

# COURSE DESCRIPTIONS

Curriculum and course changes in the 2009-2010 *Bastyr University Catalog* are applicable to students entering during the 2009-2010 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

AV: Ayurvedic Medicine  
 BC: Basic Sciences  
 BH: Applied Behavioral Science  
 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: Naturopathic Midwifery Certificate  
 NM: Naturopathic Medicine  
 OM: Acupuncture and Oriental Medicine  
 PM: Physical Medicine  
 PS: Counseling and Health Psychology  
 RD: Didactic Program in Dietetics  
 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 ND Program 1 (preclinical) and MS Year 1  
 6xxx ND Program 2 (preclinical) and MS Year 2  
 7xxx ND Program 3 (clinical)  
 8xxx ND Program 4 (clinical)  
 9xxx Electives (undergraduate and graduate)

The second digit indicates the type of course:

x1xx General courses (core course for ABS)  
 x2xx Diagnostic courses (major course for ABS)  
 x3xx Diagnostic/therapeutic courses (major course for ABS)  
 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: acupuncture and Oriental medicine (AOM), midwifery/natural childbirth (MW), naturopathic medicine (ND), and nutrition (NTR).*

## AYURVEDIC MEDICINE

### AV9110 Fundamentals of Ayurvedic Medicine 2 credits

This elective course is an introduction to Ayurvedic medicine. It considers concepts of recognizing Ayurvedic body type and psychological personality, customizing the health plan to suit the unique constitution, Ayurvedic nutrition and diet therapy, Ayurvedic herbology, and gentle detoxification through Ayurvedic Pancha-Karma therapy. This course is recommended prior to taking other Ayurvedic electives. Prerequisite: Admission to Bastyr University

## BASIC SCIENCES

Lynelle Golden, PhD, Department Chair

### BC1105 College Algebra/Pre-Calculus 4 credits

This course covers basic equations, inequalities and modeling, and functions and graphs. Specific emphasis is placed upon quadratic, exponential and logarithmic functions. Prerequisite: Precollege algebra (taught in a high school or community college)

### BC2106 Introduction to Physics 4 credits

This course offers an introduction to the general principles of physics. Topics include Newton's laws of motion, momentum and energy, linear and rotational motion, electromagnetism and optics. This course can be used as a prerequisite for the ND program. Offered only summer quarter, if sufficient enrollment. Prerequisite: College algebra or precalculus

### BC2115 General Chemistry Intensive 1 Lecture 5 credits

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. Prerequisites: Passing grade in college level introduction to chemistry course

### BC2116 General Chemistry 1 Intensive Lab 1 credit

Corequisite: BC2115

### BC2117 General Chemistry 2 Intensive Lecture 5 credits

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. Prerequisites: BC2115

### BC2118 General Chemistry 2 Intensive Lab 1 credit

Prerequisite: BC2116 or equivalent. Corequisite: BC2117

### BC3100 Survey of Organic Chemistry 4 credits

This survey course examines the types of bonding, functional groups, and physical properties of saturated and unsaturated hydrocarbons, alcohols, phenols, thiols, ethers, aldehydes, ketones, carboxylic acids, amines, and amides. Prerequisite: general chemistry (BC2115 or equivalent)

### BC3113 Living Anatomy 3 credits

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

### BC3115 Organic Chemistry Intensive 1 Lecture 4 credits

This is a four-week intensive summer course. This course along with Organic Chemistry 2 is intended to satisfy the organic chemistry prerequisites for BC5104. 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

### BC3116 Organic Chemistry Intensive 1 Lab 1 credit

Prerequisite: At least a C in BC2117 and BC2118 or equivalent college-level courses elsewhere. Corequisite: BC3115

### BC3124 Organic Chemistry for Life Sciences Lecture/Lab 5 credits

Offered in the fall, this course is intended to satisfy the organic chemistry prerequisite for BC4109. This course offers a survey of the chemistry and reactivity of organic compounds with an emphasis on those molecules of biological importance. Prerequisite: At least a C in either BC2117 and BC2118 or an equivalent college-level chemistry course with lab

### BC3125 Organic Chemistry Intensive 2 Lecture 4 credits

This is a four-week intensive summer course. This course along with Organic Chemistry 1 is intended to satisfy the organic chemistry prerequisites for BC5104. Structure and function of proteins, lipids, carbohydrates and nucleic acids are also included. Prerequisite: A grade of C or better in BC3115

### BC3126 Organic Chemistry Intensive 2 Lab 1 credit

Prerequisite: A grade of C or better in BC3116. Corequisite: BC3125

**Anatomy and Physiology Sequence for AOM**

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. Prerequisites: 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

**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.

**BC3141 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

**BC3142 Anatomy and Physiology 2 Lecture/Lab** 4 credits

See the description of the A and P sequence above. Topics covered in this course include the anatomy and physiology of the muscular, endocrine, cardiovascular, and immune systems and blood. Prerequisite: BC3141

**BC3143 Anatomy and Physiology 3 Lecture/Lab** 3 credits

See the description of the A and P sequence above. Topics covered in this course include the anatomy and physiology of the digestive, respiratory, urinary and reproductive systems. Prerequisite: BC3142

**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

**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 BC3142

**BC4109 Biochemistry for Life Sciences 1 Lec** 4 credits

This course is offered both in winter and summer. Topics include fuel metabolism, carbohydrates and lipids. Nutrition program undergraduates are required to take the lab, BC4110, within one calendar year of completion of the lecture, BC4109. Prerequisite: A grade of at least a C in either BC3124 or one quarter of college-level organic chemistry with laboratory. A grade of at least a C in one quarter of college-level biology with laboratory is also required.

**BC4110 Biochemistry for Life Sciences 1 Lab** 1 credit

This course is offered in winter quarter only. Prerequisites: Either concomitant registration in BC4109 or completion of BC4109 with a grade of at least a C within the previous calendar year

**BC4112 Biochemistry for Life Sciences 2 Lec** 4 credits

This course is offered in spring and summer. Topics include eicosanoids, cholesterol metabolism, amino acid metabolism, and nucleotide metabolism. Nutrition program undergraduates are required to take the lab, BC4113, within one calendar year of completion of the lecture, BC4112. Prerequisite: A passing grade in BC4109

**BC4113 Biochemistry for Life Sciences 2 Lab** 1 credit

This course is offered in spring quarter only. Prerequisites: Either concomitant registration in BC4112 or completion of BC4112 with a grade of at least a C within the previous calendar year

**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: BC3143 and BC4112

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

This course is designed to teach 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: BC3143, BC4112

**BC4120 Microbiology Lecture (AOM and HS)****2 credits**

This course explores the world of microorganisms and human health. Pathogens associated with human illness are emphasized, including bacteria, fungi, viruses, parasites and prions. Prerequisites: BC3136 or BC3142

**BC4120L Microbiology Laboratory (AOM) Lab****1 credit**

In this intensive, hands-on laboratory component of Microbiology lecture, students further explore the nature of micro-organisms, including their culture and identification using various staining and biochemical testing. Prerequisite: Co-enrollment in BC4120

**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 non-prescribed and/or substances of abuse are also explored. The actions, therapeutic rationale, benefits, risks and potential interactions of pharmaceuticals are emphasized. Prerequisites: BC4112 or OM3110, BC3136 or BC3143

**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

**Biochemistry 1-3**

This three (3) course sequence is for naturopathic medicine students and provides an in-depth study of biochemistry. Descriptions for each course in the sequence are below.

**BC5104 Biochemistry 1****4 credits**

Topics include fed and fasting states, fuel oxidation, carbohydrate metabolism and lipid metabolism. Prerequisite: Admission to naturopathic medicine program or permission of instructor

**BC5105 Biochemistry 2****4 credits**

Topics include eicosanoids, cholesterol metabolism, amino acid metabolism, and nucleotide metabolism. Prerequisite: grade of "AC" in BC5104 or grade of B or higher in BC4109

**BC5106 Biochemistry 3****4 credits**

Topics include nucleic acids, gene expression, protein structures, fructose and galactose metabolism, pentose phosphate pathway, antioxidant systems, ethanol metabolism, and clinical case studies. Prerequisite: Grade of "AC" in BC5105 or grade of B or higher in BC4112

**Human Physiology 1-3**

This integrated sequence is presented as two educational units, intended to help students develop an in-depth understanding of mechanisms involved in the normal functioning of human organ systems. Course activities include workshops, problem-solving sessions and laboratory exercises.

