs, in addition to exploring financing options for opening a large or small East Asian medicine practice. *Prerequisite(s): These courses are to be taken in the ordered sequence of CM551, CM671, CM751 and CM861.* 

Lecture: 18 | 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

3 Rotations Clinic: 144 | Hours: 144

Fourth Year Winter Totals- Clinic: 120 | Lab: 0 | Lecture: 42 | Hours: 162 | Credits: 8.5

# Spring

#### 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 | 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* 

3 Rotations Clinic: 144 | Hours: 144

#### 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 | Hours: 24

#### CM 899 - Race and Diversity in Healthcare

#### Credit(s): 2

This course is designed to provide 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 healthcare. Finally, we will address the implications of this framework for understanding health inequality and how we choose to address it.

Lecture: 24 | 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.

Lecture: 12 | 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 to be taken in the ordered sequence of CM812, CM822 and CM832*.

Lecture: 24 | Hours: 24

#### CM 996 - Clinic Exit Exam

Fourth Year Spring Totals-Clinic: 120 | Lab: 12 | Lecture: 84 | Hours: 216 | Credits: 12.5

Fourth Year Totals- Clinic: 504 | Lab: 48 | Lecture: 210 | Hours: 762 | Credits: 40.5

# 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.
- 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 incorporate 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.

# **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. During the MScN program, students choose a curriculum track, either clinical or culinary, to specialize in a specific area in which they intend to utilize their degree.

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
  - 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 10 elective credits (4 undergraduate and 6 graduate) 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 - Clinical Track

# First Year

# Fall

- IM 321 Critical Thinking for Pre-Health Professionals Credit(s): 3.00
- NS 311 Anatomy and Physiology Credit(s): 4.00
- NS 312 Anatomy and Physiology Lab Credit(s): 1.00
- NS 315 General Chemistry I with Lab Credit(s): 3.00
- NU 310 Fundamentals of Nutrition Credit(s): 4.00
- NU 313 Fundamentals of Nutrition Workshop Credit(s): 1.00
- NU 314 Culinary Skills Credit(s): 2.00

First-Year Fall Total Credits: 18

# Winter

- NS 325 General Chemistry II with Lab Credit(s): 3.00
- NU 312 American Food Systems Credit(s): 3.00
- SS 321 Culture, Identity and Emotion Credit(s): 3.00
- SS 331 Advanced Writing and Self-Reflective Skills Credit(s): 3.00
- Elective Credit(s): 2.00

First-Year Winter Total Credits: 14

# Spring

- IM 411 Health Psychology and Mind-Body Medicine Credit(s): 3.00
- NS 324 Organic Chemistry I with Lab Credit(s): 3.00
- NU 322 Nutritional Anthropology Credit(s): 3.00
- SS 332 Intercultural Communication Skills Credit(s): 3.00
- Elective Credit(s): 2.00

First-Year Spring Total Credits: 14
First-Year Total Credits: 46

# **Second Year**

# Summer

- NU 301 Farm to Table Credit(s): 2.00
- NS 401 Biochemistry for Life Sciences **Credit(s): 4.00**

Second-Year Summer Total Credits: 6

# Fall

- GSN 516 Pathophysiology Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit
- GSN 590 Career Development I Credit(s): 1.00
- \*As a graduate course, students will be charged the graduate cost per credit
- NS 334 Organic Chemistry II with Lab Credit(s): 3.00
- NS 411 Biostatistics for Pre-Health Majors Credit(s): 3.00
- NS 412 Scientific and Professional Communication Credit(s): 3.00
- NS 413 Introduction to Research Methods Credit(s): 3.00

### Second-Year Fall Total Credits: 16

# Winter

- GSN 515 Nutritional Assessment Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit
- GSN 518 Food Relationship Coaching Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit
- GSN 614 Advanced Nutritional Biochemistry Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit
- NS 321 Genetics Credit(s): 4.00
- NS 421 Evidence-Based Practice for Pre-Health Professionals **Credit(s)**: 3.00
- SS 421 Ethics and Philosophical Dilemmas Credit(s): 3.00

# Second-Year Winter Total Credits: 19

# Spring

- \*These are all graduate courses and will be charged at the graduate cost per credit for the remainder of the accelerated BScN to MScN program\*
- GSN 524 Medical Nutrition Therapy Credit(s): 4.00
- GSN 529 Applied Medical Nutrition Therapy Credit(s): 2.00
- GSN 555 Clinical Biochemistry and Nutrition Credit(s): 3.00
- NU 531 Whole Food: Rethinking the Science of Nutrition Credit(s): 4.00
- NU 532 Nutritional Epidemiology Credit(s): 4.00

# **Second-Year Spring Total Credits: 17**

# **Second-Year Total Credits: 58**

# Third Year

# Summer

- GSN 589 Nutritional Immunology Credit(s): 4.00
- GSN 591 Career Development II Credit(s): 2.00

#### Third-Year Summer Total Credits: 5

# Fall

- GSN 526 Lifecycle Nutrition Credit(s): 4.00
- GSN 534 Cultural Humility and Food Justice Credit(s): 2.00
- GSN 536 Gut Microbiome Credit(s): 2.00
- GSN 690 Capstone Preparation Credit(s): 1.00

### Third-Year Fall Total Credits: 9

# Winter

- GSN 505 Healing Foods I Credit(s): 2.00
- GSN 506 Healing Foods I Practicum Credit(s): 2.00
- GSN 552 Nutritional Supplements Credit(s): 2.00
- GSN 563 Business of Nutrition Credit(s): 2.00
- GSN 691 Capstone I: Internship Credit(s): 2.00
- Elective Credit(s): 2.00

### Third-Year Winter Total Credits: 12

# Spring

- GSN 509 Community Nutrition and Food Policy Credit(s): 2.00
- GSN 692 Capstone II: Internship Credit(s): 2.00
- Elective Credit(s): 4.00

# Third-Year Spring Total Credits: 8

#### Third-Year Total Credits: 34

- GSN 515 Nutritional Assessment Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit.
- GSN 518 Food Relationship Coaching Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit.
- GSN 561 Recipe and Menu Development Credit(s): 2.00
- \*As a graduate course, students will be charged the graduate cost per credit.
- NS 321 Genetics Credit(s): 4.00
- NS 421 Evidence-Based Practice for Pre-Health

Professionals Credit(s): 3.00

• SS 421 - Ethics and Philosophical Dilemmas Credit(s): 3.00

# **Total Core Credits: 128**

(Undergraduate: 70 | Graduate: 58)

#### **Total Elective Credits: 10**

(Undergraduate: 4 | Graduate: 6)

**Total Required Credits: 138** 

# Accelerated BScN\MScN Three-Year Course Descriptions - Clinical Track

First Year

Fall

# 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.

# 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

This course introduces the structure and function of the human body from a whole-systems perspective. The integumentary, musculoskeletal, nervous, cardiovascular, lymphatic, respiratory, digestive, urogenital, and immune systems, and endocrine systems will be covered. Mechanisms for maintaining homeo/allostasis as well as concepts of development, metabolism, fluid and electrolyte balance, and acid- base balance will be explored. *Corequisite(s): NS 311. Note: Additional fee required.* 

NS 315 - General Chemistry I with Lab

Credit(s): 3.00

This course is an accelerated version of General Chemistry I. It includes a lab, and covers topics, including measurements, atoms, ions, and molecules, chemical formulas and equations, stoichiometry, states of matter, thermochemistry, atomic theory, ionic and covalent bonding, molecular geometry, and solutions.

NU 310 - 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.

**NU 313 - 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): NU 310- Fundamentals of Nutrition

NU 314 - 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.

First-Year Fall Total Credits: 18

Winter

NS 325 - General Chemistry II with Lab

Credit(s): 3.00

This course is an accelerated version of General Chemistry II. It includes a lab, and covers topics, including rates of reaction, chemical equilibria, acids and basis, plus chemical properties of main group elements and transition elements. This course will also cover

575

introductions to electrochemistry, nuclear chemistry, organic chemistry (carbon bonding) and polymer chemistry. *Prerequisite(s)*: NS 315E or equivalent. *Note*: Additional course fee.

**NU 312 - American Food Systems** 

Credit(s): 3.00

The food system is a complex network that is deeply connected to health, society, and the environment. This survey of local, regional, and national food systems will provide students with a basic understanding of how to analyze individual elements of the systems and their interrelationships and how to begin assessing the "sustainability" of those food systems at different scales and in different bioregions.

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)**: 2.00

First-Year Winter Total Credits: 14

Spring

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 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.

**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.

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)**: 2.00

First-Year Spring Total Credits: 14

First-Year Total Credits: 46

577

Second Year

Summer

NU 301 - 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.

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.

\*As a graduate course, students will be charged the graduate cost per credit

**GSN 590 - Career Development I** 

Credit(s): 1.00

This course provides students with the skills and strategies needed for successful career planning and development. Students will engage in self-reflection and assessment, identify career objectives, explore potential career options, and develop an actionable plan to achieve their professional goals.

\*As a graduate course, students will be charged the graduate cost per credit

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 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 515 - Nutritional Assessment** 

579

#### Credit(s): 3.00

Learn clinical and dietary evaluation methods to determine an individual's health and nutrition status and gain proficiency in 1) Clinical documentation, including taking a medical and nutrition history, writing progress notes, and determining nutrition diagnoses matched to medical diagnoses; 2) Performing dietary analyses and nutrition-focused physical examinations, including basic anthropometric measurements, vital signs and peripheral stigmata; 3) Administering and interpreting questionnaires related to diet, food security, health, and nutrition issues; 4) knowledge of the Department of Agriculture (USDA) guidelines for preventive and therapeutic interventions of current nutrient guidelines; 5) Evaluating laboratory test results from blood, saliva, and urine; 6) Proposing recommendations based on an individual's health and nutrition needs using evidence-based nutrition practice guidelines; 7) Communicating nutrition therapy plans with primary care providers or the healthcare team to ensure client management and complete care coordination. *Prerequisite(s): TH 507, GSN 514, GSN 516*.

