

# COURSE DESCRIPTIONS

Curriculum and course changes in the 2014-2015 *Bastyr University Catalog* are applicable to students entering during the 2014-2015 academic year. Please refer to the appropriate catalog if interested in curriculum and courses required for any other entering year.

## Program, Department and Course Designation Codes

AY:	Ayurvedic Sciences
BC:	Basic Sciences
BO:	Botanical Medicine/Herbal Sciences
CH:	Chinese Herbal Medicine Certificate
DI:	Dietetic Internship
EX:	Exercise Science and Wellness
HO:	Homeopathic Medicine
IS:	Interdisciplinary Studies
MW:	Midwifery
NM:	Naturopathic Medicine
OM:	Acupuncture and Oriental Medicine
PM:	Physical Medicine
PS:	Counseling and Health Psychology
RD:	Didactic Program in Dietetics
SN:	Science and Naturopathy
TR:	Nutrition

## COURSE NUMBERING SEQUENCE KEY

The first digit indicates the year/level at which the course is offered:

1xxx	Freshman prerequisite courses
2xxx	Sophomore prerequisite courses
3xxx	Junior BS Program
4xxx	Senior BS Program
5xxx-8xxx	Graduate and Professional level courses
9xxx	Electives (undergraduate and graduate)

The second digit indicates the type of course:

x1xx	General courses
x2xx	Diagnostic courses
x3xx	Diagnostic/therapeutic courses
x4xx	Therapeutic courses
x5xx	Special topics courses
x8xx	Clinic and clinical courses
x9xx	Independent study

Note: In the following descriptions, commonly used abbreviations in reference to Bastyr programs include the following: ayurvedic sciences (AY), acupuncture and Oriental medicine (AOM), midwifery/natural childbirth (MW), naturopathic medicine (ND) and nutrition (NTR).

# AYURVEDIC SCIENCES

Dhaval Dhru, MD, Department Chair

If not enrolled in the MSAS program, students must be in good academic standing and meet prerequisite requirements to take courses as electives within the MSAS curriculum for elective credit.

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## **AY5101 Fundamentals and Philosophy of Ayurveda** **2 credits**

This course is an introduction to the history and philosophy of ayurveda. Students learn about four distinct historical periods of ayurveda, the two prominent schools of ayurveda and the primary and secondary ayurvedic authors and their texts. Prerequisite: admission to Bastyr University

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## **AY5105 Medical Sanskrit 1** **2 credits**

Ayurvedic medical Sanskrit is not intended to teach Sanskrit as a spoken second language. Rather, the focus of this class is on vocabulary and reading ayurvedic texts. Knowledge of basic medical Sanskrit is necessary for authentic integration of ayurvedic knowledge. Students are instructed to read, write and recite the Sanskrit Devanagari alphabet. Prerequisite: enrollment in the MSAS program, or concurrent enrollment in or completion of AY5101, or permission of dean

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## **AY5106 Medical Sanskrit 2** **2 credits**

This course is a continuation of Medical Sanskrit 1. This class includes an understanding of sentence constructs, identifying the etymology (derivation of words from basic constructs and root) of words and comprehending the grammar of Sanskrit prose in a medical context, leading to reading Sanskrit medical texts and understanding the meaning of commonly used medical passages (sutras). Prerequisite: AY5105

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## **AY5107 Medical Sanskrit 3** **2 credits**

This class is a continuation of Medical Sanskrit 2 and focuses on the Sanskrit of the major ayurvedic classical literature, the Samhitas. Students read and translate important passages from the literature. Prerequisite: AY5106

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## **AY5110 Ayurvedic Body Systems 1** **2 credits**

This course explores the basic concepts of ayurvedic anatomy. Students also explore the basic concept of ayurvedic physiology including details regarding Dosha (energetic principles), Dhātu (tissues) and Mala (waste products). Prerequisite: enrollment in the MSAS program

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## **AY5111 Ayurvedic Body Systems 2** **2 credits**

This course presents additional concepts of ayurvedic anatomy, including a deeper understanding of Doshas within the areas of organs, systems and nadis, srotas (channels). It also explores the depth of the three attributes (Sāva, Rajas and Tamas) in addition to how each governs the mind and emotions. Also addressed are Agni (Fire) — its types, its function, its importance in health and disease — and Ojas (Natural vitality, vigor, immunity) — its function and signs of increase or decrease. Prerequisite: AY5110

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## **AY5112 Ayurvedic Pathology 1** **2 credits**

This course covers disease states and pathology in an ayurvedic context. Doshā imbalance, as well as causes of disease (such as genetic, constitutional and seasonal) and the stages of disease (such as accumulation, aggravation and augmentation), are addressed. Prerequisite: enrollment in the MSAS program

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## **AY5201 Ayurvedic Assessment (Prakṛti and Vikṛti)** **2 credits**

According to ayurveda, Prakṛti means the physical constitution of a person, and Vikṛti means the state of disease. Prakṛti is the science of nature, which determines the innate character, physical constitution or disposition of a person. It helps in deciding the ideal lifestyle and therapeutic regimen for an individual. This course focuses on ayurvedic constitutional assessment and the disease assessment of the individual. Prerequisite: enrollment in the MSAS program, or completion of AY5101, or permission of dean

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## **AY5202 Ayurvedic Examination** **2 credits**

This course builds upon the ayurvedic pulse and tongue assessment skills by delving more deeply into multifaceted examination, palpation, voice (Ashtavidhā Parikṣhā) and ayurvedic energy points (Marmas) principles. Prerequisite: enrollment in the MSAS program

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## **AY5203 Ayurvedic Assessment Lab 1** **1 credit**

This lab allows time to practice assessment skills (such as pulse and tongue diagnosis) with input from and oversight by the instructor. Prerequisite: enrollment in the MSAS program

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## **AY5301 Ayurvedic Psychology** **2 credits**

This course covers a range of observation and interviewing skills. These skills include observation of behavior, listening, objective questioning, appropriate boundary setting and motivational interviewing, presented in the context of ayurvedic psychological assessment. The course covers ayurvedic concept of structure and function of mind. Prerequisite: enrollment in the MSAS program, or concurrent enrollment in or completion of AY5101, or permission of dean

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## **AY5401 Yoga Therapy, Theory and Practice 1** **2 credits**

This class covers yoga philosophy and Patanjali's eight limbs of yoga. Through individual practice, students pursue an understanding of the effect yoga has on the Doshas Energetic principles and bodily functions. The class is focused on the ayurvedic application of yoga for health and constitutional balance and is not intended as a personal yoga routine. Prerequisite: enrollment in the MSAS program, or concurrent enrollment in or completion of AY5101, or permission of dean

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## **AY5402 Yoga Therapy, Theory and Practice 2** **2 credits**

This course is a continuation of Yoga Therapy, Theory and Practice 1. Four different types of yoga, along with some important yoga texts, are discussed. Students explore six yogic cleansing procedures. Prerequisite: enrollment in the MSAS program, or completion of AY5401, or permission of dean

**AY5405 Ayurvedic Herbology 2 credits**

This course addresses the principles, qualities, actions and therapeutic profiles of the foods, herbs and other natural therapeutic substances in ayurveda. The course covers herbal properties, preparations, ayurvedic energetics, phytochemistry and clinical indications for herbs treating the digestive, respiratory and urinary systems. Prerequisite: enrollment in the MSAS program

**AY5406 Ayurvedic Herbal Therapies (Dravyagunavijnana) Lecture/Lab 2 credits**

This course is a continuation of Ayurvedic Herbology and covers herbal properties, preparations, ayurvedic energetics, phytochemistry and clinical indications for herbs treating the cardiovascular system, nervous system, endocrine system and immune system. Prerequisite: completion of AY5405

**AY5407 Preventive Ayurveda 1 2 credits**

This course covers daily and seasonal routines (Dinacharya) for maintenance of health. Students explore ways in which to counsel clients to maintain balance of mind, body and consciousness through proper diet and lifestyle choices. Prerequisite: enrollment in the MSAS program or completion of AY5101, or permission of dean

**AY5408 Panchakarma 1 credit**

This course covers in detail five therapeutic procedures (Panchakarma), preparatory procedures and follow-up rejuvenative measures with appropriate dietary and behavioral guidelines. Prerequisite: enrollment in the MSAS program

**AY5410 Ayurvedic Diet and Lifestyle Therapies (Ahara and Vihara) 3 credits**

This course teaches the concepts of ayurvedic ahara (nutrition): food combining, eating habits and food energetics as well as vihara (lifestyle): daily and seasonal routines, relaxation, meditation, sleep, stress management, personal habits and behaviors, exercise, relationships and goals applied to different disease conditions and pathologies. Prerequisite: enrollment in the MSAS program

**AY5801 Ayurvedic Observation 1 1 credit**

Students are required to take general observation shifts or rotations, and each observation shift involves observation of care under the supervision of licensed or otherwise qualified ayurvedic faculty members. Ayurvedic medicine skills demonstrated in this setting include therapeutics utilized in the training of ayurvedic health practitioners and are performed in the context of ayurvedic medicine. Each student is evaluated on increased competence and specific skills as s/he progresses through clinical education. Prerequisite: enrollment in the MSAS program

**AY5802 Ayurvedic Observation 2 1 credit**

See above description. Prerequisite: AY5801

**AY6100 Ayurvedic Pathology 2 2 credits**

See description for AY5112. Prerequisite: AY5112

**AY6101 Ayurvedic Pathology 3 2 credits**

See description for AY5112. Prerequisite: AY6100

**AY6102 Preventive Ayurveda 2 2 credits**

See description for AY5407. Prerequisite: AY5407

**AY6105 Jurisprudence and Ethics 1 credit**

Medical ethics and legal considerations are discussed in relationship to patient care, privacy issues and scope of practice. Prerequisite: enrollment in the MSAS program

**AY6106 Business Management 2 credits**

This class focuses on the foundations for building a health care practice, including formulating and completing a business plan. Additional topics include office planning, bookkeeping, fee structures, taxes, accounting, marketing and communication skills. Additional practice building skills and requirements — including city and state licensing, marketing strategies, legal consent and privacy disclosures, practice options and referrals — are also covered. Prerequisite: enrollment in the MSAS program

**AY6201 Ayurvedic Assessment Lab 2 1 credit**

See description for AY5203. Prerequisite: AY5203

**AY6401 Ayurvedic Therapeutics Lab 1 (Bhaishajya Kalpana) 1 credit**

This is a practical course that guides the advanced ayurvedic student on how to prepare herbal medicines such as herbal oils, powders, juices, mineral therapies and more. Students are supervised in the making and application of these preparations. Prerequisite: enrollment in the MSAS program

**AY6402 Ayurvedic Therapeutics Lab 2 (Bhaishajya Kalpana) 1 credit**

See above description. Prerequisite: AY6401

**AY6403 Ayurvedic Nutrition Lab 1 credit**

This course explores the basics of ayurvedic cooking for prevention and treatment of constitutional balance and imbalances. It also addresses basic ayurvedic household preparations such as food and topical application of spices and oils. Prerequisite: enrollment in the MSAS program, or completion of AY6102, or permission of dean

**AY6405 Rejuvenative Therapies (Rasayana) 2 credits**

This course covers rejuvenation and revitalization therapies. Students explore indications, importance and different aspects of these therapies, including the role these therapies play as preventive measures. Prerequisite: enrollment in the MSAS program

**Ayurvedic Sciences Student Clinician Rotations**

Students are required to take general clinical rotations. Each rotation shift involves provision of care under the supervision of licensed or otherwise qualified faculty. Demonstrated in this setting are many skills and therapeutics utilized in the training of ayurvedic health practitioners performed in the context of ayurvedic medicine. Each student is evaluated on increased competence and specific skills as she/he progresses through clinical education.

**AY6801 Ayurvedic Clinic 1 2 credits**

See above description. Prerequisite: AY5802

**AY6802 Ayurvedic Clinic 2 2 credits**

See description preceding AY6801. Corequisite: AY6801

<b>AY6803 Ayurvedic Clinic 3</b>	<b>2 credits</b>
See description preceding AY6801. Corequisite: AY6802	
<b>AY6804 Ayurvedic Clinic 4</b>	<b>2 credits</b>
See description preceding AY6801. Prerequisite: AY6803	
<b>AY6805 Ayurvedic Clinic 5</b>	<b>2 credits</b>
See description preceding AY6801. Corequisite: AY6804	
<b>AY6806 Ayurvedic Clinic 6</b>	<b>2 credits</b>
See description preceding AY6801. Corequisite: AY6805	
<b>AY6807 Ayurvedic Clinic 7</b>	<b>2 credits</b>
See description preceding AY6801. Corequisite: AY6806	
<b>AY6808 Ayurvedic Clinic 8</b>	<b>2 credits</b>
See description preceding AY6801. Corequisite: AY6807	
<b>AY6810 India Internship</b>	<b>3 credits</b>
In this required course, students travel to India to work as interns with experienced ayurvedic clinicians in ayurvedic clinics and hospitals. Students have the opportunity to learn by observing, assisting and discussing with expert clinicians. They practice the art and science of history taking and constitution questionnaire evaluation, as well as practice the skills of physical observation and physical examination. They practice how to use the above information for effective evaluation of constitution and imbalance and put together a comprehensive individualized ayurvedic treatment plan. Every student intern is under the guidance of a clinical supervisor who supervises individual cases, monitors progress and assures completion of all required hours and reporting. Prerequisite: completion of AY6805	

## BASIC SCIENCES

Mark Martzen, PhD, Department Chair

<b>BC2115 General Chemistry Intensive 1 Lecture</b>	<b>5 credits</b>
This four-week summer quarter course is the first part of an eight-week intensive series held in two parts. The fundamental laws and basic concepts of modern chemistry as applied to the structure and behavior of matter/energy are presented. Topics include measurements and dimensional analysis; atoms, molecules and ions; mixtures; quantitative relationships; thermochemistry; the periodic table; chemical bonding; gases, liquids and solids; rates of reactions; equilibrium; acids and bases; solubility; and oxidation/reduction. Prerequisite: passing grade in college-level introduction to chemistry course	
<b>BC2116 General Chemistry 1 Intensive Lab</b>	<b>1 credit</b>
Corequisite: BC2115	
<b>BC2117 General Chemistry 2 Intensive Lecture</b>	<b>5 credits</b>
This four-week summer quarter course is the second part of an eight-week intensive series held in two parts. The fundamental laws and basic concepts of modern chemistry as applied to the structure and behavior of matter/energy are presented. Topics include measurements and dimensional analysis; atoms, molecules and ions; mixtures; quantitative relationships; thermochemistry; the periodic table; chemical bonding; gases, liquids and solids; rates of reactions; equilibrium; acids and bases; solubility and oxidation/reduction. Prerequisite: BC2115	

<b>BC2118 General Chemistry 2 Intensive Lab</b>	<b>1 credit</b>
Prerequisite: BC2116 or equivalent. Corequisite: BC2117	
<b>BC3113 Living Anatomy</b>	<b>3 credits</b>
Required for exercise science students. This course emphasizes musculoskeletal anatomy through lecture and palpation. The focus is to lay a strong foundation of the muscles, bones and joints necessary for understanding biomechanics. Weekly lecture and palpation are reinforced by a required rotation in the cadaver anatomy laboratory. This course is a prerequisite for the massage intensive course and is offered winter quarter only. Prerequisite: none	

<b>BC3115 Organic Chemistry Intensive 1 Lecture</b>	<b>4 credits</b>
This is a four-week intensive summer course. This course along with Organic Chemistry 2 is intended to satisfy the organic chemistry prerequisites for the naturopathic medicine program. This course offers a systematic study of the physical properties, electronic structures, modes of bonding and patterns of reactivity seen in alkanes, alkenes, alcohols, thiols, ketones, aldehydes, esters, ethers, phosphoesters, thioesters, amines, amides, carboxylic acids and aromatic compounds. Prerequisite: at least a C in BC2115 and BC2117 or equivalent college-level courses elsewhere	

<b>BC3116 Organic Chemistry Intensive 1 Lab</b>	<b>1 credit</b>
Prerequisite: at least a C in BC2117 and BC2118 or equivalent college-level courses elsewhere. Corequisite: BC3115	

<b>BC3123 Organic Chemistry for Life Sciences Lecture/Lab</b>	<b>6 credits</b>
Offered in the fall, this course is intended to satisfy the organic chemistry prerequisite for BC4117. This course offers a survey of the chemistry and reactivity of organic compounds with an emphasis on those molecules of biological importance. Approximately 20 percent of lectures are taught using online exercises. Prerequisite: at least a C in either BC2117 and BC2118 or an equivalent college-level chemistry course with lab	

<b>BC3125 Organic Chemistry Intensive 2 Lecture</b>	<b>4 credits</b>
This is a four-week intensive summer course. This course along with Organic Chemistry 1 is intended to satisfy the organic chemistry prerequisites for the naturopathic medicine program. Structure and function of proteins, lipids, carbohydrates and nucleic acids are also included. Prerequisite: a grade of C or better in BC3115	

<b>BC3126 Organic Chemistry Intensive 2 Lab</b>	<b>1 credit</b>
Prerequisite: A grade of C or better in BC3116. Corequisite: BC3125	

<b>Anatomy and Physiology Sequence for AOM</b>
This three (3)-course sequence for AOM students presents an integrated approach to the study of the normal human body. The anatomy, physiology of each major organ system and their interrelationships are approached in a lecture/laboratory format. Prosected cadavers are used for lab demonstrations.

**BC3134 Living Anatomy for AOM** 4 credits

Western anatomy and acupuncture energetic anatomy are bridged in this course that emphasizes musculoskeletal anatomy through lecture, palpation and the study of cadavers. Anatomical connections to acupuncture point location are reinforced in both surface anatomy and in the required weekly cadaver laboratory. Offered fall quarter. Prerequisite: admission into AOM program

**BC3135 Anatomy and Physiology 1 Lecture/Lab (AOM)** 5 credits

See general description of Anatomy and Physiology sequence preceding BC3134 above. Topics covered in this course include cellular anatomy and physiology, and the integumentary, nervous, muscular, and endocrine systems. Prerequisite: BC3134 or permission of basic sciences department

**BC3136 Anatomy and Physiology 2 Lecture/Lab (AOM)** 4 credits

See general description of Anatomy and Physiology sequence above. Topics covered in this course include blood, lymphatic, immune, cardiovascular, respiratory, digestive, urinary and reproductive systems. Prerequisite: BC3135 or permission of basic sciences department

**BC3139 Human Biology Seminar** 2 credits

This course assesses the baseline learning skills of students and then addresses areas of concern in problem solving, writing, study strategies and prerequisite knowledge. Students are introduced to the goals of the human biology program and to resources available to achieve these goals. Prerequisite: admission to the human biology program

**BC3144 Integrated Biochemistry and Cell Biology Lecture/Lab** 6 credits

This course is an introduction to the basic principles of biochemistry, cellular and molecular biology, and genetics relevant to human cells. Topics include cell chemistry, molecular genetics, energy metabolism and cell homeostasis. General themes or models are introduced as a foundation for integration of concepts. Foundational concepts continue to be integrated throughout Integrated Human Biology 1-3. The lab component introduces students to relevant techniques in biochemistry and molecular biology and emphasize scientific inquiry. Prerequisite: admission to the human biology program or students in the ND post-baccalaureate program

**BC3145 Physics 1 Lecture/Lab** 4 credits

The first in a sequence of courses designed as a survey of physics. The course focuses on classical mechanics. Specific applications to human biology are emphasized. The lab component emphasizes scientific inquiry and applications to human biology. Prerequisite: admission to the human biology program or permission of instructor

**BC3146 Physics 2 Lecture/Lab** 4 credits

The second in a sequence of courses designed as a survey of physics. The course focuses on thermal physics and electromagnetism. Specific applications to human biology are emphasized. The lab component emphasizes scientific inquiry and applications to human biology. Prerequisite: BC3145

**BC3148 Research Methods in Human Biology 1** 3 credits

This course provides an overview of the fundamentals of the scientific method and research design. Students develop the skills needed to locate, evaluate and utilize published scientific research. Students become familiar with qualitative and quantitative research methods and the principles of effective experimental design. Prerequisite: admission to the human biology program or permission of instructor

**BC3149 Research Methods in Human Biology 2** 3 credits

This course builds upon Research Methods in Human Biology 1. Students learn when to use basic quantitative biostatistical methods. The importance of statistical methods in effective experimental design is emphasized. Prerequisite: BC3148

**BC3150 Biophysics 1** 1 credit

This course provides the application of conceptual and quantitative principles of physics to biological processes that are studied in tissues, and the integumentary, endocrine and nervous systems. Students use physical principles to solve biological problems. Corequisite: BC3151 or permission of the instructor

**BC3151 Integrated Human Biology 1 Lecture/Lab** 6 credits

This course includes an introduction to basic concepts necessary to understand structure and function at the higher organizational levels. Basic principles of anatomy, physiology, biochemistry, and cell and developmental biology are integrated to provide an understanding of tissues, the integumentary system, and the basic functions of endocrine and neural control systems. General themes or models are used to facilitate integration of concepts. The lab component emphasizes scientific inquiry and examines histology, anatomy, biochemistry and physiology of the systems examined. Prerequisite: BC3144

**BC3152 Integrated Human Biology 2 Lecture/Lab** 6 credits

This course is a continuation of Integrated Human Biology 1. Basic principles of anatomy, physiology, biochemistry, and cell and developmental biology are integrated to provide an understanding of the skeletal and muscular systems, blood, and the immune and cardiovascular systems. General themes or models are used to facilitate integration of concepts. The lab component emphasizes scientific inquiry and examines histology, anatomy, physiology and biochemistry of the systems. Prosected cadavers are used for anatomical study. Prerequisite: BC3151

**Anatomy and Physiology 1-3 for Undergraduate Science Majors**

This three (3)-course sequence presents an integrated approach to the study of the normal human body. The anatomy, histology and physiology of each major organ system and their interrelationships are approached in a lecture/laboratory format. This sequence is designed for students enrolled in the nutrition, herbal sciences, exercise science, and psychology and human biology programs. Prosected cadavers are used for lab demonstrations.

**BC3161 Anatomy and Physiology 1 Lecture/Lab 3 credits**

See the sequence description above. This course covers basic cell structure and function, histology, and the anatomy and physiology of the integumentary, skeletal and nervous systems.

Prerequisites: general chemistry and general biology with labs

**BC3162 Anatomy and Physiology 2 Lecture/Lab 3 credits**

See the description of the A and P sequence preceding BC3161.

Topics covered in this course include the anatomy and physiology of the muscular, endocrine, cardiovascular and immune systems, and blood. Prerequisite: passing grade in BC3161

**BC3163 Anatomy and Physiology 3 Lecture/Lab 4 credits**

See the description of the A and P sequence preceding BC3161.

Topics covered in this course include the anatomy and physiology of the digestive, respiratory, urinary and reproductive systems. Prerequisite: passing grade in BC3162

**BC3901, BC3902, BC3903 Independent Study  
variable credit**

These courses provide an opportunity for undergraduate students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person, the student may explore a field of study that is of personal interest and value. Prerequisite: permission of department chair

**BC4100 Microbiology Lecture/Lab 4 credits**

This course explores the diversity of microorganisms, including bacteria, fungi, algae, protozoans and infectious particles. The beneficial and detrimental effects of these microorganisms are explored, including human pathogens, biotechnology, food production and bioterrorism. The lab provides exposure to the standard microbiological tools used in clinical laboratories: sterile technique, pure culture, staining, selection of selective and differential media, biochemical tests, isolation of organisms from samples, antibiotic susceptibility and identification of unknowns. Corequisite: BC3152

**BC4104 Microbiology 3 credits**

This course introduces the world of microorganisms and human health. Pathogens associated with human illness are emphasized, including bacteria, fungi, viruses, parasites and prions. Prerequisite: BC3136 or BC3162

**BC4105 Introduction to Western Pathology (AOM)  
3 credits**

This course explores the inflammatory process, cell injury and repair, basic immunopathology, cancer, and blood, hemodynamic and cardiovascular disorders. Prerequisites: BC3100 and BC3135 or BC3162

**BC4108 Biophysics 2 1 credit**

This course provides the application of conceptual and quantitative principles of physics to biological processes that are studied in the skeletal, muscular and cardiovascular systems. Students use physical principles to solve biological problems. Prerequisite: BC3150; Corequisite: BC3152 or permission of the instructor

**BC4114 Disease Processes 4 credits**

This course is designed for nutrition and herbal science students and is an introduction to pathology. The inflammatory process, basic immunopathology, diabetes, cancer, anemias and the most common and clinically relevant disease processes of the cardiovascular and gastrointestinal systems are covered. Prerequisites: BC3163, BC4140

**BC4115 Pharmacology Overview for Herbal Sciences  
3 credits**

This course teaches the basics of how the commonly used pharmaceutical drugs work. It emphasizes the mechanisms of actions, the adverse effects and the common therapeutic guidelines for drug treatment. Where appropriate, botanical mechanisms of action are discussed and possible areas of drug-herb interactions are noted. Prerequisites: BC3163, BC4140

**BC4116 Bioethics 3 credits**

This course provides an opportunity for students to think critically about difficult ethical problems that emerge from scientific research and the application of medical technology to human biology. Discussions and assignments focus on personal decision making and public policy relevant to biomedical issues. Prerequisite: admission to the human biology program or permission of the instructor

**BC4117 Biochemistry for Life Sciences 1 Lecture/Lab 5 credits**

Biochemistry of fuel metabolism, carbohydrates and lipids. This course is taught for undergraduates in herbal science, nutrition and health psychology (human biology track). This course is offered in both winter and summer. Prerequisites: a grade of at least a C- in either BC3123 or one quarter of college-level organic chemistry with laboratory; and a grade of at least a C in one quarter of college-level biology with laboratory is also required.

**BC4119 Intro to Research Proposals 2 credits**

Students work with a mentor to write a research proposal. Students who are working with human subjects also submit the proposal to the Institutional Review Board (IRB) for approval. This course is a prerequisite for BC9119 or BC9801. Prerequisites: all year-one courses in the Integrated Human Biology Program

**BC4125 Pharmacology Overview for AOM 4 credits**

Awareness of pharmaceuticals common to Western therapeutics is essential for proper patient assessment and care. In this course, students explore naming, dosing and general mechanisms for the activity and clearance of prescription and over-the-counter medications. Issues pertaining to prescribed medications and interactions with nonprescribed and/or substances of abuse are also explored. The actions, therapeutic rationale, benefits, risks and potential interactions of pharmaceuticals are emphasized. Prerequisites: BC3104 or BC4140, and BC3136 or BC3163

**BC4135 Biophysics 3****1 credit**

This course provides the application of conceptual and quantitative principles of physics to biological processes that are studied in the respiratory, renal and reproductive systems. Students will use physical principles to solve biological problems. Prerequisite: BC4108, Corequisite: BC4153 or permission of the instructor

**BC4140 Biochemistry for Life Sciences 2****4 credits**

Topics include eicosanoids, cholesterol metabolism, amino acid metabolism and nucleotide metabolism. This course is taught for undergraduates in herbal science, nutrition and health psychology (human biology track). Prerequisite: a passing grade in BC4117

**BC4153 Integrated Human Biology 3 Lecture/Lab 6 credits**

This course is a continuation of Integrated Human Biology 2. Basic principles of anatomy, physiology, biochemistry, and cell and developmental biology are integrated to provide an understanding of the renal, respiratory, digestive and reproductive systems. General themes or models are used to facilitate integration of concepts. The lab component emphasizes scientific inquiry and examines histology, anatomy, physiology and biochemistry of the systems. Prosected cadavers are used for anatomical study. Prerequisite: BC3152

**BC4161 Advanced Cell and Molecular Biology 4 credits**

This course evaluates cellular function and genetic concepts from an experimental perspective. Emphasis is placed on the functional relationships between cellular structures, molecular genetics and biosynthetic functions with application to experimental data from human cells. Prerequisite: BC3144 or permission of instructor. Corequisite: BC4153

**BC4901, BC4902, BC4903 Independent Study variable credit**

These courses provide an opportunity for undergraduate students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person, the student may explore a field of study that is of personal interest and value. Prerequisite: permission of department chair

**BC5118 Disease Processes 1****3 credits**

This course is designed for nutrition master's students and is an introduction to pathology. Included are the inflammatory process, cell repair and basic immunology. (For Disease Processes 2, see BC5132.) Prerequisite: admission to MS nutrition program

**Gross Human Anatomy Lab 1-3**

Students have the opportunity to locate anatomical structures with hands-on dissection. This allows students to visualize anatomy three-dimensionally and is invaluable when performing examinations in a clinical setting.