**BC5107 Human Physiology 1 Lecture/Lab****5.5 credits**

See description above. This course is the first part of one educational unit (BC5107-BC5108) in the yearlong study of normal functioning of human organ systems. The primary focus of the quarter includes general models (common concepts) in physiology, excitable cells, muscle physiology, cardiovascular physiology and temperature regulation. Prerequisite: Admission to naturopathic medicine program

**BC5108 Human Physiology 2 Lecture/Lab****5.5 credits**

See description preceding BC5107. This course is the second part of one educational unit (BC5107-BC5108) in the yearlong study of normal functioning of human organ systems. The primary focus of the quarter includes respiratory, renal and gastrointestinal physiology, as well as acid-base balance. Prerequisite: BC5107 or permission of instructor

**BC5109 Human Physiology 3 Lecture****3 credits**

See description preceding BC5107. This course is the second educational unit in the yearlong study of normal functioning of human organ systems. The primary focus of the quarter is endocrine physiology. Prerequisite: BC5108 or permission of instructor

**BC5110 Histology****5 credits**

This lecture and lab course examines the microscopic anatomy of human tissues and organs. The course is especially designed to prepare naturopathic students for Pathology in the following year. Emphasis is placed on topics that will also be studied in Biochemistry, Human Physiology and Anatomy. Prerequisite: Admission to naturopathic medicine program

**BC5112 Embryology****3 credits**

This course covers human development from conception to birth including the formation of tissues, organs and systems of the body, integrating histology and anatomy. Prerequisite: Admission to naturopathic medicine program

**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 Lecture 1-3**

This three (3) course sequence for naturopathic medical students provides an in-depth study of macroscopic human anatomy. Each of these courses has three components: lecture (theory), dissection (practicum) and living anatomy. The dissection and living anatomy components provide the “hands-on” experience absolutely necessary for a physician. In living anatomy, students learn to identify and palpate superficial and deep structures. Principles of motion, palpation and neurological testing are also introduced in living anatomy, which forms the foundation of the physical examination.

**BC5122 Gross Human Anatomy 1 Lecture 4.5 credits**

See description above. This course emphasizes the theory and living anatomy of the upper and lower extremities and of the thorax. Prerequisite: Admission to naturopathic medicine program

**BC5123 Gross Human Anatomy 2 Lecture 4.5 credits**

See description preceding BC5122. This course includes the theory and living anatomy of the thorax, abdomen, pelvis, perineum and back. Prerequisite: Grade of AC in BC5122

**BC5124 Gross Human Anatomy 3 Lecture 4.5 credits**

See description preceding BC5122. This course examines in detail the theory and living anatomy of the head and neck regions. Prerequisite: Grade of AC in BC5123

**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. Note: Students must take the Gross Human Anatomy Lecture and Dissection Lab simultaneously.

**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

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

See description preceding BC5122L. In the winter quarter students dissect the thorax, abdomen, perineum and back with faculty supervision. Prerequisite: Grade of AC in BC5122

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

See description preceding BC5122L. The spring quarter involves supervised dissection and study of the back, head and neck. Prerequisites: Grade of AC in BC5123

**BC5129 Neuroscience 5.5 credits**

The central nervous system is studied in class discussion and laboratory with emphasis on physiologically and clinically relevant regions and pathways. Regions include cerebrum, thalamus, brainstem, spinal cord and cerebellum. Cranial nerve nuclei are studied in conjunction with motor and sensory pathways, including peripheral receptors and effectors. Clinical case studies are used in the laboratory to practice diagnostic skills and to emphasize special topics. Prerequisites: BC5108, BC5110, BC5124 (or concurrent registration in BC5124)

**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 is designed to provide 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, and an introduction to searching medical literature databases, 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

**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: BC4125, OM3110

**BC6134 Advanced Living Anatomy 1 credit**

This course combines Western anatomy with advanced acupuncture point locations to enhance clinical skills and outcomes. The course uses musculoskeletal anatomy through lecture, palpation and the study of cadavers. Anatomical connections to advanced acupuncture point location are reinforced in both surface anatomy and in the required weekly cadaver laboratory. Prerequisite: BC3134, admission to DAOM program or permission of AOM Dean

**Human Pathology 1-3**

The three (3) course series of Human Pathology is integrated with Physical/Clinical Diagnosis and Clinical Laboratory Diagnosis to provide for the development of diagnostic and assessment skills. During this sequence in Human Pathology, students study the normal and abnormal changes that occur in the human body when confronted with internal and external stresses that create an imbalance in homeostasis and the development of disease.

**BC6200 Human Pathology 1** **4 credits**

This course covers the basic mechanisms underlying the development of human disease, emphasizing medical terminology, etiologies, pathogenesis, morphological changes and clinical consequences. Specific topics include cell injury, inflammation, healing, immunity, neoplasia and principles of genetic disease. Prerequisites: BC5106, BC5109, BC5110, BC5124. Prerequisites or Corequisites: BC6204 and BC5112

**BC6201 Human Pathology 2** **4 credits**

See description preceding BC6200. This course covers the pathology of the respiratory, hepatobiliary and cardiovascular systems, as well as the blood, spleen and pancreas. Prerequisite: BC6200

**BC6202 Human Pathology 3** **4 credits**

See description preceding BC6200. The final course in this sequence covers the pathology of the genitourinary, gastrointestinal, endocrine and nervous systems. Prerequisite: BC5129 (or concurrent if on five-year track option A), BC6201

**BC6204 Immunology** **4 credits**

This course explores the basic principles of human immunity, including nonspecific host defenses, humoral and cell-mediated immunity, complement, cytokines, and the major histocompatibility complex. The course defines a normal immune response and explores what occurs when the immune system is not functioning normally as in autoimmunity, hypersensitivity, and immune deficiencies. Also examined are transplantation and cancer surveillance. (Immunology is a prerequisite for Infectious Diseases.) Prerequisite: Completion of all first year BC courses for the four or five-year track and BC5142. Prerequisite or Corequisite: BC5112

**BC6209 Infectious Diseases** **5 credits**

This course explores a systems-wide approach to infection. The focus is on infectious agents (identification, virulence, transmission), pathology of infection, signs and symptoms, laboratory diagnosis, prognosis, and therapeutic strategies to infection. Prerequisite: BC6204

**BC6305 Pharmacology** **5 credits**

This course covers the basics of drug interactions including pharmacokinetics, pharmacodynamics, drug and toxin metabolism, and the molecular basis for drug and botanical effects. Particular attention is given to the commonly used therapeutic agents for cardiac, central nervous system, infectious, and endocrine diseases. Toxicities, drug interactions and clinical effectiveness are also emphasized. Most legend drugs within the naturopathic scope of practice are included and the mechanisms of herbal action and drug/herb interactions are discussed. Prerequisites: BC5106, BC5109, BC6200

**BC7101 Pathology of Cancer** **3 credits**

This course provides a biomedical overview of cancer in terms of biology, etiology, staging and progression. The coursework provides the allopathic framework from which clinical care is derived. The course also provides students with a more sophisticated understanding of the paradigm of Western oncology care, which, in turn, ultimately enhances patient care and treatment strategies. Prerequisites: Admission to DAOM program, or one of BC5132 or BC6202, or permission of AOM dean or instructor

**BC7105 Pharmacology of Cancer Therapeutics****3 credits**

This course provides a foundation for understanding the pharmacological agents used in cancer treatment. Topics include primary medications used in oncology as well as secondary medication to address side effects of treatment. Pharmacological management of medicating for depression/anxiety are also covered. Prerequisites: Admission to DAOM program, or one of BC5132 or BC6305, or permission of AOM dean or instructor

**BC9115 Drug/Herb Interactions** **2 credits**

This course examines herb/ supplements and drug interactions. The course examines herbs that can be used for specific pathological conditions (ulcers, depression, anxiety, etc.) and then looks at the possible drug interactions that may occur. Specific emphasis is placed on mechanisms and the *in vitro* and clinical trial data on botanicals. Prerequisites: BC6305 for NM students; BC4125 for AOM students. Open to students who have completed a pharmacology course and to practicing pharmacists.