\*As a graduate course, students will be charged the graduate cost per credit

#### **GSN 518 - Food Relationship Coaching**

#### Credit(s): 3.00

This course examines our relationship to food, including neurobiological and behavioral connections that influence food choices. 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 coaching are highlighted. Practical application of the material is woven throughout the course. *Prerequisite(s):* GSN 507, GSN 516

\*As a graduate course, students will be charged the graduate cost per credit

#### GSN 614 - 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, genomic, and epigenetic factors influencing nutrition status. Advanced understanding of various disease mechanisms, the dysregulation of glucose, fatty acid, protein, and micronutrient metabolism that promotes chronic activation of the inflammatory pathways, oxidative stress, and the contribution to cognitive decline. Relate the biochemical basis of disease to proactive and preventive nutritional interventions. *Prerequisite(s): GSN 514 or GSNO 514, or equivalent.* 

\*As a graduate course, students will be charged the graduate cost per credit

#### 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: 19

#### Spring

\*These are all graduate courses and will be charged at the graduate cost per credit for the remainder of the accelerated BScN to MScN program\*

#### **GSN 524 - Medical Nutrition Therapy**

#### Credit(s): 4.00

Evaluate the evidence-based research of dietary interventions for various disease states. Develop a nutrition diagnosis that aligns with a medical diagnosis. Create and integrate nutrition interventions with standards of medical care and alternative methodologies to treat common nutrition-related diseases. Modify therapeutic meal plans from a nutritionally adequate diet (NAD) and science-based eating patterns. Design personalized nutrition interventions targeting the etiology of nutrition-related problems within the context of an

individual's genetics, capabilities, lifestyle, environment and motivation for behavioral change to achieve a medical or health goal while considering food sourcing, culturally appropriate food selections, and meal preparation strategies that engage clients/patients in accomplishing their medical and nutrition goals. *Prerequisite(s): TH 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.* 

#### **GSN 555 - Clinical Biochemistry and Nutrition**

Credit(s): 3.00

Learn the science-based and personalized approach to medical nutrition therapy that uses conventional and functional medicine 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, intestinal dysbiosis, genomic and epigenetic Factors that influence nutrition status and requirements. Correlate laboratory findings with other biomarkers to formulate nutrition care plans that address the unique biochemical profiles of patients. *Corequisite(s): GSN 524 or GSNO 524.* 

#### 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 and 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: 17

Second-Year Total Credits: 58

Third Year

Summer

#### **GSN 589 - 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 591 - Career 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.* 

Third-Year Summer Total Credits: 5

Fall

#### **GSN 526 - Lifecycle Nutrition**

Credit(s): 4.00

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 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 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.* 

Third-Year Fall Total Credits: 9

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): TH 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 552 - Nutritional Supplements**

#### Credit(s): 2.00

Explore the use of nutritional supplements (including 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): TH 507 or GSN 584* 

#### 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 software for nutrition professionals and when to file self-employment taxes. NUNM graduates will guest lecture to discuss their experiences and provide valuable insight into their business ventures. Students will have the opportunity to develop a business plan for their own business.

#### 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*.

Elective **Credit(s)**: 2.00

Third-Year Winter Total Credits: 12

**Spring** 

#### **GSN 509 - Community Nutrition and Food Policy**

#### Credit(s): 2.00

This course examines community nutrition within the context of our current globalized food system. It is an overview of factors influencing nutritional health within the population at large with a focus on how communities meet their nutritional needs. We use an intersectional lens to understand the complexity of working within a community to empower and mobilize participants towards greater health. In addition, the coursework examines the role of public and private agencies in community assessment, nutritional

interventions and public health assurance. This includes an investigation and discussion of how policy influences the nutritional status of communities. We use the socio-ecological model to assess how social determinants of health and systems of oppression. are interwoven with all aspects of the food system. This course will also examine various theories and model of public health and how they are utilized to gain a greater understanding of the current landscape of community nutrition. Lastly, students will research the needs of a specific population and create a nutritional intervention that aims to decrease health disparities by addressing issues of equity within a public health model. *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.* 

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

Third-Year Spring Total Credits: 8

Third-Year Total Credits: 34

#### **GSN 515 - Nutritional Assessment**

Credit(s): 3.00

Learn clinical and dietary evaluation methods to determine an individual's health and nutrition status and gain proficiency in 1) Clinical documentation, including taking a medical and nutrition history, writing progress notes, and determining nutrition diagnoses matched to medical diagnoses; 2) Performing dietary analyses and nutrition-focused physical examinations, including basic anthropometric measurements, vital signs and peripheral stigmata; 3) Administering and interpreting questionnaires related to diet, food security, health, and nutrition issues; 4) knowledge of the Department of Agriculture (USDA) guidelines for preventive and therapeutic interventions of current nutrient guidelines; 5) Evaluating laboratory test results from blood, saliva, and urine; 6) Proposing recommendations based on an individual's health and nutrition needs using evidence-based nutrition practice guidelines; 7) Communicating nutrition therapy plans with primary care providers or the healthcare team to ensure client management and complete care coordination. *Prerequisite(s): TH 507, GSN 514, GSN 516*.

\*As a graduate course, students will be charged the graduate cost per credit.

#### **GSN 518 - Food Relationship Coaching**

#### Credit(s): 3.00

This course examines our relationship to food, including neurobiological and behavioral connections that influence food choices. 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 coaching are highlighted. Practical application of the material is woven throughout the course. *Prerequisite(s):* GSN 507, GSN 516

\*As a graduate course, students will be charged the graduate cost per credit.

#### GSN 561 - 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 parings, menu modifications, and have a chance to test out their recipes. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required.* 

\*As a graduate course, students will be charged the graduate cost per credit.

#### 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.

**Total Core Credits: 128** 

(Undergraduate: 70 | Graduate: 58)

**Total Elective Credits: 10** 

(Undergraduate: 4 | Graduate: 6)

Total Required Credits: 138

# Accelerated BScN\MScN Three-Year Curriculum - Culinary Track

#### First Year

#### Fall

- IM 321 Critical Thinking for Pre-Health Professionals Credit(s): 3.00
- NS 311 Anatomy and Physiology Credit(s): 4.00
- NS 312 Anatomy and Physiology Lab Credit(s): 1.00
- NS 315 General Chemistry I with Lab Credit(s): 3.00
- NU 310 Fundamentals of Nutrition Credit(s): 4.00
- NU 313 Fundamentals of Nutrition Workshop Credit(s): 1.00
- NU 314 Culinary Skills Credit(s): 2.00

First-Year Fall Total Credits: 18

#### Winter

- NS 325 General Chemistry II with Lab Credit(s): 3.00
- NU 312 American Food Systems Credit(s): 3.00
- SS 321 Culture, Identity and Emotion Credit(s): 3.00
- SS 331 Advanced Writing and Self-Reflective Skills Credit(s): 3.00
- Elective **Credit(s)**: **2.00**

First-Year Winter Total Credits: 14

# **Spring**

- IM 411 Health Psychology and Mind-Body Medicine Credit(s): 3.00
- NS 324 Organic Chemistry I with Lab Credit(s): 3.00
- NU 322 Nutritional Anthropology Credit(s): 3.00
- SS 332 Intercultural Communication Skills Credit(s): 3.00
- Elective Credit(s): 2.00

First-Year Spring Total Credits: 14

First-Year Total Credits: 46

#### Second Year

#### Summer

- NS 401 Biochemistry for Life Sciences Credit(s): 4.00
- NU 301 Farm to Table Credit(s): 2.00

# Second-Year Summer Total Credits: 6 Fall

- GSN 516 Pathophysiology Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit
- GSN 590 Career Development I Credit(s): 1.00
- \*As a graduate course, students will be charged the graduate cost per credit
- NS 334 Organic Chemistry II with Lab Credit(s): 3.00
- NS 411 Biostatistics for Pre-Health Majors Credit(s): 3.00
- NS 412 Scientific and Professional Communication Credit(s): 3.00
- NS 413 Introduction to Research Methods Credit(s): 3.00

#### Second-Year Fall Total Credits: 16

#### Winter

- GSN 515 Nutritional Assessment Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit.
- GSN 518 Food Relationship Coaching Credit(s): 3.00
- \*As a graduate course, students will be charged the graduate cost per credit.
- GSN 561 Recipe and Menu Development Credit(s): 2.00
- \*As a graduate course, students will be charged the graduate cost per credit.
- NS 321 Genetics Credit(s): 4.00
- NS 421 Evidence-Based Practice for Pre-Health Professionals Credit(s): 3.00
- SS 421 Ethics and Philosophical Dilemmas Credit(s): 3.00

#### **Second-Year Winter Total Credits: 18**

# **Spring**

- \*These are all graduate courses and will be charged at the graduate cost per credit for the remainder of the accelerated BScN to MScN program\*
- GSN 512 Food Marketing & Communication Credit(s): 2.00
- GSN 524 Medical Nutrition Therapy Credit(s): 4.00
- GSN 529 Applied Medical Nutrition Therapy Credit(s): 2.00
- NU 531 Whole Food: Rethinking the Science of Nutrition Credit(s): 4.00
- NU 532 Nutritional Epidemiology Credit(s): 4.00

# Second-Year Spring Total Credits: 16

#### **Third Year**

#### Summer

- GSN 543 Personal Chef and Food Service Credit(s): 2.00
- GSN 591 Career Development II Credit(s): 2.00
- Elective **Credit(s)**: 2.00

#### **Third-Year Summer Total Credits: 5**

#### Fall

- GSN 526 Lifecycle Nutrition Credit(s): 4.00
- GSN 534 Cultural Humility and Food Justice Credit(s): 2.00
- GSN 536 Gut Microbiome Credit(s): 2.00
- GSN 690 Capstone Preparation Credit(s): 1.00
- Elective **Credit(s)**: **2.00**