**BC5122L Gross Human Anatomy 1 Lab****1 credit**

Fall quarter involves students dissecting the lower and upper extremities with faculty supervision. Prerequisite: admission to naturopathic medicine program. Corequisite: BC5151

**BC5123L Gross Human Anatomy 2 Lab****1 credit**

See description preceding BC5122L. In winter quarter, students dissect regions of the neck, thoracic cavity and abdominal cavity that support the cardiovascular, respiratory and digestive systems. Regional anatomy is also covered as we dissect the anterior neck, thorax and abdominal regions of the body. Prerequisite: BC5122L. Corequisites: BC5152, BC5153, BC5154

**BC5124L Gross Human Anatomy 3 Lab****1 credit**

See description preceding BC5122L. In the first half of spring quarter, students dissect the deep back, spinal cord, skull and cranial fossae to best support the nervous system. The peripheral cranial and spinal nerves are dissected and their distribution explored and reviewed. The special senses are also covered. In the second half of the quarter, students dissect the anatomy to support the renal and reproductive system. Prerequisite: BC5123L. Corequisites: BC5155, BC5156, BC5157

**BC5132 Disease Processes 2****2 credits**

This course is designed for nutrition master's students. It is a continuation of BC5118. This course is a systematic approach to pathology in which selected organ systems are explored with an emphasis on the most common and clinically relevant disease processes. (For Disease Processes 1, see BC5118.) Prerequisite: BC5118

**BC5140 Research Methods in AOM****3 credits**

This course provides an introduction to basic concepts of scientific methods, statistics, epidemiology and research methodology. Also explored are the state of AOM research and its interface with the research world. Emphasis is placed on gaining an understanding of how to read and evaluate AOM/medical published research articles. Students also practice applied research skills and use of the library and Internet. Prerequisite: admission to MSA or MSAOM program

**BC5142 Fundamentals of Research Design 2 credits**

This course provides the student with the basic knowledge needed to evaluate the quality, internal validity and external validity of published research literature. This includes the basic types of clinical epidemiological studies, the basic principles of biostatistics, an introduction to searching medical literature databases, and retrieving and interpreting relevant research information. The course is the foundation for Critical Evaluation of the Medical Literature (NM7142) in which students learn how to evaluate medical literature to achieve an evidence-based medical practice. Prerequisite: admission to naturopathic medicine program or permission of instructor

**BC5146 Physiology 1 Lab****1.5 credits**

This module includes application of functional concepts for the cardiovascular, respiratory and digestive systems. Corequisites: BC5152, BC5153, BC5154

**BC5147 Physiology 2 Lab****1 credit**

This module includes application of functional concepts for the endocrine, renal and reproductive systems. Corequisites: BC5155, BC5156, BC5157

**BC5150 Integrated Structure and Function Lecture/Lab 8.5 credits**

This module begins by encouraging students to establish a learning community to support their success in the naturopathic medicine curriculum. Students are required to build a framework of core principles in histology, embryology and biochemistry. Students build a foundation of the structure and function of cells and tissues in order to predict the cellular response and adaptation to challenges. The module integrates concepts from cellular metabolism, molecular genetics, embryology and histology. The module also addresses the structure and function of the integumentary system. Lab addresses the histology of tissues and skin. Concepts in naturopathic philosophy are applied from the concurrent Naturopathic Theory and Practice 1 module, as appropriate. Lecture is taught in a hybrid-online format. Prerequisite: admission to the naturopathic medicine program

**BC5151 Integrated Musculoskeletal Lecture/Lab 6.5 credits**

This module requires students to apply core concepts to the basic structure and function of the nervous and endocrine system. It also includes the anatomy, biochemistry, histology, and physiology of the muscular and skeletal systems. Students integrate structure-function relationships of the musculoskeletal system in order to predict responses and adaptations to challenges. This module includes detailed anatomy of the limbs. Lab includes application of functional concepts. Scientific concepts for the musculoskeletal system are applied to the development of clinical skills in the Clinical Skills 1 module that is offered concurrently. Lecture is taught in a hybrid-online format. Prerequisite: admission to the naturopathic medicine program

**BC5152 Integrated Cardiovascular and Immune Systems 5.5 credits**

This module includes the anatomy, embryology, biochemistry, histology and physiology of the cardiovascular system and blood. Students integrate the structure-function relationships of the cardiovascular system and blood in order to predict responses and adaptations to challenges. The module also includes an overview of the lymphatic system and immunity. Scientific concepts for the cardiovascular system are applied in the Clinical Skills 2 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisite: BC5150 or permission of basic sciences chair

**BC5153 Integrated Respiratory System 4.5 credits**

This module includes the anatomy, embryology, biochemistry, histology and physiology of the respiratory system. Students integrate the structure-function relationships of the respiratory system in order to predict responses and adaptations to challenges. Scientific concepts for the respiratory system are applied in the Clinical Skills 2 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisite: BC5150 or permission of basic sciences chair

**BC5154 Integrated Digestive System 4.5 credits**

This module includes the anatomy, embryology, biochemistry, histology and physiology of the digestive system. Students integrate the structure-function relationships of the digestive system in order to predict responses and adaptations to challenges. Scientific concepts for the digestive system are applied in the Clinical Skills 2 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisite: BC5150 or permission of basic sciences chair

**BC5155 Integrated Endocrine System and Metabolism 4.5 credits**

This module includes the anatomy, embryology, biochemistry, histology and physiology of the endocrine system with an emphasis on metabolic control. Students apply concepts of endocrine control to make predictions regarding changes in growth metabolism that influence the function of all organ systems. Scientific concepts for the endocrine system and metabolism are applied in the Clinical Skills 3 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisite: BC5150 or permission of basic sciences chair

**BC5156 Integrated Renal and Reproductive System 4 credits**

This module includes the anatomy, embryology, biochemistry, histology and physiology of the renal and reproductive systems. Students integrate the structure-function relationships of these systems in order to predict responses and adaptations to challenges. Scientific concepts for the renal and reproductive systems are applied in the Clinical Skills 3 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisite: BC5150 or permission of basic sciences chair

**BC5157 Integrated Nervous System Lecture/Lab 7 credits**

This module includes the detailed anatomy, embryology and physiology of the brain, spinal cord and spinal nerves. Students integrate structure-function relationships for both the somatic motor and autonomic divisions of the peripheral nervous system. Students also address the integrative functions of the cerebral cortex and sensory and motor pathways required to predict sensory and motor deficits that occur with specific lesions. Lab includes work with sectioned brains and applications of functional concepts. Scientific concepts for the nervous system are applied to the development of clinical skills, including testing of somatic reflexes in the Clinical Skills 3 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisite: BC5150 or permission of basic sciences chair

**BC5901, BC5902, BC5903 Independent Study variable credit**

These courses provide an opportunity for graduate students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person, the student may explore a field of study that is of personal interest and value. Prerequisite: permission of department chair

**BC6100 Pharmacology of CHM and Drug Interactions 2 credits**

This course provides an overview of the active constituents found in commonly used Chinese herbs and their potential interactions with pharmaceuticals. It also details the *in vitro*, *in vivo* and clinical trial evidence for efficacy. Prerequisites: BC3104, BC4125

**BC6101 Integrated Immunology, Pathology and Infectious Diseases 1 5.5 credits**

This module includes the histology, physiology and pathology of the immune system, an introduction to infectious diseases and core principles of pathology. Principles of pathology and immunology are applied in the context of cancer. Scientific concepts are applied to the development of diagnostic skills in the Naturopathic Clinical Diagnosis 1 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisites: completion of all first year integrated systems modules. Corequisite: NM6310

**BC6102 Integrated Immunology, Pathology and Infectious Diseases 2 2.5 credits**

This module includes the pathology and infectious diseases and applications of immunology to blood, skin and the musculoskeletal system. Scientific concepts are applied to the development of diagnostic skills in the Naturopathic Clinical Diagnosis 1 module that is taken concurrently. Lecture is taught in a hybrid-online format. Corequisites: BC6101, NM6310

**BC6103 Integrated Immunology, Pathology and Infectious Diseases 3 3 credits**

This module includes the pathology, infectious diseases and applications of immunology to the cardiovascular system. Scientific concepts are applied to the development of diagnostic skills in the Naturopathic Clinical Diagnosis 2 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisites: BC6101, BC6102. Corequisite: NM6311

**BC6104 Integrated Immunology, Pathology and Infectious Diseases 4 4 credits**

This module includes the pathology, infectious diseases and applications of immunology to the respiratory and digestive systems. Scientific concepts are applied to the development of diagnostic skills in the Naturopathic Clinical Diagnosis 2 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisite: BC6101. Corequisite: NM6311

**BC6105 Integrated Immunology, Pathology and Infectious Diseases 5 4 credits**

This module includes the pathology, infectious diseases and applications of immunology to the renal and reproductive systems. Scientific concepts are applied to the development of diagnostic skills in the Naturopathic Clinical Diagnosis 3 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisite: BC6101. Corequisite: NM6312

**BC6106 Integrated Immunology, Pathology and Infectious Diseases 6 2 credits**

This module includes the pathology, infectious diseases and applications of immunology to the endocrine and nervous systems. Scientific concepts are applied to the development of diagnostic skills in the Naturopathic Clinical Diagnosis 3 module that is taken concurrently. Lecture is taught in a hybrid-online format. Prerequisites: BC5157, BC6101. Corequisite: NM6312

**BC9103 Neurological Diseases 2 credits**

This seminar course explores the known environmental and genetic factors that are associated with Parkinson's disease and Alzheimer's disease, and examines how genes and environment interact in determining disease predisposition. Dietary factors are also discussed for their protective or predisposing roles in the development of neurological diseases. Students review papers that provide epidemiological or experimental evidence for the predisposing and protective agents of neurological diseases. Students have an opportunity to present an article and lead a class discussion. Prerequisites: BC3149, BC5142 or TR5104 or permission of instructor

**BC9104 Immunology 4 credits**

This course explores the normal mechanisms by which the immune system protects against disease-causing agents. The focus is on the basic concepts of human immunity, including nonspecific and specific host defenses. Prerequisite: BC3152 or permission of instructor

**BC9105 Laboratory Research 2 credits**

This laboratory course is designed to enable students to learn basic experimental techniques used in preclinical biomedical research studies. Prerequisites: one year of biology or equivalent (to be assessed and approved by instructor) and one year of chemistry or equivalent. Students must take the bloodborne pathogen safety training prior to start of class. Contact the safety coordinator for upcoming dates.

**BC9106 Human Biology and Toxicology 3 credits**

This course introduces the biochemical, cellular and physiologic responses of human tissues to toxic doses of chemicals and radiation. Prerequisite: BC3152 or permission of instructor

**BC9107 Virology 3 credits**

This course introduces the molecular biology of animal viruses and examines virus-host relationships, including viral pathogenesis. Unusual infectious agents including viroids and prions are also studied. Prerequisite: BC4100 or BC4104 or permission of instructor

**BC9108 Pathophysiology 3 credits**

This course assesses the biological basis for disease. The course focuses on the mechanisms by which disruption of normal homeostatic mechanisms result in the development of many common disease states. Prerequisite: BC4153

**BC9109 Advanced Musculoskeletal Anatomy with Palpation** 4 credits

This course builds on the foundational musculoskeletal anatomy in Integrated Human Biology 2 and includes more detailed anatomy of bones, muscles and joints. The course allows students to learn palpation skills, build a foundation for biomechanics, and gain additional experience in the cadaver lab. The course is required for Integrated Human Biology students who want to enroll in the summer massage intensive. Prerequisite: BC3152

**BC9112 Advanced Topics in Human Biology** 1 credit

This is a seminar course with a focus on current topics related to human biology. Students read and discuss current research papers. Prerequisite: BC4153 or permission of the instructor

**BC9114 Natural Products** 2 credits

This course covers the mechanism of action, constituent compositions, classification and the biosynthetic pathways of relevant constituents in natural products (secondary metabolites of plants, fungi or marine organisms). Methods of standardization and quantification as well as the chemical ecology of natural products are discussed. Prerequisite: BC3123 or equivalent

**BC9117 Advanced Lab Research Methods** 2 credits

This two-credit laboratory course is for individuals who have completed the basic Laboratory Research course. In this course, with appropriate guidance from the instructor, the goal is for the student to design and carry a small research project to completion. Prerequisite: BC9105 or permission of instructor. Students must take the bloodborne pathogen safety training prior to start of class. Contact the safety coordinator for upcoming dates.

**BC9119 Directed Study Research** 0-5 credits

Students complete an original research project under the supervision of a previously approved faculty mentor or external advisor. The research proposal for the project is completed in the Introduction to Research Proposals course. Students are required to present the results of the study to the Bastyr community. May be repeated with permission of departmental committee. Prerequisite: approval of a departmental committee

**BC9130 Special Topics in Human Biology** variable credit

These courses are offered as required and address specialized areas and new developments in human biology. Courses are not necessarily offered each year. Prerequisites: BC3151 or permission of the instructor

**BC9801 Internship** 0-5 credits

Students complete a supervised work experience with a previously approved business firm, clinic or governmental agency. Students are required to present a summary of the internship experience to the Bastyr community. May be repeated with permission of departmental committee. Prerequisite: approval of a departmental committee

**BOTANICAL MEDICINE**

Sheila Kingsbury, ND, RH (AHG), Department Chair

**BO2101 Introduction to Botany Lecture/Lab** 3 credits

In introducing students to plant science, this course encompasses the study of plants from the molecular to the ecosystem level. Topics include cellular biology, morphology, physiology, classification and evolutionary relationships, life cycles, and introductory ecology. The course emphasizes the importance of plants and their products in the life of the planet and the interdependence of all living things. Prerequisite: college-level biology

**BO3103 Botany 1 Lecture/Lab** 3 credits

This course expands upon basic concepts of botany as they relate to the herbal sciences. It explores plants as a kingdom with unparalleled importance for the rest of planetary life and presents important concepts from botanical disciplines, including plant identification, plant physiology, economic botany, ethnobotany, ecology and plant genetics. Prerequisite: BO2101

**BO3104 Organic Gardening** 2 credits

The goal of this class is to give students the knowledge and skills necessary to design and implement a perennial or annual organic garden. Topics explored include soil fertility, garden cultivation, transplanting and direct seeding, irrigation principles, composting, pest and weed management, soil testing, and social and environmental issues in agriculture. Prerequisite: none; however, students in the CHLD program cannot use this course toward their elective requirement

**BO3105 Plant Identification Lecture/Lab** 3 credits

This course develops plant taxonomy and morphology skills. Students learn distinguishing plant family characteristics and the use of a dichotomous key for identification. Basic life cycles of major plant groups are studied in relation to habitat, seasonal changes and climate impact. Outdoor field work, live plant laboratory study and herbarium samples are utilized to aid in developing identification skills. Prerequisites: BO3103, BO3108

**BO3106 Herbal Medicine Making for All (lab)** 1 credit

This course is an introduction to herbal medicine making and applications. The class is designed for interested students and staff, especially for those students whose programs do not offer classes in herbal medicine and for those who want to have hands-on experience in the lab learning about herbs and herbal preparation. The class introduces home remedies in the form of tinctures, teas, infused oils, salves, creams, poultices, hydrosols, steams and bath salts. Prerequisite: none; however, students in the Herbal Sciences or ND program cannot use this course toward their elective requirement.

**BO3108 Introduction to Herbal Sciences Lecture/Lab** 3 credits

As the beginning of the Herbal Sciences foundational coursework, Introduction to Herbal Sciences introduces students to diverse aspects of herbalism, including current sociopolitical and legal trends, ethics, sustainable plant conservation, herbal terminology and preparations, manufacturing and retail site visits, and forest, field and garden herb walks. Prerequisite: admission into herbal sciences program or permission from the department chair

**BO3114 Herbal Preparations** 3 credits

This course presents the pharmacy of herbal medicine where the focus is on preparations from plants to products. This is a medicine-making lab. Students participate hands-on in the making of preparations for internal and topical use, including infusions and decoctions, tinctures, and other extracts, creams and ointments, compresses, poultices, suppositories and more. Local plant identification and harvesting techniques and practices are incorporated. Prerequisite: BO3108

**BO3115 Herbal Medicine History and Traditions** 2 credits

World herbalism is the focus of this course, introducing students to diverse cultures of herbal practices. Systems to be studied include Native American, ayurvedic, TCM, Thompsonian, physiomedical and eclectic. The energetic aspects of herbs and plant spirit medicine are explored. Prerequisite: BO3114 or permission from the department

**BO4100 Herbs and Food** 3 credits

This course surveys diverse topics regarding herbs and food, with attention to the cultural and dietary evolution of herbal usage, herbal sources of primary nutrients, and the role of digestion, emphasizing herbal influences. Students gain an understanding of how to grow, harvest and utilize herbs to best obtain and maintain the highest nutrient availability. Prerequisites: BC3123, BC3163, BC4140, BO3114 or BO6305 or BO9100

**BO4102 Research Methods for Herbal Sciences** 2 credits

This course is an introduction to research methods. Included are the basic concepts of scientific methods, epidemiology and research methodology. Students practice applied research skills such as use of the library and Internet and evaluation of research literature. Prerequisites: BC3161, BO3103, BO3108

**BO4103 Botany 2 Lecture/Lab** 3 credits

This course deepens the botanical knowledge of students by presenting selected topics in advanced botany. It presents plant development and classic and modern methods of plant propagation. Students explore plant constituents in depth, including the classes of plant hormones and plant toxins and their roles in plants and humans, as well as the various groups of secondary plant substances that generate unique plant colors, spices, fragrances and medicine. Prerequisites: BO3103, BO3105, BO3114

**BO4107 Materia Medica 1 for Herbal Sciences** 5 credits

This course is the introduction to the materia medica series, taught with a foundation in plant taxonomy and pharmacognosy. The plant family structure acts as a mapping for learning nomenclature, energetics, folklore, chemical constituents, medicinal applications, pharmacy, toxicology and safety factors of chosen botanicals. Key actions of the herbs are explored based on several world herbal models, and the science and art of formulating are developed. Prerequisites: BC3163, BC4140, BO3105, BO3114

**BO4108 Materia Medica 2 for Herbal Sciences** 5 credits

Materia Medica 2 is a continuation of the study of materia medica with an emphasis on a different set of botanical families through lecture, lab and experimentation. See description of BO4107. Prerequisite: BO4107

**BO4109 Materia Medica 3 for Herbal Sciences** 5 credits

Materia Medica 3 is a continuation of the study of materia medica with an emphasis on a different set of botanical families through lecture, lab and experimentation. See description of BO4107. Prerequisite: BO4108

**BO4111 First Aid for Herbalists** 2 credits

This class covers a wide range of first aid situations, including safety protocols and scope of care for herbalists, acute-care scenarios, pain remedies, materia medica, infections, allergies, preparing a first aid kit, commonly found first aid plants, injuries and wounds, burns, food and water sickness, animal bites and stings, and other first aid circumstances. Prerequisite: BO3114 or permission from department

**BO4112 Northwest Herbs** 1 credit

This is a field and lab course focusing on the plants of the Pacific Northwest. This class focuses on plant recognition and identification, botany, ethnobotany and medicinal application of the plants found in the outdoor classroom of the Bastyr University campus. The class is primarily an outdoor field class, exploring all the new growth of the spring season, with some lab sessions to work with preparations of the plants being studied. Prerequisite: BO4129 or permission from instructor

**BO4119 Pharmacognosy for Herbal Sciences** 2 credits

This course looks at the chemistry of secondary metabolites in medicinal plants, algae and fungi. This chemical knowledge is then used to construct an understanding of real-world applicability in areas such as extraction techniques, medicinal activities and nutritional aspects in an active-learning environment. Prerequisites: BC4140, BO3108

**BO4122 Test Methods for Botanical Authentication****Lab** **2 credits**

This course develops the ability of the student to identify and evaluate the authenticity and quality of raw herbal material. Organoleptic skills, involving the senses of sight, touch, smell and taste, are explored along with microscopic identification and interpretation of assay and spec sheets. Chromatographic analysis is introduced. Prerequisites: BC4140, BO3105

**BO4123 Soil Ecology** **1 credit**

This course focuses on the interaction of the soil-food-web, the diversity of soil organisms (bacteria protozoa, fungi, animals, plants) in natural and managed ecosystems; roles in primary metabolism; nutrient cycling; decomposition and reclamation; and responses to environmental change. Explore soil testing methods and soil building techniques, including cover crops, mulching, composting, vermiculture and use of compost teas. Prerequisite: none

**BO4124 Introduction to Biodynamic Agriculture** **2 credits**

This course explores the comprehensive and cosmological methods behind the biodynamic farming movement inspired by Rudolf Steiner. A lab component includes the preparation and use of various biodynamic foliar sprays, compost preparations, and associated practices that contribute to soil health and stimulate plant vitality while enhancing the overall nutritional quality of food crops. An overview of requirements for biodynamic certification and ongoing research demonstrating the ecological benefits of biodynamic agriculture are provided. Prerequisite: none

**BO4125 Introduction to Herb/Drug Interaction****2 credits**

This course takes the pharmacokinetics and pharmacology of the herbs and drugs and reviews potential interactions and the postulated mechanisms. Students review the literature of documented herb/drug interactions and critically analyze these reports. Prerequisites: BC3163, BC4115, BC4140, BO4102, BO4108, BO4119

**BO4127 Mycology** **1 credit**

This course focuses on the ecological role of mushrooms in building and maintaining an edible landscape. An overview of mushroom cultivation techniques is provided. Learn about mycoremediation and mycofiltration and how mushrooms can be used to transform toxic wastes into less harmful substances, partially mitigating environmental degradation. Prerequisite: none

**BO4128 QAQC - Quality Assurance/Quality Control****Lecture/Lab** **2 credits**

This course combines analytical rigor of quality control with the whole-system aspects of quality assurance in an industry context. Students experience quality assurance practice in a problem-based format relating to the herbal industry. They explore QA as an attitude and a way of working, which not only improves businesses, but the way people work and live. The lab emphasizes the practice of QC procedures and protocols through a comparison of herbal products using analytical equipment and methodology, including GC, HPLC and spectrophotometry. Prerequisites: BC4104, BO4107, BO4122

**BO4129 Ethnobotany** **2 credits**

This course is designed to introduce the basis of ethnographic methodology. It explores the world and different cultures, people's past and present use of plants, food, medicine, shelter, clothing, etc. Various regions are discussed and contrasted from anthropological and historic perspectives. Indigenous guests are invited to represent their ways of life. Prerequisite: none

**BO4131 Permaculture 1 Lecture/Lab** **3 credits**

This course introduces the concept of permaculture design and its role in integrating sustainable, regenerative systems into any landscape. Students learn how the core set of permaculture design principles and ethics guides every step of the design process — bringing in natural patterns, utilizing ecological principles, connecting design elements with function and utilizing natural energy sources. A lab explores pattern recognition, reading the landscape, flow diagrams, zone and sector analysis, data collecting, basic drafting skills, mapping and design exercises. Prerequisite: admission into the holistic landscape design certificate program or permission of the program chair

**BO4132 Permaculture 2 Lecture/Lab** **3 credits**

This course focuses on how energy flows through natural systems, creating biogeographical climate types and global weather patterns. Students learn about analogue climates, renewable energy systems, appropriate technology and permaculture design strategies specific to various climate types. Emphasis is on permaculture strategies for water management in rural or urban systems. A lab introduces keyline systems and earthworks, practical ways of assessing slope and techniques for trapping and storing energy. Winter tree pruning and grafting techniques are also introduced. Prerequisite: BO4131

**BO4133 Permaculture 3 Lecture/Lab** **3 credits**

This course focuses on land use systems for achieving self-reliance by integrating cultivated ecosystems, permaculture design techniques and agroforestry practices. Topics include establishing and maintaining medicinal and edible food forests; animals and insects in permaculture systems; wildlife management and agroforestry practices including windbreaks, hedgerows and alley cropping, silvopasture, riparian buffers and forest farming. A lab explores practical elements of plant guild assembly, orchard design, forest management, animal husbandry and beekeeping. Prerequisite: BO4132

**BO4134 Organic Seed Production 1 credit**

Collecting seed from superior plant stock has been practiced for thousands of years, resulting in higher yields and bioregionally adapted plants. This course provides an overview of seed physiology and explores the importance of seed banks, as well as participatory plant-breeding projects. Students learn the processes of preserving valuable genetic material — seed harvesting, seed cleaning/extraction, storage, viability and record keeping. Seed types, isolation distances and practical breeding techniques are discussed. Prerequisite: none

**BO4135 Organic Greenhouse and Nursery Management 1 credit**

This course provides an overview of important techniques to insure plant health from seed to market. Through hands-on experience, students learn about plant propagation techniques, plant selection, potting media for various plant types and ways to balance the elements of soil, air, light, moisture and heat in the greenhouse. Ideas for establishing and maintaining a small-scale landscape or market nursery are explored through site visits and guest instructors. Prerequisite: none

**BO4137 Horticultural Research and Grant Writing 1 credit**

This course reviews how to pursue and participate in horticultural research and how techniques learned throughout this program can be applied in research studies. Grant writing basics are also taught with a focus on how to apply for grant funding for horticultural research or permaculture projects. Prerequisite: none

**BO4138 Biointensive IPM and Plant Health 2 credits**

Explore the principles and applications of biointensive integrated pest management (IPM), which integrates ecological and economic factors into agricultural system design and management. The primary goal of biointensive IPM is to provide guidelines and options for effectively managing pests and beneficial organisms in an ecological context and address public concerns about environmental quality and food safety. Signs and symptoms of plant deficiencies and diseases are examined and treated with appropriate organic inputs in order to restore balance to the soil, shifting the disease state. Prerequisite: none

**BO4139 Permaculture in a Global Context 1 credit**

This course explores social permaculture and the invisible structures that either support or degrade human settlements. Students learn ways in which permaculture principles and ethics can be utilized to cultivate sustainable communities and cooperative economies. Topics include design models and strategies for developing broad-scale urban and village systems, ways to retrofit existing urban environments, strategies for circumventing natural disasters and the dynamics of cultivating community — consensus building, community wellness, food security, grafting community knowledge and resources, community-scale industry, cooperative legal systems, land access strategies, land restoration, and earthworks. Prerequisite: BO4133

**BO4141 Medicinal and Edible Plants in the Landscape 1 credit**

This course explores the many attributes of a wide variety of medicinal and edible plants that add beauty and utility in cultivated landscapes. Propagation, cultivation and environmental tolerances are discussed, with an additional emphasis on the therapeutic properties of the plants. The course also covers basic harvesting and medicine-making techniques, with hands-on experience in the campus gardens and herb lab. Prerequisite: admission into the holistic landscape design certificate program or permission of the program chair

**BO4142 Medicinal and Edible Plants in the Landscape 2 1 credit**

This course is a continuation of the study of medicinal and edible plants in the landscape, with an emphasis on a different set of botanical families and plants in season. See description of BO4141. Prerequisite: BO4141

**BO4143 Medicinal and Edible Plants in the Landscape 3 1 credit**

This course is a continuation of the study of medicinal and edible plants in the landscape, with an emphasis on a different set of botanical families and plants in season. See description of BO4141. Prerequisite: BO4142

**BO4144 Horticultural Business Practices 1 credit**

This course explores the niches available for permaculture landscape designers with a medicinal and edible plant focus. Local horticultural business owners (herbalists, permaculturists and horticulturists) share their experiences and expertise through panels, site visits and presentations. Business models for growing and harvesting medicinal plants, establishing a medicinal plant nursery or creating value-added products are explored, plus an introduction to practices essential for operating and managing a successful horticultural business. Prerequisite: none

**BO4150 Research Applications 1 credit**

This is the final course in a series of research and analytical testing methods courses designed for the herbal sciences program. This course allows the application of the knowledge previously gained by giving students the chance to propose a QAQC testing project and to complete it and present the results to their peers. Prerequisite: BO4128

**BO4801 Herbal Sciences Practicum 1 credit**

This course introduces students to the practical application of herbal knowledge. Possible practicum sites include herbal product manufacturers, growers and wildcrafters, herbal researchers, practitioners, and educators. Evaluation based on successful completion of hours, self-evaluation, site evaluation of student and a brief presentation to cohort. Prerequisite: completion of the first quarter and concurrent enrollment in the second quarter of the herbal sciences curriculum

**BO4810 Holistic Landscape Design Practicum 1 credit**

This capstone course provides students with the opportunity to design and implement a final project that demonstrates and integrates elements of permaculture design with other tools and concepts gained from the CHLD curriculum. Students work in teams to develop a practical, sustainable and bountiful permaculture landscape design that reflects an understanding of the site and the needs of the client. In addition to site assessment and the establishment of goals and timelines, teams are expected to create base maps and overlays as well as estimate budgets and expenses. Prerequisite: BO4132

**BO6305 Botanical Medicine Lab 1 credit**

This course teaches students botanical terminology and the basics of pharmacognosy. Students are trained in organoleptic and other assessment tools pertaining to quality of plants and plant products. Students are taken from fresh plant harvest to production and storage of herbal products and learn the variety of medicine-making techniques used in industry as well as in smaller clinic settings. Prerequisite: admission to the naturopathic medicine program. Corequisite: SN6300

**BO6901, BO6902, BO6903 Independent Study variable credit**

A student may contract with a botanical medicine faculty member or approved faculty or professional to do an in-depth study in an area not covered in the botanical medicine curriculum. The independent study may include pre-approved botanical medicine research projects or studies in traditional herbal medicine. Prerequisites: BO6305 and permission of department chair

**BO7305 Botanical Medicine Formulation Lab 1 credit**

This lab course follows the initial Integrative Therapeutics series. Students, having been introduced to the majority of the Western herbal medicines, now learn how to formulate and create those medicines for cases structured to match the year-three modules. This course teaches formulation skills and case-based medicine making for musculoskeletal conditions. Corequisite: NM7310 or permission of the dean or chair of program

**BO7306 Botanical Medicine Formulation Lab 2 1 credit**

This course is a continuation in the series of advanced botanical medicine formulation and case-based medicine making. This course focuses on the nervous and endocrine system, and mental health conditions. Corequisites: NM7321, NM7319, NM7318 or permission of the dean or chair of program

**BO7307 Botanical Medicine Formulation Lab 3 1 credit**

This course is a continuation in the series of advanced botanical medicine formulation and case-based medicine making. This course focuses on gastrointestinal, cardiac, hematological and respiratory conditions. Corequisites: NM7322, NM7323, NM7324 or permission of the dean or chair of program

**BO7308 Botanical Medicine Formulation Lab 4 1 credit**

This course is a continuation in the series of advanced botanical medicine formulation and case-based medicine making. This course focuses on EENT, female and male reproductive and urological conditions. Corequisites: NM7328, NM7329, NM7331, NM7336 or permission of dean or chair of program

**BO7901, BO7902, BO7903 Independent Study variable credit**

A student may contract with a botanical medicine faculty member or approved faculty or professional to do an in-depth study in an area not covered in the Bastyr curriculum. The independent study may include pre-approved botanical medicine research projects or studies in traditional herbal medicine. Prerequisites: BO7305 and permission of department chair

**BO8301 Botanical Medicine Formulation Lab 5 1 credit**

This course is a continuation in the series of advanced botanical medicine formulation and case-based medicine making. This course focuses on advance case topics. Corequisite: NM8305 or permission of the dean or chair of program

**BO8901, BO8902, BO8903 Independent Study variable credit**

A student may contract with a botanical medicine faculty member or approved faculty or professional to do an in-depth study in an area not covered in the Bastyr curriculum, or to participate in a botanical medicine research project. The independent study may include pre-approved botanical medicine research projects or studies in traditional herbal medicine. Prerequisites: BO7305 and permission of department chair

**BO9112 Plants in Ceremony: An Exploration of Yourself 2 credits**

This course is a three-day exploration of the state of spirit and soul through the use of plants in ceremony. It includes both individual and group evaluation of who you are, where you come from, what you have and want to experience. The class takes each individual and the group into sacred space to access and facilitate an experience of deep healing. Plant spirits, masks, drumming, toning, chanting and the use of herbs both internally and externally are the tools for growth and change. Prerequisite: none

**BO9115 Herbs and Ayurvedic Medicine 2 credits**

This course engages the student in a "process-centered" approach to ayurvedic botanical medicine, focusing on therapeutic objectives and herbal actions. The class discusses case strategy and the role of individual ayurvedic herbs, ayurvedic polyherb formulas and herb actions from the ayurvedic perspective. Each section of materia medica includes an ayurvedic overview of the system/function, ayurvedic energetics, A and P review, ayurvedic pathology and herbal properties used in treatment of that system. Prerequisite: none

**BO9116 Cascade Herb Experience 2 credits**

This three-day herbal medicine field course is designed to introduce students to recognizing and wildcrafting native plant species in the North Cascades. The weekend includes ethical wildcrafting, as well as identifying plants, medicine making and harvesting from cultivated gardens. This camping experience includes a medicine-making workshop, group meals and several field sojourns to explore various habitats and ecosystems. Prerequisites: BO3114, BO6305 or BO3106

**BO9118 Herbal Medicine in Italy** 3 credits

This course is an on-site study abroad in various regions of Italy. While immersed in Italian culture, many facets of herbal medicine are explored, including plant identification through field excursions, herbal preparations and medicinal applications. Throughout the two weeks in Italy, students integrate herbal medicine in a way that facilitates a lifelong love of learning and living with plants and their healing powers. Yoga and meditation are woven throughout the course, infused with the spiritual energetics of plants, allowing each participant a deeper understanding of her/himself as healer. Prerequisite: a passionate interest in herbs and herbal medicine and a curiosity about the history and culture of Italy.