**BC9505 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.

**BC9506 Physics 2: Electromagnetism/Optics 2 credits**

This intensive short course (4 full days) is intended to help ND students meet the Bastyr University ND program's physics requirement. In particular, the course is designed for students who did well in a single college level physics course that covered mechanics but not electromagnetism or optics. Topics include electrostatics, electric current, magnetism, properties of light, reflection and refraction, and color. Prerequisites: BC1105 or equivalent, grade C or better in college physics

**BC9507 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: BC9505 or permission of instructor. Students must take the bloodborne pathogen safety training prior to start of class. Contact the safety coordinator for upcoming dates.

**BC9522 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 organism). Methods of standardization and quantification as well as the chemical ecology of natural products are discussed. Prerequisite: BC3124 or equivalent

## 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

**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, BO3114

**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 to herbal sciences program

**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, Shamanic, Ayurvedic, TCM, Physio-medical and Eclectic, Unani and Tibetan. The energetic aspects of herbs including quantum physics, doctrine of signature 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: BC3124, BC3143, BC4112, BC4113, BO3114 or BO6303 or BO9514

**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. Prerequisite: Completion of the first year of the herbal sciences curriculum

**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, 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****Lecture/Lab** **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: BC3143, BC4112, BC4113, BO3105, BO3114

**BO4108 Materia Medica 2 for Herbal Sciences****Lecture/Lab** **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****Lecture/Lab** **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, 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. It is a good companion class to Plant Identification as it reinforces the skills being learned in the laboratory. Prerequisites: BO3114 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: BC4112, BO3108

**BO4122 Test Methods for Botanical Authentication****Lecture/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: BC4113, BO3105, BO3114

**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: BC3143, BC4112, BC4113, BC4115, BO4102, BO4108, BO4119

**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, 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: BC4120, 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

**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 brief presentation to cohort. Prerequisite: Completion of the first year of the herbal sciences curriculum

**Botanical Medicine 1-5**

The botanical medicine curriculum provides an in-depth study of the botanical materia medica. Terminology, nomenclature, plant identification, pharmacology, pharmacognosy, toxicity, herb-drug interactions, formula preparation and clinical application are among topics covered in these courses. Students gain skills in herbal management of acute and chronic disease conditions.

**BO5301 Botanical Medicine 1 Lecture/Lab 2 credits**

This course introduces students to the history, philosophy and science of botanical medicine. Terminology of botanical medicine, and the medicinal, botanical and pharmacological categorizations are studied. Overviews of botany, pharmacognosy and formulation principles are covered with introductions to plant identification. Materia medica of the gastrointestinal system is introduced. Students are introduced to the importance and principles of sustainable agriculture and ecological harvesting. Labs reinforce didactic learning and bring the plant medicine alive through hands-on experience. Prerequisite: Admission to naturopathic medicine program

**BO5901, BO5902, BO5903 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. Prerequisites: BO5301 and permission of department chair

**Botanical Medicine 2-5**

These courses, four quarters total, sequentially offered over two years, are designed to teach the information and skills required to assess, evaluate and apply botanical knowledge in naturopathic treatment protocols. Students evaluate botanicals from an organ-system perspective. Material presented about each botanical includes taxonomic family, description, habitat, part(s) used, energetics, pharmacognosy, herb-drug interaction, pharmacology, historical and current medicinal actions and uses, pharmacy and toxicology. The students integrate pathophysiology, biochemistry and vitalistic understanding in the presentation of material. Plant specimens and slides aid the understanding of the presented botanicals. In BM 4 and 5, the labs enhance didactic learning and clinical application through hands-on experience and case studies.

**BO6301 Botanical Medicine 2 2 credits**

See description above. Prerequisites: BC5106, BC5109, BO5301

**BO6302 Botanical Medicine 3 2 credits**

See description preceding BO6301. Prerequisite: BO6301

**BO6303 Botanical Medicine Dispensary Lab 1 credit**

This course focuses on clinically useful herbal preparations. Students make herbal tinctures, glycerites, infusions, decoctions, poultices, compresses, syrups, creams, ointments, emulsions, liniments, suppositories and capsules. They examine the comparable advantages and disadvantages of each type of preparation, incorporating pharmacognosy into their understanding of each preparation. Prescription writing is reviewed. Organoleptic testing to assess medicinal preparation identity and quality is taught. Field identification is reinforced through herb walks in the woods and in the Bastyr herb garden. Prerequisite: BO6302 or permission of department chair

**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: BO6301 and permission of department chair

**BO7300 Botanical Medicine 4 Lecture/Lab 2 credits**

See description preceding BO6301. Lab is included. Prerequisites: BO6302, BO6303

**BO7301 Botanical Medicine 5 Lecture/Lab 2 credits**

See description preceding BO6301. Lab is included. Prerequisites: BO6303, BO7300

**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: BO7300 and permission of department chair

**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: BO6303 and permission of department chair

**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. The activity fee covers tent camping fees and food. Prerequisite: BO3114 or BO5301

**BO9118 Herbal Medicine in Italy 3 credits**

This course combines herbal medicine and Italian culture. Throughout two weeks in Italy, students learn the history and medical applications of plants, explore cultivated and wild fields, and visit herbal manufacturers. The course utilizes the facilities and museum of the Italian herb company Aboca and the University of Salerno. Students are responsible for their airfare to Italy and personal expenses. The student fee covers group accommodations, transportation, one meal a day and any group events. A nonrefundable deposit is required upon registration. Prerequisite: None

**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: BC4112 or BC5106 and BC3143 or BC5109 and BO4107 or BO5301

**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

**BO9501 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

**BO9504 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

**BO9506 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! Prerequisite: Concurrently enrolled in BO4107 or completion of BO6301

**BO9509 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

**BO9514 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

**BO9527 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

**BO9529 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

**BO9532 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

**BO9542 Food and Medicinal Mushrooms 2 credits**

This class is a combination of lecture, field hours and lab work. The class covers edibility, toxicity and medicinal uses of fungi. In this class you learn where, when and how to find mushrooms in the field as well as what to do with them once you find them. The role of fungi in their ecosystems is also studied. In addition to the course hours required, there are optional field trips arranged. Prerequisite: None

**BO9555 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.

## CHINESE HERBAL MEDICINE CERTIFICATE

Terry Courtney, MPH, LAC, Dean

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. Prerequisites: CH6421, CH6422, 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: Admission to MSAOM or CCHM

**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 to MSAOM or CCHM, 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 substances for external application. Prerequisites: Admission to MSAOM or CCHM, 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 downwards, 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 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 to 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 and Chengdu Universities of TCM are the main sites for Bastyr herbal internships. For more information and an application, see the AOM China Studies link, on the Clinical Education page, at MyBU. bastyr.edu. The clinic in China is an eight (8) credit experience to be applied toward MSAOM or CCHM internship 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 an herbal intern.