Third-Year Fall Total Credits: 11

#### Winter

- GSN 505 Healing Foods I Credit(s): 2.00
- GSN 506 Healing Foods I Practicum Credit(s): 2.00
- GSN 538 Cooking Pedagogy Credit(s): 2.00
- GSN 557 Cooking with Medicinal Herbs Credit(s): 2.00
- GSN 563 Business of Nutrition Credit(s): 2.00
- GSN 691 Capstone I: Internship Credit(s): 2.00

Third-Year Winter Total Credits: 12

### Spring

- GSN 509 Community Nutrition and Food Policy Credit(s): 2.00
- GSN 558 Food as Medicine Everyday (FAME) Educator Training Credit(s): 2.00
- GSN 692 Capstone II: Internship Credit(s): 2.00
- Elective Credit(s): 2.00

**Third-Year Spring Total Credits:8** 

**Total Core Credits: 128** 

**Total Elective Credits: 10** 

**Total Required Credits: 138** 

# Accelerated BScN\MScN Three-Year Curriculum - Culinary Track

First Year

Fall

#### 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.

#### 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

This course introduces the structure and function of the human body from a whole-systems perspective. The integumentary, musculoskeletal, nervous, cardiovascular, lymphatic, respiratory, digestive, urogenital, and immune systems, and endocrine systems will be covered. Mechanisms for maintaining homeo/allostasis as well as concepts of development, metabolism, fluid and electrolyte balance, and acid- base balance will be explored. *Corequisite(s): NS 311. Note: Additional fee required.* 

NS 315 - General Chemistry I with Lab

Credit(s): 3.00

This course is an accelerated version of General Chemistry I. It includes a lab, and covers topics, including measurements, atoms, ions, and molecules, chemical formulas and equations, stoichiometry, states of matter, thermochemistry, atomic theory, ionic and

covalent bonding, molecular geometry, and solutions.

NU 310 - 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.

**NU 313 - 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): NU 310- Fundamentals of Nutrition

NU 314 - 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.

First-Year Fall Total Credits: 18

Winter

NS 325 - General Chemistry II with Lab

Credit(s): 3.00

This course is an accelerated version of General Chemistry II. It includes a lab, and covers topics, including rates of reaction, chemical equilibria, acids and basis, plus chemical properties of main group elements and transition elements. This course will also cover

593

introductions to electrochemistry, nuclear chemistry, organic chemistry (carbon bonding) and polymer chemistry. *Prerequisite(s)*: NS 315E or equivalent. *Note*: Additional course fee.

**NU 312 - American Food Systems** 

Credit(s): 3.00

The food system is a complex network that is deeply connected to health, society, and the environment. This survey of local, regional, and national food systems will provide students with a basic understanding of how to analyze individual elements of the systems and their interrelationships and how to begin assessing the "sustainability" of those food systems at different scales and in different bioregions.

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)**: 2.00

First-Year Winter Total Credits: 14

Spring

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 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.

**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.

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): 2.00

First-Year Spring Total Credits: 14

First-Year Total Credits: 46

595

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*.

NU 301 - 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.

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.

\*As a graduate course, students will be charged the graduate cost per credit

**GSN 590 - Career Development I** 

Credit(s): 1.00

This course provides students with the skills and strategies needed for successful career planning and development. Students will engage in self-reflection and assessment, identify career objectives, explore potential career options, and develop an actionable plan to achieve their professional goals.

\*As a graduate course, students will be charged the graduate cost per credit

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 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

597

Winter

#### **GSN 515 - Nutritional Assessment**

Credit(s): 3.00

Learn clinical and dietary evaluation methods to determine an individual's health and nutrition status and gain proficiency in 1) Clinical documentation, including taking a medical and nutrition history, writing progress notes, and determining nutrition diagnoses matched to medical diagnoses; 2) Performing dietary analyses and nutrition-focused physical examinations, including basic anthropometric measurements, vital signs and peripheral stigmata; 3) Administering and interpreting questionnaires related to diet, food security, health, and nutrition issues; 4) knowledge of the Department of Agriculture (USDA) guidelines for preventive and therapeutic interventions of current nutrient guidelines; 5) Evaluating laboratory test results from blood, saliva, and urine; 6) Proposing recommendations based on an individual's health and nutrition needs using evidence-based nutrition practice guidelines; 7) Communicating nutrition therapy plans with primary care providers or the healthcare team to ensure client management and complete care coordination. *Prerequisite(s): TH 507, GSN 514, GSN 516*.

\*As a graduate course, students will be charged the graduate cost per credit.

#### **GSN 518 - Food Relationship Coaching**

Credit(s): 3.00

This course examines our relationship to food, including neurobiological and behavioral connections that influence food choices. 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 coaching are highlighted. Practical application of the material is woven throughout the course. *Prerequisite(s):* GSN 507, GSN 516

\*As a graduate course, students will be charged the graduate cost per credit.

#### **GSN 561 - 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 parings, menu modifications, and have a chance to test out their recipes. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required.* 

\*As a graduate course, students will be charged the graduate cost per credit.

#### 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: 18

#### Spring

\*These are all graduate courses and will be charged at the graduate cost per credit for the remainder of the accelerated BScN to MScN program\*

#### **GSN 512 - Food Marketing & Communication**

#### Credit(s): 2.00

This course provides students the opportunity to explore and utilize multimedia to create culinary and nutrition-centered content. Students will practice communication skills and create a framework for defining their purpose, content and audience. Students will learn

and practice food photography, digital media content creation, writing for social media and professional communication, and other marketing and brand development strategies.

#### **GSN 524 - Medical Nutrition Therapy**

#### Credit(s): 4.00

Evaluate the evidence-based research of dietary interventions for various disease states. Develop a nutrition diagnosis that aligns with a medical diagnosis. Create and integrate nutrition interventions with standards of medical care and alternative methodologies to treat common nutrition-related diseases. Modify therapeutic meal plans from a nutritionally adequate diet (NAD) and science-based eating patterns. Design personalized nutrition interventions targeting the etiology of nutrition-related problems within the context of an individual's genetics, capabilities, lifestyle, environment and motivation for behavioral change to achieve a medical or health goal while considering food sourcing, culturally appropriate food selections, and meal preparation strategies that engage clients/patients in accomplishing their medical and nutrition goals. *Prerequisite(s): TH 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 and 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: 16

Third Year

Summer

GSN 543 - 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 when inperson.* 

**GSN 591 - Career 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: 5

Fall

**GSN 526 - Lifecycle Nutrition** 

Credit(s): 4.00

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 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 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: 11

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): TH 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 538 - 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 GSN0 502. Note: Additional fee required when in-person.

**GSN 557 - 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 when in-person

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 software for nutrition professionals and when to file self-employment taxes. NUNM graduates will guest lecture to discuss their experiences and provide valuable insight into their business ventures. Students will have the opportunity to develop a business plan

for their own business.

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.

Third-Year Winter Total Credits: 12

#### **GSN 509 - Community Nutrition and Food Policy**

Credit(s): 2.00

This course examines community nutrition within the context of our current globalized food system. It is an overview of factors influencing nutritional health within the population at large with a focus on how communities meet their nutritional needs. We use an intersectional lens to understand the complexity of working within a community to empower and mobilize participants towards greater health. In addition, the coursework examines the role of public and private agencies in community assessment, nutritional interventions and public health assurance. This includes an investigation and discussion of how policy influences the nutritional status of communities. We use the socio-ecological model to assess how social determinants of health and systems of oppression. are interwoven with all aspects of the food system. This course will also examine various theories and model of public health and how they are utilized to gain a greater understanding of the current landscape of community nutrition. Lastly, students will research the needs of a specific population and create a nutritional intervention that aims to decrease health disparities by addressing issues of equity within a public health model. *Prerequisite(s): GSN 534.* 

#### **GSN 558 - 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 curriculum to build and teach a successful FAME series in your own community. Training includes FAME Educator competency development and training materials, location development and marketing, navigating cooking workshop management and logistics, and more. This class is for those who intend to teach the FAME series in their community, thereby supporting the Food as Medicine Institute's mission to make whole-foods nutrition education more accessible. *Prerequisite(s): GSN 502 or GSNO 502, GSN 524 or GSNO 524; and instructor approval. Note: Additional fee required when in-person.* 

#### **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.

Elective Credit(s): 2.00

Third-Year Spring Total Credits:8

**Total Core Credits: 128** 

**Total Elective Credits: 10** 

**Total Required Credits: 138** 

# **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
- IM 321 Critical Thinking for Pre-Health Professionals Credit(s): 3.00
- NS 311 Anatomy and Physiology Credit(s): 4.00
- NS 312 Anatomy and Physiology Lab Credit(s): 1.00
- NS 315 General Chemistry I with Lab Credit(s): 3.00
- SS 311 Self-Care and Self-Management Credit(s): 3.00

First-Year Fall Total Credits: 17

#### Winter

- IM 422 Introduction to Botanical Medicine **Credit(s): 4.00**
- NS 325 General Chemistry II with Lab Credit(s): 3.00
- SS 312 Introduction to Medical Anthropology Credit(s): 3.00
- SS 321 Culture, Identity and Emotion Credit(s): 3.00
- SS 331 Advanced Writing and Self-Reflective Skills Credit(s): 3.00

First-Year Winter Total Credits: 16

# Spring

- IM 331 Exercise Science Credit(s): 3.00
- IM 411 Health Psychology and Mind-Body Medicine Credit(s): 3.00
- NS 322 Immunology Credit(s): 4.00
- NS 324 Organic Chemistry I with Lab Credit(s): 3.00
- SS 332 Intercultural Communication Skills Credit(s): 3.00

First-Year Spring Total Credits: 16

First-Year Total Credits: 49

#### **Second Year**

#### Summer

- NS 401 Biochemistry for Life Sciences Credit(s): 4.00
- Elective Credit(s): 2.00

Second-Year Summer Total Credits: 6

#### Fall

- NS 334 Organic Chemistry II with Lab Credit(s): 3.00
- NS 411 Biostatistics for Pre-Health Majors Credit(s): 3.00
- NS 412 Scientific and Professional Communication Credit(s): 3.00
- NS 413 Introduction to Research Methods Credit(s): 3.00
- Elective Credit(s): 2.00

Second-Year Fall Total Credits: 14

#### Winter

- NS 321 Genetics Credit(s): 4.00
- NS 421 Evidence-Based Practice for Pre-Health

Professionals Credit(s): 3.00

- SS 421 Ethics and Philosophical Dilemmas Credit(s): 3.00
- SS 422 Careers: From Undergraduate Degree to

**Employment Credit(s): 2.00** 

• 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
- NS 432 Physics with Lab Credit(s): 5.00
- SS 499 Undergraduate Capstone Credit(s): 3.00
- Elective Credit(s): 2.00

Second-Year Spring Total Credits: 14

Second-Year Total Credits: 48

**Total Core Credits: 89** 

**Total Elective Credits: 8** 

(8 required, students may take up to 18)

**Total Required Credits: 97** 

# **BSiHS Two-Year Course Description**

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*.