**BO9119 Clinical Pharmacognosy** 2 credits

This course reviews the secondary metabolites in plants, algae and fungi that are fundamental to their medicinal activities. This information is presented in a clinically relevant manner, as opposed to focusing solely on the chemistry of the compounds. Major classes of constituents including terpenoids, phenylpropanoids, resins, glycosides, alkaloids and saponins are discussed. Prerequisite: BO4107 or SN6301

**BO9121 Botanical Studies in Costa Rica** 3 credits

This botanical field course combines herbal medicine, Latin American culture and holistic land stewardship. Over 10 days, students explore botanical medicine in the jungle canopy, rivers, mountains and ocean beaches. The class visits herbal farms, preservation gardens, jungle wilderness and sustainable communities, and interacts with folk herbalists from the abuelo's generation, as well as world-renowned, modern permaculturists. Prerequisite: none

**BO9127 Herbal Medicine Throughout Oregon** 3 credits

This is an eight-day field course, touring the variety of herbal growing and manufacturing facilities throughout western Oregon. Students explore the production of herbal medicines from seed to final products, including plant identification, cultivation, manufacturing processes and clinical applications of medicinal plants. A nonrefundable deposit is required upon registration. Prerequisite: none

**BO9128 Plant Identification and Medicinal Field Botany** 3 credits

This elective class combines morning classroom study and afternoon field trips to introduce plant taxonomy and morphology. Key characteristics distinguishing native plant families, the use of a dichotomous key to identify NW plants, and life cycles of each major plant group are taught. Afternoon field trips to mountains, forests and parks emphasize plant identification topics as well as medicinal aspects of plants. Field trips include four hours on site plus one-two hours travel time before and after class. Prerequisite: College Biology

**BO9129 Island Herb Experience** 2 credits

This three-day course focuses on medicinal plants and sea plants in their natural habitat, studying plant identification, botany, properties, ecology, harvesting and lore. Students have the opportunity to gather wild herbs and sea plants and prepare tinctures and other medicines. Prerequisite: none

**BO9302 Flower Essences** 2 credits

"Disease will never be cured or eradicated by present materialist methods, for the simple reason that disease in its origin is not material." (Dr. Edward Bach, 1931). Flower essences — subtle extracts still made from many of the original plants found in the region of Dr. Bach's home in England — are used to address issues of emotional well-being, soul development and mind/body health. This elective is an introductory course in the origins, nature and therapeutic use of the Bach Flower Remedies. Prerequisite: none

**BO9306 Clinical Formulations and Applications of Botanical Medicine** 1 credit

In this course students learn how to use botanical formulations for specific common clinical conditions. Botanicals are grouped by condition and offer specific formulas and applications that are most effective for specific ailments. Students learn how to mix essential oils and other liquid extracts, which liquid extracts are incompatible, how to use toxic herbs as low-dose formula activators and how to make formulas taste good. Prerequisites: BO4107 or SN6300 and BO6305

**BO9401 Foundations of Aromatic Medicine** 1 credit

This class creates a dynamic that clearly integrates the uses of essential oils within traditional herbal medicine. In this two-day intensive, the student is guided to understand and utilize the world of aromatic medicine. An understanding of major functional chemistry groups, aldehydes, esters, ketones, monoterpenes alcohols, phenols, etc., and clinical application is included. Materia medica of 11 primary essential oils is studied. Prerequisite: none

**BO9405 Introduction to Gemmotherapy** 2 credits

This course unfolds the principles of gemmotherapy as a phytotherapeutic method of drainage. Included are the preparation, posology and safety issues when using these plant stem cell therapies, as well as the phytochemical analysis of the gemmos. An overview of the 50 primary remedies gives details about each remedy through organ system affinity. Clinical applications are included each week through case-study analysis. Prerequisite: none. Open to all students interested in the study of gemmotherapy, but class is taught at a clinical level.

**BO9528 Appalachia Field Course 2 credits**

This course combines herbal medicine and Appalachian culture. It is a 10-day course that explores the traditional early American use of native East Coast plants and experiences the music, scenery and life in the Appalachian hills throughout the mid- to southeast coast region of the U.S.. We visit historical sites, homes of families that have been Appalachian herbal wildcrafters going back to the 1700s, see the Great Smoky Mountains, the Land of the Waterfalls and more. Students learn plant identification, harvesting and traditional medicine making as well as history and culture of the regions we visit.. Prerequisite: none

**BO9533 Southwest Herb Experience 2 credits**

Students travel across the Sonoran desert in southern Arizona and California, learning plant identification and medicinal uses of the plants encountered. Some of the most important and powerful herbal medicines of North America come from this region. The ecology of the desert and what makes the Sonoran special are discussed. Practical medicine making, safe and sustainable harvesting, first aid and non-medicinal uses are also reviewed. Prerequisite: completion of BO3108 or SN6300 or equivalent

**BO9543 Asian Medicinal Plant Horticulture 1 credit**

The wide variety of plants used in traditional East Asian medicine makes them a rich source of biodiversity for the landscape. Domestic cultivation of these species may have long-term income potential for growers and landowners. In this course, students examine groups of Asian species in terms of their family relationships, including native North American species, as well as their ecology and function in the landscape. Basic principles of horticulture, including propagation, planting and harvesting are taught using specific examples from each group of plants. Related issues, including conservation and marketing are addressed. Prerequisite: none

## CHINESE HERBAL MEDICINE CERTIFICATE

For acupuncture and Oriental medicine courses, see alphabetical listings beginning with OM. A grade of C or higher is required to pass all AOM/CCHM courses.

**CH5901, CH5902, CH5903 Independent Study variable credit**

These courses provide an opportunity for students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person/sponsor, the student may explore a field of study in Chinese herbal medicine of personal interest and value. Prerequisite: permission of dean

**CH6105 Chinese Herb Preparations 1 credit**

This course provides students with hands-on experience in cooking and preparing Chinese herbal preparations. The course covers various ways to prepare decoctions; preparation of pills, powders and granules; topical applications and further refinement of moxa-based products. Prerequisite: CH6423

**CH6408 Chinese Herbal Therapeutics 1 4 credits**

This course is part of a four-quarter series covering the therapeutic clinical applications of Chinese herbal medicine. This first course covers a variety of common internal medicine conditions, including respiratory, cardiovascular, gastrointestinal, genitourinary and endocrine conditions. Prerequisites: CH6431, CH6432

**CH6409 Chinese Herbal Therapeutics 2 4 credits**

This course is part of a four-quarter series covering the therapeutic clinical application of Chinese herbal medicine. This second course focuses on gynecology, obstetrics and pediatric diseases. Prerequisites: CH6431, CH6432

**CH6410 Chinese Herbal Therapeutics 3 4 credits**

This course is part of a four-quarter series covering the therapeutic clinical applications of Chinese herbal medicine. This third course focuses on eye/ear, nose, throat and dermatology, as well as an overview of sexually transmissible diseases. Prerequisites: CH6431, CH6432

**CH6411 Chinese Herbal Therapeutics 4 4 credits**

This course is part of a four-quarter series covering the therapeutic clinical applications of Chinese herbal medicine. This fourth and final course covers musculoskeletal and connective tissue conditions, including acute sports injury, with focus on internal and external applications for pain, burns and trauma. Prerequisites: CH6431, CH6432

**CH6421 Chinese Materia Medica 1 4 credits**

This course is part of a three-quarter series covering the Chinese materia medica. This first quarter focuses on herbs that release the exterior, quell fire, cool blood, drain dampness, drain downwards, dispel wind dampness and release food stagnation. Prerequisite: completion of first-year curriculum

**CH6422 Chinese Materia Medica 2 4 credits**

This course is part of a three-quarter series covering the Chinese materia medica. This second quarter focuses on herbs that clear heat and relieve toxicity, clear deficient heat, clear summer heat, transform phlegm, relieve coughing and wheezing, regulate qi, promote the movement of qi, invigorate blood, transform congealed blood, stop bleeding and warm the interior/expel cold. Prerequisites: admission into MSAOM or CCHM program, CH6421 or permission of instructor

**CH6423 Chinese Materia Medica 3 4 credits**

This course is part of a three-quarter series covering the Chinese materia medica. This third quarter focuses on herbs that tonify qi, tonify the blood, nourish the yin, tonify the yang, calm the spirit, expel wind, stabilize and bind, open the orifices, and expel parasites, and on other substances for external application. Prerequisites: admission into MSAOM or CCHM program, CH6422 or permission of instructor

**CH6431 Chinese Herbal Medicine Formulations 1****4 credits**

This course is part of a two-quarter series covering the foundation formulas in Chinese herbal medicine. This first class focuses on formulas that release the exterior, quell fire, cool blood, drain downward, drain dampness, dispel wind damp, release food stagnation, clear heat and relieve toxicity, clear summer heat, transform phlegm, relieve cough/wheeze and regulate qi. Prerequisites: CH6421, CH6422 and CH6423

**CH6432 Chinese Herbal Medicine Formulations 2****4 credits**

This course is part of a two-quarter series covering the foundation formulas in Chinese herbal medicine. This second class focuses on formulas that promote the movement of qi, invigorate the blood, congeal blood and stop bleeding, warm the interior/expel cold, tonify the qi, tonify the blood, nourish yin, tonify yang, calm the spirit, expel wind, stabilize and bind, open orifices, expel parasites, and on other formulas for external applications. Prerequisite: CH6431

**Chinese Herbal Medicine Clinic 1-8**

Students enrolled in the MSAOM or CCHM programs are eligible to take clinic shifts in Chinese herbal medicine, under the supervision of licensed acupuncturists. Students may take the CH6831 and CH6832 CHM Dispensary shifts at any time in the MSAOM or CCHM program. At a minimum, students must be enrolled in the Chinese Herbal Therapeutics course series in order to be eligible for CHM clinic intern status.

**CH6803 CHM Clinic 1****2 credits**

See description above. Prerequisites: CH6408 (may be concurrent) and admission into MSAOM or CCHM program

**CH6804 CHM Clinic 2****2 credits**

See description preceding CH6803. Prerequisite: CH6803

**CH6805 CHM Clinic 3****2 credits**

See description preceding CH6803. Prerequisite: CH6804

**CH6806 CHM Clinic 4****2 credits**

See description preceding CH6803. Prerequisite: CH6805

**CH6807 CHM Clinic 5****2 credits**

See description preceding CH6803. Prerequisite: CH6806

**CH6808 CHM Clinic 6****2 credits**

See description preceding CH6803. Prerequisite: CH6807

**CH6809 CHM Clinic 7****2 credits**

See description preceding CH6803. Prerequisite: CH6808

**CH6810 CHM Clinic 8****2 credits**

See description preceding CH6803. Prerequisite: CH6809

**Herbal Medicine Clinic in China 1-4**

Students in good academic standing are encouraged to apply for advanced studies in China. Currently, Shanghai University of TCM and Sichuan Integrated Hospital of Eastern and Western Medicine are the main sites for Bastyr herbal clinical experiences. For more information and an application, see the AEAM China Studies link on MyBU. The clinic in China is an eight (8) credit experience to be applied toward MSAOM or CCHM clinic requirements and/or elective credit. These credits may not be audited.

**CH6821 Clinic in China 1****2 credits**

See description above. Prerequisite: permission of dean

**CH6822 Clinic in China 2****2 credits**

See description preceding OM6821. Prerequisite: permission of dean

**CH6823 Clinic in China 3****2 credits**

See description preceding OM6821. Prerequisite: permission of dean

**CH6824 Clinic in China 4****2 credits**

See description preceding OM6821. Prerequisite: permission of dean

**CHM Dispensary**

Students are required to do two (2) CHM dispensary shifts in the clinic. The shifts can be taken at any time once a student has begun the herbal curriculum. It is recommended that students complete at least one dispensary shift prior to starting as a student herbal clinician.

**CH6831 CHM Dispensary 1****2 credits**

See description above. Prerequisite: admission into MSAOM or CCHM program

**CH6832 CHM Dispensary 2****2 credits**

See description preceding CH6831. Prerequisite: admission into MSAOM or CCHM program

**CH6901, CH6902, CH6903 Independent Study****variable credit**

These courses provide an opportunity for students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person/sponsor, the student may explore a field of study in Chinese herbal medicine of personal interest and value. Prerequisite: permission of dean

**Chinese Herbal Medicine Clinic 1-4 Elective**

Students have the opportunity to take elective shifts in Chinese herbal medicine with approval of the dean.

**CH9801 CHM Dispensary Elective****2 credits**

See description above. Prerequisite: permission of dean

**CH9802 CHM Elective Shift****2 credits**

See description preceding CH9801. Prerequisite: permission of dean

## DIETETIC INTERNSHIP

Debra Boutin, MS, RD, Internship Director

**D15100 Introduction to the Practice of Dietetics****1 credit**

This course serves as the program orientation and includes a discussion of professional ethics and standards of practice. Prerequisite: admission into internship program

**D15101 Community Nutrition****1 credit**

This course includes a review of services provided by community and public health dietitians. Lectures and discussions focus on the unique concerns of community and public health nutrition. Evaluation is based on written assignments, participation in seminar discussion, final exam and activities. Prerequisite: admission into internship program

**DI5103 Food Service Administration 1 credit**

This course is a review of food service management through lectures and discussions of administrative problem-solving techniques and methods of management, cost control and quality assurance. Evaluation is based on participation in seminar discussion, activities and final exam. Prerequisite: admission into internship program

**DI5104 Medical Nutrition Therapy 1 credit**

This course prepares interns for their clinical/hospital-based rotation, emphasizing medical nutrition therapy, including enteral and parenteral therapy. Information is presented through lectures, demonstrations, discussion and case studies. Evaluation is based on written assignments, clinical cases and final exam. Prerequisite: admission into internship program

**DI5801 Community Practicum 2 credits**

This course is the application of DI5101 through the execution of selected community nutrition planned experiences. Evaluation is based on successful completion of all learning activities. Prerequisite: admission into internship program

**DI5814 Food Service Practicum 4 credits**

This course is the application of DI5103 through food service planned experiences. Evaluation is based on successful completion of all learning activities. Prerequisite: admission into the internship program

**DI5820 Medical Nutrition Therapy Practicum 5 credits**

This course is the application of DI5104 through clinical planned experiences. Evaluation is based on successful completion of all learning activities. Prerequisite: admission into internship program

## EXERCISE SCIENCE AND WELLNESS

**EX3101 Biomechanics 1 2 credits**

This course is an introduction to the fundamental principles of human movement, focusing on the study and elementary analysis of human motion based on anatomical and mechanical principles. Prerequisites: BC3161, BC3162. Corequisite: BC3163.

**EX3105 Physical Activity and Wellness 2 credits**

This course covers the general principles behind physical activity and how it relates to overall health and wellness. The course provides students with an introduction to the basic fundamentals of exercise and their application in leading a healthier and more physically active lifestyle through the entire lifespan. Prerequisite: none

**EX4100 Physiology of Exercise 5 credits**

This course explores concepts in the physiology of exercise, including fuel substrate utilization, metabolism, adaptations and responses to different exercise modalities. The class examines: (1) physiology of exercise, (2) physiology of health and fitness, and (3) physiology of performance. This course is designed to complement the Exercise Physiology Lab, which emphasizes:

(1) the factors that limit health and fitness, (2) work tests used to evaluate cardiorespiratory fitness, (3) training methods for fitness, (4) body composition measures and (5) field and laboratory aerobic and anaerobic fitness tests. Prerequisites: BC3163, BC4140 (or equivalent), CPR and first aid certification

**EX4102 Biomechanics 2 3 credits**

This course examines the anatomical and mechanical concepts required for critical assessment, description and qualitative analysis of human movement in a clinical context. Prerequisites: BC3113, EX3101

**EX4105 Business Principles in Health Promotion 2 credits**

This course is designed to introduce nutrition and exercise science students to business principles within the health professions. The course facilitates a better understanding of the necessary market research involved in the process of developing health related strategic and business plans. Prerequisite: admission into BSN or BSX program

**EX4107 Sports Nutrition 5 credits**

This course examines the interaction between nutrition, physical activity and athletic performance. Topics focus on the efficacy of ingesting various macronutrients and bioactive compounds found in foods for enhancing certain types of athletic performance. Nutritional biochemistry of macronutrients and micronutrients, including digestion, biological requirements, absorption and metabolism are emphasized. Prerequisite: BC4140 or permission of instructor. Students who take this course as a requirement may not gain elective credits by taking TR9109, as the content of these two courses is similar.

**EX4112 Seminar in Ergogenic Aids 1 credit**

This course is designed to allow students exposure to the various ergogenic aids currently on the market. This course requires students to research and present material on the advertised benefits of specific ergogenic aids, literature on the product and critical thinking around metabolic pathways of ingredients found within the products. Prerequisite: EX4107

**EX4115 Motor Learning and Development 3 credits**

This course investigates principles of human movement and the acquisition of motor skills, as well as motor and perceptual development throughout the lifespan. Upon successful completion of the course, students are able to trace the path of human perceptual-motor development and to discuss the implications of general principles of motor development for the movement and sport specialist. Attention is given to learning theories, reinforcement, transfer, massed and distributed practice schedules, closed and open skills, motivation, feedback, arousal, motor control systems, and retention of motor skills. Prerequisite: none

**EX4119 Principles of Resistance Training 3 credits**

This course includes an introduction to principles and fundamentals of resistance training, including both a theoretical and practical, hands-on component. Students are expected to participate in the resistance training core activity while also covering the basics of muscle physiology, bioenergetics, biomechanics, training principles (modes and methods), training theory and practical considerations as they pertain to resistance training. Prerequisites: BC3113, BC3163, EX4115

**EX4123 Exercise Prescription and Testing 5 credits**

This course explores the role of exercise in the assessment of functional capacity and in the diagnosis of coronary heart disease. Techniques of exercise stress testing are studied and practiced along with basic electrocardiography. Methods of quantifying energy cost of exercise and the development of exercise prescriptions are emphasized. This course contains a lab component for practical application of these concepts and development of these skills. Prerequisite: EX4100

**EX4124 Exercise Science Laboratory Techniques****2 credits**

This course offers students exposure to, and practical hands-on experience with, laboratory techniques commonly used in exercise physiology labs and health and fitness settings. Prerequisite: EX4100

**EX4133 Exercise Prescription for Special Populations****2 credits**

This course is designed to expose students to various special populations, pathophysiology and the American College of Sports Medicine exercise recommendations for varying diseases states. Corequisite: EX4123

**EX4140 Community Health Promotion 2 credits**

This course is designed to allow students to explore the theories and concepts of health behavior change and the principles of public health, and to provide students with a platform to create programs and practice disseminating health and wellness information to adults in community settings. Prerequisite: none

**EX4800 Exercise and Nutrition Practicum 2 credits**

This course provides the opportunity for students to develop practical experience in nutrition and exercise education through presentations and preceptorships. All practicum sites must be approved by instructor and practicum preceptor by March 15. This course may be taken in any quarter, except summer, during year two if student is in good academic standing. Prerequisite: none

**EX4810 Internship for Exercise Science and Wellness 12 credits**

This course provides students with practical knowledge in different areas of exercise science and wellness, including (1) physical therapy/sports medicine clinics, (2) hospital cardiac/pulmonary rehabilitation, (3) health and fitness facilities, (4) spa/retreat/wellness centers or (5) athletic training facilities. Students assume a leadership role and perform administrative tasks under an experienced agency supervisor and faculty sponsor. All internship sites must be approved by instructor and internship preceptor by March 15. Internship hours can begin in any quarter following junior year with approval of instructor, but may only be registered for during spring quarter of the senior year. See instructor for official policy guidelines. Prerequisite: a 2.0 or better in all designated courses or approval of exercise science program director. Student must be in good academic standing to pursue internship.

## HOMEOPATHIC MEDICINE

**Homeopathy 1-5**

Homeopathy 1-5, the homeopathic course sequence in natural therapeutics, is required for all students in the naturopathic medicine program. Student clinicians may register for the Homeopathy Specialty Clinic at the time of their entry into the Bastyr Clinic if they have successfully completed Naturopathic Therapeutics-Homeopathy 3 or obtain the permission of the department chair. The courses beyond Homeopathy 5 are elective courses offered to naturopathic medical students interested in the further study of homeopathy and are nonsequential.

**HO6305 Homeopathy 1****1.5 credits**

This course is an introduction to the classical theory and practice of homeopathy. The principles, history and method of practice are explored, including the concept of the vital force, use of the repertory, study of homeopathic philosophy (including the concept of miasms), the difference between acute and chronic prescribing, homeopathic pharmacy and an introduction to homeopathic materia medica. The meaning of and dangers of suppression in medicine are discussed. When possible, cases are used to elucidate concepts. Emphasis is placed on the integral relationship of homeopathy to naturopathic practice. Students learn the classic materia medica of at least 19 homeopathic remedies. Prerequisite: admission into naturopathic medicine program or permission of dean or chair of program

**HO6306 Homeopathy 2** **2 credits**

This course further elucidates homeopathic philosophy, including the application of the vital force to homeopathic prescribing. Homeopathic materia medica, case taking, case analysis and repertization, and posology are emphasized. Students learn the difference between an acute and a chronic homeopathic case and when and what to treat. Each week students in their assigned groups receive cases to analyze based on concepts and material medica discussed. Students further develop their classical in-depth knowledge of homeopathic polycrest remedies and their important acute and constitutional applications. Students acquire the basic skills of homeopathic case taking and case analysis. Prerequisite: HO6305 or permission of the dean or chair of program

**HO6307 Homeopathy 3** **2 credits**

This course is the third in the homeopathy required series. Students continue to refine skills in materia medica through individual and group-based learning, case discussion and case analysis. Case taking and case analysis are further discussed, and the concepts of potency and prescribing from the perspective of first and return office calls are all introduced. Students demonstrate integration of knowledge through taking one case outside of class to chart and analyze. Prerequisite: HO6306 or permission of the dean or chair of program

**HO7300 Homeopathy 4** **1.5 credits**

This course emphasizes homeopathic materia medica as well as homeopathic case taking and case analysis. The first return office call is discussed in depth, including an analysis of the results of the first prescription. The importance of the vital force, Hering's Law and the application of homeopathic principles in taking, analyzing and following a homeopathic case are emphasized. Each week students prepare cases for class discussion. Students take one homeopathic case outside of class. Materia medica is discussed as it pertains to the systems modules as it is applicable. Prerequisite: HO6307 or permission of dean or chair of program

**HO7301 Homeopathy 5** **1 credit**

This class is the completion of the beginning-level skills needed to further the development of homeopathic practice. Homeopathic materia medica are expanded, and the concept of miasmatic prescribing is introduced. The student's case taking, case analysis and repertory skills are expanded. The return office call is emphasized. The importance of following the case, the timing of the homeopathic prescription and repetition of the homeopathic remedy are discussed. Each week students prepare cases for class discussion. Students take one homeopathic case outside of class. Homeopathy is discussed within the systems modules as applicable. Prerequisite: HO7300 or permission of dean or chair of program

**Homeopathy 6-8**

These three elective courses are offered to naturopathic medicine students interested in the further study of homeopathy after successfully completing Homeopathy 3 (HO6307).

**HO9310 Homeopathy 6** **3 credits**

This course continues the study of homeopathic materia medica. Cured cases are studied to illustrate points of case analysis; materia medica and the homeopathic theory of miasms are explored more deeply. Prerequisite: HO6307 or permission of department chair

**HO9311 Homeopathy 7** **3 credits**

This course is a continuation in the advanced study of materia medica, case analysis and case management. Prerequisite: HO6307 or permission of department chair

**HO9312 Homeopathy 8** **3 credits**

This course is a continuation of the advanced study of homeopathy. Homeopathic medicines are reviewed and analyzed via case study. Cases are presented by practicing homeopaths. Prerequisite: HO6307 or permission of department chair

**Homeopathy Grand Rounds**

Each student registered in the Homeopathy Specialty Clinic must also enroll in Homeopathy Grand Rounds. Cases seen in the Homeopathy Specialty Clinic are discussed in depth with respect to case analysis, comparative materia medica and case management. Students who have completed HO6307 and want further knowledge of homeopathy but are not enrolled in the Homeopathy Specialty Clinic may enroll in Homeopathy Grand Rounds with permission from the department chair. If a student is registered for a Homeopathy shift, Homeopathy Grand Rounds cannot be audited.

**HO9800 Homeopathy Grand Rounds 1** **1 credit**  
See description above. Prerequisite: none

**HO9801 Homeopathy Grand Rounds 2** **1 credit**  
See description preceding HO9800. Prerequisite: none

**HO9802 Homeopathy Grand Rounds 3** **1 credit**  
See description preceding HO9800. Prerequisite: none

**HO9803 Homeopathy Grand Rounds 4** **1 credit**  
See description preceding HO9800. Prerequisite: none

**HO9804 Homeopathy Grand Rounds 5** **1 credit**  
See description preceding HO9800. Prerequisite: none

**Homeopathy Specialty Clinic**

The Homeopathic Specialty shift allows students to apply classical homeopathic principles to patient care in a supervised clinical setting, including case taking, case analysis, prescribing and case management. Students may take up to four homeopathy clinical shifts if space is available. Prerequisite: none

**Homeopathy Specialty Clinic 1-4 Elective**

Students particularly interested in homeopathy may take additional elective clinic shifts in the Homeopathy Specialty Clinic, with permission of the department chair, on a space-available basis.

**HO9821 Patient Care 1 - Elective (Fall)** **2 credits**  
See description above. Prerequisite: permission of department chair

**HO9822 Patient Care 2 - Elective (Winter)** **2 credits**  
See description preceding HO9821. Prerequisite: permission of department chair

**HO9823 Patient Care 3 - Elective (Spring)** **2 credits**  
See description preceding HO9821. Prerequisite: permission of department chair

**H09824 Patient Care 4 - Elective (Summer) 2 credits**

See description preceding H09821. Prerequisite: permission of department chair

**INTERDISCIPLINARY STUDIES**

Timothy C. Callahan, PhD, Senior Vice President and Provost

**IS3111 Interdisciplinary Experiences in Natural Health Arts and Sciences 1 1 credit**

This course provides undergraduates with an opportunity to participate in workshops, seminars and other activities related to health. Students work collaboratively across disciplines to build an integrated model of health. Communication and critical thinking skills are emphasized. Offered fall quarter. Prerequisite: admission into an undergraduate program at Bastyr University. This course is required for all undergraduate students.

**IS9120 Introduction to Backpacking and Plant Identification 2 credits**

This class meets over two weekends. The first weekend meets in class. The second weekend is an overnight backpacking trip. Basic backpacking skills, including trip planning, gear selection, route finding/navigation, and backcountry rules and regulations are introduced. Basic plant identification skills, and how to safely collect and use a limited number of medicinal plants in the backcountry, are also covered. Prerequisite: none. This class is best suited to those with little or no backpacking experience/plant identification training. If you have physical limitations that would prevent completion of an 8-12 mile backpacking trip, please contact the instructor directly. This class is offered every other year during the summer.

**IS9115 Intestinal Microbiota 3 credits**

This course provides an overview of the contribution of intestinal microbiota to human health. The composition of the gut microbiome, initiation and support of the gut normal flora, interactions with the host and other microbes, microbiota association with health and disease states, and approaches to manipulating the gut ecosystem are explored.

**Integrative Consultation and Practice 1-2**

These elective courses provide opportunities to engage in meaningful professional conversations across multiple disciplines (e.g., naturopathic medicine, acupuncture, counseling, nutrition, midwifery and ayurvedic sciences). Students refine abilities to engage in case conceptualization and treatment planning from a collaborative and integrative perspective for use in their future professional practices. Courses may be taken out of sequence since each section utilizes different case studies, and students taking a second section will complete more complicated assignments. Prerequisite: Admission to a graduate-level clinical program

**IS9526 Integrative Consultation and Practice 1 1 credit**

See description above. Prerequisite: Admission to a clinical program.

**IS9527 Integrative Consultation and Practice 2 1 credit**

See description preceding IS9526. Prerequisite: Admission to a clinical program.

**MIDWIFERY**

Suzy Myers, LM, CPM, MPH, Department Chair

Please note: All but a select few of the midwifery courses are offered in a hybrid (online/onsite) format only.