**CH6831 CHM Dispensary 1 2 credits**

See description above. Prerequisite: Admission to MSAOM or CCHM program

**CH6832 CHM Dispensary 2 2 credits**

See description preceding CH6831. Prerequisite: Admission to 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

**CH9520 Introduction to AOM Oncology 2 credits**

This class presents an overview of TCM oncology with discussion in pathology, diagnosis and treatment for many of the common cancers. Treatments for side effects from conventional therapies are also discussed. This course provides an introduction to clinical adjunctive cancer care, with emphasis on integrated CAM/allopathic co-management. Prerequisite: OM5805

**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

**DI5100 Introduction to the Practice of Dietetics****1 credit**

This course includes a discussion of professional ethics and standards of practice. Prerequisite: Admission to the internship program

**DI5101 Community Nutrition 1 credit**

This course includes a review of services provided by community and public health nutritionists. 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 to the 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 to the 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 to the 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 to the 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 to 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 to the internship program

## EXERCISE SCIENCE AND WELLNESS

Tiffany Reiss, PhD, Program Director

**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: BC3141, BC3142 and BC3143 (concurrent)

**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 the (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: BC4112/4113 and BC3143 (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 and 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. Prerequisites: BC4112/4133 or permission of instructor

**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. Prerequisites: 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, BC3143, 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 and practical hands-on experience to 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 provide students exposure 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. 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. Students apply the information obtained through past didactic experiences by working in areas such as (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 in various related activities and perform administrative tasks in support of such activities under an experienced agency supervisor and faculty sponsor. Prerequisites: 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

Richard Mann, ND, Department Chair

**Homeopathy 1-3**

This course sequence is required for all students in the naturopathic medicine program. Homeopathy 4-6 are elective courses. Student clinicians are allowed to register for the Homeopathy Specialty Clinic after successfully completing H06302 or with permission of the department chair. However, H09301 is recommended as a prerequisite or corequisite to the Homeopathy Specialty Clinic.

**H06300 Homeopathy 1****2 credits**

This course is an introduction to homeopathy — its theory and practice. Using Hahnemann's Organon of Medicine, the principles of homeopathic medicine and the development of its method of practice are explored. This includes the use of the repertory, study of homeopathic philosophy, and an introduction to homeopathic materia medica. When possible, cases are used to elucidate concepts. Emphasis is placed on the integral relationship of homeopathy to naturopathic practice. Prerequisites: BC5106, BC5109, BC5124 and NM5115 or NM5136 or permission of department chair

**H06301 Homeopathy 2****3 credits**

This course emphasizes homeopathic case taking and analysis. Students learn how to take and analyze a homeopathic case, how to prioritize symptoms and how to use the homeopathic repertory as a guide to prescribing the proper medicine. Different methods of case analysis are discussed. Students actively take and analyze a homeopathic case. Basic homeopathic materia medica continues to be elucidated. Prerequisite: H06300

**H06302 Homeopathy 3****3 credits**

This course emphasizes homeopathic materia medica. Repertory skills are further developed. When possible, homeopathic case studies are used to illustrate basic concepts. Prerequisite: H06301

**H06901, H06902, H06903 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, the student may explore a field of study that is of personal interest and value. Prerequisites: H06300 and permission of department chair

**Homeopathy 4-6**

These three (3) elective courses are offered to naturopathic medicine students interested in the further study of homeopathy, after successfully completing Homeopathy 3 (H06302).

**H09301 Homeopathy 4****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: H06302 or permission of department chair

**HO9302 Homeopathy 5** 3 credits

This course is a continuation in the advanced study of materia medica, case analysis and case management. Prerequisite: HO6302 or permission of department chair

**HO9303 Homeopathy 6** 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: HO6302 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 HO6302 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.

**HO9800 Homeopathy Grand Rounds 1** 1 credit

See description above. Prerequisite: HO6302

**HO9801 Homeopathy Grand Rounds 2** 1 credit

See description preceding HO9800. Prerequisite: HO6302

**HO9802 Homeopathy Grand Rounds 3** 1 credit

See description preceding HO9800. Prerequisite: HO6302

**HO9803 Homeopathy Grand Rounds 4** 1 credit

See description preceding HO9800. Prerequisite: HO6302

**HO9804 Homeopathy Grand Rounds 5** 1 credit

See description preceding HO9800. Prerequisite: HO6302

**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 and prescribing and case management. Students may take up to four homeopathy clinical shifts if space is available. Prerequisite: HO6302

**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. Prerequisites: HO6302 and permission of department chair

**HO9822 Patient Care 2 - Elective (winter)** 2 credits

See description preceding HO9821. Prerequisites: HO6302 and permission of department chair

**HO9823 Patient Care 3 - Elective (spring)** 2 credits

See description preceding HO9821. Prerequisites: HO6302 and permission of department chair

**HO9824 Patient Care 4 - Elective (summer)** 2 credits

See description preceding HO9821. Prerequisites: HO6302 and permission of department chair

## INTERDISCIPLINARY STUDIES

Tim Callahan, PhD, Vice President for Research and Collaboration

**IS4101 Seminar in Natural Health Sciences** 2 credits

This capstone course is designed to integrate knowledge and experience gained from the various undergraduate natural health science disciplines and to apply these to disease prevention and attaining and maintaining optimal health. Students work in teams to address important issues in health such as the life cycle from birth through death and chronic disease. Communication and critical thinking skills are emphasized, and students have an opportunity to model integrative approaches to optimal health. Prerequisite: Senior undergraduate status

**IS9510 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 back-country rules and regulations are introduced. Basic plant identification skills and how to safely collect and use a limited number of medicinal plants in the back-country are also covered. Prerequisites: 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.

## NATUROPATHIC MIDWIFERY

Morgan Martin, ND, LM, Department Chair

**MW7302 Prenatal Complications** 3 credits

In this course students focus on the recognition and care of common physical and emotional complications of pregnancy. Students develop in-depth practice guidelines for common complications that include definitions, etiologies, incidences, signs and symptoms, risks, differential diagnoses, management, consultation, and referral practices. Students also become familiar with expected allopathic management of common complications and the associated risks and benefits. The distinction between the scope of practice of the general naturopathic physician and that of the naturopathic midwife is emphasized. Prerequisite: NM7313

**MW7303 Labor Complications** 3 credits

In this course students focus on the role of the naturopathic midwife in the care of the laboring woman, with special emphasis on the diagnosis and management of complications of the intrapartum period. Students develop practice guidelines for intrapartum complications. The practical portion of the course covers basic nursing skills such as the administration of IV fluids, episiotomy, perineal repair, urinary catheterization and the administration of medications. Consultation/referral practices are integral to this course. (Students must have completed this course before performing any skills independently at births.) Prerequisites: NM7313, MW7320. Corequisite: MW7321

**MW7304 Maternal Postpartum Care 2 credits**

While this course begins with the management of the normal and complicated third stage of labor, it focuses on the role of the naturopathic midwife in the care of the new mother. The practical portion of the course covers blood loss assessment and management, and placental inspection. The normal puerperium is addressed, as are the development and naturopathic management of physical and emotional postpartum complications. Students develop clinical practice guidelines for common complications. Client education in the areas of infant care, self care, breast feeding and parenting skills is also covered. Prerequisite: MW7320

**MW7310 Neonatology 3 credits**

In this course students study the normal development and management of the newborn. The innate intelligence and sensitivity of the developing child are emphasized. Etiologies, risks, signs, symptoms and management of pathologies of the newborn are presented. Students develop practice guidelines for common neonatal complications. The practical portions of the course include infant physical exam, gestational age assessment, and neonatal resuscitation skills and knowledge. Previous participation in at least 20 births is strongly recommended. Prerequisites: MW7320, NM7314. Note: This course is for students in their final year of the naturopathic midwifery program.

**MW7315 The Practitioner's Guide to Lactation****Management 2 credits**

This course is required for midwifery students and is designed for the midwife, doula, lactation consultant, nurse, physician, nutritionist or other member of the mother's and infant's health care team. The course provides the core knowledge and skills necessary to help mothers breast-feed, as well as some advanced skills needed for problem solving. Students learn basic lactation management skills through practical application of scientific principles. Naturopathic modalities of treatment and contraindicated herbs are discussed. Students practice skills such as assessment, planning, alternative feeding methods, milk expression techniques and documentation. Prerequisite: None. This course is offered only in the summer and is open to students entering their final year in a degree program.