#### 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.

#### 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

This course introduces the structure and function of the human body from a whole-systems

perspective. The integumentary, musculoskeletal, nervous, cardiovascular, lymphatic, respiratory, digestive, urogenital, and immune systems, and endocrine systems will be covered. Mechanisms for maintaining homeo/allostasis as well as concepts of development, metabolism, fluid and electrolyte balance, and acid- base balance will be explored. *Corequisite(s): NS 311. Note: Additional fee required.* 

#### NS 315 - General Chemistry I with Lab

Credit(s): 3.00

This course is an accelerated version of General Chemistry I. It includes a lab, and covers topics, including measurements, atoms, ions, and molecules, chemical formulas and equations, stoichiometry, states of matter, thermochemistry, atomic theory, ionic and covalent bonding, molecular geometry, and solutions.

#### 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.

First-Year Fall Total Credits: 17

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 325 - General Chemistry II with Lab

Credit(s): 3.00

This course is an accelerated version of General Chemistry II. It includes a lab, and covers topics, including rates of reaction, chemical equilibria, acids and basis, plus chemical

properties of main group elements and transition elements. This course will also cover introductions to electrochemistry, nuclear chemistry, organic chemistry (carbon bonding) and polymer chemistry. *Prerequisite(s)*: NS 315E or equivalent. *Note*: Additional course fee.

## 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.

First-Year Winter Total Credits: 16

Spring

#### **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.

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.

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: 49

614

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*.

• Elective Credit(s): 2.00

Second-Year Summer Total Credits: 6

Fall

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 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, 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.* 

#### 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 T5 undergraduate credits at NUNM, including SS 422. Note: Additional fee required.* 

• Elective **Credit(s)**: 2.00

Second-Year Spring Total Credits: 14

Second-Year Total Credits: 48

**Total Core Credits: 89** 

Total Elective Credits: 8

(8 required, students may take up to 18)

**Total Required Credits: 97** 

## **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

- IM 321 Critical Thinking for Pre-Health Professionals Credit(s): 3.00
- NU 310 Fundamentals of Nutrition Credit(s): 4.00
- NU 313 Fundamentals of Nutrition Workshop Credit(s): 1.00
- NU 314 Culinary Skills Credit(s): 2.00
- NS 311 Anatomy and Physiology Credit(s): 4.00
- NS 312 Anatomy and Physiology Lab Credit(s): 1.00
- NS 315 General Chemistry I with Lab Credit(s): 3.00

#### First-Year Fall Total Credits: 18

## Winter

- NS 325 General Chemistry II with Lab Credit(s): 3.00
- NU 312 American Food Systems Credit(s): 3.00
- NU 422 Diet and Disease Credit(s): 3.00
- SS 321 Culture, Identity and Emotion Credit(s): 3.00
- SS 331 Advanced Writing and Self-Reflective Skills Credit(s): 3.00

#### First-Year Winter Total Credits: 15

## **Spring**

- IM 411 Health Psychology and Mind-Body Medicine Credit(s): 3.00
- NS 324 Organic Chemistry I with Lab Credit(s): 3.00
- NU 322 Nutritional Anthropology Credit(s): 3.00
- NU 331 Foundations of Community Nutrition Credit(s): 3.00
- NU 411 Food Security Credit(s): 3.00
- SS 332 Intercultural Communication Skills Credit(s): 3.00

# First-Year Spring Total Credits: 18 First-Year Total Credits: 51

## **Second Year**

#### Summer

- NU 301 Farm to Table Credit(s): 2.00
- NS 401 Biochemistry for Life Sciences **Credit(s): 4.00**

#### Second-Year Summer Total Credits: 6

## Fall

- NS 334 Organic Chemistry II with Lab Credit(s): 3.00
- NS 411 Biostatistics for Pre-Health Majors Credit(s): 3.00
- NS 412 Scientific and Professional Communication Credit(s): 3.00
- NS 413 Introduction to Research Methods Credit(s): 3.00

Second-Year Fall Total Credits: 12

## Winter

- NS 321 Genetics Credit(s): 4.00
- NS 421 Evidence-Based Practice for Pre-Health

Professionals Credit(s): 3.00

- NU 318 Food Relationship Coaching Credit(s): 2.00
- SS 421 Ethics and Philosophical Dilemmas Credit(s): 3.00
- SS 422 Careers: From Undergraduate Degree to Employment Credit(s): 2.00

**Second-Year Winter Total Credits: 15** 

## Spring

- NU 431 Whole Food: Rethinking the Science of Nutrition Credit(s): 4.00
- NU 432 Nutritional Epidemiology Credit(s): 4.00
- SS 499 Undergraduate Capstone Credit(s): 3.00
- Elective Credit(s): 4.00

Second-Year Spring Total Credits: 15
Second-Year Total Credits: 48

**Total Core Credits: 87** 

**Total Elective Credits: 4** 

(4 required, students may take up to 18)

**Total Required Credits: 99** 

## **BScN Two-Year Course Descriptions**

First Year

Fall

#### 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.

#### NU 310 - 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.

#### NU 313 - 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):* NU 310- Fundamentals of Nutrition

## **NU 314 - 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.

### 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

This course introduces the structure and function of the human body from a whole-systems perspective. The integumentary, musculoskeletal, nervous, cardiovascular, lymphatic, respiratory, digestive, urogenital, and immune systems, and endocrine systems will be covered. Mechanisms for maintaining homeo/allostasis as well as concepts of development, metabolism, fluid and electrolyte balance, and acid- base balance will be explored. *Corequisite(s): NS 311. Note: Additional fee required.* 

## NS 315 - General Chemistry I with Lab

#### Credit(s): 3.00

This course is an accelerated version of General Chemistry I. It includes a lab, and covers topics, including measurements, atoms, ions, and molecules, chemical formulas and equations, stoichiometry, states of matter, thermochemistry, atomic theory, ionic and covalent bonding, molecular geometry, and solutions.

First-Year Fall Total Credits: 18

Winter

#### NS 325 - General Chemistry II with Lab

## Credit(s): 3.00

This course is an accelerated version of General Chemistry II. It includes a lab, and covers topics, including rates of reaction, chemical equilibria, acids and basis, plus chemical properties of main group elements and transition elements. This course will also cover introductions to electrochemistry, nuclear chemistry, organic chemistry (carbon bonding) and polymer chemistry. *Prerequisite(s)*: NS 315E or equivalent. *Note*: Additional course fee.

### **NU 312 - American Food Systems**

## Credit(s): 3.00

The food system is a complex network that is deeply connected to health, society, and the environment. This survey of local, regional, and national food systems will provide students with a basic understanding of how to analyze individual elements of the systems and their interrelationships and how to begin assessing the "sustainability" of those food systems at different scales and in different bioregions.

#### 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.

#### 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

#### 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 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.* 

## **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**

Community nutrition is a discipline that helps individuals, families, and groups within a community setting improve their dietary intake and food security to promote health and prevent disease. Students examine the complex biological, economic, social, cultural, and public policy issues that cause poor nutrition and increase disease risk. Through analysis, discussion, and research, students advocate for and plan community programs and

personalized services that positively affect nutrition knowledge, food consumption behavior, and health outcomes. *Prerequisite(s)*: NU 310.

**NU 411 - Food Security** 

Credit(s): 3.00

This survey is a critical and interdisciplinary exploration of current issues of local, regional and national strategies to address food insecurity and provides students with a basic understanding of the social, political and economic foundations of food security, food sovereignty, and food justice. Students analyze individual elements of food security, the approaches and interrelationships and assess the individual, community impacts and sustainability of those practices at different levels and diverse locations.

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: 18

First-Year Total Credits: 51

Second Year

Summer

NU 301 - 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.

**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

#### 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 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: 12

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*.

#### **NU 318 - Food Relationship Coaching**

**Credit(s): 2.00** 

This course examines our relationship to food, including neurobiological and behavioral connections that influence food choices. 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 coaching are highlighted. Practical application of the material is woven throughout the course. *Prerequisite(s):* NU 310

#### 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.* 

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.* 

#### **NU 432 - Nutritional Epidemiology**

#### Credit(s): 4.00

Students learn to conduct and 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): 4.00** 

Second-Year Spring Total Credits: 15

Second-Year Total Credits: 48

**Total Core Credits: 87** 

**Total Elective Credits: 4** 

(4 required, students may take up to 18)

**Total Required Credits: 99** 

## Master of Science in Clinical Research, MSCR

The mission of the clinical research program is to train research professionals to advance the science of natural medicine.