**MW3101 Midwifery Care 1: Introduction to the Midwives Model of Care 3 credits**

This course includes an introduction to the guiding principles, philosophy and values of the Midwives Model of Care, an introduction to cultural competency, and an overview of the midwife's role throughout the childbearing year. Basic principles of client education and health literacy are covered. The course also includes an introduction to the professional roles, responsibilities, and legal issues of midwifery, as well as national and local midwifery organizations. Prerequisite: none

**MW3104 Introduction to Epidemiology for Midwives: Fundamentals of Evidence-Based Practice 3 credits**

This course focuses on developing the skills needed to critically evaluate research relevant to midwifery care. Epidemiology for Midwives also introduces research methodologies and biostatistics and enables students to apply these concepts to evaluation of the efficacy and safety of midwifery and homebirth, the cost effectiveness of midwifery care, and the value of midwifery research. Additionally students begin the process of identifying their master's project. Prerequisite: none

**MW3301 Well Woman Health Assessment 4 credits**

This course includes onsite presentations, discussions and skills practice, with the objective of developing the skills for taking a thorough client medical and social history and performing and charting a complete physical exam, including breast and pelvic exams. Prerequisite: enrollment in midwifery program

**MW3311 Perinatal Nutrition 1: Pre-conception and Prenatal 2 credits**

This course addresses nutritional needs during pregnancy, emphasizing how nutrition can assist in the management of common pregnancy-related issues, as well as building maternal and fetal nutrient stores. Students learn assessment, counseling and nutrition-related problem solving for the pregnant woman and her family. Prerequisite: enrollment in midwifery program

**MW4100 Genetics and Embryology 2 credits**

This course provides an introduction to human genetics, genetic disorders, and embryological and fetal development, both normal and abnormal, with an emphasis on teaching and supporting clients. Prerequisite: none

**MW4102 Professional Issues Seminar: Midwifery History, Politics and Activism 2 credits**

An overview of the history of childbirth, medicine and midwifery beginning with the indigenous peoples and colonialists in North America, through the 19th and 20th centuries; then focusing on the social movements of the 1960s and 70s that re-awakened the midwifery profession in North America; to the present political climate in which direct-entry midwifery is practiced in the U.S. and Canada. Prerequisite: none

**MW4105 Professional Issues Seminar: Midwifery****Legal, Ethical and Professional Frameworks 2 credits**

This course covers state and provincial midwifery laws, processes for legislative change, quality assurance, professional liability and ethics. The midwife's role and responsibilities regarding current state, provincial, national and international midwifery are also addressed. Particular emphasis is placed on developing the knowledge and skills necessary to make difficult decisions in today's complex professional and legal environment. Prerequisite: none

**MW4106 Professional Issues Seminar: Power****and Privilege in the Midwifery Profession 1 credit**

This course provides a foundation for students to understand racism, the way in which it adversely impacts individuals and society, and its specific effects on health and health care. Areas of exploration include power, privilege, social identity and prejudice, as well as structural theories of racism. Using a variety of resources and activities, class members reflect on their own biases and experiences; recognize and begin undoing internalized racial oppression; and gain tools to begin undoing institutional racism, thus becoming more effective health care providers. Prerequisite: none

**MW4107 Professional Issues Seminar: Social Difference and Implications in Midwifery Practice 2 credits**

This course helps guide the student through raising awareness of one's own conscious and unconscious beliefs and biases regarding those who are different from oneself, and gain an understanding of how these beliefs and biases may impact how we see, interact with and provide competent care for a variety of minority groups in the U.S. and Canada. Students explore some of the societal challenges faced by women of various cultural groups as they embark on pregnancy, birth, motherhood and care of their newborns. Prerequisite: MW4106

**MW4302 Midwifery Care 2: Pregnancy and Prenatal Care 4 credits**

Midwifery Care 2 includes the anatomy and physiology of normal pregnancy and an in-depth study of routine prenatal care procedures. It also includes assessment of each woman's individual needs and treatments for common discomforts and problems in pregnancy. Throughout Midwifery Care courses 2-7, students use case management exercises to practice critical thinking and risk assessment skills; apply precepts of evidence-based practice; and work toward acquiring skills as culturally competent providers and understanding the midwife as a community health worker. Corequisites: MW4320, MW4313 Prerequisite: MW3101

**MW4303 Midwifery Care 3: Advanced Pregnancy and Prenatal Care 4 credits**

This course includes information relevant to more complicated aspects of prenatal care: early pregnancy bleeding, management of the Rh-negative mother, anemia, infections, trauma, miscarriage, post-date pregnancy, gestational diabetes and hypertensive disorders. Corequisites: MW4322, MW4314 Prerequisite: MW4302

**MW4305 Gynecology****3.5 credits**

This course covers female reproductive anatomy and physiology from menarche through menopause and provides an introduction to women's health concerns, including sexuality, fertility, infertility, contraception, unwanted pregnancy, and the diagnosis and treatment of common gynecologic problems and reproductive tract infections. Prerequisite: none

**MW4307 Breastfeeding and Lactation Education****2 credits**

This course is designed to give student midwives the ability to educate women about the benefits of breastfeeding, to prepare clients to breastfeed, to understand the anatomy and physiology involved in breastfeeding, to assist clients with early breastfeeding, to help with common problems and to make appropriate referrals to other care providers for breastfeeding concerns beyond their expertise or scope of practice. Prerequisite: none

**MW4310 Pharmacology and Treatments 1 1.5 credits**

This course includes foundational information about allopathic medications and immunizations relevant to midwifery practice and the midwife's professional and legal responsibilities around using medications. Prerequisite: none

**MW4311 Pharmacology and Treatments 2 1.5 credits**

This course continues with an overview of certain complementary medicines, such as homeopathy, Western herbs and traditional Chinese medicine, and their use and application in midwifery practice. Prerequisite: MW4310

**MW4313 Counseling for the Childbearing Year 1****1 credit**

This introductory course consists of information, role-playing and student presentations designed to develop basic skills needed for client counseling. Prerequisite: MW3301. Corequisites: MW4302, MW4322

**MW4314 Counseling for the Childbearing Year 2****1 credit**

This course is a continuation of Counseling for the Childbearing Year 1, with discussion and skill building related to domestic violence, as well as resources and skills for counseling pregnant women dealing with substance abuse issues. Prerequisite: MW4313. Corequisites: MW4303, MW4323

**MW4320 Clinical Skills 1****1.5 credits**

The Clinical Skills course is presented as a series of on-site skills labs and workshops, coordinated with Midwifery Care and Clinical Seminar course content. The objective of this course is to develop many of the skills, both hands-on and teaching, necessary to practice midwifery. Clinical Skills 1 builds on and amplifies some of the key skills first introduced in Well Woman Health and Assessment and covers aseptic technique, medication administration, pregnant abdominal exam, venipuncture, urinalysis and further practice in vital signs. Students are introduced to the fundamentals of being a birth assistant in addition to completing a full-day neonatal resuscitation program (NRP) certification as well. Prerequisite: MW3301. Corequisites: MW4302, MW4313

**MW4322 Clinical Skills 2** **1 credit**

Continuation of the Clinical Skills series. Students practice client-informed choice skills related to perinatal care, as well as learn principles and skills related to intravenous therapy during intrapartum care, and review and practice injections and venipuncture. Prerequisite: MW4320. Corequisites: MW4303, MW4314

**MW4323 Clinical Skills 3** **.5 credits**

Continuation of the Clinical Skills series. Students learn skills needed for intrapartum care: perineal suturing, simulation of cervical exam, rupture of membranes, hand maneuvers for receiving the baby, estimating blood loss and treating postpartum hemorrhage. Prerequisite: MW4322. Corequisites: MW5304, MW5315

**MW4331 Clinical Seminar 1** **1 credit**

Clinical Seminar is a seven-quarter series concurrent with practicum, focusing on the integration of theory and practice. As the course progresses quarter by quarter, both student expectations and complexity of case management skills increase. Clinical Seminar 1 learning activities focus on building basic skills in charting, phone triage, data collection, continuing education, basic management decisions, risk assessment and physician consultation and referral. Prerequisite: MW4302

**MW4332 Clinical Seminar 2** **1 credit**

Continuation of Clinical Seminar series. This quarter further refines students' skills in charting, phone triage and risk assessment with emphasis on appropriate guidelines. Case questions and management problems increase in complexity to mirror student's clinical experience in practicum, continuation of case presentations and use of "virtual client" with phone triage exercises. Prerequisite: MW4331

**MW4333 Clinical Seminar 3** **1 credit**

Continuation of Clinical Seminar series. In this course students are expected to have refined skills in charting, phone triage and communication with other medical professionals, developing understanding of and skill with more complex management decisions. Case questions and "virtual client" exercises require the student to demonstrate higher level problem-solving and critical thinking skills. Prerequisite: MW4332

**MW4810 Midwifery Practicum**

**variable to maximum of 8.5 credits**

Credits vary by quarter for a total of 8.5. Theoretical coursework is complemented by clinical rotations with practitioners providing midwifery and related women's health care. Must be coenrolled in the Clinical Seminar series while in practicum except during the summer quarters. Prerequisite: eligibility for practicum as outlined in the Practicum Handbook

**MW5100 Research Methods for Midwifery** **3 credits**

This course builds on the foundation and skills of Introduction to Epidemiology for Midwives and facilitates skills needed for the Master's Project series. Students gain understanding in, and apply appropriate research methods to, their question of interest, including skills in grant writing, institutional review board (IRB) application and presentation of work. Prerequisite: MW3104

**MW5101 Master's Project 1** **.5 credits**

This course is part of a series designed to build on the foundations of Introduction to Epidemiology for Midwives and to further develop the student's Master's Project. Topics may include refining the research hypothesis, data collection plan and application for human subjects review. Prerequisite: MW3104

**MW5110 Master's Project 2** **1.5 credits**

Continuation of Master's Project series. Students will initiate work on project proposal under the guidance of Committee Chair. Prerequisite: MW5101

**MW5111 Master's Project 3** **2 credits**

Continuation of Master's Project series. Students will continue work on project proposal, form a committee and submit proposal draft(s) to chair and committee for feedback.

Prerequisite: MW5110

**MW5112 Master's Project 4** **2 credits**

Continuation of Master's Project series. Students will complete final proposal and pursue IRB approval if needed. Prerequisite: MW5111

**MW5114 Professional Issues Seminar: Health Care Systems and Health Policy** **2 credits**

This course addresses issues in health care organization and financing. Students learn about formal health care systems in the U.S. and Canada as they relate to midwifery practice. In addition, health care policy and health care reforms are explored with an emphasis on how midwives can function as effective advocates for improved maternity care policy. Prerequisite: none

**MW5304 Midwifery Care 4: Labor and Birth** **6 credits**

A continuation of the Midwifery Care courses, this course includes an in-depth study of midwifery management of the normal processes of all stages of labor, birth and care of the mother and neonate in the immediate postpartum period, with an emphasis on preparing students for out-of-hospital birth practice. Prerequisites: MW4303, MW5315, MW4323

**MW5308 Midwifery Care 5: Postpartum and Newborn Care** **5 credits**

This course addresses the roles and responsibilities of the midwife during the postpartum period. It includes a review of breastfeeding, maternal physiological changes and psychosocial adjustments, common newborn procedures and select newborn problems. Prerequisite: MW5304. Corequisites: MW5316, MW5324

**MW5309 Midwifery Care 6: Challenges in Practice** **5 credits**

This course covers a variety of complications the midwife may encounter in clinical practice. Emphasis is on recognition and current thinking about prevention/treatment modalities, including medical as well as complementary and nutritional therapies. In addition to the role of physician consultation and referral, this course addresses controversies within the midwifery community regarding where and how these clinical challenges should be handled. Prerequisite: MW5308

**MW5315 Counseling for the Childbearing Year 3****1.5 credits**

A continuation of the counseling courses, this course complements Midwifery Care 4 and includes information and skills for counseling, supporting and effectively empowering women through labor who have a history of reproductive loss and/or disappointment during pregnancy or birth. Prerequisite: MW4314. Corequisites: MW4323, MW5304

**MW5316 Counseling for the Childbearing Year 4:****Postpartum****1.5 credits**

This section of the Counseling curriculum complements Midwifery Care 5 and includes information and skills needed to assess postpartum emotional adjustments and attachment difficulties and to provide early parenting support and intervention. Prerequisite: MW5315. Corequisites: MW5308, MW5324

**MW5324 Clinical Skills 4:****.5 credits**

Continuation of the Clinical Skills series. Students learn newborn exam techniques, newborn screening techniques, assessing and aiding with breastfeeding challenges, and informed choice and teaching appropriate to postpartum care. Prerequisite: MW4323. Corequisites: MW5308, MW5316

**MW5326 Clinical Skills 5****1 credit**

Continuation of the Clinical Skills series. Using simulation models, students learn and practice emergency delivery skills, including breech delivery, shoulder dystocia, cord prolapse and unexpected twin delivery. Prerequisite: MW5324. Corequisite: MW5309

**MW5334 Clinical Seminar 4****1 credit**

Continuation of Clinical Seminar series. Students participate in a variety of clinical practice skills including a data collection project; "virtual client" exercises that continue to challenge students in making complex clinical management decisions; ongoing practice in charting and phone triage with emphasis on valid management decisions consistent with safe practice and midwifery standard of care; and case presentations and complex case questions. Prerequisite: MW4333

**MW5810 Midwifery Practicum****variable to maximum of 7.5 credits**

Credits vary by quarter for a total of 7.5. Theoretical coursework is complemented by clinical rotations with practitioners providing midwifery and related women's health care. Must be coenrolled in the Clinical Seminar series while in practicum, except during the summer quarters. Prerequisite: MW4810

**MW6110 Master's Project 5****2 credits**

Continuation of Master's Project series. Students will initiate work on final project in consultation with committee. Prerequisite: MW5112

**MW6111 Master's Project 6****2 credits**

Master's Project series. Students will continue work on final project, submitting at least one draft to committee. Prerequisite: MW6110

**MW6112 Master's Project 7****1 credit**

Final in Master's Project series. Students will submit final project to committee for approval and prepare presentation to Bastyr community. Prerequisite: MW6111

**MW6115 Professional Issues Seminar: The Business of Midwifery****2.5 credits**

This course includes topics related to establishing a private midwifery practice, including a business plan and budget, and seeking employment opportunities in midwifery or a related field. The course also includes an update on current issues facing the profession of midwifery to prepare students for post-graduation activities. Prerequisite: none

**MW6199 Master's Project Continuation****0 credits**

Enrollment in this course is required when a student has not yet completed the midwifery master's project but all program master's project credits have been registered. One credit of tuition is charged per quarter enrolled until completion of project. Prerequisite: MW6112

**MW6307 Midwifery Care 7: Synthesis and Application****2 credits**

This course includes discussions and assignments designed to integrate and apply to clinical care the concepts of informed choice, evidence-based practice, and ethical, professional and legal issues, including consultation and referral systems. Students hone critical thinking and risk assessment skills, cultural sensitivity and an understanding of the midwife as a community health worker through case management exercises and panel discussions. Prerequisite: MW5309

**MW6335 Clinical Seminar 5****1 credit**

Continuation of Clinical Seminar series. In this course students continue with "virtual client" exercises and more complex case questions and presentations, fine-tuning management decisions and skills acquired in practicum, focusing on the integration of theory and clinical practice. Prerequisite: MW5334

**MW6336 Clinical Seminar 6****1 credit**

Continuation of Clinical Seminar series. In this course students continue with "virtual client" exercises reflecting the level of primary midwife under supervision. Students make presentations of their data collection project and continuing education topics. Prerequisite: MW6335

**MW6337 Clinical Seminar 7****1 credit**

Continuation of Clinical Seminar series. In this quarter, students are assessed for their readiness for entry-level practice, which takes into consideration the progression of their clinical problem-solving skills while caring for the fictional "virtual clients." Continuation of student presentations of data collection projects and continuing education topics. Prerequisite: MW6336

**MW6810 Midwifery Practicum****variable to maximum of 33.5 credits**

Credits vary by quarter for a total of 33.5. Theoretical coursework is complemented by clinical rotations with practitioners providing midwifery and related women's health care. Must be coenrolled in the clinical seminar series while in practicum, except during the summer quarters. Prerequisite: MW5810

**MW6899 Midwifery Practicum Continuation 0 credit**

Enrollment in this course is required when a student has not yet completed the midwifery practicum requirement but all program practicum credits have been registered. One credit of tuition is charged per quarter enrolled until completion of project. Prerequisite: MW6810 (33.5 credits)

**MW7901, MW7902, MW7903 Independent Study variable to maximum of 2 credits**

This course provides an opportunity for students to study areas of interest in greater detail than is covered in the regular curriculum. With the aid of a selected resource person, the student may explore any topic within the area of childbirth. The student is responsible for submitting an independent study form to the program chair that includes learning objectives, evaluation method and timeline. Students may study more than one topic, using a separate course number for each topic. Two credits are required in the naturopathic midwifery program. Prerequisites: MW7321 and permission of department chair

## NATUROPATHIC MEDICINE

Jane Guiltinan, ND, Dean

**NM5140 Constitutional Assessment 2 credits**

Students learn to assess constitution from different global medicine perspectives, including the roots of Western medicine, traditional East Asian medicine, homeopathic miasm theory and Ayurveda traditions. Prerequisite: admission into naturopathic medicine program

**NM5141 Naturopathic Theory and Practice 1 2 credits**

Naturopathic Practice modules cover topics that are integral to becoming a naturopathic physician, including naturopathic philosophy, history, business and professionalism. This first module introduces naturopathic philosophy and professionalism. Subsequent modules build on these skills. Prerequisite: admission into naturopathic medicine program

**NM5142 Naturopathic Theory and Practice 2 2 credits**

This module continues concepts in naturopathic philosophy, history and professionalism. Students deepen their exploration of the naturopathic principles, the therapeutic order and the determinants of health. Students apply the naturopathic principles to the evaluation and management of clinical cases. Students also begin the application of these principles to their own lives, exploring what healing means to them personally. Prerequisite: NM5141

**NM5143 Naturopathic Theory and Practice 3 2 credits**

This module addresses naturopathic philosophy, history and professionalism. Students broaden their outlook by examining current issues in public health. This includes different issues that are pertinent to different age groups, ethnicities and societies in the United States and abroad. Students discuss/experience how naturopathic philosophy and practice can be used to improve the health and well-being of these various populations. Students also examine current political movements in public health and the role of naturopathic medicine in these emerging trends. Prerequisite: NM5142

**NM5820 Clinic Observation 1 1 credit**

This course introduces the student to the clinical experience. Students develop a familiarity with clinic operations and individual roles in delivering naturopathic medicine as part of the patient care team. This course includes 20 hours clinical plus 2 hours didactic. Prerequisite: admission into naturopathic medicine program

**NM6110 Naturopathic Theory and Practice 4 .5 credits**

This module addresses naturopathic philosophy, history, professionalism and beginning concepts in business. The development of clinical skills builds on structure-function relationships that are covered in the Scientific Foundations modules that run concurrently with this module. Prerequisite: NM5143 or permission of the dean or chair of program

**NM6111 Naturopathic Theory and Practice 5 .5 credits**

This module addresses naturopathic philosophy and deepens concepts in business. Prerequisite: NM6110 or permission of the dean or chair of the program

**NM6112 Naturopathic Theory and Practice 6 .5 credits**

This module addresses naturopathic history and philosophy, professionalism and business. Concepts are integrated with naturopathic clinical diagnosis and therapeutic modules and scientific modules that run concurrently. Prerequisite: NM6111 or permission of the dean or chair of program

**NM6310 Naturopathic Clinical Diagnosis 1 4 credits**

Students develop clinical diagnosis skills in this module, including discussing signs and symptoms, conducting and interpreting physical exams, and ordering and interpreting laboratory medicine and imaging data to formulate a differential diagnosis. Students also learn how to interview, synthesize and organize patient information into a standard and naturopathic medical history. Students address the hematologic, integumentary and musculoskeletal systems during this quarter. Prerequisites: completion of all first-year Scientific Foundations modules. Corequisites: BC6101, BC6102 or permission of the dean or chair of program

**NM6311 Naturopathic Clinical Diagnosis 2 4 credits**

In this module, students continue to develop clinical diagnosis skills, including discussing signs and symptoms, conducting and interpreting physical exams, and ordering and interpreting laboratory medicine and imaging data to formulate a differential diagnosis. Students learn skills in how to interview, synthesize and organize patient information into a standard and naturopathic medical history. During this quarter, students address the cardiovascular, respiratory and gastrointestinal systems. Prerequisite: NM6310 or permission of the dean or chair of program. Corequisites: BC6103, BC6104

**NM6312 Naturopathic Clinical Diagnosis 3 4 credits**

In this module, students continue to develop clinical diagnosis skills, including discussing signs and symptoms, conducting and interpreting physical exams, and ordering and interpreting laboratory medicine and imaging data to formulate a differential diagnosis. Students learn skills in how to interview, synthesize and organize patient information into a standard and naturopathic medical history. During this quarter, students address the renal, male and female reproductive, endocrine and nervous systems. Prerequisite: NM6311 or permission of the dean or chair of program. Corequisites: BC6105, BC6106

**NM6315 Physical Exam Diagnosis Lab 1 1 credit**

In this lab, students learn how to perform the basic elements of a physical exam on an adult patient. They learn how to recognize, describe and document abnormal findings. During this quarter, they learn how to perform clinically relevant and focused physical exam skills of the head, neck and integumentary and musculoskeletal systems. Prerequisites: completion of all first-year Scientific Foundations modules and Naturopathic Practice modules 1-3

**NM6316 Physical Exam Diagnosis Lab 2 1 credit**

In this lab, students learn how to perform the basic elements of a physical exam on an adult patient. They learn how to recognize, describe and document abnormal findings. During this quarter, they learn how to perform clinically relevant and focused physical exam skills of the cardiovascular, respiratory and gastrointestinal systems. Prerequisite: NM6315 or permission of the dean or chair of program. Corequisite: NM6311

**NM6317 Physical Exam Diagnosis Lab 3 1 credit**

In this lab, students learn how to perform the basic elements of a physical exam on adult, geriatric and pediatric patients. They learn how to recognize, describe and document abnormal findings. During this quarter, they learn how to perform clinically relevant and focused physical exam skills of the male and female genitourinary, endocrine and nervous systems. Corequisite: NM6312 Prerequisite: NM6316 or permission of the dean or chair of program

**NM6320 Clinical Diagnosis Lab 1 1 credit**

In this lab, students develop laboratory medicine skills that include how to perform phlebotomy, standard spun hematocrits, erythrocyte sedimentation rates and other basic hematologic point of care tests. Corequisite: NM6310 or permission of dean or chair of program

**NM6321 Clinical Diagnosis Lab 2 1 credit**

In this lab, students develop laboratory medicine skills related to the cardiovascular, respiratory and gastrointestinal systems. These skills include how to perform an ECG, peak expiratory flow tests, spirometry, fecal occults blood test and other point of care tests related to these systems. Prerequisite: NM6320 or permission of the dean or chair of program. Corequisite: NM6311

**NM6322 Clinical Diagnosis Lab 3 1 credit**

In this lab, students develop laboratory medicine skills related to the renal, male and female reproductive, endocrine and nervous systems. These skills include how to perform macro and micro urinalysis, semen analysis, vaginal wet mount tests and other point of care tests related to these systems. Prerequisite: NM6321 or permission of the dean or chair of program. Corequisite: NM6312

**NM6810 Clinic Observation 2 2 credits**

Offered in California only. See description for NM6811 and NM6812. Prerequisites: NM5820 and completion of first-year Scientific Foundation modules

**NM6811 Clinic Observation 2 Part 1 1 credit**

Students apply specific skills they have obtained in didactic training into the patient care setting as a supportive member of the clinical team. Students are evaluated throughout the year on basic individual skills that are integral to a naturopathic physician. This course includes 20 hours of clinic time plus 2 hours of didactic time. Prerequisites: NM5820 and completion of first-year Scientific Foundation modules

**NM6812 Clinic Observation 2 Part 2 1 credit**

Students apply specific skills they have obtained in didactic training into the patient care setting as a member of the clinical team. Students are evaluated on skills that are integral to a naturopathic physician. This course includes 20 hours of clinic time plus 2 hours of didactic time. This course may be assigned in either winter or spring. Prerequisite: NM6811 or approval of the Associate Dean of Clinical Education

**NM7110 Naturopathic Theory and Practice 7 1 credit**

This module addresses how to apply the proper Current Procedural Terminology (CPT) code for efficient billing of patient visits using the International Statistical Classification of Diseases (ICD-10 system). Prerequisite: NM6312 or permission of the dean or chair of program

**NM7111 Naturopathic Theory and Practice 8 .5 credits**

This module addresses naturopathic history and philosophy, professionalism and business. History and philosophy concepts are applied in the context of the diagnostics and therapeutics in the Endocrine, Nervous System and Mental Health and Lifespan Considerations modules. Prerequisite: NM7110 or permission of the dean or chair of program

**NM7112 Naturopathic Theory and Practice 9 .5 credits**

This module addresses naturopathic history and philosophy, professionalism and business. History and philosophy concepts are applied in the context of the diagnostics and therapeutics in the Digestive, Cardiovascular and Respiratory modules. Prerequisite: NM7111 or permission of the dean or chair of program

**NM7113 Naturopathic Practice 10 1 credit**

This course is an overview of the state laws and the regulations as they relate to the practice of naturopathic medicine. This includes licensing, malpractice, patient and physician rights and the mechanisms by which laws are applied and enforced. Prerequisite: NM7112 or permission of the dean or chair of program

**NM7142 Critical Evaluation of the Medical Literature 2 credits**

In this course, students further develop skills needed to locate, critically evaluate and translate biomedical evidence-based literature into clinical practice using core competencies learned in the Fundamentals of Research Design. The course allows students to better understand the treatments their patients receive and the new biomedical research relevant to their profession. Practical application of biomedical decision-making is emphasized, with students using their patient experiences to guide their clinically answerable questions on diagnosis and therapeutics. Prerequisites: BC5142, SN6102

**NM7310 Musculoskeletal System and Orthopedics 3.5 credits**

This module includes a discussion of the evaluation and management process of orthopedic and other musculoskeletal related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology and standards of care as they are related to the musculoskeletal system and how to apply them. Students learn standards of care as they relate to the musculoskeletal system and orthopedics. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7318 Nervous System and Mental Health 5 credits**

This module includes a discussion of the evaluation and management process of the nervous system and common mental health related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology and standards of care as they relate to the nervous system and common mental health conditions. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7319 Endocrine System 5 credits**

This module includes a discussion of the evaluation and management process of the endocrine system and other related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology and standards of care as they relate to the endocrine system. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7321 Lifespan Considerations 3.5 credits**

This module includes discussions of the evaluation and management process of medical concepts from normal maternity to pediatrics through geriatrics. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, standards of care and screening exams as they relate to the various stages of the lifespan and how to apply them. Students learn public health concepts, such as vaccinations. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7322 Digestive System 3.5 credits**

This module includes a discussion of the evaluation and management process of the digestive system and other related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, and standards of care as they relate to the digestive system. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7323 Cardiovascular System 5 credits**

This module includes a discussion of the evaluation and management process of the cardiovascular system and other related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, therapeutic exercise and standards of care as they relate to the cardiovascular system. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7324 Respiratory System 3 credits**

This module includes a discussion of the evaluation and management process of the respiratory system and other related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, and standards of care as they relate to the respiratory system. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7326 Medical Procedures 1 2 credits**

This module trains students to be able to perform basic medical procedures in their clinical training, including clean technique, universal precautions, intradermal, subcutaneous and intramuscular injections, and procedures for office emergencies. Other topics include nebulizers and inhaled nutrients, and an introduction to venous access devices. This class meets the state of Washington requirements for 16 hours of IV therapy training, including osmolarity calculations. (*Note: Other jurisdictions may have additional requirements.*) Class includes both lecture and laboratory. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7327 Environmental Medicine 1 credit**

Building on concepts learned in the first year, this module focuses on the health effects of environmental exposures from air, water, food, medication, activities, and work and home environments. The dynamics of toxicant absorption, transport, compartmentalizing, excretion and innate self-protection are presented. Basic principles of biotransformation are covered, as well as screening patients by history and objective testing. Students learn principles and application of depuration and chelation modalities. Emphasis is placed throughout on providing evidence-based strategies and practice guidelines for environmental risk evaluation and management. Prerequisites: NM6312, BC6106 and PM5315 or permission of the dean or chair of program

**NM7328 Female Reproductive and Urology 5 credits**

This module includes a discussion of the evaluation and management process of the female reproductive, urologic system and other related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, and standards of care as they relate to the female reproductive and urology systems. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7329 Male Reproductive and Urology 2.5 credits**

This module includes a discussion of the evaluation and management process of the male reproductive, urologic and other related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, and standards of care as they relate to the male reproductive and urology systems. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM7331 Renal System 2.5 credits**

This module includes a discussion of the evaluation and management process of the renal system and other related conditions. Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, and standards of care as they relate to the renal system. Prerequisite: NM6312 or permission of the dean or chair of program

**Clinical Pharmacology**

These courses focus on prescribing for and the medical management of patients on the most common pharmaceutical for presenting complaints seen in a primary care setting. Each class is aligned with the concurrent systems modules.

**NM7332 Clinical Pharmacology 1 5 credits**

In this course students learn how to prescribe and manage pharmaceuticals for pain and the musculoskeletal systems. Herb/drug, supplement/drug and drug/drug interactions are also discussed. Corequisite: NM7310

**NM7333 Clinical Pharmacology 2 5 credits**

In this course students learn how to prescribe and manage pharmaceuticals for the nervous and endocrine systems and mental health. Herb/drug, supplement/drug and drug/drug interactions are also discussed. Corequisites: NM7318, NM7319

**NM7334 Clinical Pharmacology 3 5 credits**

In this course students learn how to prescribe and manage pharmaceuticals for the digestive, cardiovascular and respiratory systems. Herb/drug, supplement/drug and drug/drug interactions are also discussed. Corequisites: NM7322, NM7323, NM7324

**NM7335 Clinical Pharmacology 4 5 credits**

In this course students learn how to prescribe and manage pharmaceuticals for EENT and the renal, male and female reproductive systems. Herb/drug, supplement/drug and drug/drug interactions are also discussed. Corequisites: NM7328, NM7329, NM7331, NM7336

**NM7336 Eyes, Ears, Nose and Throat 3.5 credits**

This module includes a discussion of the evaluation and management process of the eyes, ears, nose and throat (EENT). Students learn how to use diagnostic imaging and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology and standards of care as they relate to EENT. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**Bastyr Center for Natural Health: Patient Care Shifts**

Naturopathic medicine students are required to take 18 general patient care shifts or rotations. Each patient care shift/rotation involves provision of care under the supervision of licensed faculty. The medical skills mastered in this setting include all skills and therapeutics utilized in the provision of primary naturopathic medicine and are performed in the context of naturopathic principles. Each student is evaluated for increasing competence and specific skills as she/he progresses through the clinical education. See also listings for physical medicine Patient Care Shifts (PM7801, PM7802, PM8801 and PM8802). Prerequisite: none

**NM7820 Patient Care 1 2 credits**

See description above. Prerequisite: see above

**NM7821 Patient Care 2 2 credits**

See description preceding NM7820. Prerequisite: NM7820

**NM7822 Patient Care 3 2 credits**

See description preceding NM7820. Prerequisite: NM7821

**NM7823 Patient Care 4 2 credits**

See description preceding NM7820. Prerequisite: NM7822

**NM7824 Patient Care 5 2 credits**

See description preceding NM7820. Prerequisite: NM7823

**NM7825 Patient Care 6 2 credits**

See description preceding NM7820. Prerequisite: NM7824

**NM7826 Patient Care 7 2 credits**

See description preceding NM7820. Prerequisite: NM7825

**NM7827 Patient Care 8 2 credits**

See description preceding NM7820. Prerequisite: NM7826

**NM7828 Patient Care 9 2 credits**

See description preceding NM7820. Prerequisite: NM7827

**NM7829 Patient Care 10 2 credits**

See description preceding NM7820. See NM8830-NM8836 for Patient Care 11-17 descriptions. Prerequisite: NM7828

**NM7901, NM7902, NM7903 Independent Study variable credit**

These courses provide an opportunity for students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person/sponsor, the student may explore a field of study in naturopathic medicine of personal interest and value. Prerequisite: permission of the dean or associate dean

**NM8100 Naturopathic Theory and Practice 11 .5 credits**

This module addresses naturopathic history and philosophy, professionalism, and business. History and philosophy concepts are applied in the context of the diagnostics and therapeutics in the integumentary system. Prerequisite: NM7113

**NM8105 Advanced Business Practices 1 1.5 credits**

This module builds on principles that have been introduced throughout the curriculum in Naturopathic Practice modules beginning in year two. Specific topics include business set-up, including all aspects of starting or joining a medical practice. Students create a business plan, learn the legal aspects of starting and running a business, and identify successful marketing strategies. Prerequisite: NM8100 or permission of the dean or chair of program

**NM8106 Advanced Business Practices 2 .5 credits**

This module builds on principles that have been introduced throughout the curriculum in Naturopathic Practice modules. Specific topics include the financial skills of running and maintaining a business, including accounting, fee schedules and the legal aspects of working with an attorney. Prerequisite: NM8105 or permission of the dean or chair of program

**NM8107 Advanced Business Practices 3 .5 credits**

This module presents the final aspects of business management for a naturopathic physician. It includes the procedures and the business of managing local, state and federal taxes. It also addresses the administrative aspect of being a business owner or participant, including employees, paperwork and chart management. Prerequisite: NM8106 or permission of the dean or chair of program

**NM8301 Clinical Pharmacology 5 .5 credits**

In this course students learn how to prescribe and manage pharmaceuticals for the integumentary system. Herb/drug, supplement/drug and drug/drug interactions are also discussed. Corequisite: NM8305

**NM8305 Integumentary System 3 credits**

This module includes a discussion of the evaluation and management process of the integumentary system and other related conditions. Students learn how to use diagnostic procedures and other evaluation tools to determine a diagnosis. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, and standards of care as they relate to the integumentary system. Prerequisites: NM6312 and BC6106 or permission of the dean or chair of program

**NM8309 Rheumatology 1.5 credits**

This module focuses on the inflammatory and autoimmune conditions involving the connective tissue, muscles and joints. Students learn evidence-based practices of nutrition, botanical medicine and pharmacology, and standards of care as they relate to rheumatology. Prerequisites: completion of all naturopathic medicine systems modules or permission of the dean or chair of program

**NM8310 Medical Procedures 2 2 credits**

Minor surgical procedures as defined by scope of practice for naturopathic physicians and licensing laws are taught. This lecture course covers common minor surgery office procedures. Topics include suturing techniques; wound, infection and burn management; local anesthetics; bandaging techniques, dermatologic biopsies and the recognition of conditions requiring medical referral for surgical intervention. Prerequisite: NM7326. Corequisite: NM8305 or permission of the dean or chair of program

**NM8316 Advanced Topics in Public Health 1 credit**

This module incorporates the principles and application of public health into naturopathic clinical decision making and the role of the naturopathic physician in community public health. (Note that public health competencies are also integrated into year three systems modules.) Prerequisites: completion of all naturopathic medicine systems modules or permission of the dean or chair of program

**NM8317 Advanced Topics in Geriatric Medicine 2 credits**

This module focuses on the special needs in assessment, diagnosis and treatment to support geriatric patients in maintaining health, independence and quality of life as they age. End of life care is also discussed. Prerequisites: completion of all naturopathic medicine systems modules or permission of the dean or chair of program

**NM8318 Advanced Topics in Clinical Ecology 1 credit**

This module continues the discussion of prevention, diagnosis and treatment of allergies in all its forms. Cause and contribution of food, plant, hydrocarbon and environment are presented. Recognition of signs and symptoms of allergy with focus on foundational treatment is included. Prerequisites: completion of all naturopathic medicine systems modules or permission of the dean or chair of program

**NM8319 Advanced Topics in Oncology 2.5 credits**

This module presents the role of the primary care naturopathic physician involved in the co-management of patients with cancer. Current knowledge of the causes and mechanisms of the disease are presented. Module includes the standards of care involved in the diagnosis, assessment and management of cancer. There is an overview of the provision of ethical practices and the primary needs of cancer survivors as well as the role of complementary therapeutics including concepts from diet and nutrient therapy. Prerequisites: completion of all naturopathic medicine systems modules or permission of the dean or chair of department.