**MW7320 Normal Maternity 3 credits**

This course is designed to meet the needs of the naturopathic doctor-in-training for general family practice and is the first in the naturopathic midwifery program series. It is an introduction to normal maternity and to the midwives' model of care, with a focus on the role of the naturopathic doctor in the support of healthy women who are or who want to become pregnant. The emphasis is on normal, healthy pregnancy and birth. A brief overview of the maternal postpartum period and newborn adaptation is included. The intent is to prepare ND students to discuss normal preconception, pregnancy and postpartum-related concerns with their clientele and to competently attend unplanned (emergent, normal) deliveries. Scope of practice boundaries and consultation/referral practices are integral to this course. Prerequisite: BC6202

**MW7321 Advanced Normal Maternity 2 credits**

This course facilitates competency in the advanced management of normal pregnancy and birth and is intended for enrollees in the naturopathic midwifery program. Topics covered include prenatal assessment skills, maternal physiological changes in pregnancy, pelvimetry, charting and prenatal testing. Also covered are advanced normal labor and delivery management, including cardinal movements, monitoring protocols, common complications, hand maneuvers, birth positions, waterbirth, and introductory neonatal assessment and management. Students practice conducting prenatal consults, cervical dilation assessment, initial and routine visits, client education, and telephone assessment and consultation. Prerequisite: MW7320

**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 which 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

**MW8102 Childbirth Education 1 credit**

This course offers an overview of the current trends in and methods of teaching childbirth education classes and prepares students to teach childbirth education classes. Concepts of instruction, learning and effective means of conveying both factual information and practical skills to expectant parents are presented. Students are required to attend and critique at least one community childbirth education class session and to teach one topic in class. Prerequisite: MW7320

**MW8103 Legal and Professional Issues in Midwifery 2 credits**

This course outlines the legal responsibilities and restrictions of practice for naturopathic physicians specializing in natural childbirth. Upon completion of this course students demonstrate knowledge of the following: professional ethics specific to midwifery; local and national politics; midwifery regulation in various jurisdictions; peer review procedures, quality assurance and quality improvement mechanisms; malpractice insurance; billing practices; informed consent/choice; scope and standards of practice; cultural diversity in client populations; consultation/referral relationships; dual licensure; unlicensed/unregulated practice; regulatory systems, sanctions and disciplinary processes. Prerequisite: NM7109. Note: This course is for students in their final year of the naturopathic midwifery program.

**MW8105 Grief and Loss in Midwifery 2 credits**

Upon completion of this course, students are competent to do the following: provide emotional support to families grieving the loss of a pregnancy or newborn, teach self-nurturing methods that facilitate healing in the grief process, model how to heal through and be strengthened by loss, and draw on personal spiritual resources for the benefit of self and client. Students develop skills in helping couples talk through the impact of grief and loss on their relationship and the grief of infertility. Students also learn to help parents deal with bereavement pressures, grief reactions of the extended family, and societal expectations around the death of a child, a spontaneous abortion or planned termination of pregnancy. Prerequisite: PS6306

**MW8410 Clinical Pharmacology in Midwifery 1 credit**

This course covers medication use during pregnancy and intrapartum, along with substances commonly used in healthy neonates. The course emphasizes the medications that midwives may legally administer in Washington state, including indications, contraindications, and associated risks for interaction and/or adverse effects for these agents. Additionally, the course includes dosing and routes of administration along with the underlying pharmacodynamics and pharmacokinetics. Throughout, scope of practice and consultation/referral indications are incorporated into the information discussed. Prerequisites: BC6305, MW7321, admission to naturopathic midwifery program

**Childbirth Practicum**

Students intern with approved licensed or legal practitioners providing maternity care services. Students are required to actively participate in 25 births (12.5 credits of MW8800 or 1 credit/2 participations) and to manage 50 births (25 credits of MW8802 or 1 credit/2 managements).

**MW8800 Birth Participations**

**variable to maximum of 12.5 credits**

See description above. Prerequisite: MW7320

**MW8802 Birth Managements**

**variable to maximum of 25 credits**

See description preceding MW8800. Prerequisites: MW7320, MW7321

**Birth Rounds**

This three (3) course sequence consists of maternity skills labs and case reviews facilitated by the naturopathic midwifery clinical faculty. Specific midwifery topics are addressed in a small group discussion, skill labs and role play format. Prerequisite: Current enrollment in naturopathic midwifery program and concurrent enrollment in MW8800 or MW8802

**MW8811 Birth Rounds 1 1 credit**

See description above. Corequisite: MW8800

**MW8812 Birth Rounds 2 1 credit**

See description preceding MW8811. Corequisite: MW8800 or MW8802. Prerequisite: MW8811

**MW8813 Birth Rounds 3 1 credit**

See description preceding MW8811. Corequisite: MW8800 or MW8802. Prerequisite: MW8812

**MW8899 Childbirth Practicum Continuation 0 credits**

This course continues the student's enrollment in the naturopathic midwifery program during quarters when no births or classes are registered. One credit of tuition is charged to maintain active student status in the program. Prerequisites: MW8802 and MW8813

**MW8901, MW8902, MW8903 Independent Study**

**variable to maximum of 2 credits**

See description for MW7901, MW7902, MW7903. Prerequisites: MW7321 and permission of program chair

**MW9100 Midwifery Wisdom: An Introduction 3 credits**

This course is designed to be the first in the naturopathic midwifery curriculum. It is an introduction to the art and practice of midwifery. It includes a brief history of midwifery and medicine in the U.S., as well as trends in and perspectives on birth in American culture. Students are introduced to counseling skills in maternity care, lactation issues, the fourth trimester, various definitions of "midwife," and some realities of midwifery practice. In addition, students view a variety of midwifery-related videos and develop a group and an individual project. Prerequisite: Admission to Bastyr University. Note: This class is a prerequisite for application to the naturopathic midwifery program. This course is offered only in the summer.

**MW9115 Doula Training 3 credits**

This course prepares the student for the unique role of a doula — a professional who provides physical, emotional and informational support for women in labor. Topics covered include female reproductive anatomy, fetal development, components of perinatal care, clinical terminology, communication skills, pain management techniques, the emotional and psychological aspects of giving birth and its significance in women's lives. Scope of practice, providing culturally sensitive support, clarifying values and beliefs about birth, coping with complications in pregnancy and labor, newborn care, and breast feeding are also included. Upon completion of this course students interested in doula certification may apply to the Pacific Association for Labor Support (PALS) or DONA International. PALS offers an apprenticeship program, which supports placement with certified doulas in the Seattle area who mentor newly trained doulas seeking certification. Prerequisite: MW9100. This course is offered only in the summer.

**MW9120 Fertility Awareness and Natural Family**

**Planning 2 credits**

This course prepares participants for the clinical management of fertility using the most current fertility awareness and family planning techniques and resources. Students examine historical and psychological aspects related to conception and contraception and review basic reproductive anatomy and physiology. They assess pros and cons of various natural fertility assessment tools and tracking techniques and learn to analyze patient fertility charts. Learners discuss and practice methods for teaching and counseling patients utilizing these methods. Upon completion of this course students are able to assist patients in assessing and tracking fertility for conception or contraception, utilizing a variety of methods. Prerequisite: None

**MW9500 Introduction to Childbirth****1 credit**

This course allows students to experience childbirth and some of the associated activities. Participants attend an orientation at BU, participate in pre- and post-natal visits with a local practitioner, observe a birth, attend a birth rounds class and write a summary of the experience. Notes: Additional hours may be required if the birth a student observes is exceptionally brief. If this elective credit is needed for graduation, the entire process must be completed by the final week of classes. This course cannot be audited. Prerequisite: MW7320

## NATUROPATHIC MEDICINE

Dean, To Be Named

**NM5113 Naturopathic Medicine in Historical Context****2 credits**

This course traces the roots of naturopathic medicine and the development of its modalities and philosophy from 4,000 BC to the present day. Lab cohorts are introduced to the principles and practices of naturopathic medicine and discuss them in a historical context to gain an understanding of the philosophical, political and therapeutic constructs that shaped our current profession. Prerequisite: Admission to ND program