The Master of Science in Clinical Research (MSCR) 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 MSCR 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 MSCR 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.

- 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 10 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 (if 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.

## **MSCR Two-Year Curriculum**

## First Year

#### Fall

- GSN 516 Pathophysiology Credit(s): 3.00
- RES 502 Principles of Epidemiology Credit(s): 3.00
- RES 510 Introduction to Integrative Health and Medicine Credit(s): 2.00
- RES 520 Integrative Medicine Research Fundamentals Credit(s): 1.00
- RES 530 Research Methodology Credit(s): 3.00
- RES 590 Career Development I Credit(s): 1.00

First-Year Fall Total Credits: 13

## Winter

- RES 501 Journal Club Credit(s): 1.00
- RES 505 Bioethics Credit(s): 2.00
- RES 591 Career Development II Credit(s): 2.00
- RES 600 Biostatistics I Credit(s): 2.00
- RES 610 Technical Writing Credit(s): 2.00
- Elective Credit(s): 2.00

First-Year Winter Total Credits: 11

## **Spring**

- RES 501 Journal Club Credit(s): 1.00
- RES 531 Integrative Medicine Research Seminar Credit(s): 1.00 \*
- RES 601 Biostatistics II Credit(s): 3.00
- RES 630 Public Health Policy Credit(s): 2.00
- RES 690 Thesis Preparation Credit(s): 3.00
- Elective Credit(s): 2.00

First-Year Spring Total Credits: 12 First-Year Total Credits: 36

## **Second Year**

## Fall

- TH 507 Fundamentals of Nutrition Credit(s): 4.00
- RES 691 Scientific Literature Review Credit(s): 2.00
- RES 692 Experimental Design Credit(s): 2.00
- RES 702 Integrative Immunology Credit(s): 3.00
- Elective Credit(s): 2.00

## **Second-Year Fall Total Credits: 13**

## Winter

- RES 501 Journal Club Credit(s): 1.00
- RES 693 Research Project Implementation Credit(s): 2.00
- RES 694 Data Collection Credit(s): 2.00
- RES 695 Data Analysis Credit(s): 2.00
- Elective Credit(s): 2.00

Second-Year Winter Total Credits: 9

## **Spring**

- GSGH 610 Grant Writing Credit(s): 2.00
- RES 696 Thesis Writing Credit(s): 2.00
- RES 697 Thesis Defense Credit(s): 2.00
- Elective **Credit(s)**: **2.00**

**Second-Year Spring Total Credits: 8** 

**Second-Year Total Credits: 30** 

**Total Core Credits: 56** 

**Total Elective Credits: 10** 

**Total Required Credits: 66** 

\*May be taken any term

## **MSCR Two-Year Course Descriptions**

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 MSCR 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 - Career 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: MSCR 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 - Career 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 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: MSCR students are required to take two terms of Journal Club.* 

**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 630 - Public Health Policy** 

Credit(s): 2.00

In this course, students explore the role of public health policy in ensuring the health of populations and examine how governments, communities and individuals engage in the public health policy process. The importance of health policy needs assessment, application of evidence, and implementation evaluation will be emphasized. Students exercise their oral and written communication skills to present evidence-based perspectives on relevant public health issues. And as a final project, students will develop or modify a health-related

policy on an issue of local, national or global interest. Prerequisite(s): RES 502.

**RES 690 - Thesis Preparation** 

Credit(s): 3.00

This course focuses on development of each student's thesis project. 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.

Prerequisite(s): RES 530, RES 591.

Elective Credit(s): 2.00

First-Year Spring Total Credits: 12

First-Year Total Credits: 36

641

Second Year

Fall

TH 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 MSCR students.* 

**RES 691 - Scientific Literature Review** 

Credit(s): 2.00

Students will conduct scientific literature reviews as an early phase step for the research thesis project. *Prerequisite(s): RES 690*.

**RES 692 - Experimental Design** 

**Credit(s): 2.00** 

Students will focus on experimental design and methodology development that best answers their research question. *Prerequisite(s): RES 691*.

**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: 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: MSCR students are required to take two terms of Journal Club.* 

## **RES 693 - Research Project Implementation**

### Credit(s): 2.00

Students will operationalize their research project based on their approved study design. *Prerequisite(s):* RES692

#### **RES 694 - Data Collection**

## Credit(s): 2.00

Students will continue to operationalize their research project and collect data. Prerequisite(s): RES693

### **RES 695 - Data Analysis**

## Credit(s): 2.00

Students will analyze the data collected during their research project. *Prerequisite(s):* RES694

• Elective Credit(s): 2.00

Second-Year Winter Total Credits: 9

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 696 - Thesis Writing**

**Credit(s): 2.00** 

Students will compose their written thesis and identify their thesis committee. *Prerequisite(s):* RES695

## **RES 697 - Thesis Defense**

Credit(s): 2.00

Students will finalize their written thesis and provide an oral defense. *Prerequisite(s):* RES696

• Elective **Credit(s)**: 2.00

Second-Year Spring Total Credits: 8

Second-Year Total Credits: 30

**Total Core Credits: 56** 

**Total Elective Credits: 10** 

Total Required Credits: 66

\*May be taken any term

## 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 strongly encouraged to travel abroad as part of their global health training. 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.

## **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:

- 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.
  - 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.
  - 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 (if 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 trip, and complete a 200-hour 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): 3.00
- GSGH 521 Social and Behavioral Foundations of Health Credit(s): 2.00
- GSGH 590 Professional Development I Credit(s): 1.00
- GSN 516 Pathophysiology Credit(s): 3.00
- GSN 527 Research Fundamentals Credit(s): 2.00
- RES 510 Introduction to Integrative Health and Medicine Credit(s): 2.00

First-Year Fall Total Credits: 13

## Winter

- GSGH 525 Program Design and Needs Assessment Credit(s): 2.00
- GSGH 706 Conference in Global Health Credit(s): 1.00
- RES 502 Principles of Epidemiology Credit(s): 3.00
- RES 505 Bioethics Credit(s): 2.00
- Elective Credit(s): 2.00

First-Year Winter Total Credits: 10

# **Spring**

- GSGH 524 Population Research Approaches Credit(s): 3.00
- GSGH 526 Program Implementation and Evaluation Credit(s): 2.00
- GSGH 531 Social Justice and Human Rights Credit(s): 2.00
- RES 501 Journal Club Credit(s): 1.00
- RES 630 Public Health Policy Credit(s): 2.00
- Elective **Credit(s)**: 2.00

First-Year Spring Total Credits: 12

First-Year Totals: 35

**Second Year** 

#### Fall

- GSGH 510 Global Health Discussion Series Credit(s): 2.00
- GSGH 513 Comparative Global Health Systems Credit(s): 2.00
- GSGH 842 Introduction to Tropical Disease Credit(s): 2.00
- GSGH 690 Fieldwork Preparation Credit(s): 2.00
- Elective Credit(s): 4.00

## **Second-Year Fall Total Credits: 11**

# Winter

• GSGH 691 - Fieldwork Travel Credit(s): 8.00

**Second-Year Winter Total Credits: 8** 

# **Spring**

- GSGH 610 Grant Writing Credit(s): 2.00
- GSGH 692 Fieldwork Presentation Credit(s): 2.00
- Electives **Credit(s)**: **4.00**

**Second-Year Spring Total Credits: 8** 

Second-Year Totals: 27

**Total Core Credits: 50** 

**Total Elective Credits: 12** 

**Total Required Credits: 62** 

# **MScGH Two-Year Course Descriptions**

First Year

Fall

#### GSGH 511 - Foundations of Global Health

Credit(s): 3.00

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.

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 527 - Research Fundamentals** 

Credit(s): 2.00

In this course, students will learn the various aspects of research, including information discovery, study design and methodology, and how to interpret and critically evaluate the literature. Students will evaluate and apply research results in case-based learning activities.

**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.

First-Year Fall Total Credits: 13

Winter

**GSGH 525 - Program Design and Needs Assessment** 

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 706 - 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

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networking opportunities are required. This course may be taken during any term and repeated once for elective credit. *Note: Additional fee required* 

#### **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.

Elective Credit(s): 2.00

First-Year Winter Total Credits: 10

Spring

#### **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 526 - Program Implementation and Evaluation

Credit(s): 2.00

In this course, students develop the knowledge and skills necessary to implement and evaluate a protocol for health-related programs, services, policies and interventions in local,

national and global settings. *Prerequisite(s): GSGH 525* 

**GSGH 531 - Social Justice and Human Rights** 

Credit(s): 2.00

In this course, students explore the concepts of justice, conflict and social change and examine the ways in which political, economic, media, education, and other institutions and systems create challenges for justice. Students will develop strategies for change including activism, advocacy, assistance, and community organizing. Students explore social change

on levels from grassroots campaigns to international diplomacy and policy work.

**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: MSCR students are required to take two terms of Journal

Club.

**RES 630 - Public Health Policy** 

Credit(s): 2.00

In this course, students explore the role of public health policy in ensuring the health of populations and examine how governments, communities and individuals engage in the public health policy process. The importance of health policy needs assessment, application of evidence, and implementation evaluation will be emphasized. Students exercise their oral and written communication skills to present evidence-based perspectives on relevant public health issues. And as a final project, students will develop or modify a health-related policy on an issue of local, national or global interest. *Prerequisite(s): RES 502.* 

Elective **Credit(s)**: 2.00

First-Year Spring Total Credits: 12

First-Year Totals: 35

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Second Year

Fall

GSGH 510 - Global Health Discussion Series

Credit(s): 2.00

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 513 - Comparative Global Health Systems** 

Credit(s): 2.00

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 842 - Introduction to Tropical Disease** 

Credit(s): 2.00

This course examines the biologic, social, and epidemiological aspects of tropical diseases.