**Preceptorship 1-3 and Advanced Preceptorship**

Students have the opportunity to preceptor with physicians (ND, MD, DO) in practice. A preceptor/outreach coordinator assists students in locating appropriate preceptorship sites.

**NM8801 Preceptorship 1 1 credit**

See description above. Prerequisite: admission into naturopathic medicine program

**NM8802 Preceptorship 2 1 credit**

See description preceding NM8801. Prerequisite: NM8801

**NM8803 Preceptorship 3 1 credit**

See description preceding NM8801. Prerequisite: NM8802

**NM8815 Grand Rounds 1 1 credit**

This module brings students together with experts in skills, knowledge or fields relevant to the practice of naturopathic medicine. This course is a series of presentations that bring depth to areas of medical knowledge or practice. Corequisite: final year of program or permission of the dean or chair of program

**NM8816 Grand Rounds 2 1 credit**

This module brings students together with experts in skills, knowledge or fields relevant to the practice of naturopathic medicine. This course is a series of presentations that bring depth to areas of medical knowledge or practice. Prerequisite: NM8815 or permission of the dean or chair of program

**NM8817 Grand Rounds 3 1 credit**

This module brings students together with experts in skills, knowledge or fields relevant to the practice of naturopathic medicine. This course is a series of presentations that bring depth to areas of medical knowledge or practice. Prerequisite: NM8816 or permission of the dean or chair of program

**NM8830 Patient Care 11 2 credits**

See description preceding NM7820. Prerequisite: NM7829

**NM8831 Patient Care 12 2 credits**

See description preceding NM7820. Prerequisite: NM8830

**NM8832 Patient Care 13 2 credits**

See description preceding NM7820. Prerequisite: NM8831

**NM8833 Patient Care 14 2 credits**

See description preceding NM7820. Prerequisite: NM8832

**NM8834 Patient Care 15 2 credits**

See description preceding NM7820. Prerequisite: NM8833

**NM8835 Patient Care 16 2 credits**

See description preceding NM7820. Prerequisite: NM8834

**NM8836 Patient Care 17 2 credits**

See description preceding NM7820. Prerequisite: NM8835

**NM 8837 Patient Care 18 2 credits**

See description preceding NM7820. Prerequisite: NM8836

**NM8844 Interim Patient Care 2 credits**

See description preceding NM7820. Prerequisite: NM7820

**NM8901, NM8902, NM8903 Independent Study variable credit**

These courses provide an opportunity for students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person/sponsor, the student may explore a field of study in naturopathic medicine of personal interest and value. Students may devote one (1) to five (5) of their elective credits to independent study. Prerequisite: permission of dean

**NM9111 Fasting and Natural Medicine 1 credit**

Prerequisite: admission to naturopathic medicine program or permission of dean

**NM9112 Traditional Naturopathic Medicine Series: Special Topics 2 credits**

This course presents special topics in traditional medicine. Examples of topics include the healing reaction, natural hygiene and fasting, nature cure, the spiritual aspects of health and illness, and methods and techniques taught by traditionally trained naturopathic physicians. Cases are considered in lecture and discussion using this approach. Prerequisite: NM5113

**NM9115 Traditional Naturopathic Medicine Series: Natural Hygiene, Principles, Research and Practice 2 credits**

This course teaches and explores principles, research and practice of natural hygiene. The variable factors that determine health, health recovery and disease are integrated with current scientific research and today's practice of natural hygiene. Prerequisite: admission to the naturopathic medicine program or MS in nutrition program

**NM9305 Advance Clinical Topics in Diabetes and Vascular Disease .5 credits**

This elective clinical discussion session meets three (3) times per quarter and dedicates two hours to content relevant to naturopathic practices in diabetes and cardiovascular disease. The first hour includes case presentation and discussion by current clinical students. The second hour is dedicated to the discussion of new research, including basic and clinical science. Prerequisite: Clinic eligible or permission of dean or chair of program

**NM9314 Advanced Gynecology and Practicum 2 credits**

This class includes advanced discussion in topics such as dysfunctional uterine bleeding, cervical cytology, chronic pelvic pain, recurrent vaginitis, breast disease, contraception management, osteoporosis and menopause. This class includes several case discussions. Included is a two-hour practicum each week to review and practice the gynecologic exam, breast exam and office procedures. The practicum also includes discussion, demonstration and practice of intrauterine device (IUD) insertions plus endometrial and vulvar biopsies. Prerequisite: NM7328

**NM9316 Advanced Pediatrics 2 credits**

This elective course focuses on clinical pearls and necessary knowledge for the naturopathic physician who will be working with children of all ages. Practical skills, such as vaccine administration, blood collection and exam skills are taught, as well as more advanced pediatric assessment techniques and treatment options. Prerequisite: NM7321

**NM9405 Traditional Naturopathic Medicine Series:****Principles of Clinical Fasting 1 credit**

The purpose of this course is to familiarize students with the clinical application of fasting and management of fasting patients. Principles of natural hygiene, naturopathic philosophy and the therapeutic order are applied. Prerequisite: admission into naturopathic medicine program or permission of instructor

**NM9406 Introduction to Cell Salt Therapy and Clinical Application 1 credit**

This 11-hour course covers the history, material medica and clinical use of cell salts. It includes lecture and case discussions that clarify the use of biochemical cell salts in conjunction with other naturopathic modalities. Prerequisite: BC3161 or BC5122L

**NM9410 IV Therapy: Formulations, Compounding and Safety Considerations 2 credits**

This course expands the students' knowledge about the safe use of IV therapy in a primary care setting. The laboratory portion includes additional practice in mixing, starting and administering IVs. This course meets the requirements for IV therapy in California and Hawaii. Prerequisite: NM7326

**Patient Care Elective Shifts 1-4**

Students may take Patient Care Shifts as elective credit by permission of clinic medical director

**NM9801 Patient Care Elective (fall) 2 credits**

See description above. Prerequisite: permission of clinic medical director

**NM9802 Patient Care Elective (winter) 2 credits**

See description preceding NM9801. Prerequisite: permission of clinic medical director

**NM9803 Patient Care Elective (spring) 2 credits**

See description preceding NM9801. Prerequisite: permission of clinic medical director

**NM9804 Patient Care Elective (summer) 2 credits**

See description preceding NM9801. Prerequisite: permission of clinic medical director

**NM9811 Advanced Preceptorship 2 credits**

Students have the opportunity to preceptor with physicians (ND, MD, DO) in practice, in lieu of a regular clinic shift. Advanced preceptorships may also be taken for elective credit. Approval must be granted by the associate clinical dean for naturopathic medicine. Prerequisites: mid-level primary clinician status and completion of all preceptor rotations

## ACUPUNCTURE AND ORIENTAL MEDICINE

For a listing of the Chinese herbal medicine courses that are part of the MSAOM or CCHM programs, please see alphabetical listings beginning with CH.

A grade of C or higher is required to pass all AOM/CCHM courses. Please review grade point requirements for the MSA/MSAOM programs.

**CPR for Health Care Providers**

Prior to entrance into the clinic, all students in the MSA and MSAOM programs must complete a CPR course for health care professionals. This is a Bastyr Center for Natural Health requirement and is offered by the health and safety officer, health and safety department. Prerequisite: none

**OM3111 Survey of Organic and Biochemistry 4 credits**

This survey course examines carbon bonding and the nomenclature and structure of functional groups, such as saturated and unsaturated hydrocarbons, alcohols, phenols, thiols, ethers, aldehydes, ketones, carboxylic acids, amines, and amides. The biochemistry portion focuses on the structure, function, and anabolic and catabolic pathways of carbohydrates, lipids, amino acids, proteins, nucleic acids, and the genetic code. Prerequisite: General Chemistry (BC2115 or equivalent)

**OM4101 History of Medicine 2 credits**

This course is a survey of the history of medicine, including cross-cultural perspectives in healing. The course traces the history of medical practice from ayurveda, Hippocrates and Taoism to the development of drug therapy and allopathic medicine. Special attention is placed on issues of cultural diversity in medicine. Prerequisite: admission into AOM program

**Meridians and Points 1-3 Lecture/Lab**

This series includes a comprehensive study of acupuncture meridians and points of the human body with reference to traditional Chinese locations. The traditional indications, precautions and physiological responses according to modern research are emphasized. The 12 regular meridian channels and eight extra meridian channels, 15 collaterals, 365 regular acupoints and extra points are discussed. Labs, lectures and illustrations are coordinated to provide students with hands-on skills and a thorough understanding of points and meridians.

**OM4109 Meridians and Points 1 Lecture/Lab 3 credits**

See description above. Prerequisite: admission into AOM program

**OM4110 Meridians and Points 2 Lecture/Lab 3 credits**

See description preceding OM4109. Prerequisite: OM4109

**OM4111 Meridians and Points 3 Lecture/Lab 3 credits**

See description preceding OM4109. Prerequisite: OM4110

**OM4118 TCM Fundamentals 4 credits**

This course TCM covers the traditional theories fundamental to the practice of acupuncture and Oriental medicine. Students are introduced to the philosophy, theories of diagnosis and therapeutic concepts underlying traditional Chinese medicine. Prerequisite: none

**TCM Diagnosis 1-2**

In TCM Diagnosis 1 and 2, students begin the study, analysis, and understanding of the tongue and pulse. These courses focus on the understanding and practical skills of TCM diagnosis, applicable to both traditional Chinese herbology and acupuncture. Topics include differentiation of syndromes according to etiology, disease classification by symptom analysis, an in-depth study of the four diagnostic methods and the principles of treatment. Teaching aids, illustrations and case studies are utilized to facilitate learning.

**OM4211 TCM Diagnosis 1 3 credits**

See description above. Prerequisites: OM4118/OM5120 and admission into AOM program

**OM4212 TCM Diagnosis 2 3 credits**

See description preceding OM4211. Prerequisite: OM4211

**TCM Pathology 1-2**

TCM Pathology 1 and 2 focus on understanding of the TCM empirical model of pathophysiology of health disharmonies according to Zang Fu and channel theories. Through case presentations, students learn to analyze the etiology, signs and symptoms, and patterns that create disease, and treatment plans that facilitate homeostasis.

**OM4221 TCM Pathology 1 3 credits**

See description above. Prerequisites: OM4118/OM5120 and admission into AOM program

**OM4222 TCM Pathology 2 3 credits**

See description preceding OM4221. Prerequisite: OM4221

**OM4315 TCM Bodywork: Tui Na 1 credit**

Tui na, a form of bodywork, is a therapeutic massage modality that originated in China. Based on the theories of TCM, tui na's effects can be utilized for acute conditions, as well as for constitutional disharmonies. In this course, students are introduced to various techniques, as well as fundamental principles for common therapeutic applications. Both practical and theoretical aspects are emphasized. Prerequisite: admission into AOM program

**OM4406 Qi Gong 1 credit**

Qi gong refers to the building, harnessing and proper directing of qi (energy.) Through proper exercise and instruction, students experience qi gong as a valuable resource for self healing and building energy. Prerequisite: admission into AOM program or permission of dean

**TCM Techniques 1-3 Lecture/Lab**

This sequence of courses offers instruction in both the principles and hands-on skills of acupuncture techniques. Considerable emphasis is put on patient safety, competence in clean needle technique, material preparations and precautions. Technical training includes needling, moxibustion, cupping, electro-acupuncture, Gwa Sha, plum blossom needle and physical stimulation of acupoints. A student must be enrolled in the MSA or MSAOM program in order to take these courses.

**OM4413 TCM Techniques 1 Lecture/Lab 1.5 credits**

See description above. (For TCM Techniques 2-3, see OM5432 and OM5439.) Prerequisites: BC3134, OM4109, OM4118. Corequisites: BC3135 and OM4110

**OM4800 AOM Clinic Entry 2 credits**

This course covers clinic requirements, procedures and protocols, as well as clinic philosophy and standards of practice. Case management skills and charting skills prepare students for their clinic experience. Students attend case preview/review sessions where clinic cases are discussed. Special topics include confidentiality, special needs of different patient groups, dispensary, ethics and library support. Familiarity with Bastyr Center for Natural Health from the perspective of the patient and preparation for becoming a clinician are the key aspects of this course. Prerequisite: admission into AOM program

**Clinical Observation 1-3**

As part of the first stage in clinical training, students are placed at clinic as observers and perform under the supervision of faculty who are licensed acupuncturists. Training occurs at Bastyr Center for Natural Health as well as other community sites. Observation is designed to introduce and train the student in clinical protocol, patient care etiquette, and appropriate interactive skills with supervisors and student clinicians. Completion of the observation experience prepares students to further advance in the clinical training program.

**OM4803 Clinical Observation 1 2 credits**

See description above. Prerequisite: OM4800

**OM4804 Clinical Observation 2 2 credits**

See description preceding OM4803. See OM5803 for Clinical Observation 3 description. Prerequisite: OM4803

**OM4806 AOM Preceptor Observation 2 credits**

The required preceptorship experience can be done while in observation status or completed during the student clinician phase. Students who choose to complete the preceptorship during the clinician phase are still eligible to start clinic in spring quarter of their second year, which is the traditional entry point into direct patient care. This observation experience is to be completed with a practicing professional either in or outside of Washington state. Prerequisite: OM4804 or permission of dean

**OM4901, OM4902, OM4903 Independent Study****variable credit**

These courses provide an opportunity for students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person/sponsor, the student may explore a field of study in acupuncture and Oriental medicine of personal interest and value. Prerequisite: permission of dean

**OM5121 Medical Chinese 1****1 credit**

Medical Chinese 1 provides basic training in the Chinese Romanization system (pin yin), which assists students in recognizing Chinese medical concepts in both written and oral form. This is the first course in a four-course series and is the only medical Chinese course required for MSA students. Prerequisite: admission into AOM program

**OM5122 Medical Chinese 2****1 credit**

Medical Chinese 2 introduces basic Chinese characters, including the use of radicals. Simple greetings are also covered. This is the second course in a four-course series. A portion of this class is online. Prerequisite: OM5121 or permission of the dean

**OM5123 Medical Chinese 3****2 credits**

Medical Chinese 3 focuses on introducing herbs with correct pronunciation and visual recognition of characters, introducing TCM clinical terminology and developing verbal skills to include simple conversational Chinese. This is the third course in a four-course series. Prerequisite: OM5122 or permission of the dean

**OM5124 Medical Chinese 4****2 credits**

Medical Chinese 4 continues with the study of herbal pronunciation and visual recognition of characters, introducing additional TCM clinical terminology. The course also covers simple grammar and sentence structure and builds verbal skills with simple medical conversation. This is the final course in a four-course series. Prerequisite: OM5123 or permission of the dean

**OM5300 Auricular Therapy****2 credits**

This course introduces the basics of auricular therapy (ear acupuncture) and its use in diagnosis and treatment. Prerequisite: OM5436

**OM5303 Public Health Issues in AOM****3 credits**

HIV/AIDS and chemical dependency are two major public health challenges for which the AOM profession has been instrumental in providing important ancillary care. This course provides an overview of differential diagnosis, treatment approaches and collaboration with other health care professionals in the treatment setting. The course blends Western medical theories with Oriental medicine in order to provide the student with a solid beginning foundation of clinical knowledge. Prerequisite: clinician status in AOM

**Survey of Western Clinical Sciences 1-3**

This three-course sequence emphasizes the systemic approach to Western pathology and the signs and symptoms that are clinically associated with disease in the various organ systems. Students learn basic physical exam skills from a Western clinical sciences perspective, including an overview of the fundamentals of laboratory test interpretation. Recognition of signs and symptoms, as well as objective findings that would indicate the necessity for a referral, are extremely important to contemporary acupuncture practice.

**OM5321 Survey of Western Clinical Sciences 1****3 credits**

See description above. Prerequisites: BC3136, BC4105 and admission into AOM program

**OM5322 Survey of Western Clinical Sciences 2****3 credits**

See description preceding OM5321. Prerequisite: OM5321

**OM5324 Survey of Western Clinical Sciences 3****3 credits**

See description preceding OM5321. Prerequisite: OM5322

**OM5405 TCM Whole Foods Nutrition****2 credits**

Students learn through lecture, demonstration and practical lab how to recognize and apply a wide variety of foods for use in common patterns of pathology in TCM. Prerequisites: OM5418, OM5419

**Acupuncture Therapeutics 1-7**

This sequence of seven (7) courses covers the systems of the body and the conditions and disorders that afflict the body's systems from a TCM perspective. Each course begins with a brief survey of Western biomedical information. Traditional approaches in acupuncture are covered to familiarize students with TCM therapeutics. There is an overall emphasis on classical applications as they relate to therapeutics.

**OM5414 Acupuncture Therapeutics 1****2 credits**

See description above. This course provides an introduction to the seven (7) part sequence of Acupuncture Therapeutics. Also covered are the most common disorders seen in the clinical setting. Prerequisites: OM4212, OM4222

**OM5415 Acupuncture Therapeutics 2****2 credits**

See description preceding OM5414. This course provides foundational training in musculoskeletal and dermatology conditions. Also covered are respiratory disorders. Prerequisite: OM5414

**OM5416 Acupuncture Therapeutics 3****2 credits**

See description preceding OM5414. Acupuncture therapeutics for disorders of the gastrointestinal and hepatobiliary systems are covered in this course. Prerequisite: OM5414

**OM5417 Acupuncture Therapeutics 4****2 credits**

See description preceding OM5414. Acupuncture therapeutics for the treatment of pediatric and gynecological disorders are covered in this course. Prerequisite: OM5414

**OM5418 Acupuncture Therapeutics 5****2 credits**

See description preceding OM5414. Students learn to treat disorders of the cardiovascular system and common psychiatric disorders. Prerequisite: OM5414

**OM5419 Acupuncture Therapeutics 6 2 credits**

See description preceding OM5414. (For Acupuncture Therapeutics 7, see OM6417.) This course covers the approach to and treatment of eye, ear, nose and throat conditions. Prerequisite: OM5414

**OM5432 TCM Techniques 2 Lecture/Lab 1.5 credits**

See description preceding OM4413. This course continues with building basic needling skills and introducing moxibustion, Gwa Sha, and other non-needle modalities. Prerequisite: OM4413

**OM5436 TCM Techniques 3 Lecture/Lab 1.5 credits**

See description preceding OM4413. This course provides students with advanced acupuncture skills, supervised practice on difficult acupuncture points and the techniques of acupuncture microsystems. Prerequisite: OM5432

**OM5438 TCM Advanced Techniques Lab 1 credit**

This course provides additional instruction, review and practice opportunity for all material taught in the TCM Techniques 1-3 series. Prerequisite: OM5436

**OM5442 Tai Chi 1 credit**

Tai chi is an important energetic system that utilizes specific movements and exercises designed to harmonize and build one's spirit and body. Prerequisite: admission into AOM program or permission of dean

**OM5803 Clinical Observation 3 2 credits**

See description preceding OM4803. Prerequisite: OM4804

**Student Clinician Shifts and Interim Clinic**

Students progress through 14 MSA shifts or 16 MSAOM shifts, which start in the spring of their second year and continue through the remainder of the program. An increasing level of independence is expected of student clinicians as they approach graduation. This is assessed through supervisor evaluations and clinical competencies performed by the student clinician throughout their clinical experience. Prerequisite: passage of the AOM clinic entry exam

Note to graduate: AEAM students must complete 400 separate patient treatments on a minimum of 100 different patients completed over a minimum of one academic year. In order to satisfy the patient contact requirements, students may need additional clinic shifts beyond those required for graduation from the University.

**OM5813 AOM Clinic 1 2 credits**

See description above. Prerequisites: admission into MSA or MSAOM program, OM5803, and successful completion of Clinician Entry exam

**OM5814 AOM Clinic 2 2 credits**

See description preceding OM5813. Prerequisite: OM5813

**OM5815 AOM Clinic 3 2 credits**

See description preceding OM5813. Prerequisite: OM5814

**OM5816 AOM Clinic 4 2 credits**

See description preceding OM5813. Prerequisite: OM5815

**OM5817 AOM Clinic 5 2 credits**

See description preceding OM5813. Prerequisite: OM5816

**OM5818 AOM Clinic 6 2 credits**

See description preceding OM5813. See OM6827-OM6836 for AOM Clinic 7-16. Prerequisite: OM5817

**OM5819 AOM Interim Clinic 1.5 credits**

See description preceding OM5813. Prerequisite: OM4800

**OM5901, OM5902, OM5903 Independent study variable credit**

These courses provide an opportunity for students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person/sponsor, the student may explore a field of study in acupuncture and Oriental medicine of personal interest and value. Prerequisite: permission of dean

**OM6105 Jurisprudence/Ethics 1 credit**

Medical ethics and legal considerations are discussed in relationship to patient care and privacy issues. Prerequisite: OM6827

**OM6110 TCM Medical Classics 2 credits**

This course offers a survey of the historical evolution of TCM from its empirical beginnings within different schools to the most current practices. Prerequisite: admission into AOM program

**OM6111 Practice Management 1 2 credits**

This is the first of a two-class series. The primary focus is assisting with the foundations of building a practice, including formulating and completing a business plan. Additional topics include office planning, bookkeeping, fee structures, taxes, accounting, marketing and communication skills. Prerequisite: OM5815

**OM6112 Practice Management 2 1 credit**

This is the second of a two-class series. This course focuses on additional practice building skills and requirements, including city and state licensing, marketing strategies, legal consent and privacy disclosures, practice options and referrals. Prerequisite: OM6111

**OM6310 Case Review 2 credits**

This course runs concurrently with clinic and provides a forum for the discussion of cases seen in the teaching clinic. Prerequisite: OM5813

**OM6314 Clinical Theatre 1 credit**

This course provides an opportunity to observe experienced practitioners conducting patient interviews, constructing treatment plans and applying treatments. The course is designed to assist students with understanding various approaches to medical interviewing, and patient care and management. Prerequisite: OM5813

**OM6417 Acupuncture Therapeutics 7 2 credits**

See description preceding OM5414. Acupuncture therapeutics of renal and genitourinary systems, plus immune disorders, including MS, CFIDS and fibromyalgia. Prerequisite: OM5414

**OM6820 Clinic Entry for China 1 credit**

Required for all students (master's and doctoral) who plan to study in China. This class is designed to prepare AOM students for their studies in Chengdu or Shanghai. Major topics include professional hospital conduct in the Chinese hospital, Chinese cultural topics, safety and practical travel tips. Prerequisite: prior approval for China study or permission of dean

**Acupuncture Clinic in China 1-4**

Students in good academic standing are encouraged to apply for advanced studies in China. Currently, Sichuan Integrated Hospital of Eastern and Western Medicine in Chengdu and Shanghai Universities of TCM are the main sites for Bastyr. For more information and an application, see the *Student Clinician Handbook*. The clinic in China is an eight (8) credit experience to be applied toward the MSA or MSAOM program and/or elective credit. These credits may not be audited.

**OM6821 Clinic in China 1 2 credits**

See description above. Prerequisite: permission of dean

**OM6822 Clinic in China 2 2 credits**

See description preceding OM6821. Prerequisite: permission of dean

**OM6823 Clinic in China 3 2 credits**

See description preceding OM6821. Prerequisite: permission of dean

**OM6824 Clinic in China 4 2 credits**

See description preceding OM6821. Prerequisite: permission of dean

**OM6827 AOM Clinic 7 2 credits**

See description preceding OM5813. Prerequisite: OM5818

**OM6828 AOM Clinic 8 2 credits**

See description preceding OM5813. Prerequisite: OM6827

**OM6829 AOM Clinic 9 2 credits**

See description preceding OM5813. Prerequisite: OM6828

**OM6830 AOM Clinic 10 2 credits**

See description preceding OM5813. Prerequisite: OM6829

**OM6831 AOM Clinic 11 2 credits**

See description preceding OM5813. Prerequisite: OM6830

**OM6832 AOM Clinic 12 2 credits**

See description preceding OM5813. Prerequisite: OM6831

**OM6833 AOM Clinic 13 2 credits**

See description preceding OM5813. Prerequisite: OM6832

**OM6834 AOM Clinic 14 2 credits**

See description preceding OM5813. Prerequisite: OM6833

**OM6835 AOM Clinic 15 2 credits**

See description preceding OM5813. Prerequisite: OM6834

**OM6836 AOM Clinic 16 2 credits**

See description preceding OM5813. Prerequisite: OM6835

**OM6901, OM6902, OM6903 Independent Study variable credit**

These courses provide an opportunity for students to study areas of interest that are not included in the regular curriculum. With the aid of a selected resource person/sponsor, the student may explore a field of study in acupuncture and Oriental medicine of personal interest and value. Prerequisite: permission of dean

*AEAM Department Electives: The following courses (course numbers starting with OM9—) represent a variety of electives and special topics courses offered on a rotating basis.*

**OM9101 Overview of TCM and Physics 3 credits**

This course provides an overview of Western physics and the physiological mechanisms behind concepts of traditional Chinese medicine. The course covers the framework behind the current Western scientific understanding of traditional Chinese medicine. Prerequisites: OM4111, OM4222

**Qi Gong Elective Series**

Courses are grouped into three units of three classes each. The first unit of classes must be completed before either units 2 or 3 can be taken.

**Unit 1: Learning the Basics of Qi Gong****OM9111 Qi Gong: Internal Activation 1 credit**

This is the first class in a three-course series, introducing methods and techniques for direct, experiential understanding of the internal qi pathways of the Du and Ren meridians. The focus is on activating and cultivating one's own qi in accordance with corresponding yin/yang theory and TCM principles. Prerequisite: OM4406

**OM9112 Qi Gong: Energizing the Zang Fu 1 credit**

This is the second in a three-course series, introducing methods for developing the Zang Fu related meridians. Students learn meridian cultivation exercises and gain an experiential understanding of the internal organs at the energetic level. Prerequisite: OM9111

**OM9113 Qi Gong: Energizing the Extraordinary Meridians 1 credit**

This is the third in a three-course series, introducing methods for developing the extraordinary pathways. Students gain an experiential understanding of the functions of the extraordinary energy pathways at the subtle energy level. Prerequisite: OM9112

**Unit 2: Training for Teaching Qi Gong to Others****OM9121 Qi Gong: Development of Emotional Well-Being 1 credit**

Students learn internal organ energy activation and cultivation leading to an experiential understanding of the emotional functions of the organs and the development of emotional management. Prerequisite: OM9113

**OM9122 Qi Gong: Internal Balance and Qi Cultivation 1 credit**

Students learn advanced qi cultivation exercises including those affecting the central and autonomic nervous systems, including the Marrow Gate and the Brain Gate. Prerequisite: OM9121

**OM9123 Qi Gong: Teaching Methods and Philosophy 1 credit**

Students learn methods and tools for conducting presentations and classes, including self-care practice and understanding of the trinity of students-teacher-universal energy. Prerequisite: OM9122

**Unit 3: Therapeutic Application: Basics of Diagnostic Methods and Techniques****OM9131 Qi Gong: Diagnostics 1 credit**

The first of a three-course series. Methods covered include qi resonance, qi image perception and qi energy-body communication. Prerequisite: OM9113

**OM9132 Qi Gong: Therapeutic Approaches 1 credit**

This is the second of a three-course series. This course introduces the relationship between Qi Gong and five-element theory and the application of this knowledge in addressing health conditions. Students learn how natural changes within the body and the external environment affect health and quality of life. Prerequisite: OM9131

**OM9133 Qi Gong: Philosophy and Ethics 1 credit**

This is the third of a three-course series. This course introduces the Qi Gong healing philosophy and the ethical code for providing Qi Gong treatments. Students learn appropriate self care before and after providing Qi Gong sessions. Prerequisite: OM9132

**OM9135 Kung Fu 1 1 credit**

Chinese kung fu is an ancient form of exercise. Unlike the current Qi Gong and tai chi courses, this class concentrates on developing muscular and cardiovascular fitness, as well as teaching students concentration and the ability to focus qi. This is a non-sparring class. Its focus is to treat kung fu as an art form and means of maintaining one's health.

**OM9201 TCM Diagnostics for NDs 3 credits**

This course is designed to provide naturopathic students an opportunity to apply basic diagnostic principles of traditional Chinese medicine. Topics include TCM interviewing skills, pulse, tongue, meridian, palpation and case analysis. Beginning patient assessment skills are introduced. Prerequisite: OM4118

**OM9303 TCM Sports Medicine 1 1 credit**

This course covers the theories, techniques and treatments of TCM sports medicine. The class focuses on introducing the treatments of six common joint injuries: mandible dislocation, luxation of biceps, long head tendon, acromioclavicular joint, sternoclavicular joint and radial capitulum. Prerequisite: BC3134

**OM9306 Five Element 2 2 credits**

This course provides an integrated approach to five-element diagnostic laws and theory. The course provides a bridge between TCM and five-element theory. Emphasis is given to developing diagnostic skills, interviewing and examining techniques. The student is guided to a new experience of seeing, hearing, feeling and smelling. Understanding all correspondences of lifestyle preference, personality, compensation for early traumas and emotional patterns, with a consciousness from within each element, is the goal of a series of experiential exercises. Prerequisite: OM4118

**OM9309 Introduction to Foot Reflexology Massage**

**1 credit**

This course introduces the theory and techniques of foot reflexology massage. Foot reflexology uses acupressure reflex points on the soles of the foot and lower leg to stimulate trigger points/meridians to treat disorders, including PMS, stress and fatigue, headache, arthritis, insomnia, depression, digestive disorders and backache. History of reflexology, preparing herbal foot soaks, reflexology foot massage instruction/practice and walks in Bastyr's reflexology path are also covered. Prerequisite: none

**OM9313 Geriatric Care in AOM 2 2 credits**

This course provides students with the clinical skills necessary to the specifics of geriatric clinical care. This includes intake and listening skills and specific considerations for the treatment of chronic versus acute conditions. Treatment protocols for common disorders are also covered. Prerequisite: OM5813

**OM9314 TCM Sports Medicine 2 1 credit**

This course covers the theories, techniques and treatments of TCM sports medicine. The class focuses on providing ancillary treatment for fractures of the ulna, radius (with subluxation of the radial capitulum), wrist joint, metacarpal thumb joint, hip joint, patella, fibular capitulum, ankle joint, fifth metatarsal bone, phalangeal joints of the toe and the ankle joint. Prerequisite: BC3134

**OM9317 Thai Massage 1 1 credit**

This course covers the theories and techniques of Thai massage. Classes focus on introducing the first five of the 10 Thai massage meridians and massage techniques and procedures on the feet, legs, neck and back. Prerequisite: BC3113 or BC3134 or BC5124

**OM9318 Thai Massage 2 1 credit**

This course covers the theories and techniques of Thai massage. Classes focus on introducing the last five of the 10 Thai massage meridians and massage techniques and procedures used on the face, abdomen, arms and fingers. Prerequisite: BC3134 or BC3113 or BC5124

**Tui Na 2-5**

Tui na is a therapeutic form of massage based on the principles of Chinese Medicine. The focused nature of tui na, in terms of precise manual technique and focus on specific problem resolution, make it an excellent clinical therapy. The tui na series provides students an opportunity to work on specific hand/finger techniques that make this massage form remarkably effective.