**NM5114 Fundamentals of Naturopathic Clinical****Theory****2 credits**

Naturopathic principles of practice, concepts of health and disease, environment, hygiene, nature cure, natural therapeutics, prevention and wellness are discussed with an emphasis on the vitalistic context of science-based naturopathic medicine. Lab cohorts explore the naturopathic principles, therapeutic order and determinants of health more deeply and begin to apply them to cases. Prerequisite: Admission to ND program

**NM5115 Naturopathic Medicine in Global Context****2 credits**

This course explores the current practice of natural medicine across the globe. Students survey traditional healing methods as well as institutional practices of natural therapeutics. Drawing on the historical and philosophical information given the previous two quarters, students gain an understanding of the current political, social and cultural context of natural medicine in each region. The lab cohorts explore the different philosophical and clinical practices of each region and discuss/experience how these complement current naturopathic philosophy and practice. Prerequisite: Admission to ND program

**NM5500 Intensive: Advanced Standing Status****variable credit**

This intensive is designed to satisfy a selection of lower-level naturopathic medicine courses, enabling advanced standing students to better integrate the first and second-year curriculum. Topics may include naturopathic philosophy, botanical medicine courses, physician heal thyself or clinic entry. Prerequisite: Admission to naturopathic medicine program with advanced standing status

**Clinic Entry 1-2**

Clinic Entry 1 and 2 are designed to prepare students for their clinical training in Bastyr Center for Natural Health. Descriptions of these courses follow.

**NM5804 Clinic Entry 1****1 credit**

This experiential course provides naturopathic medical students with the opportunity to become familiar with, and to personally experience, Bastyr Center for Natural Health from a patient's perspective. As patients, students experience a first office call and return office call, as well as experience naturopathic modalities. Students also attend case preview and review. This class offers students clinical experience with the medicine they are studying. Prerequisite: Admission to naturopathic medicine program

**NM5901, NM5902, NM5903 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. Prerequisites: NM5113 and permission of dean

**NM6100 Successful Charting and Coding****1 credit**

This course provides an opportunity to learn skills of efficient charting and coding, and how to use ICD9 and CPT nomenclature necessary when insurance billing or when seeing patients who self-bill insurers. Insurance contract evaluation is also reviewed. Prerequisites: Admission to the naturopathic program or permission of dean

**NM6105 Fundamentals of Business Operations****2 credits**

This course provides an opportunity to learn business fundamentals such as creating a mission, selecting a clinic name, planning layout for a clinic and dispensary, registering a business, hiring and managing employees. Financial planning, keeping statistics, and creating a business plan are also reviewed along with the opportunity to learn how to identify ideal candidates for care, learn interpersonal techniques that promote clinical and economic success. Patient retention and management systems are also reviewed. Prerequisites: Admission to the naturopathic program or permission of dean

**NM6115 Goal Setting and Self Motivation****1 credit**

This course shares methods in goal setting and personal development used by leaders in our field, helpful to the new graduate starting his/her career. Prerequisites: Admission to the naturopathic program or permission of dean

**NM6120 Professional Speaking and Writing****1 credit**

This course provides students guidance and practice on professional speaking and writing and suggestions to identify and secure opportunities. Prerequisites: Admission to the naturopathic program or permission of dean

**Clinical Laboratory Diagnosis 1-3**

This sequence of three (3) courses introduces the student to laboratory diagnoses of clinical disorders and disease states. Emphasis is on methods of analysis, appropriateness of tests, interpretation of laboratory results and clinical application of laboratory data for the primary care provider. NM6210 focuses primarily on definitions of "normals," hematology and coagulation. NM6211 explores clinical chemistries and their interpretation. NM6212 focuses on the laboratory diagnosis of urogenital and endocrine disorders.

**NM6210 Clinical Laboratory Diagnosis 1** 3.5 credits  
See description above. Prerequisite: BC5106

**NM6211 Clinical Laboratory Diagnosis 2** 3.5 credits  
See description preceding NM6210. Prerequisite: NM6210

**NM6212 Clinical Laboratory Diagnosis 3** 3.5 credits  
See description preceding NM6210. Prerequisite: NM6211

**Physical/Clinical Diagnosis 1-3**

The Physical/Clinical Diagnosis series of six (6) courses uses a lecture and laboratory format to teach practical clinical skills. Emphasis is on early detection of abnormalities and diagnosis of common health problems. Differential diagnosis and assessment, patient interview techniques, history taking and physical examination are covered. Also included are indications for diagnostic procedures and an introduction to clinic protocols.

**NM6221 Physical/Clinical Diagnosis 1 Lecture** 2 credits  
See description above. Prerequisites: BC5124, BC5129

**NM6221I. Physical/Clinical Diagnosis 1 Lab** 2 credits  
See description preceding NM6221. Corequisite: NM6221

**NM6222 Physical/Clinical Diagnosis 2 Lecture** 2 credits  
See description preceding NM6221. Prerequisite: NM6221

**NM6222I. Physical/Clinical Diagnosis 2 Lab** 2 credits  
See description preceding NM6221. Corequisite: NM6222

**NM6224 Physical/Clinical Diagnosis 3 Lecture** 2.5 credits  
See description preceding NM6221. Prerequisite: NM6222

**NM6224I. Physical/Clinical Diagnosis 3 Lab** 2 credits  
See description preceding NM6221. Corequisite: NM6224

**NM6901, NM6902, NM6903 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. Prerequisites: BC6200, NM6210, NM6221 and permission of dean

**Public Health and Environmental Medicine**

In these two (2) courses, the toxic effects of the pollution of our air, water, food, and electromagnetic environment are provided. Types, sources, and health effects of common pollutants, prevention and treatment of occupational diseases, public health and the public health system are discussed. The clinician's interaction with public health resources and responsibilities is emphasized.

**NM7101 Environmental Medicine** 1.5 credits  
See description above. Prerequisite: NM6221

**NM7102 Public Health** 1.5 credits  
See description preceding NM7101. Prerequisite: NM6221

**NM7116 Naturopathic Clinical Theory** 1 credit  
This course emphasizes the clinical application of the principles of naturopathic medicine, using the therapeutic order as an integrative framework and providing students with a foundation for naturopathic case analysis and management. Prerequisite: Concurrent with clinic shifts

**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. Prerequisite: BC5142 or BC5141

**NM7302 Gastroenterology** 2 credits  
Disorders of the gastrointestinal system, the digestive tract and related organs are presented with discussion of prevalence, pathophysiology, diagnosis, naturopathic analysis, and conventional and naturopathic therapeutics for these conditions. Prerequisite: Concurrent with clinic shifts

**NM7304 Dermatology** 2 credits  
Differential diagnosis and assessment of common skin disorders are covered in this course. Emphasis is placed on treatment from a conventional and naturopathic perspective. Prerequisite: Concurrent with clinic shifts

**NM7305 Clinical Ecology** 2 credits  
This course covers the diagnosis, prevention and treatment of allergy in its many forms. Food, plant, environment, hydrocarbon and other types are presented. Considered are such topics as masked allergies, allergic adaptation, challenge testing, rotation diets, environmental medicine clinics, fasting and various laboratory tests for allergies (i.e., skin, sublingual, intradermal and blood). Prerequisite: Concurrent with clinic shifts

**NM7306 Oncology 2 credits**

Students explore the problems involved in the diagnosis and assessment of cancer. Current knowledge of the causes and mechanisms of cancer are presented. Included is an overview of the current conventional therapies for cancer, their efficacy and side effects. Students learn how to become an effective part of the health care team in providing care to patients. Complementary naturopathic care for patients with cancer is presented to provide a comprehensive approach to patient management. Prerequisite: Concurrent with clinic shifts

**NM7307 Eye, Ear, Nose and Throat (EENT) 2 credits**

Conventional and naturopathic therapeutics for EENT conditions are presented. Prerequisite: Concurrent with clinic shifts

**NM7311 Neurology 2 credits**

Students refine their skills in diagnosis and treatment from both a conventional and naturopathic perspective of neurological diseases in this course. Recognition of conditions requiring referral for specialized diagnostic procedures and care are addressed. Prerequisite: Concurrent with clinic shifts

**NM7313 Gynecology 3 credits**

In this course students study the interrelationship of patient history, symptoms, physical signs and laboratory tests in making early and accurate diagnoses. Naturopathic therapeutics for gynecological conditions are covered. Students participate in a practicum experience as well. Prerequisite: Concurrent with clinic shifts

**Pediatrics 1-2**

This two (2) course sequence presents the differential diagnosis and assessment of the common problems of infancy, childhood, and adolescence. Emphasis is on early recognition of signs and symptoms, disease prevention, and the development of a healthy lifestyle at an early age. Treatment of common childhood conditions and diseases is presented.