GSGH 690 - Fieldwork 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)**: **4.00** 

Second-Year Fall Total Credits: 11

Winter

GSGH 691 - Fieldwork Travel

Credit(s): 8.00

Fieldwork provides students with supervised, advanced practical experience in a population-focused, health-related local, national or international setting. 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: 8

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* 

**GSGH 692 - Fieldwork Presentation** 

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: 8

Second-Year Totals: 27

**Total Core Credits: 50** 

656

Total Elective Credits: 12

Total Required Credits: 62

# **Master of Science in Nutrition, MScN**

The mission of the Master of Science in Nutrition program is to cultivate nutritionists who utilize evidence-informed personalized medical nutrition therapy to support health through clinical practice, culinary medicine, and education. Graduates emerge equipped with the expertise to translate knowledge into impactful interventions for fostering health and wellness within the individuals and communities they serve.

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. Students choose a curriculum track, clinical or culinary, to better refine their program and prepare for a career in the field of nutrition.

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-totable, students explore the relationship between food production and utilization, considering environmental, social and economic facilitators and barriers of designing healthy communities.

Students in the MScN program will be prepared to meet the following program outcomes and competencies:

**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 6 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 (if 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. The on-campus and online curriculum layouts are the same, except the online students complete GSN502 Culinary Skills during the 2nd term of the program.

# MScN Two-Year - Clinical Track Curriculum

# First Year

#### Fall

- GSN 502 Culinary Skills Credit(s): 2.00
- TH 507 Fundamentals of Nutrition Credit(s): 4.00
- GSN 508 Fundamentals of Nutrition Workshop Credit(s): 1.00
- GSN 514 Nutritional Biochemistry Credit(s): 3.00
- GSN 516 Pathophysiology Credit(s): 3.00
- GSN 527 Research Fundamentals Credit(s): 2.00
- GSN 590 Career Development I Credit(s): 1.00

#### First-Year Fall Total Credits: 16

# Winter

- GSN 505 Healing Foods I Credit(s): 2.00
- GSN 506 Healing Foods I Practicum Credit(s): 2.00
- GSN 515 Nutritional Assessment Credit(s): 3.00
- GSN 518 Food Relationship Coaching Credit(s): 3.00
- GSN 614 Advanced Nutritional Biochemistry Credit(s): 3.00

# First-Year Winter Total Credits: 13

# **Spring**

- GSN 524 Medical Nutrition Therapy Credit(s): 4.00
- GSN 529 Applied Medical Nutrition Therapy Credit(s): 2.00
- GSN 555 Clinical Biochemistry and Nutrition Credit(s): 3.00

# First-Year Spring Total Credits: 9

# First-Year Totals: 38

## **Second Year**

#### Summer

- GSN 503 Farm to Table Credit(s): 2.00
- GSN 589 Nutritional Immunology Credit(s): 4.00
- GSN 591 Career Development II Credit(s): 2.00

## **Second-Year Summer Total Credits: 7**

# Fall

- GSN 526 Lifecycle Nutrition Credit(s): 4.00
- GSN 534 Cultural Humility and Food Justice Credit(s): 2.00
- GSN 536 Gut Microbiome Credit(s): 2.00
- GSN 690 Capstone Preparation Credit(s): 1.00

#### Second-Year Fall Total Credits: 9

## Winter

- GSN 552 Nutritional Supplements Credit(s): 2.00
- GSN 563 Business of Nutrition Credit(s): 2.00
- GSN 691 Capstone I: Internship Credit(s): 2.00
- Elective Credit(s): 2.00

#### Second-Year Winter Total Credits: 8

# **Spring**

- GSN 509 Community Nutrition and Food Policy Credit(s): 2.00
- GSN 692 Capstone II: Internship Credit(s): 2.00
- Electives Credit(s): 2.00

**Second-Year Spring Total Credits: 8** 

Second-Year Totals: 32 Total Core Credits: 64 Total Elective Credits: 6 Total Required Credits: 70

# **MScN Two-Year - Culinary Track Curriculum**

# First Year

## Fall

- GSN 502 Culinary Skills Credit(s): 2.00
- TH 507 Fundamentals of Nutrition Credit(s): 4.00
- GSN 508 Fundamentals of Nutrition Workshop Credit(s): 1.00
- GSN 514 Nutritional Biochemistry Credit(s): 3.00
- GSN 516 Pathophysiology Credit(s): 3.00
- GSN 527 Research Fundamentals Credit(s): 2.00
- GSN 590 Career Development I Credit(s): 1.00

#### First-Year Fall Total Credits: 16

# Winter

- GSN 505 Healing Foods I Credit(s): 2.00
- GSN 506 Healing Foods I Practicum Credit(s): 2.00
- GSN 515 Nutritional Assessment Credit(s): 3.00
- GSN 518 Food Relationship Coaching Credit(s): 3.00
- GSN 561 Recipe and Menu Development Credit(s): 2.00

# First-Year Winter Total Credits: 12

# **Spring**

- GSN 512 Food Marketing & Communication Credit(s): 2.00
- GSN 524 Medical Nutrition Therapy Credit(s): 4.00
- GSN 529 Applied Medical Nutrition Therapy Credit(s): 2.00

# First-Year Spring Total Credits: 8

# First-Year Totals: 36

## **Second Year**

## Summer

- GSN 503 Farm to Table Credit(s): 2.00
- GSN 543 Personal Chef and Food Service Credit(s): 2.00
- GSN 591 Career Development II Credit(s): 2.00

#### Second-Year Summer Total Credits: 5

# Fall

- GSN 526 Lifecycle Nutrition Credit(s): 4.00
- GSN 534 Cultural Humility and Food Justice Credit(s): 2.00
- GSN 536 Gut Microbiome Credit(s): 2.00
- GSN 690 Capstone Preparation Credit(s): 1.00

#### Second-Year Fall Total Credits: 9

## Winter

- GSN 538 Cooking Pedagogy Credit(s): 2.00
- GSN 557 Cooking with Medicinal Herbs Credit(s): 2.00
- GSN 563 Business of Nutrition Credit(s): 2.00
- GSN 691 Capstone I: Internship Credit(s): 2.00
- Elective **Credit(s)**: 2.00

**Second-Year Winter Total Credits: 10** 

# **Spring**

- GSN 509 Community Nutrition and Food Policy Credit(s): 2.00
- GSN 558 Food as Medicine Everyday (FAME) Educator Training Credit(s): 2.00
- GSN 692 Capstone II: Internship Credit(s): 2.00
- Elective **Credit(s)**: 2.00

Second-Year Spring Total Credits: 10

Second-Year Totals: 34 Total Core Credits: 64 Total Elective Credits: 6 Total Required Credits: 70

# **MScN Two-Year - Clinical Track Course Descriptions**

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.* 

#### TH 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 MSCR 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): TH 507. Note: Additional fee required.* 

#### **GSN 514 - Nutritional Biochemistry**

Credit(s): 3.00

Learn the molecular, biochemical, and metabolic characteristics of food's dietary nutrients and bioactive compounds, emphasizing their relationships and contributions to health and disease. Gain the core knowledge and key concepts related to the science of human nutrition, gut microbiota and the gut-brain axis, including enzyme kinetics, bioenergetics, metabolic pathways, genomics, free radical regulation, inflammatory pathways, fluid and electrolyte balance, acid-base balance, xenobiotics, heavy metals, pesticides, herbicides,

persistent organic pollutants, their affect 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 527 - Research Fundamentals** 

Credit(s): 2.00

In this course, students will learn the various aspects of research, including information discovery, study design and methodology, and how to interpret and critically evaluate the literature. Students will evaluate and apply research results in case-based learning activities.

GSN 590 - Career Development I

Credit(s): 1.00

This course provides students with the skills and strategies needed for successful career planning and development. Students will engage in self-reflection and assessment, identify career objectives, explore potential career options, and develop an actionable plan to achieve their professional goals.

First-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): TH 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): 3.00

Learn clinical and dietary evaluation methods to determine an individual's health and nutrition status and gain proficiency in 1) Clinical documentation, including taking a medical and nutrition history, writing progress notes, and determining nutrition diagnoses matched to medical diagnoses; 2) Performing dietary analyses and nutrition-focused physical examinations, including basic anthropometric measurements, vital signs and peripheral stigmata; 3) Administering and interpreting questionnaires related to diet, food security, health, and nutrition issues; 4) knowledge of the Department of Agriculture (USDA) guidelines for preventive and therapeutic interventions of current nutrient guidelines; 5) Evaluating laboratory test results from blood, saliva, and urine; 6) Proposing recommendations based on an individual's health and nutrition needs using evidence-based nutrition practice guidelines; 7) Communicating nutrition therapy plans with primary care providers or the healthcare team to ensure client management and complete care coordination. *Prerequisite(s): TH 507, GSN 514, GSN 516*.