**OM9322 Tui Na 2 1 credit**

See description above. The tui na techniques covered in this course include: shaking, squeezing, striking, regulating, bending, splashing, scratching, sweeping, locking, swinging, gathering, separating and rotating techniques. Prerequisite: OM4315

**OM9323 Tui Na 3 1 credit**

See description preceding OM9322. The tui na techniques covered in this course include trembling, pinching, clenching, flicking, pressing, tapping, dry-clean hair movement, brushing, plucking, stepping and stretching techniques. Prerequisite: OM4315

**OM9324 Tui Na 4 1 credit**

See description preceding OM9322. There are many advanced tui na techniques that can enhance resolution of pain. This course gives students an opportunity to apply previously learned advanced tui na techniques with a variety of common clinical conditions, including headache, TMJ, upper extremities, carpal tunnel syndrome, wrist pain and injury of lower extremities, including the gastrocnemius muscle, ankle sprains and traumatic synovitis. Prerequisite: OM4315

**OM9325 Tui Na 5** **1 credit**

See description preceding OM9322. There are many advanced tui na techniques that can enhance resolution of pain. This course gives students an opportunity to apply previously learned advanced tui na techniques with a variety of common clinical conditions, including pain in the scapula, mid- and low-back areas, prolapsed disc conditions, injury to the superior cluneal nerve and trauma to the piriformis muscle. External herbal applications also covered. Prerequisite: OM4315

**OM9330 TCM Nutrition Lab 1** **2 credits**

This nutrition/cooking lab focuses on the application of Chinese herbs in Chinese cooking. Students shop for the menu of the day and learn how to choose good quality ingredients. The course covers the use of food and herbs in TCM as they relate to various diseases. One kind of soup and several dishes are made for lunch each session. Prerequisite: none

**OM9400 Tai Chi 2** **1 credit**

This course offers further explorations with different styles and varieties of tai chi to further enhance health and well being (tai chi advanced). Prerequisite: OM5442 or permission of dean

**OM9402 Qi Gong 2** **1 credit**

The manipulation of one's energetic core is further explored and expanded as a valuable tool to use with patients in the health care setting. Prerequisite: OM4406 or permission of dean

**OM9403 Tai Chi Sword** **1 credit**

This form, known as "Swimming Dragon," utilizes the classic weapon style from the Yang family tai chi chuan to stimulate the Yin energy. Course includes history of the form and yin/yang foundation theory and presents the difference between the weapon form and the bare-hand form. Students learn the 37 classical movements. Prerequisite: OM5442 or permission of dean

**OM9404 Tai Chi Saber** **1 credit**

This form, known as "Jumping Tiger," utilizes the classic weapon style from the Yang family tai chi chuan to stimulate the Yang energy. Course includes history of the form and yin/yang foundation theory and presents the difference between the weapon form and the bare-hand form. Students learn the 13 classical movements. Prerequisite: OM5442 or permission of dean

**OM9420 Specialized Approaches in Acupuncture Therapy: Acupuncture Detox Training** **2 credits**

This course provides an overview of the field of chemical dependency treatment and the role of acupuncture and includes an overview of the biochemistry of chemical dependency, outpatient treatment strategies for safely detoxifying and aftercare. This course is the didactic portion of a larger certification program offered by the National Acupuncture Detoxification Association (NADA). Upon completion of this course and an outside clinical rotation, students are eligible to work as acupuncturists in chemical dependency treatment facilities upon graduation/licensure. Prerequisite: OM5813 or permission of dean

**OM9569 Introduction to AOM Oncology** **2 credits**

This is an introductory course to the field of oncology in AOM. This course covers both basic Western medical and TCM pathology, diagnosis and treatment for some of the common cancers, treatments for side effects from conventional therapies, and acupuncture and Chinese herbal medicine as complementary cancer care. Prerequisite: primary student clinician status in AOM programs

**OM9570 Patent Formulas** **2 credits**

This course surveys commonly used, commercially available herbal preparations (patent medicines), which are often used as adjunctive therapies in TCM. Prerequisite: OM5405 or permission of dean

**Clinical Elective 1-3**

Students may take clinical shifts as elective credit by permission of the dean.

**OM9821 Clinical Elective 1** **2 credits**

See description above. Prerequisite: permission of dean

**OM9822 Clinical Elective 2** **2 credits**

See description preceding OM9821. Prerequisite: permission of dean

**OM9823 Clinical Elective 3** **2 credits**

See description preceding OM9821. Prerequisite: permission of dean

## PHYSICAL MEDICINE

Dean Neary, ND, Department Chair

**PM5315 Physical Medicine 1** **1.5 credits**

This module prepares the naturopathic medical student to understand and employ hydrotherapy techniques in the clinical setting. Lecture topics include history, philosophy, principles of nature cure and physiologic effects, as well as indication, contraindication and application of specific techniques. Concepts from environmental medicine are introduced, including the use of hydrotherapy to support detoxification. Skills lab provides instruction and hands-on training in various general hydrotherapy applications and on special techniques such as constitutional hydrotherapy and colon hydrotherapy. Prerequisites: BC5151, SN5100

**PM5315L Physical Medicine 1 Lab** **1 credit**

This skills lab provides instruction and hands-on training in various general hydrotherapy applications and on special techniques, such as constitutional hydrotherapy and colon hydrotherapy. Prerequisite: Integrated Musculoskeletal module and Clinical Skills Lab 1. Corequisite: PM5315

**PM5316 Physical Medicine 2** **1 credit**

Prepares the naturopathic medical student to understand and employ electrotherapy techniques in the clinical setting. Lecture topics include history, philosophy and physiologic effects, as well as indication, contraindication and application of specific equipment/techniques. Prerequisite: PM5315

**PM5316L Physical Medicine 2 Lab .5 credits**

Skills lab provides instruction and hands-on training using various electrotherapeutic devices such as ultrasound, diathermy, electrical stimulation (NMES), ultraviolet, and infrared and low-level laser therapy (LLLT). Corequisite: PM5316

**PM6305 Physical Medicine 3 2 credits**

Students apply their knowledge/skills of observation, anatomical landmarks and palpation to assess the physical structure of a patient's body, and formulate an understanding of the biomechanical basis for movement. Students are instructed on clinical implications and application of therapeutic touch, as well as introduction to select myofascial release techniques. Prerequisite: PM5316

**PM6306 Physical Medicine 4 3 credits**

Indication, contraindication and application of soft-tissue manipulation techniques are covered in this course, specifically muscle energy technique (MET) for select muscles. Osseous manipulation technique (axial spine) is introduced. Prerequisite: PM6305 or permission of the dean or chair of program

**PM6307 Physical Medicine 5 3 credits**

This course focuses on select techniques for osseous manipulation of the axial spine in uncomplicated cases. Prerequisite: PM6306 or permission of the dean or chair of program

**PM7310 Physical Medicine 6 3 credits**

This course focuses on select techniques for osseous manipulation of the axial spine in more complicated cases. This module continues development of select techniques for osseous manipulation of the axial spine in more complicated cases. Diagnosis and treatment of sports injuries commonly seen by a general practice naturopathic physician are covered. Methods of fitness testing, exercise description and the use of exercise as therapy are taught. Prerequisite: PM6307 or permission of the dean or chair of program

**PM7311 Physical Medicine 7 2 credits**

This course focuses on select techniques for osseous manipulation of the axial spine in more complicated cases. Prerequisite: PM7310 or permission of the dean or chair of program

**Bastyr Center for Natural Health: Physical Medicine Shifts 1-4**

Students are required to take four (4) physical medicine shifts during their clinical training. Each physical medicine shift involves faculty-supervised provision of naturopathic physical medicine. Massage, hydrotherapy, physiotherapy, soft tissue manipulation and naturopathic osseous manipulation therapies are the emphasized clinical skills. Students' competency in assessment skills and the application of physical medicine modalities are assessed through their supervisor evaluations. Additionally, students complete sequential clinical competencies throughout their physical medicine clinical experiences. Prerequisite: clinic eligibility

**PM7801 Physical Medicine 1 (Patient Care 18) 2 credits**

See description above. Prerequisite: see above

**PM7802 Physical Medicine 2 (Patient Care 19) 2 credits**

See description preceding PM7801. Prerequisite: PM7801

**PM8801 Physical Medicine 3 (Patient Care 20) 2 credits**

See description preceding PM7801. Prerequisite: PM7802

**PM8802 Physical Medicine 4 (Patient Care 21) 2 credits**

See description preceding PM7801. Prerequisite: PM8801

**PM9300 Massage Intensive 6 credits**

This course is cosponsored with the Bellevue Massage School Center for Healing Arts. Students interested in further information may meet with an advisor evaluator in the registrar's office or with a department program coordinator to discuss the availability of the program and prerequisite requirements. This course cannot be audited. Note: ONLY THREE (3) CREDITS may be used toward ND elective credit.

**PM9307 Abdomen 1 Visceral Manipulation 2 credits**

This is a beginning-level course, which covers the fundamentals of visceral manipulation as applied to the liver, gall bladder, stomach, duodenum, jejunioileum and the colon. The training is very precise and true to the body of work and research brought forth by both Dr. Barral and Dr. Gehin. This course cannot be audited. Prerequisite: must be registered for at least one clinic shift

**PM9310 Massage 1.5 credits**

The intention of the class is to teach the student how to be comfortable when touching in a therapeutic setting. Through massage techniques, the student is taught how to palpate tissues to discover tissue changes and how to treat those changes. The class focuses on Swedish massage indications, contraindications and techniques, and introduces other soft-tissue assessment and treatment techniques. This course cannot be audited. Prerequisite: BC3113 or BC3134 or BC5122

**Craniosacral Therapy 1-2**

These courses are designed as an introduction to the theory and practice of craniosacral therapy. The theory is based on the physiological principle that the flow of fluid within the body is important in health, and that structure and function are directly related to one another in health and disease. Methods for evaluation and treatment of the entire body are described, observed and practiced. The student learns a 10-step protocol for therapeutic application. This course cannot be audited.

**PM9311 Craniosacral Therapy 1 3 credits**

See description above. This course cannot be audited. Prerequisites: BC5124 and PM5316 (for ND); PM5316 or PM9310 and BC3163 (for NTR, ExS, HS); BC3136 and PM5310 or PM9310 (for AOM)

**PM9315 Craniosacral Therapy 2 3 credits**

See description preceding PM9311. This course cannot be audited. Prerequisite: PM9311

# COUNSELING AND HEALTH PSYCHOLOGY

Diedra L. Clay, Psy.D., Department Chair

The prerequisite of “senior standing” means that the student has successfully completed a minimum of 45 credits in the Bastyr health psychology program.

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## **PS3114 Developmental Psychology** 4 credits

This course examines the stages of human psychological development and the corresponding tasks, issues and challenges inherent in each stage. Additionally, it examines learning styles across the life span and implications for adult learning. Concepts such as modeling, separation anxiety, moral reasoning and gender constancy are considered. The roots and patterns of attachment, early socialization, and sex and gender roles as part of psychosocial and moral development are explored in relation to theorists such as Piaget, Erikson, Bowlby and Kohlberg. Prerequisite: none

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## **PS3123 Health Psychology 1** 4 credits

This course serves as an introduction to the study of undergraduate health psychology at Bastyr University. The course provides students with opportunities to improve the skills needed for a successful experience at Bastyr. These include the ability to work cooperatively in small groups, the ability to find and use library resources in psychology and related modalities, the ability to critically read and think about research articles, and the ability to use American psychological writing and reference style. This course also introduces students to the biopsychosocial model of health and illness. Prerequisite: admission into the health psychology major

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## **PS3124 Health Psychology 2** 4 credits

This course continues the examination of the biopsychosocial model of health and illness. The impact of psychosocial variables such as social support and coping are covered, and students learn about methods for identifying and changing maladaptive health-related behaviors. The psychological and behavioral components of illnesses such as chronic pain, cancer and heart disease are examined. Prerequisite: PS3123

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## **PS3126 Psychology of Personality** 4 credits

This course offers an understanding and working knowledge of basic theories of personality, including those of Freud, Adler, Jung, Miller, Rogers, Maslow and Mahler. Assessment tools such as the MBTI, projective techniques such as the TAT and taxonomies of personality traits are examined. Students also critically explore coping patterns and mental health as a result of personality differences. The concept of self via humanistic psychology and social learning theory are contrasted with a psychodynamic approach to personality. Prerequisite: none

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## **PS3127 Foundations of Counseling for Dietitians**

3 credits

This course highlights how the building of a therapeutic relationship with a client is a basic foundation for the delivery of quality care by a dietitian. Particular strategies and interventions are highlighted that will likely prove beneficial for dietitians and clients establishing good rapport, collaborating for treatment goal setting and pursuing realistic behavior change. Opportunities for practice with these techniques are provided. Prerequisite: admission into DPD program or permission of instructor

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## **PS3128 Psychology of Sports and Exercise** 2 credits

This is an introduction to sports and exercise behaviors of both individuals and groups. Topics include cognitive and behavioral strategies, personality profiles, performance enhancement, motivation theory, and exercise initiation, adoption and maintenance as they apply to various dimensions of physical performance. This course may be taught using an online format. Prerequisite: introductory psychology course

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## **PS3129 Abnormal Psychology** 4 credits

This course provides an overview and historical background of abnormal behavior, including present-day categories of abnormal behavior, symptomology, etiology and treatment. Historical perspectives related to the current conception of psychopathology as disease are the focus of this course. Subcategories of the pathology model are analyzed, as well as modern classification. Prerequisite: none

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## **PS3131 Learning, Cognition and Behavior** 4 credits

This course provides an introduction to historical and contemporary behavioral and cognitive theories and research about how we learn. Topics such as memory, thinking, problem solving, behavior acquisition and extinction, and reinforcement are explored. The course also explores the ways in which information is gathered from the external world, organized and stored in memory. Prerequisite: none

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## **PS3133 Introduction to Statistics** 4 credits

Statistical concepts and procedures used in the behavioral sciences are examined. These include probability, distributions, analysis of central tendency and variability, hypothesis testing and estimation. Parametric and nonparametric theory and tests are addressed and the application of statistics in behavioral, biomedical and epidemiological research is explored. Experience with the Statistical Package for the Social Sciences (SPSS) is included. Prerequisite: none

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## **PS3134 Research Methods in Psychology** 4 credits

This course covers the basic scientific methods used in psychological research. Research issues such as formulating hypotheses and operational definitions, validity and reliability are introduced, and descriptive, correlation, experimental and quasi-experimental research designs are discussed. Prerequisite: admission into the health psychology major

**PS3139 Spirituality and Health 3 credits**

This course provides an introduction to the Spirituality and Health series by reviewing theoretical and historical perspectives and current thinking on the relationship between psychology, spirituality and health, and the separation of scientific medicine and spirituality. Ideas about spiritual healing and the nature of the soul in healing are explored. Students examine the place of humans in the natural world and consciousness research and use tools such as meditation that focus on the reintegration of mind, body and spirit. Prerequisite: none

**PS3147 Myth, Ritual and Health 3 credits**

The role of mythology in culture is examined, and the impact of ritual and initiation on health and human development is explored. Indigenous healing practices and modern healing approaches, as well as the role of illness as a transformative process, are examined. Prerequisite: none

**PS3601 Psychology of Nourishment 3 credits**

In this course, the student explores the personal and psychological components of nutrition and nourishment, including his/her relationship to food and eating, one's own sources of psychological nourishment and the impact of dietary changes on family dynamics. Students study the role of nourishment as it applies to developmental models. This course contrasts psychosocial stages of development with specific diets and food trends. Prerequisite: introductory psychology course

**PS3615 Health and Oriental Medicine 3 credits**

This course explores the practice of Oriental medicine and its relationship to Western psychology. Special attention is given to the influences of qi gong, Taoist and five-element tradition. Psychological health is examined from an energetic perspective, congruent with Oriental medicine's philosophy of approaching emotional problems as a result of an imbalance. The five-element tradition is explored in the context of maintaining health and wellness and contrasted with traditional Western concepts of balance. Prerequisite: none

**PS3901, PS3902, PS3903 Independent Study variable credit**

Independent study provides the student an opportunity to study an area of interest in psychology not included in the regular curriculum. Both the topic and the resource person must be approved by the psychology department chair. To begin independent study, the student must have completed 45 credits in psychology. Prerequisite: permission of department chair

**PS4101 Social Psychology 4 credits**

Using the perspective of social psychology, this course examines issues such as attitude change, interpersonal attraction and behavior, prejudice, attribution theory, aggression, conformity and inter/intragroup behavior, group process, leadership and social cognition. Prerequisite: none

**PS4102 Ethical Issues in Psychology 3 credits**

This course provides an introduction to global ethical philosophies and professional ethics in psychology, including practical application of ethical principles as they relate to contemporary psychological and biomedical issues. Topics such as informed consent, professional boundaries, confidentiality, ethics in research and dual relationships are emphasized. Students learn principles of ethical decision making, including autonomy and beneficence. Theoretical concepts are applied to personal, professional and global issues through the use of case studies. Prerequisite: introductory psychology course

**PS4106 Multicultural Psychology 3 credits**

This course explores diversity and similarity among human beings. An emphasis is placed on students' exploring their own backgrounds and biases to become better equipped at understanding and fighting racism, sexism, and other inequities and bigotries. Topics such as treatment of diversity and diversity impact on health are a focus. Students are expected to contribute personal reactions and evidence attempts at personal growth in multicultural understanding. Prerequisite: none

**PS4109 Human Sexuality 3 credits**

This course is designed to provide an overview of human sexuality. Students increase their knowledge, comfort and personal insight in topics like sex research, sexual anatomy, gender roles, sexual orientation, sexually transmitted infections and sexuality education. This course examines sexuality from personal, historical and cultural perspectives. Prerequisite: none

**PS4112 Creating Wellness 3 credits**

This course explores wellness comprehensively, including study of its physical, mental, emotional, behavioral, social and spiritual dimensions. We address the shifting paradigm of medical models from technocratic to biopsychosocial to holistic and look at how this shift is affecting traditional areas of study. The focus of this course is on biological-psychological interactions and the mind-body connection — how we stay healthy, how we become resilient and how we create well-being. The emerging field of positive psychology is also discussed. Prerequisite: none

**PS4113 Holistic Interventions in Addictions 2 credits**

This course offers a comprehensive study of approaches to treatment and case management, designed to offer an integrated approach in dealing with individuals who struggle with addictions. Modalities such as acupuncture, use of herbs and complementary and alternative medical practices for treatment of addictions are explored. Prerequisite: introductory psychology course

**PS4117 Experimental Psychology 4 credits**

This class focuses on the fundamentals of experimental design in psychology. Special attention is given to formulating hypotheses and operational definitions, data collection, analyses and interpretation. Students select, define and measure appropriate variables. Topics such as sensory and perceptual processes, attention and reaction time, as well as learning and memory, may be explored in the context of laboratory psychology. Prerequisites: PS3133, PS3134

**PS4124 Biological Psychology 5 credits**

This course provides a comprehensive introduction to the structure and functions of the human nervous system and investigates the biological basis of the senses, emotion and sleep. Topics such as hunger and thirst, sexual behavior, memory and language may also be explored. Prerequisite: none

**PS4126 Research Proposal 2 credits**

In this course students write the proposal for their senior research project. They review background literature, formulate hypotheses and operational definitions, and develop study procedures. Applications for Bastyr Institutional Ethics Review Board approval for empirical studies are also completed. Prerequisites: PS3133, PS3134

**PS4128 Research Project 5 credits**

The research project offers students the opportunity to explore a topic within the field of psychology and complete a literature review or empirical study on that topic under the direction of a psychology faculty member. Students present a hypothesis and methodology for testing and carry out a project. This course is equivalent to a senior thesis. Prerequisites: PS3133, PS3134, PS4117, PS4126

**PS4129 Research Presentation 3 credits**

The purpose of this course is to provide students with the opportunity to develop and deliver a conference-style presentation on the specific research topic they explored in PS4128. Prerequisite: PS4128

**PS4149 Psychology and World Religions 5 credits**

This course examines the central beliefs, traditions and practices of the five major world religions (Christianity, Judaism, Islam, Buddhism and Hinduism) as well as a variety of additional religions. The personal and cultural roles of religion as they relate to wellness and health care are discussed. This course combines in class discussion with various experiential components. Prerequisite: none

**PS4150 Healing: Self, Society and World 3 credits**

The final course in the Spirituality and Health series integrates information from the previous four courses and helps students extend their knowledge and skills toward community building, environmental and social change, and personal service. Prerequisites: PS3139, PS3147, PS4149

**PS4501 SPSS Lab .5 credits**

The SPSS lab course is designed for those undergraduate psychology students who have already completed an introduction to statistics course but lack training in the use of the Statistical Package for the Social Sciences (SPSS). The course introduces students to the fundamentals of creating data sets, labeling and manipulating variables, and testing hypotheses using various statistical commands in SPSS. Students gain hands-on experience with using SPSS on PC computers. This course is normally scheduled in the same quarter as Introduction to Statistics. Prerequisite: introductory statistics course

**PS4610 Special Topics in Health Care 3 credits**

Contemporary issues in health care as they relate to psychology are explored in this seminar-style course. Topics such as the environment of the health care industry, complementary medicine, the biopsychosocial model of health care and holistic psychological interventions are examined. Prerequisite: none

**PS4800 Practicum in Psychology variable credit**

This course provides students with the opportunity for practical experience in a variety of community settings related to psychology and health. Practicum sites are arranged by the student and must be approved by the instructor. A maximum of one practicum site experience is allowed per quarter. One credit equals 33 hours of practicum-related work over the course of an academic quarter. Maximum of two credits per quarter. Prerequisite: satisfactory completion of 30 credits in the BS in psychology program

**PS4901, PS4902, PS4903 Independent Study variable credit**

Independent Study provides the student an opportunity to study an area of interest in health psychology not included in the regular curriculum. (An independent study cannot substitute for or be used to repeat a course offered in the prescribed curriculum.) It is the responsibility of the student to enlist a qualified resource person to guide the independent study. The counseling and health psychology department chair must approve both the topic and the resource person. To begin independent study, the student must have completed 45 credits in residence. Prerequisite: permission of department chair

**PS5100 Psychological Foundations: Personality 4 credits**

The course consists of an intensive study and comparison of major theories and perspectives on personality. Characteristic research is reviewed and methods of personality research and its ramifications for assessment and counseling practice are explored. Prerequisite: admission into MACP program

**PS5101 Psychological Foundations: Life-Span Development 4 credits**

This course examines the stages of human psychological development from conception to death and the corresponding tasks, issues and challenges inherent in each stage throughout a person's lifespan. The course examines theory in developmental psychology and its application to counseling practice. Prerequisite: admission into MACP program

**PS5102 Biopsychosocial Approaches and Complementary and Alternative Medicine 4 credits**

This course examines the dynamic interaction of mind, body and spirit and their application to counseling and mental health practice. Particular attention is given to alternative theoretical perspectives to allopathic medical models and the implications for understanding healthy human behavior as well as the treatment of and response to problematic affective states and problem behavior. Prerequisite: admission into MACP program

**PS5104 Professional Orientation, Ethics and Law  
Proseminar 4 credits**

This course explores the ethical and legal issues relevant to the practice of counseling and psychology, including confidentiality, ethical competence, privilege and multiple relationships. Ethical issues concerning private practice, licensing, certification and forensics are covered. Principles of ethical decision making are given specific attention. This course provides students with a broad overview of mental health and is intended to serve as an orientation to professional practice. Prerequisite: admission into MACP program

**PS5105 Psychological Foundations: Multiculturalism,  
Diversity and Social Justice 4 credits**

This course addresses multicultural issues in the practice of psychology through investigating the fundamental levels of awareness, knowledge and skills necessary to competently serve diverse populations. The multiple dimensions of identity, including race, ethnicity, religion, socioeconomic status, gender, disability and sexual orientation are explored in the context of development, assessment and interventions. Prerequisite: admission into MACP program

**PS5106 Statistics 4 credits**

In this course, statistical procedures such as probability, correlation and regression, analysis of variance, binomial and normal distributions, hypothesis testing and estimation are examined within the context of the behavioral sciences. The course covers the application of descriptive and inferential statistics in research and measurement. Prerequisite: admission into MACP program

**PS5108 Introduction to Health Psychology 3 credits**

A comprehensive introduction to the theory and practice of health psychology examining the application of psychological theory and research to specific health issues. The strategies of health promotion and disease prevention, as well as the management of chronic and terminal illness, are examined. The course reviews relevant research and consider the implications for counseling practice. Prerequisite: admission into MACP program

**PS5109 Fundamentals of Counseling 3 credits**

This course provides an introduction to the fundamental interviewing and counseling skills in light of the principles of naturopathic medicine. The course covers multiple specific skills applicable across theoretical orientations, including use of questions, encouragement, paraphrasing, summarizing, confrontation, reflection of feeling, focusing, directives and others. Special attention is given to risk assessment in clinical practice. The course is supplemented with a weekly practicum lab in which students develop basic counseling skills. Prerequisite: PS5121

**PS5110 Fundamentals of Counseling: Group Dynamics  
3 credits**

This course introduces students to the basic principles of group psychotherapy and includes both an experiential and didactic component. Theories of group development and research issues are also reviewed. Prerequisite: PS5301 or permission of instructor

**PS5111 Fundamentals of Motivation and Behavior Change  
(offered at Bastyr University California only) 3 credits**

This course introduces students to the biopsychosocial model with an emphasis on behavior change theories as they relate to health promotion, to include the transtheoretical model, social cognition theory, learning theories and the health belief model. Students explore factors that may serve as barriers to behavior and lifestyle change, and identify strategies that support motivation, self-efficacy and relapse prevention.

**PS5113 Theories of Counseling and Psychotherapy  
3 credits**

This course covers the major theoretical approaches to counseling and psychotherapy, including psychoanalysis, cognitive-behavioral therapy, client-centered, gestalt and solution-focused. Case studies, role-plays, student-led discussion groups and videos supplement readings and lecture. Prerequisite: PS5301

**PS5115 Fundamentals of Counseling: Systems,  
Families and Couples 4 credits**

This course covers an overview of the development of the field of family therapy and an introduction to the theory and practice of the major "schools." Additional issues to be covered include medical family therapy, critiques of the major models, and culturally sensitive assessment and treatment with diverse families. Case studies, role-playing and videos supplement readings and lecture. Prerequisite: admission into MSN/CHP program or permission of instructor

**PS5120 Therapeutic Alliance 1 1 credit**

This course covers introductory theory and skills focused on the cultivation of the therapeutic relationship, including effective counselor qualities; the common factors that facilitate psychological well-being, and the development of attending behaviors in clinical practice. Specific attention is placed on applying these clinical skills across cultural differences, including developing an awareness of one's own unique strengths and biases. Critical ethical issues related to professional practice are explored. Concepts are integrated with naturopathic history, philosophy and professionalism. Lectures are taught in a hybrid-online format. Prerequisite: admission into naturopathic medicine program

**PS5121 Therapeutic Alliance 2 1 credit**

This course continues to develop knowledge and understanding in introductory theory and skills focused on the cultivation of the therapeutic relationship, including effective counselor qualities, the common factors that facilitate psychological well-being, and the development of attending behaviors in clinical practice. Specific attention is placed on applying these clinical skills across cultural differences, including developing an awareness of one's own unique strengths and biases. Critical ethical issues related to professional practice are explored. Concepts are integrated with naturopathic history, philosophy and professionalism. Lectures are taught in a hybrid-online format. Prerequisite: PS5120.