**NM7314 Pediatrics 1 2 credits**

See description above. Prerequisite: Concurrent with clinic shifts

**NM7315 Pediatrics 2 2 credits**

See description preceding NM7314. Prerequisite: Concurrent with clinic shifts

**NM7320 Family Medicine 2 credits**

This course explores family health and wellness and the role of the physician's influence on the perpetuation of health. Prerequisite: PS6306, concurrent with clinic shifts

**NM7325 Naturopathic Case Analysis and Management 1 1.5 credits**

This course is designed to provide a format for the development of skills and rationale in naturopathic case analysis, treatment integration and case management. Naturopathic principles of practice are applied, in concert with conventional case analysis. Prerequisite: NM6224, concurrent with first clinic shifts

**NM7330 The Healing Systems 1 credit**

This course examines seven core systems, which maintain the body's strength and vitality, and how illnesses can be traced to weaknesses in one or more of these systems. Diagnosis and treatment of underlying systemic weaknesses and optimizing function in these systems to focus effectively on the healing effort are emphasized. In the therapeutic order, the course reflects the therapeutic intent of tonifying systems and supporting the body/spirit in healing itself. Prerequisite: Concurrent with clinic shifts

**NM7341 Cardiology 3 credits**

This course covers the pathophysiology, advanced diagnosis and treatment of diseases of the cardiovascular system. Both naturopathic and conventional therapies are discussed based on the nature and severity of the diseases included. Prerequisite: Concurrent with clinic shifts or NM6224

**NM7416 Minor Office Procedures 3 credits**

Minor surgical procedures as defined by scope of practice for naturopathic physicians and licensing laws are taught. This lecture/laboratory course covers common minor surgery office procedures. Topics include suturing techniques; wound, infection and burn management; local anesthetics; bandaging techniques; and the recognition of conditions requiring medical referral for surgical intervention. Prerequisite: NM6224

**NM7417 Medical Procedures 3 credits**

This course provides students with training in a variety of medical procedures including immunization, prescription writing, intravenous and intramuscular injections. The pre-clinical CPR training requirement is also met through this course. Prerequisite: NM6224

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

Naturopathic medicine students are required to take 18 general patient care shifts. Each patient care shift involves provision of care under the supervision of licensed faculty. The medical skills mastered in this setting include standard medical skills and are performed in the context of naturopathic principles. Each student is evaluated for increasing competence and specific skills as s/he progresses through the clinical education. See also listings for physical medicine Patient Care Shifts (PM7801, PM7802, PM8801 and PM8802). Prerequisites: successful completion of all required first and second year ND courses for the four-year track or all required first, second, and third year ND courses for the five-year track, Option A, NM6224, a TB test, and 20 hours of preceptorship

**NM7820 Patient Care 1 2 credits**

See description above. Prerequisites: 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

**NM7835 Building Clinical Skills** **2 credits**

Cross listed as NM9835. This course is part of an ongoing series that is formulated to build and enhance clinical skills. The course covers all aspects of the clinical encounter including the interview, physical exam, case analysis, and differential diagnosis, laboratory and imaging as diagnostic tools, and naturopathic case analysis. The course is a directed study with lecture and group discussion and sessions. The student completes case-based assignments and brings the results to the group for analysis and discussion. Practice of personal skills outside of class is expected and is necessary for improvement to occur. Prerequisite: Clinic eligibility

**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

**NM8101 Ethics** **1 credit**

Ethics of the physician-patient relationship are explored in case studies. Prerequisite: NM6105

**NM8102 Jurisprudence** **1 credit**

This course is an overview of the state laws and the regulations as they relate to the practice of naturopathic medicine in the state of Washington. This includes licensing, malpractice, patient and physician rights, and the mechanisms by which laws are applied and enforced. Prerequisite: NM8101

**Radiographic Interpretation 1-2**

In this two (2) course sequence, students learn the fundamentals of radiographic interpretation. This course includes x-ray physics, the production and effects of ionizing radiation and radiological safety. Radiographic findings of common disorders are discussed with emphasis on differential diagnosis and correlation with clinical findings. Included is the study of pathologies of the skeleton, the thoracic region, and the gastrointestinal and genitourinary systems. Since many images are presented in class and considered extremely important to the learning process, in-person classroom attendance is required.

**NM8201 Radiographic Interpretation 1 Lecture****2 credits**

Since many images are presented in class and considered extremely important to the learning process, in-person classroom attendance is required. See description above. Prerequisite: NM7823

**NM8212 Radiographic Interpretation 2** **3 credits**

In this lecture course, students learn the diagnostic imaging appearance of common disorders of the skeleton, chest, and abdomen, with an emphasis on x-ray presentation. Further diagnostic imaging terminology is introduced. Since many images are presented, classroom attendance is considered extremely important to the learning process. In-person classroom attendance is required. Prerequisite: NM8201

**NM8214 Diagnostic Imaging** **3 credits**

Students are introduced to special imaging procedures commonly used as ancillary and sometimes the primary imaging method in the evaluation of osseous and soft-tissue lesions of the body. Also included is the study of diagnostic ultrasound, computerized tomography, magnetic resonance imaging, nuclear medicine and fluoroscopy. Since many images are presented in class and considered extremely important to the learning process, in-person classroom attendance is required. Prerequisite: NM8201

**NM8303 Geriatrics** **2 credits**

The recognition of the physical, psychological and social differences between the elderly and the younger population is explored. The ability to differentially diagnose common disease entities of the elderly also is covered, as well as specific chronic conditions like diabetes, degenerative joint disease, coronary artery disease and problems of disabled individuals. Prerequisite: Concurrent with clinic shifts

**NM8308 Endocrinology** **3 credits**

The complex interactions of the hormone systems of the body including the causes and effects of hormonal imbalance are covered. Conventional and naturopathic therapeutics for these conditions are presented. Prerequisite: Concurrent with clinic shifts

**NM8309 Rheumatology** **1.5 credits**

This course focuses on the inflammatory conditions involving the connective tissue structures of the body, including muscles and joints. Emphasis is placed on autoimmune disorders and their treatment, with both conventional and naturopathic therapeutics. Prerequisite: Concurrent with clinic shifts

**NM8312 Urology** **1.5 credits**

Diseases of the kidney, urinary tract and male reproductive system are covered in this course, with emphasis on differential diagnosis and assessment. Case management from both a conventional and naturopathic perspective is presented. Prerequisite: Concurrent with clinic shifts

**NM8314 Pulmonary Medicine 1.5 credits**

The diagnosis and treatment of respiratory diseases, including their relationship to cardiovascular disease, are covered. Conventional and naturopathic therapeutics for respiratory problems are presented. Prerequisite: NM7341

**NM8325 Naturopathic Case Analysis and Management 2: Grand Rounds 1 credit**

Students in this clinic-based course participate in case presentations. Prerequisite: NM7325

**Advanced Naturopathic Therapeutics 1-2**

This two (2) course sequence covers health problems in a case-oriented approach. The most appropriate nutritional, botanical and environmental considerations are presented together with other appropriate naturopathic therapeutics. Emphasis is given to balance among the physical, mental and emotional aspects of treatment.