## **GSN 518 - Food Relationship Coaching**

#### Credit(s): 3.00

This course examines our relationship to food, including neurobiological and behavioral connections that influence food choices. 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 coaching are highlighted. Practical application of the material is woven throughout the course. *Prerequisite(s):* GSN 507, GSN 516

# **GSN 614 - 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, genomic, and epigenetic factors influencing nutrition status. Advanced understanding of various disease mechanisms, the dysregulation of glucose, fatty acid, protein, and micronutrient metabolism that promotes chronic activation of the inflammatory pathways, oxidative stress, and the contribution to cognitive decline. Relate the biochemical basis of disease to proactive and preventive nutritional interventions. *Prerequisite(s): GSN 514 or GSNO 514, or equivalent.* 

First-Year Winter Total Credits: 13

Spring

#### **GSN 524 - Medical Nutrition Therapy**

Credit(s): 4.00

Evaluate the evidence-based research of dietary interventions for various disease states. Develop a nutrition diagnosis that aligns with a medical diagnosis. Create and integrate nutrition interventions with standards of medical care and alternative methodologies to treat common nutrition-related diseases. Modify therapeutic meal plans from a nutritionally adequate diet (NAD) and science-based eating patterns. Design personalized nutrition interventions targeting the etiology of nutrition-related problems within the context of an individual's genetics, capabilities, lifestyle, environment and motivation for behavioral change to achieve a medical or health goal while considering food sourcing, culturally appropriate food selections, and meal preparation strategies that engage clients/patients in accomplishing their medical and nutrition goals. *Prerequisite(s): TH 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.* 

# **GSN 555 - Clinical Biochemistry and Nutrition**

Credit(s): 3.00

Learn the science-based and personalized approach to medical nutrition therapy that uses conventional and functional medicine 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, intestinal dysbiosis, genomic and epigenetic Factors that influence nutrition status and requirements. Correlate laboratory findings with other biomarkers to formulate

nutrition care plans that address the unique biochemical profiles of patients. *Corequisite(s): GSN 524 or GSNO 524.* 

First-Year Spring Total Credits: 9

First-Year Totals: 38

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 589 - 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 591 - Career 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.* 

Second-Year Summer Total Credits: 7

Fall

**GSN 526 - Lifecycle Nutrition** 

Credit(s): 4.00

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 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 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: 9

Winter

#### **GSN 552 - Nutritional Supplements**

Credit(s): 2.00

Explore the use of nutritional supplements (including 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): TH 507 or GSN 584* 

#### **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 software for nutrition professionals and when to file self-employment taxes. NUNM graduates will guest lecture to discuss their experiences and provide valuable insight into their business ventures. Students will have the opportunity to develop a business plan for their own business.

#### **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*.

Elective Credit(s): 2.00

Second-Year Winter Total Credits: 8

Spring

# **GSN 509 - Community Nutrition and Food Policy**

#### Credit(s): 2.00

This course examines community nutrition within the context of our current globalized food system. It is an overview of factors influencing nutritional health within the population at large with a focus on how communities meet their nutritional needs. We use an intersectional lens to understand the complexity of working within a community to empower and mobilize participants towards greater health. In addition, the coursework examines the role of public and private agencies in community assessment, nutritional interventions and public health assurance. This includes an investigation and discussion of how policy influences the nutritional status of communities. We use the socio-ecological model to assess how social determinants of health and systems of oppression. are interwoven with all aspects of the food system. This course will also examine various theories and model of public health and how they are utilized to gain a greater understanding of the current landscape of community nutrition. Lastly, students will research the needs of a specific population and create a nutritional intervention that aims to decrease health disparities by addressing issues of equity within a public health model. *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.* 

• Electives Credit(s): 2.00

Second-Year Spring Total Credits: 8

Second-Year Totals: 32

**Total Core Credits: 64** 

**Total Elective Credits: 6** 

**Total Required Credits: 70** 

MScN Two-Year - Culinary 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.* 

#### **TH 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 MSCR 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): TH 507. Note: Additional fee required.* 

# **GSN 514 - Nutritional Biochemistry**

Credit(s): 3.00

Learn the molecular, biochemical, and metabolic characteristics of food's dietary nutrients and bioactive compounds, emphasizing their relationships and contributions to health and disease. Gain the core knowledge and key concepts related to the science of human nutrition, gut microbiota and the gut-brain axis, including enzyme kinetics, bioenergetics, metabolic pathways, genomics, free radical regulation, inflammatory pathways, fluid and electrolyte balance, acid-base balance, xenobiotics, heavy metals, pesticides, herbicides, persistent organic pollutants, their affect 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 527 - Research Fundamentals**

Credit(s): 2.00

In this course, students will learn the various aspects of research, including information discovery, study design and methodology, and how to interpret and critically evaluate the literature. Students will evaluate and apply research results in case-based learning activities.

#### **GSN 590 - Career Development I**

Credit(s): 1.00

This course provides students with the skills and strategies needed for successful career

planning and development. Students will engage in self-reflection and assessment, identify career objectives, explore potential career options, and develop an actionable plan to achieve their professional goals.

First-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): TH 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): 3.00

Learn clinical and dietary evaluation methods to determine an individual's health and nutrition status and gain proficiency in 1) Clinical documentation, including taking a medical and nutrition history, writing progress notes, and determining nutrition diagnoses matched to medical diagnoses; 2) Performing dietary analyses and nutrition-focused physical examinations, including basic anthropometric measurements, vital signs and peripheral stigmata; 3) Administering and interpreting questionnaires related to diet, food security, health, and nutrition issues; 4) knowledge of the Department of Agriculture (USDA) guidelines for preventive and therapeutic interventions of current nutrient guidelines; 5) Evaluating laboratory test results from blood, saliva, and urine; 6) Proposing recommendations based on an individual's health and nutrition needs using evidence-based nutrition practice guidelines; 7) Communicating nutrition therapy plans with primary care providers or the healthcare team to ensure client management and complete care coordination. *Prerequisite(s): TH 507, GSN 514, GSN 516*.

#### **GSN 518 - Food Relationship Coaching**

Credit(s): 3.00

This course examines our relationship to food, including neurobiological and behavioral connections that influence food choices. 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 coaching are highlighted. Practical application of the material is woven throughout the course. *Prerequisite(s):* GSN 507, GSN 516

# **GSN 561 - 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 parings, menu modifications, and have a chance to test out their recipes. *Prerequisite(s): GSN 502 or GSNO 502. Note: Additional fee required.* 

First-Year Winter Total Credits: 12

Spring

#### **GSN 512 - Food Marketing & Communication**

Credit(s): 2.00

This course provides students the opportunity to explore and utilize multimedia to create culinary and nutrition-centered content. Students will practice communication skills and create a framework for defining their purpose, content and audience. Students will learn and practice food photography, digital media content creation, writing for social media and professional communication, and other marketing and brand development strategies.

#### **GSN 524 - Medical Nutrition Therapy**

Credit(s): 4.00

Evaluate the evidence-based research of dietary interventions for various disease states. Develop a nutrition diagnosis that aligns with a medical diagnosis. Create and integrate nutrition interventions with standards of medical care and alternative methodologies to treat common nutrition-related diseases. Modify therapeutic meal plans from a nutritionally adequate diet (NAD) and science-based eating patterns. Design personalized nutrition interventions targeting the etiology of nutrition-related problems within the context of an individual's genetics, capabilities, lifestyle, environment and motivation for behavioral

change to achieve a medical or health goal while considering food sourcing, culturally appropriate food selections, and meal preparation strategies that engage clients/patients in accomplishing their medical and nutrition goals. *Prerequisite(s): TH 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.* 

First-Year Spring Total Credits: 8

First-Year Totals: 36

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 543 - 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 when inperson.* 

#### GSN 591 - Career 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.* 

Second-Year Summer Total Credits: 5

Fall

**GSN 526 - Lifecycle Nutrition** 

Credit(s): 4.00

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 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 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: 9

Winter

**GSN 538 - 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 when in-person.* 

**GSN 557 - 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 when in-person* 

**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 software for nutrition professionals and when to file self-employment taxes. NUNM graduates will guest lecture to discuss their experiences and provide valuable insight into their business ventures. Students will have the opportunity to develop a business plan for their own business.

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*.

Elective Credit(s): 2.00

Second-Year Winter Total Credits: 10

## **GSN 509 - Community Nutrition and Food Policy**

**Credit(s): 2.00** 

This course examines community nutrition within the context of our current globalized food system. It is an overview of factors influencing nutritional health within the population at large with a focus on how communities meet their nutritional needs. We use an intersectional lens to understand the complexity of working within a community to empower and mobilize participants towards greater health. In addition, the coursework examines the role of public and private agencies in community assessment, nutritional interventions and public health assurance. This includes an investigation and discussion of how policy influences the nutritional status of communities. We use the socio-ecological model to assess how social determinants of health and systems of oppression. are interwoven with all aspects of the food system. This course will also examine various theories and model of public health and how they are utilized to gain a greater understanding of the current landscape of community nutrition. Lastly, students will research the needs of a specific population and create a nutritional intervention that aims to decrease health disparities by addressing issues of equity within a public health model. *Prerequisite(s): GSN 534.* 

#### GSN 558 - 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 curriculum to build and teach a successful FAME series in your own community. Training includes FAME Educator competency development and training materials, location development and marketing, navigating cooking workshop management and logistics, and more. This class is for those who intend to teach the FAME series in their community, thereby supporting the Food as Medicine Institute's mission to make whole-foods nutrition education more accessible. *Prerequisite(s): GSN 502 or GSNO 502, GSN 524 or GSNO 524; and instructor approval. Note: Additional fee required when in-person.* 

#### **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.

Elective **Credit(s)**: 2.00

Second-Year Spring Total Credits: 10

Second-Year Totals: 34

Total Core Credits: 64

**Total Elective Credits: 6** 

Total Required Credits: 70

# **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 deans. 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 7321, 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 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 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): 1.00** 

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 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 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.* 

#### NDEH 7331E - Homeopathy III

**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.* 

# NDEH 7332E - Homeopathy IV

## 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 7330E.* 

# Reproductive

## NDER 7330E - Natural Childbirth II: Pregnancy

# Credit(s): 3.00

This course emphasizes the role of prenatal care in assessing and maintaining the well-being of mother and fetus. Screening skills introduced in Reproductive Systems (CLS 7310) are refined and expanded including patient-centered midwifery care, prenatal labs, management of pre-existing conditions and tests for fetal well-being. Complications of pregnancy are studied along with the continuum of appropriate treatment possibilities, ranging from naturopathic therapeutics to referral for high-risk cases. The course format is lecture with case presentations and a practical lab for hands-on training. *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 delivery including assessment of fetal heart tones, managing first and second stage of labor and normal birth. Complications of labor and birth are examined and naturopathic management highlighted through the use of birth stories. The hands-on skills required for response to those situations are discussed, demonstrated and practiced through a hands-on lab. *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 focuses on the third stage of birth, from delivery of the placenta through six weeks 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, transitional anatomy and 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

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.