**PS5202 Psychopathology and Biomedical Conditions****3 credits**

This is a course in psychopathology that focuses on refining diagnostic skills and reviewing current empirical and theoretical literature on the biopsychosocial etiology of mental disorders. A special emphasis is placed on comorbid psychopathologies related to acute and chronic biomedical conditions such as pain syndromes, gastrointestinal disorders, spinal cord injury, cardiovascular disease, cancer, stroke, HIV and AIDS, and Alzheimer's disease. Corequisite: PS6315 for MSN/CHP only  
Prerequisite: admission into graduate studies

**PS5205 Patient Communications****3 credits**

This course covers the fundamentals of counseling, including essential counselor characteristics, basic communication and interview skills, the establishment of a therapeutic/wellness alliance, proficiency in stimulating health and nourishment, and suicide assessment and referral. Prerequisite: student clinician status or permission of the dean

**PS5206 Psychological Foundations: Psychopathology****4 credits**

This course examines the classification, diagnosis and associated symptomatology, etiology and treatment of mental disorders. Alternative models and various historical perspectives for understanding abnormal behavior are covered. Students learn to effectively apply and critique the Diagnostic and Statistical Manual of the American Psychiatric Association. Prerequisite: admission into MACP program

**PS5301 Fundamentals of Counseling: Basic Skills****3 credits**

This course covers the fundamentals of counseling, including essential counselor characteristics, basic communication and interview skills, the establishment of a therapeutic/wellness alliance, proficiency in stimulating health and nourishment, and suicide assessment and referral. The theory and research in common factor models of psychotherapy are emphasized. Prerequisite: admission into graduate studies

**PS5302 Counseling Theory and Practice****4 credits**

This course is a comprehensive overview of the major theoretical approaches to counseling and psychotherapy. The fundamental counseling techniques, including essential counselor characteristics, basic communication and interview skills, and the establishment of a therapeutic/wellness alliance, are examined. Prerequisite: admission into MACP program

**PS5802 Clinic Entry****1 credit**

This class covers clinical requirements, procedures and policies, including both clinic-wide and counseling shift issues. Focus is on topics such as Team Care philosophy, CPR, medical documentation and HIPAA training. Prerequisites: PS5104, PS5105, PS5206 and PS5302

**PS5901, PS5902, PS5903 Independent Study****variable credit**

Independent study provides the student an opportunity to study an area of interest in health psychology not included in the regular curriculum. (An independent study cannot substitute for or be used to repeat a course offered in the prescribed curriculum.) It is the responsibility of the student to enlist a qualified resource person to guide the independent study. The counseling and health psychology department chair must approve both the topic and the resource person. Prerequisite: permission of department chair

**PS6100 Motivational Interviewing****2 credits**

This is an advanced interviewing course designed to help students further develop their therapeutic skills at motivating clients for treatment and increasing treatment compliance. Students practice motivational interviewing in class. Prerequisite: admission into graduate studies or permission of chair

**PS6102 Research Methods and Program Evaluation****4 credits**

This course reviews the basic statistical procedures, psychometric principles and methods employed in psychological research. Research design methodology is also covered, including hypothesis formulation and experimental and quasi-experimental design. In addition to test construction, the course covers the use of needs assessment and other evaluation methods for determining the effectiveness of programs. Prerequisites: Admission into MACP program and PS5106

**PS6105 Diversity and Multicultural Issues in Health****Psychology****3 credits**

This course addresses multicultural issues in the practice of psychology through investigating the fundamental levels of awareness, knowledge and skills necessary to competently serve diverse populations. The multiple dimensions of identity, including race, ethnicity, religion, socioeconomic status, gender, disability and sexual orientation, are explored in the context of development, assessment and interventions. Prerequisite: admission into graduate studies or permission of instructor

**PS6112 Family Systems****4 credits**

This course provides a comprehensive overview of the theory and practice of the major approaches to family therapy. Additional issues to be covered include medical family therapy, critiques of the major models, and culturally sensitive assessment and treatment with diverse families. Case studies, role plays and videos supplement readings and lectures. Prerequisite: admission into MACP program

**PS6115 Human Sexuality****3 credits**

This course examines the role of sexuality in human functioning throughout the lifespan. It also covers contemporary cultural/psychosexual development and its impact on psychological health, sexual dysfunction and treatment, sexual abuse, and sexuality and spirituality. The biopsychosocial model of human sexuality is explored. Prerequisite: admission into MACP program

**PS6130 Psychological Testing 3 credits**

This course covers general principles of assessment and basic psychometrics and emphasizes basic research and interpretation skills for common personality, behavior and cognitive/intellectual assessments. Prerequisites: PS5202, PS5301, PS6315

**PS6202 Psychological Assessment 2 credits**

This course trains students to make clinical assessments of patients' psychological well-being using the Diagnostic and Statistical Manual of Mental Disorders (DSM) and, accordingly, to make judgments regarding appropriateness of treatment both within the University's clinic and the practice of naturopathy. Referral resources and procedures are discussed. Special emphasis is given to the recognition and impact of mental disorders in primary care. Lectures are taught in a hybrid-online format. Prerequisite: PS5109 or permission of the dean or chair of program

**PS6204 Substance/Chemical Addictions 4 credits**

This course provides a comprehensive overview of the assessment, diagnosis and treatment of alcohol and substance abuse disorders. The course examines the etiology and symptomatology of these addictive disorders and emphasize counseling intervention models. Behavioral addictions are also addressed. Prerequisite: admission into MACP program

**PS6207 Counseling for Eating Disorders 2 credits**

This course studies the entire spectrum of disordered eating, including anorexia, bulimia and restricted eating. Course emphasis is on the psychological, social and behavioral patterns of restrictive eating and the counseling issues, techniques and interventions that interrupt these and lead toward individual and family health and healing. This course includes a counseling lab. Prerequisites: PS5205 (AOM) or PS5301 (NTR) or PS7203 (ND) or PS5110, PS5115, PS5301 (MSN/CHP)

**PS6301 Counseling Theories and Interventions 1 3 credits**

This course focuses on developing skills related to conducting a clinical interview within the counseling context; the ability to conceptualize a clinical mental health case; and skills necessary for clinical treatment and intervention. Empirically supported counseling interventions are given specific attention, as is the biopsychosocial framework, the therapeutic stages of change, cognitive behavioral therapies and mindfulness-based therapies. The course is supplemented with a weekly practicum lab to facilitate experiential learning. Lectures are taught in a hybrid-online format. Prerequisite: PS6202 or permission of the dean or chair of program

**PS6302 Counseling Theories and Interventions 2 2 credits**

This course continues the development of student competency in mental health case conceptualization, treatment planning, and intervention by examining empirically supported practices in health psychology and behavioral medicine. Areas explored include assessing and promoting patient motivation and change, interventions grounded in mind-body medicine, and mental health consultation and referrals. The course focuses on the psychological aspects of counseling especially relevant within the practice of medicine, including treatment of psychological conditions secondary to medical problems. Lectures are taught in a hybrid-online format. Prerequisite: PS6301 or permission of the dean or chair of program

**PS6310 Nutrition and Pharmacology in Mental Health 3 credits**

This course is designed to study nutritional and pharmacological imbalances in mental health disorders and the relationship between nutrition, brain biochemistry and mental health. Nutritional and psychotropic interventions and their efficacy for mental health disorders are also examined. Prerequisites: BC5118, BC5132, and PS5202 or permission of instructor

**PS6312 Counseling Chronic and Terminal Illness 3 credits**

This course covers the assessment and intervention skills found to be effective in counseling persons with chronic pain, chronic illness or a terminal prognosis. Specific focus is on how to offer effective assistance for the emotional, social, behavioral and cognitive aspects of an ongoing pain problem and/or chronic/terminal illness. Prerequisite: admission into MACP program

**PS6315 Counseling Adults 1: Assessment and Treatment 3 credits**

This course utilizes a biopsychosocial counseling approach for assessment and treatment of adults with mental disorders and chronic illness. Students learn intake interviewing and basic counseling skills within a health psychology foundation, in preparation for their first clinic shift. The course also focuses on principles and processes for health behavior change. Key theoretical approaches and their clinical application are covered. Corequisite: PS5202 or permission of instructor

**PS6317 Counseling Adults 2: Assessment and Treatment 3 credits**

This advanced counseling course utilizes a biopsychosocial counseling and integrative approach for the assessment and treatment of adults with mental disorders and terminal illness. A primary focus is on counseling for grief and loss and includes techniques for assisting such individuals toward greater interpersonal effectiveness with partners, family members and other significant persons. This course also focuses on integrating various theoretical systems and approaches to counseling with hands-on skill development in advanced counseling techniques. Prerequisite: PS6315

**PS6320 Psychological Testing and Assessment 4 credits**

This course covers the general principles of psychometrics and the assessment of personality, behavior, cognition and intellectual functioning. The course provides an overview of the types of tests used in clinical, educational and vocational settings. In addition to reviewing professional standards for assessment, the course covers the impact of cultural factors such as test bias, and ethical/legal issues in test design and administration. Prerequisites: admission into MACP program and PS5106

**PS6323 Assessment and Treatment of Children/Adolescents in Health Psychology 3 credits**

This is an introductory course on children and adolescents' psychotherapies. It uses an integrated model of child therapy in a family context, which includes psychodynamic, cognitive-behavioral and systems perspectives. This course also explores various therapeutic modalities, using case studies to explore childhood disorders such as attention deficit hyperactivity disorder (ADHD), autism, diabetes, depression and eating disorders. Prerequisite: PS6315 or permission of instructor

**PS6325 Counseling and Spirituality 3 credits**

This course examines spiritual practices that can be incorporated into counseling sessions and introduces the student to a variety of other integral practices that might inform clinical practice, such as meditation and forms of spiritual healing. Prerequisite: admission into MACP program

**PS6330 Group Counseling 4 credits**

The course provides a comprehensive overview of group theory and process, including leadership styles, stages of group development and membership roles. Students develop group leadership skills and learn how to adapt group process to specific populations or settings. Relevant research issues are reviewed. Prerequisite: admission into MACP program

**PS6332 Psychotherapy Methods and Behavioral Medicine 4 credits**

This course explores various psychotherapeutic techniques, including cognitive behavior therapy, dialectical behavioral therapy, solution-focused therapy, acceptance and commitment therapy, progressive muscle relaxation, meditation, mindfulness, imagery, visualization, and biofeedback in the management of behavior and counseling practice. Prerequisite: admission into MACP program

**PS6401 Mind-Body Approaches for Health 2 credits**

This course examines the history, experience and appropriate application of evidence-based therapeutic techniques for stress reduction, including biofeedback, progressive muscle relaxation, deep breathing exercises, guided imagery, dream work, yoga, tai chi/qigong, exercise, sleep hygiene and components of nutrition. In vivo experience and application are a key foundation of this course. Prerequisite: admission to MACP

**PS6800 Clinic Shift 1 2 credits**

This course provides for the application of theory and the development of counseling skills under supervision. These experiences provide opportunities for students to counsel a wide variety of clients and client issues. Prerequisite: PS5802

**PS6801 Internship 1 2 credits**

A supervised experience in counseling under the intensive supervision of a University faculty member as well as on-site counseling staff is the focus of this course. The internship involves the student in the day-to-day functioning of a counselor at the respective site. Throughout the internship, the student takes on more and more of the responsibilities common to counselors at the particular setting. Prerequisite: PS6800

**PS6802 Internship 2 2 credits**

A supervised experience in counseling under the intensive supervision of a University faculty member as well as on-site counseling staff is the ongoing focus of this course. The internship involves the student in the day-to-day functioning of a counselor at the respective site. In Internship 2, the student takes on increased responsibility. Prerequisite: PS6801

**PS6803 Internship 3 2 credits**

A final supervised experience in counseling under the supervision of a University faculty member as well as on-site counseling staff is the focus of this course. The internship involves the student in the day-to-day functioning of a counselor at the respective site. In Internship 3, the student takes on increased responsibility. Prerequisite: PS6802

**PS6810 Internship Seminar 1 1 credit**

In this seminar, students present cases for which they have already received supervision at external internship sites and discuss issues related to professional development. Field placement at those sites emphasizes exposure to counseling, psychotherapy, diagnostic interviewing and diagnostic formulation. Corequisite: PS6801

**PS6811 Internship Seminar 2 1 credit**

Students continue to build their skills with regard to self-assessment, client relationship and intervention, and effective and ethical use of supervision and feedback. Corequisite: PS6802

**PS6812 Internship Seminar 3 1 credit**

Students continue to build relationship and intervention skills, grow in their ability to self-assess and use research to formulate diagnoses, assessments and interventions. Students learn how to refer to appropriate community resources and how to terminate therapeutic relationships. Prerequisite: PS6803

**PS6901, PS6902, PS6903 Independent Study variable credit**

Independent study provides the student an opportunity to study an area of interest in health psychology not included in the regular curriculum. (An independent study cannot substitute for or be used to repeat a course offered in the prescribed curriculum.) It is the responsibility of the student to enlist a qualified resource person to guide the independent study. The counseling and health psychology department chair must approve both the topic and the resource person. Prerequisite: permission of department chair

**PS7101 Professional, Ethical and Legal Issues 3 credits**

This course explores the ethical and legal issues relevant to the practice of psychology, including such topics as confidentiality, ethical competence, privilege and multiple relationships. Ethical issues concerning private practice, licensing, certification and forensics are also covered. Principles of ethical decision making are given specific attention. Prerequisite: admission into graduate studies

**PS7103 Mind Body Techniques for Stress Reduction 3 credits**

This course is designed to explore various techniques, including, but not limited to, progressive muscle relaxation, meditation, mindfulness, imagery, visualization and biofeedback in the process of stress reduction and management. Prerequisite: admission into MSN/CHP program

**PS7105 Alcohol and Substance Abuse 2 credits**

This course explores mental health counseling history, professional standards, ethical issues and legal codes and examines alcohol and substance abuse from a biological, cultural, historical, psychological, social and nutritional perspective. Focus is on counseling, treatment interventions, behavioral management and community referral resources. Prerequisite: admission into graduate studies

**PS7110 Advanced Statistics and Computer Lab 3 credits**

This course is required for students electing to do a psychology thesis. Students use statistical computer packages for statistical procedures covered in TR5100 and TR5104. As time permits, more advanced statistical procedures such as discriminant and factor analysis are also presented. The lab teaches students how to create data sets, label and manipulate variables and run statistical procedures using various statistical commands. Prerequisites: TR5100, TR5104 or permission of instructor

**PS7115 Developing and Evaluating Counseling Programs 3 credits**

This is a capstone clinical class for students where they apply their research knowledge and group counseling skills to develop an eight-week group program for Bastyr Center for Natural Health or their community site. The students work in teams to develop the curriculum. Basic tenets of program evaluation are also covered. Prerequisites: admission into MSN/CHP program, PS5110, PS7803, Clinic Shift 3

**PS7121 Thesis Advisement 1 2 credits**

This course is the first in the sequence of three courses for thesis advisement. Students form a committee and meet with their committee members to plan and implement a research project of sufficient complexity and scope in an appropriate subject area in psychology. Corequisite or prerequisite: PS7110

**PS7122 Thesis Advisement 2 2 credits**

Continuation of Thesis Advisement 1. Prerequisite: PS7121

**PS7123 Thesis Advisement 3 2 credits**

Continuation of Thesis Advisement 2. Prerequisite: PS7122

**PS7129 Career Counseling 3 credits**

This course explores career counseling theories, history and various approaches to career development. It serves to provide an introduction to the field of career counseling through consideration of both traditional and contemporary career development, and vocational choice theories and their applications to counseling. Clinical interventions, tests and assessment instruments relevant to this field are explored; cultural issues are given specific attention in this process. Prerequisites: PS7801, PS7811

**PS7203 Addictions and Disorders 2 credits**

This course examines the nature and treatment of alcohol and substance addictions and disorders from a physiological, psychological, nutritional and naturopathic perspective. Naturopathic scope of practice in the treatment and management of addictions is identified as well as community referral resources. Lectures are taught in a hybrid-online format. Prerequisite: PS5109 or permission of the dean or chair of program

**PS7801 Clinic Shift 1: Nutrition/Clinical Health Psychology 2 credits**

This directly supervised clinical experience occurs at Bastyr Center for Natural Health and emphasizes exposure to psychotherapy, diagnostic interviewing and diagnostic formulation for adults. Prerequisites: PS5110, PS5301

**PS7802 Clinic Shift 2: Nutrition/Clinical Health Psychology 2 credits**

This shift is a supervised nutrition practicum, emphasizing nutritional assessment, nutritional counseling, interviewing and chart documentation. Prerequisites: PS5301, PS5110, PS7801

**PS7803 Clinic Shift 3: Nutrition/Clinical Health Psychology 2 credits**

This directly supervised experience is the integrated counseling and nutrition shift at Bastyr Center for Natural Health. Students hone group and individual counseling skills and nutritional counseling skills by providing nutritional and health behavior change counseling and group cofacilitation for an eight-week weight and lifestyle management psychoeducational group called "Weigh to Go." This experience is supervised by a psychologist and nutritionist. Prerequisites: PS5110, PS5301, PS7802

**PS7805 MSN/CHP Practicum 1 2 credits**

Students in the MSN/CHP program receive supervised experience in a clinical setting where both nutrition and mental health counseling skills can be practiced and honed with licensed professionals from each specialty. Practicum experiences are arranged at community locations to provide students with varied opportunities and a diverse client population. As students progress from MSN/CHP Practicum 1 to 3, the level of responsibility and independence increases and different skills with a variety of clients are learned. Prerequisites: admission into MSN/CHP program, PS7801, PS7802, PS7803

**PS7806 MSN/CHP Practicum 2 2 credits**

A continuation of MSN/CHP Practicum 1. Prerequisites: PS7801, PS7802, PS7803 and PS7805

**PS7807 MSN/CHP Practicum 3** **2 credits**

A continuation of MSN/CHP Practicum 2. Prerequisites: PS7801, PS7802, PS7803 and PS7806

**PS7811 Practicum Seminar 1: Nutrition/Clinical Health Psychology** **1 credit**

In this seminar, students present cases for which they have already received supervision at external practicum sites and discuss issues related to professional development. Field placement at those sites emphasizes exposure to psychotherapy, especially health psychology, diagnostic interviewing and diagnostic formulation. Corequisite: PS7805

**PS7812 Practicum Seminar 2: Nutrition/Clinical Health Psychology** **1 credit**

A continuation of Practicum Seminar 1. Prerequisite: PS7811. Corequisite: PS7806

**PS7813 Practicum Seminar 3: Nutrition/Clinical Health Psychology** **1 credit**

A continuation of Practicum Seminar 2. Prerequisite: PS7812. Corequisite: PS7807

**PS7901, PS7902, PS7903 Independent Study** **variable credit**

Independent study provides the student an opportunity to study an area of interest in counseling psychology not included in the regular curriculum. (An independent study cannot substitute for or be used to repeat a course offered in the prescribed curriculum.) It is the responsibility of the student to enlist a qualified resource person to guide the independent study. The counseling and health psychology department chair must approve both the topic and the resource person. Prerequisite: permission of department chair

**Bastyr Center for Natural Health - Counseling Specialty Shift** **2 credits**

This required counseling shift at Bastyr Center for Natural Health provides an opportunity for naturopathic medicine students to counsel patients and receive individual supervision from the clinic counseling supervisor. The shift is limited to six students each quarter and affords ample attention to the development of each clinician's counseling skills. All naturopathic medicine students are required to take one counseling specialty shift. Students register for a patient care shift through the Doctorate in Naturopathic Medicine (ND) program. See course listings for NM7820-NM7829 and NM8830-NM8836. Additional counseling shifts are available as electives, on a space-available basis. See PS9801-PS9804. Prerequisites: PS6202, PS6301, PS6302

**PS9101 Death and Dying** **2 credits**

This introductory study of death, dying and grieving is designed to provide information, deepen understanding and create an opportunity to think and feel more deeply about life. From a variety of perspectives — psychological, historical, cultural, spiritual — the course explores some of the ways in which human beings have approached and interpreted the mystery of death, expressed their responses to dying and death, and evolved a framework of meaning for life in the face of death. Prerequisite: none

**PS9103 Ecopsychology** **2 credits**

This course introduces the student to the basic principles of the developing field of ecopsychology. This class explores evolutionary perspectives on, as well as social implications for, the merger of ecology and psychology. In addition, applications of ecopsychology within a variety of health and healing settings are examined, and an overview of the science of systems theory is intended to provide a perspective on how science has informed the study of ecopsychology. Prerequisite: none

**PS9106 Psychology of Dreams** **2 credits**

This class explores how waking and dreaming realities interrelate with each other and what is to be gained by exploring this interrelationship. Augmenting the theories of Western psychology with historical and cross-cultural perspectives, dreams are investigated in a setting that integrates academic understanding with direct experience. This includes discussion on how to better remember dreams, how to work with one's own dreams and how to bridge dreams with waking life in an engaged manner. Prerequisite: none

**PS9107 Introduction to Visualization and Imagery** **2 credits**

The development of imagery and visualization practices can enrich and empower our lives. This course explores the images and symbols inherent within us and ways to use these images for self-exploration. Students learn ways to use visualization and imagery for spiritual growth and awareness. Prerequisite: none

**PS9108 The Psychology and Soul of Breathing** **2 credits**

Breathing involves so much more than merely sustaining basic life functions. Breathing affects not only the quality of health, but according to many cultures, the soul and spirit. In this experiential elective, students explore the art and science of breathing from a biochemical, biomechanical and psychological perspective, while exploring breath as a means of expressing the body's ability to integrate and manifest spirit effortlessly into one's life. Prerequisite: none

**PS9112 Aromatherapy and the Psyche** **2 credits**

This elective explores the relationship between aromas and the psyche from a clinical perspective. As well as exploring their own reaction to aromas through experiential work, students learn about the impact specific aromas have on depression, autism, Alzheimer's disease and bereavement, and learn how to use clinical aromatherapy as a tool in clinical practice. Prerequisite: none

**PS9120 Counseling, Intuition and Spirituality** **2 credits**

This elective course examines spiritual practices that can be incorporated into counseling sessions and introduces the student to forms of spiritual healing congruent with naturopathic principles. Special focus on integrating spirituality and care of the soul as a principle of wellness and well-being. Prerequisite: PS5205 or PS6302

**PS9301 Clinical Biofeedback 2 credits**

This course reviews the clinical application of biofeedback techniques, emphasizing multimodality assessment and integration with counseling and holistic health care. Modalities/instrumentation discussed and demonstrated include electromyograph (EMG), electrodermograph (EDG), thermal biofeedback, heart and breathing rate feedback, and neurofeedback with EEG monitoring. Research findings for biofeedback treatment of various conditions are discussed. Students may take advantage of in-class experience with biofeedback monitoring as well as supervised practice in attaching sensors and operating equipment. Prerequisite: admission into Bastyr degree program

**PS9401 Advanced Counseling 3 credits**

This course is designed to strengthen previous training in counseling, specifically, in the etiology of presenting problems, the use of diagnostic decision trees and the application of treatment approaches in a clinical environment. The course facilitates experiential learning by focusing on case studies and role-playing. Prerequisite: permission of department chair

**Counseling Elective Shifts 1-4 - Clinic**

Students have the opportunity to take counseling shifts as elective credit once the required counseling shift is satisfactorily completed.

**PS9801 Patient Care Elective (fall) 2 credits**

See description above. Prerequisite: permission of department chair and clinic counseling supervisor

**PS9802 Patient Care Elective (winter) 2 credits**

See description preceding PS9801. Prerequisite: permission of department chair and clinic counseling supervisor

**PS9803 Patient Care Elective (spring) 2 credits**

See description preceding PS9801. Prerequisite: permission of department chair and clinic counseling supervisor

**PS9804 Patient Care Elective (summer) 2 credits**

See description preceding PS9801. Prerequisite: permission of department chair and clinic counseling supervisor

## DIDACTIC PROGRAM IN DIETETICS

Cristen Harris, PhD, RD, LD/N, MSN/DPD Director

Elizabeth Kirk, PhD, RD, BSN/DPD Director

**RD4105 Introduction to Dietetics 1 credit**

This course builds upon written and oral communication skills to prepare senior dietetic students for success in obtaining a dietetic internship. Topics covered include resume and cover letter writing skills in preparation for the internship and careers. Students utilize a variety of media to build upon interviewing skills and portfolio presentation. The code of ethics for dietitians and professionalism are highlighted to help students succeed in their internships and careers. Methods for dietetic registration and continuing education are also discussed. Prerequisite: admission into BSN/DPD program

**RD4120 Perspectives in Leadership and Management 3 credits**

Skills and roles of a "manager" versus a "leader" are delineated. Theories of management are reviewed, and the functions, skills and tools of management are explored. Human resource management techniques are introduced, as well as labor relations, law and financial management. Students study program planning, assessment and quality improvement, and are introduced to health care systems. The impact of effective leadership on the dietetics profession is discussed, and students assess leadership abilities. Prerequisite: admission into BSN/DPD program

**RD4130 Quantity Food Production 3 credits**

Cross listed as TR4132. This course introduces the food service industry and quantity food production. Major types of food service operations are identified, and trends that impact food service systems are explored. Students are introduced to the steps of quantity food production: procurement, receiving, storage, preparation, distribution and service. Potential hazards and related safe food-handling practices are identified. Development of standardized recipes and institutional menus are practiced, with marketing theory and techniques introduced. Students are introduced to standard food service equipment, kitchen sanitation and safety. Prerequisite: admission into BSN/DPD program

**Medical Nutrition Therapy 1-3**

In this three-course sequence, students learn the principles of the Nutrition Care Process, nutrition assessment, including anthropometric measurements, nutrient-specific laboratory data, drug-nutrient-herb interactions, direct clinical observations, guidelines for both prevention and therapeutic dietary planning, nutrient intake analyses and evaluation, and complementary nutritional therapies. Interpreting medical terminology and implementing the nutrition care process, including documentation in the medical records, are included.

**RD4301 Medical Nutrition Therapy 1: Assessment and Diagnosis 5 credits**

This course introduces nutrition assessment and diagnosis terminology utilizing the Nutrition Care Process. Medical terminology, abbreviations and standardized language for the Nutrition Care Process are practiced. Both allopathic and natural medicine perspectives are offered, including food-as-medicine, whole-food menu writing and disease prevention strategies. Anthropometric, biochemical, clinical observation and client history, and dietary history and assessment measures are included. Students begin medical documentation practice using outpatient-based case studies. Prerequisite: admission into BSN/DPD program. Corequisites: BC4114, TR4107

**RD4302 Medical Nutrition Therapy 2: Chronic Disease Management** **5 credits**

See description preceding RD4301. This course is a continuation of MNT 1. Students continue to practice nutrition assessment and diagnosis terminology to manage a variety of chronic health conditions, including cancer, kidney disease and liver disease. Nutrition intervention strategies utilize both allopathic and natural medicine perspectives. Students further develop their assessment and documentation skills from MNT 1 to a level adequate for entry into their Clinical Practicum. Prerequisites: RD4301 and admission into BSN/DPD program. Corequisite: TR4108

**RD4303 Medical Nutrition Therapy 3: Critical Care** **3 credits**

This course prepares dietetic students for the clinical rotation of an internship. Course content emphasizes acute and critical care disorders, and enteral and parenteral nutrition using case studies. Students must be enrolled in this course in order to sit for the DPD exit exam. Prerequisite/corequisites: RD4302 and admission into BSN/DPD program

**RD4410 Clinical Dietetic Practicum** **2 credits**

This course is designed to prepare students in the BSN/DPD program for dietetic internship. Clinical dietetic practicum allows the student to practice patient contact, requiring the student to manage consultations and assume primary responsibility for nutritional interventions. Activities may include group teaching, experience with "standardized" patients and one-to-one nutrition counseling sessions. Each student works in a team with other students (under faculty supervision) for consultation management and nutritional interventions. Prerequisites: RD4302, TR4207 and admission to BSN/DPD program. Corequisite: RD4303

**RD6105 Introduction to Dietetics** **1 credit**

This course builds upon written and oral communication skills to prepare senior dietetic students for success in obtaining a dietetic internship. Topics covered include resume and cover letter writing skills in preparation for the internship and careers. Students utilize a variety of media to build upon interviewing skills and e-portfolio presentation. The code of ethics for dietitians and professionalism are highlighted to help students succeed in their internships and careers. Methods for dietetic registration and continuing education are also discussed. Prerequisite: admission into MSN/DPD program

**Food Service Management 1-3**

In this three-course sequence taught at the graduate level, students learn about the food service industry, basic budgeting and accounting principles, quantity food production, marketing, quality improvement, safety and sanitation, regulations, and staffing. Using a managerial and systems approach to food service organizations, students combine theory and practice, develop business and marketing plans, and explore techniques of effective leadership and communication essential to becoming an effective manager.

**RD6131 Food Service Management 1** **2 credits**

See description above. This course, the first of a three-part series, introduces the student to the food service industry. Students learn the principles of quantity food production, including procurement, production, distribution, service, sanitation and safety. Students learn HACCP standards of quality in food service production facilities. Emphasis is placed on quality control and business management. For successful completion of this course, students must pass the ServSafe Certification examination. Additional fees for ServSafe Certification may be incurred. Students are also introduced to the concept of the business plan that will be carried forward the following quarter. Prerequisite: admission into MSN/DPD program

**RD6135 Food Service Management 2** **2 credits**

See description preceding RD6131. This course is a continuation of Food Service Management 1. Students develop a business plan in which they create the concept, organizational structure, initial operational budget, menu and marketing plan of a specific food service operation. Students develop models for ordering, receiving, inventory, staffing, orientation, training and labor schedules. Human resource management, facilities management, leadership and effective communication continue to be highlighted. Prerequisites: RD6131 and admission into MSN/DPD program

**RD6140 Food Service Management 3** **2 credits**

See description preceding RD6131. This course, the third of a three-part series, continues to focus on the management of food service systems, including personnel and financial resources. Working with diverse populations and labor unions and managing within legal regulations are emphasized. Students gain hands-on experience in a capstone project through the planning and implementation of an on-campus catering event. Prerequisites: RD6135 and admission into MSN/DPD program

**RD6403 Medical Nutrition Therapy** **3 credits**

This course prepares dietetic students for the clinical rotation of an internship. Course content emphasizes acute and critical care disorders and enteral and parenteral nutrition using case studies. Students must be enrolled in this course in order to sit for the DPD exit exam. Prerequisites: TR5321 and admission into MSN/DPD program

## SCIENCE AND NATUROPATHY

Jane Guiltinan, ND, Dean, School of Naturopathic Medicine  
Lynelle Golden, PhD, Chair, Basic Sciences Department

**SN5100 Clinical Skills Lab 1** **1 credit**

Students begin developing recognition of surface anatomy landmarks as well as palpation skills in preparation for conducting physical exams. Surface anatomy and palpation of the musculoskeletal system are covered, including palpation of the head, cervical and thoracic spine, back (including lumbar), pelvis, and extremities. The development of clinical skills builds on structure-function relationships that are covered in the integrated systems modules running concurrently with this module. Prerequisite: admission to the naturopathic medicine program. Corequisites: BC 5150, BC5151

**SN5101 Clinical Skills Lab 2** **1 credit**

Students continue developing recognition of surface anatomy landmarks as well as palpation skills in preparation of conducting physical exams of the cardiovascular, respiratory (including nose and throat) and gastrointestinal systems. Students also learn auscultation skills for these specific systems. Students learn how to perform and interpret blood pressure assessments. The development of clinical skills builds on structure-function relationships that are covered in the scientific foundations modules that run concurrently with this module. Prerequisite: SN5100. Corequisites: BC5152, BC5153, BC5154

**SN5102 Clinical Skills Lab 3** **1 credit**

Students continue developing recognition of surface anatomy landmarks as well as palpation skills in preparation for conducting physical exams. Students learn how to perform neurologic testing such as assessing the cranial nerves and deep tendon reflexes. Also during this quarter, students learn how to perform a basic multisystem physical exam. The development of clinical skills builds on structure-function relationships that are covered in the integrated systems modules that run concurrently with this module. Prerequisite: SN5101. Corequisites: BC5155, BC5156, BC5157

**SN5103 Integrated Case Studies 1** **1 credit**

This module requires students to apply principles from both Naturopathic Theory and Practice 1 and the integrated systems modules in the review, discussion and presentation of cases. Cases in the first year focus on wellness. Cases in this quarter require students to demonstrate competencies for the neuroendocrine and musculoskeletal systems. Prerequisite: admission to the naturopathic medicine program. Corequisites: NM5141, BC5150, BC5151

**SN5104 Integrated Case Studies 2** **1 credit**

This module requires students to apply principles from both Naturopathic Theory and Practice 2 and integrated systems modules in the review, discussion and presentation of cases. Cases in the first year focus on wellness. Cases this quarter require students to demonstrate competencies for the cardiovascular, immune, respiratory and digestive systems. Corequisites: NM5142, BC5152, BC5153, BC5154

**SN5105 Integrated Case Studies 3** **1 credit**

This module requires students to apply principles from both Naturopathic Theory and Practice 3 and integrated systems modules in the review, discussion and presentation of cases. Cases in the first year focus on wellness. Cases in this quarter require students to demonstrate competencies from the endocrine and metabolism, renal, reproductive and nervous system modules. Corequisites: NM5143, BC5155, BC5156, BC5157

**SN6100 Integrated Case Studies 4** **.5 credits**

Students participate in case discussions every two weeks that require application of clinical reasoning and scientific concepts to support a differential diagnosis. Case topics address the systems covered in Naturopathic Clinical Diagnosis 1. Corequisites: BC6101, BC6102, NM6310

**SN6101 Integrated Case Studies 5** **.5 credits**

Students participate in case discussions every two weeks that require application of clinical reasoning and scientific concepts to support a differential diagnosis. Case topics address the systems covered in Naturopathic Clinical Diagnosis 2. Corequisites: BC6103, BC6104, NM6311

**SN6102 Integrated Case Studies 6** **.5 credits**

Students participate in case discussions every two weeks that require application of clinical reasoning and scientific concepts to support a differential diagnosis. Case topics address the systems covered in Naturopathic Clinical Diagnosis 3. Corequisites: BC6105, BC6106, NM6312

**SN6300 Integrated Therapeutics 1** **3 credits**

This module addresses basic principles of botanical medicine and pharmacology. Students learn similarities and differences between the two therapeutic modalities and discuss them in the context of the therapeutic order. Applications of these therapeutics to blood and the integumentary and musculoskeletal systems are addressed. Prerequisite: BC5150-BC5156 or permission of the dean or chair of program

**SN6303 Integrated Therapeutics 2** **3 credits**

This module addresses basic principles of botanical medicine and pharmacology. Students learn similarities and differences between the two therapeutic modalities and discuss them in the context of the therapeutic order. Applications of these therapeutics to the digestive, respiratory and cardiovascular systems are addressed. Prerequisite: SN6300 or permission of the dean or chair of program

**SN6304 Integrated Therapeutics 3** **3 credits**

This module addresses applications of botanical medicine, nutrition and pharmacology to the renal, reproductive, endocrine and nervous systems. Students learn similarities and differences between these therapeutic modalities and discuss them in the context of the therapeutic order. Applications of these therapeutics to the renal, urinary, male and female systems are addressed. Prerequisite: SN6303 or permission of the dean or chair of program

**SN7300 Advanced Case Studies 1** **.5 credits**

This module requires students to apply principles from naturopathic medicine modules in the discussion, diagnosis and treatment of cases. Cases in the third year focus on treatment of disease. Cases in this quarter require students to demonstrate competencies for the nervous system and mental health issues as well as the endocrine system. Corequisites: NM7318, NM7319, NM7321

**SN7301 Advanced Case Studies 2** **.5 credits**

This module requires students to apply principles from advanced naturopathic practice modules in the discussion, diagnosis and treatment of cases. Cases in the third year focus on treatment of disease. Cases in this quarter require students to demonstrate competencies for the digestive, cardiovascular and respiratory systems. Corequisites: NM7322, NM7323, NM7324.

**SN7302 Advanced Case Studies 3 .5 credits**

This module requires students to apply principles from advanced naturopathic practice modules in the discussion, diagnosis and treatment of cases. Cases in the third year focus on treatment of disease. Cases in this quarter require students to demonstrate competencies for EENT, the renal, urinary, male and female systems. Corequisites: NM7328, NM7329, NM7331

**SN8300 Advanced Case Studies 4 .5 credits**

This module requires students to apply principles from advanced naturopathic practice modules in the discussion, diagnosis and treatment of cases. Cases in the fourth year focus on treatment of disease. Cases in this quarter require students to demonstrate competencies for the integumentary system. Corequisites: NM8100, NM8305

## NUTRITION

Debra Boutin, MS, RD, Department Chair

Bachelor of Science in Nutrition major (TR) courses and Master of Science in Nutrition (TR) courses are below. For course numbers and descriptions for the Dietetic Internship (DI), Didactic Program in Dietetics (RD), and Exercise Science and Wellness (EX), see alphabetical listings.

**TR2101 Introduction to Human Nutrition (online course) 3 credits**

This course introduces a basic understanding of the fundamentals of human nutrition with a whole-food perspective. Topics include the functions and food sources of carbohydrates, lipids, protein, water, vitamins and minerals. Dietary reference intakes (DRI) and other standard nutrition guidelines (both national and international) are reviewed. Food labels, nutrient intake analyses and basic nutrition assessment methods are presented and practiced. Energy balance and weight management issues are reviewed. This class is only offered online and fulfills the nutrition prerequisite admission requirement for all programs in the department. Prerequisite: none

**TR3105 Introduction to the Scientific Method (online course) 1 credit**

This online course introduces undergraduate students to the principles of the scientific method. The intention is to allow students to more effectively understand and interpret research studies referenced within courses. Prerequisite: None

**TR3111 Nutrition Throughout Life 3 credits**

This course introduces the essentials of normal human nutrition throughout the life span: pregnancy, infancy, childhood, adolescence, mature adulthood and older adulthood. Prerequisite: TR2101 or equivalent

**TR3115 Introduction to Food Science 2 credits**

This course is an introduction to areas of food science and includes a discussion of the laws relating to food, including labeling laws and the role of regulatory agencies. The course also includes an overview of food additives and food processing. Prerequisite: BC3123 Corequisite: BC4117 or permission of instructor

**TR3120 Experimental Foods Lecture/Lab 5 credits**

This course introduces students to the composition and physiochemical changes in foods in relationship to the interaction, reaction and evaluation of foods due to formulation, processing and preparation. Topics include water, carbohydrates, fruits and vegetables and their respective pigments, fats, oils animal and plant-based proteins. Review of food formulation, sensory evaluation, processing and preparation are explored in the laboratory section of this class. Students must show evidence of holding a current food handler's permit. Prerequisites: BC4117, TR3115. Corequisite: BC4140

**TR3121 Culinary Skills 1: Soups and Seasonings with Intuition 2 credits**

Students develop knife skills and are introduced to the basics of creating stocks, sauces, soups and stews. Vegetable cookery is practiced, as well as the fundamentals of working with animal proteins, including eggs, meat, fish and fowl. Bean and grain cookery are reviewed. Flatbread and quick bread methods are introduced. Students begin developing original recipes. Prerequisites: TR4103/5101, current food handler's permit

**TR3122 Culinary Skills 2: Suppers and Desserts with Originality 2 credits**

Students practice baking skills, including yeasted breads, pies, cakes and cookies. Some larger cuts of meat, marinades and vegetarian proteins are explored. Creating a portfolio of original recipes continues. Class culminates in presentation of an original main entrée, side dishes and dessert. Prerequisites: TR3121, current food handler's permit; students enrolled in the culinary arts program must have achieved a 2.0 (C grade) or better in Culinary Skills 1 to move into Culinary Skills 2

**TR3141 Therapeutic Cooking: Maintaining Health 2 credits**

The focus of this course is on food and diets that claim to promote health and wellness. A variety of time-honored as well as current approaches are reviewed. Students evaluate the evidence regarding the diet's validity and learn how to adapt and prepare dishes and design menus that are thought to be health-supportive for individuals and groups. Prerequisite: TR4103 or TR5101

**TR3142 Therapeutic Cooking: Illness and Recovery 2 credits**

The focus of this course is on food and diets that claim to aid people in recovery from special conditions or illness, or that support the management of chronic disease. Students evaluate the evidence regarding the diet's validity and learn how to design, adapt and prepare dishes, meals and remedies that are thought to be health-supportive for individuals or groups and that adhere to particular recovery-type diet protocols. Prerequisite: TR4103 or TR5101

**TR3152 Cooking Demonstration 2 credits**

This course is designed to give students the skills and practice they need to be able to do cooking demonstrations or teach classes for the public. Each student designs his/her own cooking class, emphasizing whole foods. Students practice-teach parts of their class, learn how to assist other teachers and evaluate their peers. Writing proposals and marketing are discussed. Final student demonstrations are presented for an invited audience. Prerequisite: TR4103/5101

**TR3153 Writing About Food and Health 2 credits**

This course introduces students to the skills needed for a part-time or freelance career in writing and is appropriate for those interested in improving writing skills. Students learn how to differentiate writing styles and practice various structures such as blog posts, news stories, research articles and memoirs. Composing pitches and proposals are covered. Assignments are turned in several times, allowing for editing and re-writing to be practiced, thus honing style and skills. Prerequisite: admission into the BSN culinary arts program or permission of program director

**TR3163 The Business of Cooking 3 credits**

Personal chefing, private chefing, cooking classes, catering and food delivery services are in demand. This course helps students devise a business plan to pursue self-employment. Each week a different part of the business structure is analyzed, including goal setting, licensing, financing and marketing. Students also learn intake skills and how to create a business resume. Prerequisite: admission into BSN culinary arts program or permission of program director

**TR4100 Introduction to Research Methods 3 credits**

This course, designed for students in nutrition and exercise science, is an introduction to research methods. Included are the basic concepts of scientific method, statistics, epidemiology and research methodology. Students practice applied research skills, such as use of the library and Internet, evaluation of research literature and scientific writing, and design and conducting of research. A CITI training module is completed. Prerequisites: college algebra, TR2101 or equivalent

**TR4103 Whole Foods Production 3 credits**

Cross listed as TR5101. This course covers the identification, labeling and selection of foods from nature to point of purchase. The lab portion of class completes the cycle from store to table with a weekly cooking practicum. Students develop familiarity with minimally processed foods and use these foods to build culinary skills. Fundamental cooking techniques, recipe writing and menu planning are stressed. Prerequisite: none

**TR4107 Advanced Nutrition Principles 1 4 credits**

This course is the first of a two-course series. Biochemical and physiological principles related to macro- and micronutrients and vitamins are the focus of this class. Structure, function, digestion, absorption, food sources, requirements, nutrient interactions, deficiencies and toxicity of selected macro- and micronutrients are discussed. Prerequisites: BC3163, BC4140 and introductory nutrition course

**TR4108 Advanced Nutrition Principles 2 2 credits**

This is a continuation of Advanced Nutrition Principles 1. Biochemical and physiological principles related to elements (minerals) are the focus of this class. Digestion, absorption, food sources, requirements, function, nutrient interactions, deficiencies and toxicity of selected micronutrients are discussed. Prerequisite: TR4107

**TR4113 Nutritional Supplements and Herbs 3 credits**

This course explores the natural products industry, including the history, regulation and labeling laws of the industry in the U.S. Safety, manufacturing and formulation techniques, delivery form, general applications of nutritional supplements, functional foods and herbs are presented. Prerequisites: TR3111 or equivalent, TR4107. Corequisite: TR4108

**TR4117 Nutrition, Physical Activity and Disease****5 credits**

This course provides an overview of common chronic diseases, their pathophysiology and primary prevention strategies. Designed as a capstone, this course incorporates Bastyr's philosophy of the inseparability of mind, body and spirit, while focusing on integrating the students' prior knowledge towards developing strategies to help individuals, groups and communities improve their health. Common theories of health behavior are introduced and utilized in this effort. Prerequisites: BC3163, TR3111, TR4108, TR4205

**TR4118 Cultural Perspectives on Foods 2 credits**

This course is a survey of present and past food practices around the globe, with emphasis on diverse cultural groups in the U.S. The socioeconomic and political factors in food selection are examined. Multicultural and interdisciplinary perspectives are used to broaden the understanding of basic nutrition. Prerequisite: TR2101 or equivalent

**TR4123 Culinary Skills 3: Appetizers and Entrees with Beauty 2 credits**

This course culminates in students preparing and serving a multi-course dinner to invited guests. To prepare, students learn how to create appetizers and hors d'oeuvres, layered entrees and multifaceted desserts using whole-food ingredients. How to garnish and plate elegantly are discussed. Prerequisites: TR3122, current food handler's permit; students enrolled in the culinary arts program must have achieved a 2.0 (C grade) or better in Culinary Skills 2 to move into Culinary Skills 3.

**TR4126 Community Nutrition/Nutrition Education****5 credits**

This course examines the principles of public health, community nutrition, epidemiology, health care systems, legislation and nutrition policy. Additionally, this course reviews effective oral and written communication skills, covering principles of nutrition education, including teaching/learning methods for target audiences, writing instructional goals and objectives, preparing appropriate nutrition education materials and evaluating nutrition education programs. Prerequisites: TR4108, TR4140

**TR4132 Quantity Food Production****3 credits**

Cross listed as RD4130. This course introduces the food service industry and quantity food production. Major types of food service operations are identified, and trends that impact food service systems are explored. Students are introduced to the steps of quantity food production: procurement, receiving, storage, preparation, distribution and service. Potential hazards and related safe food-handling practices are identified. Development of standardized recipes and institutional menus are practiced, with marketing theory and techniques introduced. Students are introduced to standard food service equipment, kitchen sanitation and safety. Prerequisite: admission into the BSN culinary arts program

**TR4140 Ecological Aspects of Nutrition****2 credits**

This course is an introduction to ecological issues in nutrition. Students gain an understanding of environmental issues related to food technology, water use and food production systems, including organic and sustainable agriculture. The regulation of these areas is also discussed. Prerequisite: admission to BSN program or approval from department chair

**TR4205 Nutritional Analysis and Assessment****3 credits**

This course presents different methods used for assessment and screening of nutritional status for the purpose of promoting health. The use of anthropometric, dietary, clinical and biochemical measures is emphasized. Alternative methods of nutritional assessment are introduced and evaluated. Prerequisites: TR3111 or equivalent, TR4107. Corequisite: TR4108

**TR4207 Nutritional Counseling****2 credits**

This course introduces advanced interviewing techniques used in nutritional counseling. Students explore their personal nutritional counseling style through role-play, visualization and other counseling techniques. Students build an understanding of the complexities of diet and compliance issues. Prerequisites: admission into DPD program, introductory psychology course, PS3127

**TR4805 Nutrition Education Practicum****2 credits**

This course provides the opportunity for students to develop practical experience in nutrition education through presentations and preceptorships. This course may be taken in any quarter, except summer, during year two. Prerequisites: completion of junior year, permission of instructor

**TR4820 Culinary Practicum****4 credits**

Students gain practical experience in the culinary world. Working in an off-campus venue under an approved preceptor, and also supervised hours in the Bastyr Dining Commons kitchen, students further their skills and understanding of working in a professional setting. Prerequisites: completion of TR3122 and TR3142, current food handler's permit; a 2.0 (C grade) or better in all designated culinary courses or approval of culinary arts director. Students must be in good academic standing to pursue practicum.

**TR4901, TR4902, TR4903 Independent Study****variable credit**

Credits may be applied to the nutrition elective requirement. Students focus on areas of interest not covered in the regular curriculum. Competencies and learning objectives are developed with a faculty sponsor or approved preceptor. Independent study cannot substitute for core courses offered on campus. Students must be in good academic standing and may take a maximum of four (4) credits. Prerequisite: permission of chair

**TR5100 Biostatistics****4 credits**

This is an introductory course in biostatistics with an emphasis on understanding and interpreting the common statistical methods used in health sciences research. Topics discussed include presentation and summarization of data, probability, inferential statistics, methods for comparisons of means and proportions, methods for measurement of association, prediction and multivariate statistical methods. Prerequisites: one course in college algebra and admission into Master of Science in nutrition or permission of department chair; TR5104

**TR5101 Whole Foods Production****3 credits**

Cross listed as TR4103. This course covers the identification, labeling and selection of foods from nature to point of purchase. The lab portion of class completes the cycle from store to table with a weekly cooking practicum. Students develop familiarity with minimally processed foods and use these foods to build culinary skills. Fundamental cooking techniques, recipe writing and menu planning are stressed. Prerequisite: none

**TR5104 Research Methods in Health Sciences****3 credits**

This course covers the major research methodologies used in health sciences research. This course covers the major epidemiologic and experimental methods used in health sciences. Qualitative and quantitative methods are discussed. The emphasis is on the design and interpretation of research studies. Prerequisite: admission into Master of Science in nutrition or permission of chair

**TR5115 Food Science****5 credits**

This course is an overview of food science for nutritionists. The composition and the chemical and physical properties of the major food groups are the focus. Food formulation, processing and preparation are emphasized. The technological, safety and regulatory aspects of food and food additives are also discussed. Students must show evidence of holding a current food handler's permit. Prerequisites: admission into Master of Science in nutrition program, TR5140

**TR5120 Advanced Nutrition: Macronutrients 5 credits**

Nutritional biochemistry of the macronutrients, including integrated metabolism, is discussed. Macronutrient digestion, biological requirements, absorption and metabolism are emphasized. Students apply these principles to various dietary and metabolic states. Prerequisites: Five quarter credits of nutrition, one 300- or 400-level biochemistry course or equivalent, admission into Master of Science in nutrition program

**TR5124 Advanced Nutrition: Micronutrients 5 credits**

Nutritional biochemistry of the micronutrients (vitamins and minerals) is discussed, including chemical structures, nomenclature, dietary sources, functions, bioavailability, metabolism, evidence for requirements, potential deficiency and toxicity, interaction with other nutrients and assessment of nutritional status. Prerequisites: TR5120, admission into Master of Science in nutrition program

**TR5128 Applied Research Skills 3 credits**

This course emphasizes gaining skills required to plan and execute research studies in health sciences. Topics covered include scientific writing, literature review skills, developing hypotheses, human ethics in research and scientific presentation skills. A research proposal is developed as part of this class. Prerequisites: TR5104, TR5124, admission into MSN program; Corequisite: TR5100

**TR5132 Applied Statistical Analysis 2 credits**

This course emphasizes practical skills: data management, data analysis, SPSS and/or other statistical programming. More advanced statistical procedures such as multivariate and factor analysis are also presented. Students learn how to create data sets, label and manipulate variables, and run statistical procedures using various statistical commands in lab. Prerequisite: TR5128 or permission of instructor

**TR5136 Nutrition in the Life Cycle (hybrid online/onsite course) 3 credits**

Physiological, metabolic, interpersonal and developmental relationships to nutrition are explored through the various stages in the life cycle, including infancy, childhood, young adulthood, pregnancy, mature adulthood and older adulthood. Prerequisites: admission into Master of Science in nutrition program and introductory nutrition course

**TR5140 Advanced Nutrition: Bioactive Compounds in Foods 3 credits**

There are biologically active compounds, found mainly in plant foods (sometimes called phytochemicals), that are not nutrients or human metabolites and that have potentially important effects on human physiology. This course reviews the current evidence on these compounds, including chemical structure and nomenclature, biological effects, food sources, absorption and metabolism, potential therapeutic uses, and toxicity. Examples of compounds to be discussed: bioflavonoids, carotenoids, tocopherols/tocotrienols, plant sterols, pre/probiotics, indoles/glucosinolates and alkenyl cysteine sulfoxides. Prerequisite: TR4108 (for Bachelor of Science programs); TR5124 (for Master of Science programs)

**TR5207 Nutritional Counseling 2 credits**

This course introduces advanced interviewing techniques used in nutritional counseling. Students explore their personal nutritional counseling style through multi-course, visualization and other counseling techniques. Students build an understanding of the complexities of diet and compliance issues. Prerequisites: PS5301, admission into MSN/DPD program or permission of DPD director

**TR5320 Nutrition Assessment and Therapy 1 5 credits**

This course introduces disease prevention, nutrition assessment and therapeutic interventions, including both traditional and natural medicine approaches. Medical terminology and abbreviations, using food-as-medicine, whole-food menu writing, nutritional screening and assessment with documentation for the medical record utilizing case studies are included. Anthropometric, biochemical, client history, physical findings, and food and nutrition-related history indicators are defined, interpreted and applied. Anemia, dysbiosis, food allergies and sensitivities, upper and lower GI diseases, cardiovascular disease, diabetes, hypertension, and obesity are covered. Prerequisites: BC5118, TR5120, TR5136. Corequisites: BC5132, TR5124

**TR5321 Nutrition Assessment and Therapy 2 5 credits**

This course is a continuation of Nutrition Assessment and Therapy 1. Students continue to practice application of nutrition assessment and intervention therapies. Oral/dental and bone health, cancer, HIV/AIDS, neurological diseases, dysphagia, pulmonary disease, chronic kidney disease, endocrine imbalance, detoxification and biotransformation, inflammatory diseases, and biliary and liver disease are covered. Assessment of normal pediatric nutrition is introduced. Nutrition intervention strategies using both traditional and natural medicine approaches are practiced. Prerequisites: BC5132, TR5124, TR5320; TR5207 (for DPD only)

**TR5803 Nutrition Clinic Entry 1 credit**

This class covers clinic requirements, procedures and policies, including both clinic-wide and nutrition shift issues. Focus is on topics such as team care philosophy, CPR, medical documentation and HIPAA training. This course may be taught in a hybrid/online model. Prerequisites: TR5207 or PS5301, TR5320, admission into MSN/DPD or MSN/CHP program, or permission of instructor. Corequisites: TR5321 and PS6315 (for MSN-CHP students only)

**TR5901, TR5902, TR5903 Independent Study variable credit**

Credits may be applied to the nutrition elective requirement. Students focus on areas of interest not covered in the regular curriculum. Competencies and learning objectives are developed with the help of an instructor or approved preceptor. Independent study cannot substitute for core courses offered on campus. Students must be in good academic standing and may take a maximum of four (4) credits. Prerequisites: permission of chair, admission into Master of Science in nutrition program

**TR6100 Nutritional Supplementation 4 credits**

This course focuses on the nutritional and physiological value of supplements and herbal products as applied to wellness promotion and chronic disease management. Production, safety and regulation of supplements and herbs are discussed. Students learn basic botanical concepts, terms and pharmacology. Prerequisites: TR5140, TR5321

**TR6105 Nutrition and Dietary Systems 3 credits**

This course introduces AEAM students to the importance of nutrients, foods and diets for prevention, health maintenance, and health promotion. This course provides students with a basic understanding of the fundamentals of human nutrition, including macro, micro and accessory nutrient concepts. A critical analysis of Western and non-Western dietary systems is presented. Students learn to do nutritional assessment for their patients. Prerequisite: AEAM internship eligibility

**TR6111 Contemporary Nutrition: Global and Ecological Issues 2 credits**

This is the first class in a three-course series that focuses on the importance of food and food choice in a broad context. Interactions between food choice and ecology, including such areas as food technology, water use and sustainable agriculture, are discussed. Food security and world hunger are included. Prerequisite: admission into Master of Science in nutrition program

**TR6114 Thesis variable to 12 credits**

Students form a committee and meet with their committee members to plan and implement a research project of sufficient complexity and scope in an appropriate subject area. Twelve (12) credits are necessary to meet the requirement for scholarly activity mandated for graduation with a master's degree. Thesis requirements are detailed in the Bastyr University nutrition program *Master's Thesis Handbook*. Prerequisites: TR5100, TR5104, TR5128

**TR6116 Thesis Seminar 1 credit**

This course is designed to assist students in developing skills important in performing thesis research. The format varies, but examples of activities include: presentation of thesis proposals, problem solving, reviewing recent scientific literature, and learning and practicing applicable methods (e.g., research design, research budgets, IRB applications, statistical and data analysis techniques, oral and written presentation). This one-credit class needs to be taken for three separate quarters, starting with the first quarter that students enroll in thesis credits. Prerequisites: TR5100, TR5104, TR5128. Corequisite: TR6114

**TR6122 Contemporary Nutrition: Community and Culture 3 credits**

This is the second class in a three-course series that examines public health, community nutrition and health care systems. Students begin to assess the needs of a community, outlining the background to a public health grant that will be completed in TR6133. Students explore publicly funded nutrition programs, comparing and contrasting effective community nutrition education in affecting dietary behavior change and critically evaluating effective interventions in communities with different cultural backgrounds. Prerequisites: admission into Master of Science in nutrition program, TR6111

**TR6133 Contemporary Nutrition: Public Health 3 credits**

This is the third class in a three-course series that culminates in development of a public health grant. Students explore funding sources for public health nutrition grants and explore both historical perspectives and emerging trends in nutrition policy, as they gain an understanding of the role of the community nutritionist in advocating and securing public health funds to support community nutrition interventions. Prerequisites: admission into Master of Science in nutrition program, TR6122

**TR6312 Nutrition Principles 1: Assessment, Education and Macronutrients 3 credits**

This course introduces students to whole foods for prevention, health promotion and disease treatment. Students practice nutritional assessment, food and nutrition education, and menu planning as part of naturopathic primary care. Students critically assess nutrition recommendations and diets for validity using evidence-based research. This course also provides a focused overview of the metabolism, absorption, transport and requirements for protein, carbohydrates and lipids. Prerequisite: completion of first year NM curriculum

**TR6313 Nutrition Principles 2: Micronutrients 2.5 credits**

This course gives an overview of the metabolism, absorption, transport functions, requirements (deficiencies and toxicities), food sources, nutrient-nutrient interactions and potential indications for drug-nutrient interactions for a selection of vitamins and minerals. Prerequisite: TR6312

**TR6199 Thesis Continuation 0 credits**

This course is used when a student is still working on a thesis but has already registered for the required number of thesis credits. One credit of tuition is charged. Prerequisite: TR6114 (12 credits)

**Clinic Nutrition Practicum 1-2**

Students in the MSN/DPD and MSN/CHP programs receive supervised experience in the clinical setting. Nutritional assessment, client counseling, interviewing and chart documentation are emphasized in skill development. Supervisor feedback and self-evaluation are used to help identify and develop individual areas of focus. Activities may include, but are not limited to, observation of experienced practitioners, group teaching, experience with “standardized” patients and one-to-one nutrition counseling sessions. The practicum may occur on campus, at Bastyr Center for Natural Health or at an external clinic site. As students progress from Clinic Nutrition Practicum 1 to Clinic Nutrition Practicum 2, the level of individual responsibility increases. In Clinic Nutrition Practicum 1, there is a greater emphasis on observation and skill building. The student’s role in direct client contact increases in Clinic Nutrition Practicum 2, where students are expected to take more of a leadership role in nutrition consults, with client interviewing, nutrition assessment, intervention and medical documentation.

**TR6811 Clinic Nutrition Practicum 1 2 credits**

See description above. Prerequisites: BC5132, TR5136, TR5207, TR5321, TR5803 (for DPD program); BC5132, PS5301, PS5202, TR5803, PS6315, TR5136, TR5321 (for MSN/CHP); meeting criteria for professional behavior and attitudes or permission of nutrition clinic coordinator

**TR6812 Clinic Nutrition Practicum 2 2 credits**

See description above. Prerequisites: TR6811 or PS7802 for students approved for completing both the MSN-CHP program and the DPD track; meeting criteria for professional behavior and attitude

**TR6901, TR6902, TR6903 Independent Study variable credit**

Credits may be applied to the nutrition elective requirement. Students focus on areas of interest not covered in the regular curriculum. Competencies and objectives are developed with a faculty sponsor or approved preceptor. Independent study cannot substitute for core courses offered on campus. Students must be in good academic standing and may take a maximum of four (4) credits. Prerequisite: permission of program chair

**TR9103 Chef’s Pantry 1 Credit**

The cycle of harvest-to-table often includes preserving food and stocking the pantry. This course is designed to enable students to capture the seasonal harvest and take a DIY (do it yourself) approach to creating their own well-stocked pantry. Class work includes collecting and storing herbs, making jams, canning fruits and vegetables, and infusing fats and vinegars. Depending upon the quarter offered, these topics may vary to support what foods are available based upon the season. Prerequisite: none

**TR9106 Quilliscuscut Culinary Farm Experience 2 credits**

This is a one-week, onsite course at the Quilliscuscut Farm near Colville, Washington. Students have a unique opportunity to experience the farm-to-table connection first hand. Participants milk goats, make cheese, help care for farm animals, transplant vegetables and harvest produce from the gardens. Visits to neighboring organic farms and presentations of current farm and food topics give an understanding of the implications of buying seasonal and local. Students work with a chef to prepare lunch and dinner using only ingredients from the garden and products from local farms. Retreat participants stay at the farm school, with bunkhouse-style lodging, shared bathrooms and a professional kitchen. Prerequisite: none

**TR9107 Ayurvedic Nutrition-Principles and Practices 2 credits**

Students learn the fundamentals of Ayurvedic nutrition, which includes the use of the six tastes for balancing digestion and metabolism. Students practice preparation of supportive foods for the various Ayurvedic body types using common herbs and spices. Prerequisite: none

**TR9109 Sports Nutrition for Nutritionists 3 Credits**

This course is designed to explore the role of nutrition and ergogenic aids in exercise and sport. Topics discussed include metabolic demands and substrate utilization during physical activity, thermoregulation, and dietary recommendations for active people, ergogenic aids, disordered eating and body weight regulation. Prerequisites: BSN Students who have taken TR4107 or MSN students who have taken TR5120. This course does not serve as a substitute for EX4107, and students who have taken EX4107 may not gain additional credits by taking this course.

**TR9112 Intuitive Eating and Other Philosophies of Nourishment 2 Credits**

This course focuses on the principles of the Intuitive Eating approach authored by Elyse Resch and Evelyn Tribole. This course discusses the concepts of rejecting the diet mentality, challenging the food police, making peace with food, respecting hunger and fullness, and honoring feelings without food. The course includes methods to incorporate these principles into practice by addressing behaviors that develop out of a dysfunctional relationship with food and by supporting the healing of that relationship. Other philosophies introduced in this course include: Health At Every Size, Mindful Eating and The Ellyn Satter Trust Model. Prerequisite: None

**TR9118 Food and Society (hybrid online/onsite course) 2 credits**

This elective offers students a broad perspective of the diverse political, environmental, cultural, biological and psychological factors that influence food choice. This perspective supports an understanding of the challenges faced by individuals when trying to improve nutrition habits. The course incorporates contemporary media, both books and films, and students engage in projects related to the food system. Prerequisite: none

**TR9120 Writing About Food and Health 2 credits**

This course introduces students to the skills needed for a part-time or freelance career in writing or is appropriate for those interested in improving their writing skills. Students learn how to differentiate writing styles and practice various structures, such as blog posts, news stories, research articles and memoirs. Composing pitches and proposals are covered. Assignments are turned in several times, allowing for editing and rewriting to be practiced, thus honing style and skills. Students do not have the option to audit this course. Prerequisite: none

**TR9130 Obesity and Obesity Related Diseases 2 credits**

This course focuses on the challenges raised by current international and national trends in obesity. The class is based upon a broad survey of obesity research that focuses on the underlying genetic, biologic and environmental contributors that affect energy balance. The course includes an evaluation of the efficacy of dietary, pharmacologic and surgical approaches for obesity management and examines consequences of obesity on health, medical costs and quality of life as well as its associations with public health policy, the media and environment. Prerequisite: none

**TR9139 Entrepreneurial Nutrition (hybrid online/onsite course) 2 credits**

In this course, students explore their ideas and interests related to nutrition in the context of building a foundation for a food or nutrition-related business. The class includes a variety of approaches to tap into the student's creative entrepreneurial spirit while exploring the underpinnings of a business plan. Guest speakers supplement selected readings and interactive class sessions. Prerequisite: none

**Special Topics in Nutrition 1-2**

These special topics, offered periodically, explore trends, developments and specific topical areas in human nutrition. Topics vary and are not necessarily offered every year.

**TR9511 Special Topics in Nutrition 1 2 credits**

See description above. Prerequisite: variable according to topic

**TR9512 Special Topics in Nutrition 2 2 credits**

See description preceding TR9511. Prerequisite: variable according to topic

**TR9801-9804 Clinic Practicum Elective 2 credits**

This course allows nutrition students to gain extra clinical experience beyond what is required for graduation. For other student clinicians, this course provides an opportunity to observe medical nutrition therapy and to participate in collaborative care of patients. The role of the student is decided by the supervisory faculty and varies depending on the student's prior experience. This elective may not count toward clinic requirements for clinic students. Prerequisite: open to all students who have completed at least one nutrition clinic shift (TR6811) or permission of nutrition clinic program coordinator