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 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 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

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energy. Respect for personal boundaries is emphasized. *Prerequisite(s): NDET 5120E . Note: Additional fee required.* 

## 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): 1.50

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*.

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  $z \dot{a} n g$  and  $f \hat{u}$  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 and 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 of CM516, CM526, CM536, CM616 and CM626.* 

#### 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 of CM516, CM526, CM536, CM616 and CM626. 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 of CM516, CM526, CM536, CM616 and CM626.* 

## 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): These courses are to be taken in the ordered sequence of CM516, CM526, CM536, CM616 and CM626.* 

#### 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 of CM516, CM526, CM536, CM616 and CM626.

#### 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 (*shiwen*), 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 (*shiwen*), 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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631.

## 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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631*.

## 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; These courses are to be taken in the ordered sequence of CM611, CM621 and CM631*.

#### 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): TH 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: MSCR 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 MSCR 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.

# **CCM Electives**

**MAcCHM:** 6 Credits Required **DAcCHM:** 10 Credits Required

MAcCHM and DAcCHM 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 deans. In all cases, students must satisfy course prerequisites.

MAcCHM students are also able to take any of the DAcCHM-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. 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* 

## 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 07E - Death and Dying in Chinese Medicine

Credit(s): 1.50

In the realm of alternative medicine, hospice care has received little to no attention. It is a growing problem given the reality that our country's population is aging, and therefore the need for skilled end of life care practitioners is increasing. Healers can help catalyze, ignite, and inspire this healing in clients who are in the process of dying. This class offers a road map into the realm of working with the terminally ill. We will explore the issues around dying, including our own death, and learn practical and useful skills within Chinese medicine to work with people at end of life.

#### 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 wellbeing through the process of moderating negative emotions and restoring the inherently positive qualities of our human mandate. *Note: Additional fee required* 

#### CM 38E - Sound Resonance

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.* 

# **Practice Management**

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

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

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

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

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

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

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

# 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* 

# **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 deans. 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 706 - 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 taken during any term and repeated once for elective credit. *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 718E - Spirituality and Health

## Credit(s): 2.00

This course introduces students to the world's major religious and spiritual belief systems, and increases their understanding of how spiritual and religious beliefs and practices influence individual and community health outcomes.

# **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

On this cultural immersion trip, students' study and experience culture, food and traditional medicine in Northern Thailand. Known for its temples, creative shops and incredible street food, Chiang Mai is a vibrant hub for both traditional medicine as well as modern healing arts. Students will have the opportunity to explore Thai herbal medicine, nutrition, cooking,

Thai massage, bodywork, and how Buddhist practice influences health and psychology. While being based in Chiang Mai, we will take overnight excursions to the countryside where we will have the opportunity to learn about agriculture, self-reliance and indigenous life. This Global Health trip provides an experiential understanding of Thai culture, medicine and life through a sampling of traditions, activities and community experiences. Open to all students and all programs. *Corequisite(s):* GSGH901E *Note: Itinerary-specific trip fee applies. Must have preapproval from Dean after interview.* 

#### 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/MACcHM, DSOM/DACcHM), 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 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 from the Office of Health Sciences. Note: Itinerary-specific trip fee applies.* 

# **MSCR 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 MSCR 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 deans. 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 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.

# **MScN Electives**

# Nutrition (MScN)—12 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 deans/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 521E - Culinary Skills II**

Credit(s): 1.00

This hands-on course allows students to continuing learning and practicing culinary skills, including proper knife and food preparation techniques. Note: Additional fee required. *Prerequisite(s):* GSN 502, GSNO 502, NU 314

## **GSN 538 - 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 when in-person.* 

## 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 543 - 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 when inperson.* 

## 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): TH 507 or GSN 584, GSN 516 or GSNO 516.* 

## **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 551E - Therapeutic Diets**

# **Credit(s): 2.00**

This course will review the fundamental nutrition guidelines and peer-reviewed research behind therapeutically recommended diets. Students will also prepare meals as they evaluate the food and nutritional value of each diet. *Prerequisite(s): TH 507 or GSN 584. Note: Additional fee required.* 

#### **GSN 552 - Nutritional Supplements**

## Credit(s): 2.00

Explore the use of nutritional supplements (including 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): TH 507 or GSN 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): TH 507 or GSN 584, GSN 515 or GSNO 515.* 

## **GSN 555 - Clinical Biochemistry and Nutrition**

Credit(s): 3.00

Learn the science-based and personalized approach to medical nutrition therapy that uses conventional and functional medicine 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, intestinal dysbiosis, genomic and epigenetic Factors that influence nutrition status and requirements. Correlate laboratory findings with other biomarkers to formulate nutrition care plans that address the unique biochemical profiles of patients. *Corequisite(s): GSN 524 or GSNO 524.* 

## **GSN 557 - 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 when in-person* 

## GSN 558 - 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 curriculum to build and teach a successful FAME series in your own community. Training includes FAME Educator competency development and training materials, location development and marketing, navigating cooking workshop management and logistics, and more. This class is for those who intend to teach the FAME series in their community, thereby supporting the Food as Medicine Institute's mission to make whole-foods nutrition education more accessible. *Prerequisite(s): GSN 502 or GSNO 502, GSN 524 or GSNO 524; and instructor approval. Note: Additional fee required when in-person.* 

**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 indepth 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 561 - 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 parings, 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): TH 507 or GSN 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

717

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** 

This course examines how bioactive compounds in foods can influence human health and wellness. This course blends didactic and experiential learning in an alternating lecture and cooking format. A variety of foods like herbs, spices, seaweeds, mushrooms, and medicinal plants with healing and nourishing properties are covered. Students will practice more advanced cooking techniques like fermentation, dehydration, sprouting, and other techniques in the teaching kitchen. This is a standalone elective with no prerequisite. *Note:* Additional course fee.

## **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, developmental stages and their impact on food preferences; and personal, familial and environmental barriers to healthy eating for children. Students will also investigate physiological, genetic, environmental, and behavioral factors that increase risk for dietrelated diseases. The course emphasizes ways to help children build healthy relationship with foods, engage children with their food, and help families provide age-appropriate nutrient-dense foods to their children. *Prerequisite(s): GSN 526 or GSNO 526.* 

## **GSN 574E - Advanced 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 518 or GSN 528* 

## GSN 575E - Obesity, Metabolic Syndrome, and Diabetes

## Credit(s): 2.00

This is a practical course for those working with individuals with obesity, metabolic syndrome and/or type II diabetes covering etiology; clinical characteristics; nutrition therapy recommendations; and treatment strategies. Practical applications include an exploration of common eating habits and behaviors, blood glucose monitoring and control and current medications. The course also investigates the many influences and challenges with body weight, weight changes and weight loss and evaluates current research in this area. 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 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 CPR/BLS. Additional topics include clinic guidelines, safety and emergency medical procedures, and professionalism. *Corequisite(s): GSN 524 or GSNO 586*, *GSN 528 or GSNO 528*. CLE5000 *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 write clinical chart notes. *Prerequisite(s): GSN 579E*.

## **GSNO 581E - Virtual Nutrition Clinic Experience**

## Credit(s): 2.00

In this virtual clinic experience, students individually and in groups participate in real-life simulated case scenarios to address multiple nutrition-related concerns. Learn client management and pre-visit planning. Increase confidence in clinical proficiency skills and clinical rationale by applying medical nutrition therapy to treat various nutrition-related conditions. Perform all aspects of the Nutrition Care Process, including nutrition assessment, nutrition diagnosis, nutrition intervention and nutrition evaluation and monitoring for initial and follow-up encounters. Assess and Evaluate Drug-Nutrient, Drug-Herb, Alcohol, and Dietary Interactions, food allergies, sensitivities, and intolerances. Participate in virtual grand rounds, discussing and analyzing case strategies and

interventions. Develop client/patient education handouts. Complete all regulatory trainings, including HIPAA, will be completed before engaging in patient/client care. *Prerequisite(s):* GSNO514, GSNO515, GSNO516, GSNO524, GSNO526, GSNO534 & GSNO584. *Corequisite(s):* CLE5000

## **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 589 - 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

Good health and nutrition depend on healthy plants and soils. Soil degradation, factory farming, and climate change have negative impacts on our personal health and our collective well-being. This class examines the fundamental interdependent relationship between people and the environment and offers practical approaches to build personal and communal health for the long term. We'll create designs for resilient gardens that can provide food and medicine to our communities and reflect on the implications this has for the welfare of humans. *Note: This course does not culminate in a Permaculture Design Certificate (PDC)*.

# **GSN 614 - 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, genomic, and epigenetic factors influencing nutrition status. Advanced understanding of various disease mechanisms, the dysregulation of glucose, fatty acid, protein, and micronutrient metabolism that promotes chronic activation of the inflammatory pathways, oxidative stress, and the contribution to cognitive decline. Relate the biochemical basis of disease to proactive and preventive nutritional interventions. *Prerequisite(s): GSN 514 or GSNO 514, or equivalent.* 

# 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.* 

## GSN 699E - Directed Study

# Credit(s): 1.00-4.00

Students work with a faculty mentor on a project that does not fit within an existing course. The student and faculty mentor will develop a project outline, learning objectives, and assessments that meet program outcomes and competencies. Credit assignment (1.00-4.00) is determined by the Dean based on the scope of the proposed project.

## **NS 511 - 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.

# **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, crosslisted 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

Good health and nutrition depend on healthy plants and soils. Soil degradation, factory farming, and climate change have negative impacts on our personal health and our collective well-being. This class examines the fundamental interdependent relationship

between people and the environment and offers practical approaches to build personal and communal health for the long term. We'll create designs for resilient gardens that can provide food and medicine to our communities and reflect on the implications this has for the welfare of humans. *Note: This course does not culminate in a Permaculture Design Certificate (PDC).* 

## Nutrition

## **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 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

## **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)