**NM8413 Advanced Naturopathic Therapeutics 1 2 credits**

See description above. Prerequisite: NM7330

**NM8414 Advanced Naturopathic Therapeutics 2 2 credits**

See description preceding NM8413. Prerequisite: NM8413

**Preceptorship 1-3 and Advanced Preceptorship**

Students have the opportunity to preceptor with physicians (ND, MD, DO) in practice. A preceptor/outreach coordinator helps students locate appropriate preceptorships.

**NM8801 Preceptorship 1 1 credit**

See description above. Prerequisite: Admission to 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

**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

**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 is designed to teach and explore 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

**NM9118 Energetics of Natural Medicine 0.5 credits**

This course presents an analysis of the vital force, the emergence of shape, a redefinition of disease and a discussion of specific disorders. The class is participatory, involving lecture, discussion and movement. Prerequisite: NM6224 or NM7116

**NM9401 Diabetes, Insulin Resistance Syndrome 2 credits**

Naturopathic medicine has powerful tools to meet this challenge, and we will be asked to care for an increasing number of diabetic patients. Diabetic care often presents complex management problems. The goal of this course is to develop a deeper understanding of the principles of natural diabetic care and an ability to make a sound response to the diabetic challenge. Prerequisite: Admission to Bastyr University

**NM9402 AIDS and Alternative Medicine 1.5 credits**

This course provides students with a foundation of information on HIV and AIDS necessary to meet the responsibilities of a naturopathic physician working with HIV/AIDS. Prerequisite: BC6209

**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 to the naturopathic medicine program or permission of instructor

**NM9505 Clinical Ecology 2: Chemical Sensitivities****2 credits**

Students in the naturopathic medicine program who have completed NM7101 may register for this special topics course. Students learn the manifestations presented by patients afflicted with chemical sensitivities, assessment and treatment. Prerequisite: NM7101

**NM9508 Mind, Body, Spirit and Nature: Landscape of****Thought and Therapies in Natural Medicine 2 credits**

This course is open to all levels and disciplines at Bastyr University. Up-to-date therapies are integrated with time-honored traditions in natural medicine. Students also explore the history of healing in many diverse cultures as it is relevant to natural medicine as practiced today. Comparative religions are explored for their wisdom about health and spirit. Prerequisite: Admission to Bastyr University

**NM9509 Mind, Body, Spirit and Nature: Integral****Practice 1 credit**

As human beings and health care providers we are called upon to help our patients cultivate life and wellness. A crucial question then for each of us is, "How do I cultivate my own life?" In this experiential and interactive course, students explore their own life-affirming practices, as well as cultivating a community of support and empowerment for healthy intentions. Prerequisite: Admission to Bastyr University

**Leadership Series: Special Topic Courses**

Seminars are offered on the following topics: legislative and public affairs, public speaking, writing for publication and research. Leaders in these fields work with students in a workshop format.

**NM9545 Leadership Series: Research 2 credits**

See description above. Prerequisite: Admission to the naturopathic medicine, AOM, nutrition or midwifery program

**NM9546 Leadership Series: Legislative and Public****Affairs 2 credits**

See description preceding NM9545. Prerequisite: Admission to the naturopathic medicine, AOM, nutrition or midwifery program

**NM9547 Leadership Series: Writing for Publication****2 credits**

See description preceding NM9545. Prerequisite: Admission to the naturopathic medicine, AOM, nutrition or midwifery program

**NM9548 Leadership Series: Public Speaking 2 credits**

See description preceding NM9545. Prerequisite: Admission to the naturopathic medicine, AOM, nutrition or midwifery program

**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

**NM9835 Building Clinical Skills 2 credits**

Cross listed as NM7835. This course is part of an ongoing series that is formulated to build and enhance clinical skills. The course covers all aspects of the clinical encounter including the interview, physical exam, case analysis, and differential diagnosis, laboratory and imaging as diagnostic tools, and naturopathic case analysis. The course is a directed study with lecture and group discussion and sessions. The student completes case based assignments and brings the results to the group for analysis and discussion. Practice of personal skills outside of class is expected and is necessary for improvement to occur. Prerequisite: Clinic eligibility

**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. Prerequisite: Mid-level primary clinician status and completion of all preceptor rotations

## ACUPUNCTURE AND ORIENTAL MEDICINE

Terry Courtney, MPH, LAc, Dean

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

**OM3110 Biochemistry 4 credits**

This course provides an overview of basic human metabolism. Topics include carbohydrate, protein and fat metabolic pathways, with integration into overall anabolic and catabolic metabolic processes. Prerequisite: BC3100

**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 to the AOM program

**Meridians and Points 1-3**

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.

**OM4106 Meridians and Points 1 4 credits**

See description above. Prerequisite: Admission to the AOM program

**OM4107 Meridians and Points 2 4 credits**

See description preceding OM4106. Prerequisite: OM4106

**OM4108 Meridians and Points 3 4 credits**

See description preceding OM4106. Prerequisite: OM4107

**OM4118 TCM Fundamentals 4 credits**

This course 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: Admission to the AOM program

**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, admission to the 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, patterns that create disease, and treatment plans that facilitate homeostasis.

**OM4221 TCM Pathology 1 3 credits**

See description above. Prerequisites: OM4118/OM5120, admission to the 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. The application of the various Tui Na techniques is based on the theories of TCM, and 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. Prerequisites: OM4118/OM5120, admission to the 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: OM4118 or OM5120 (can be concurrent) or permission of dean

**TCM Techniques 1-3**

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, electroacupuncture, 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.

**OM4411 TCM Techniques 1 2 credits**

See description above. (For TCM Techniques 2-3, see OM5430 and OM5436.) Prerequisites: BC3134 (or BC5122 - ND Students), OM4106, OM4118; concurrent with BC3135 and OM4107

**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 to the AOM program

**Clinical Observation 1-3**

In preparation for becoming an intern, students train 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 interns. 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 internship phase. Students who choose to complete the preceptorship during their internship phase are still eligible to start clinic in spring quarter of their second year, which is the traditional entry point into internship training. 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

**OM5120 Fundamental Principles of Traditional****Chinese Medicine** **3 credits**

This introductory course provides an overview to the theories and practice of acupuncture and Oriental medicine. Students are introduced to this ancient medicine in order to both better understand it and to recognize clinical situations that would benefit from referral to an acupuncturist. While this course is designed for students in the naturopathic medicine program, students enrolled in other degree programs are also eligible to take this course. Prerequisite: Admission to naturopathic medicine program or any other non-AOM degree program

**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 to the 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. 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. Labs and lectures are included. Prerequisite: OM5436

**OM5302 Public Health Issues in AOM** **2 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: Intern 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 to 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 to the AOM program

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

See description preceding OM5321. Prerequisite: OM5321

**OM5323 Survey of Western Clinical Science 3** **2 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 musculo-skeletal 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. This course covers the approach to and treatment of eye, ear, nose and throat conditions. Prerequisite: OM5414

**OM5430 TCM Techniques 2** **2 credits**

See description preceding OM4411. This course continues with building basic needling skills and introducing moxibustion, Gwa Sha, and other non-needle modalities. Prerequisite: OM4411

**OM5436 TCM Techniques 3** **2 credits**

See description preceding OM4411. This course provides students with advanced acupuncture skills, supervised practice on difficult acupuncture points and the techniques of acupuncture microsystems. Prerequisite: OM5430

**OM5438 TCM 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: OM4118 (may be concurrent) or 5120 (may be concurrent) or permission of dean

**OM5803 Clinical Observation 3** **2 credits**

See description preceding OM4803. Prerequisite: OM4804

**Clinical Internship and Internship Interim Clinic**

Students progress through 14 internship shifts (MSA) or 16 internship shifts (MSAOM), 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: completion of clinic entry exam

Note: To graduate, AOM 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 internship hours beyond those required for graduation from the University.

**OM5805 Clinical Internship 1** **2 credits**

See description above. Prerequisite: Admission to MSA or MSAOM, OM5803, successful completion of Clinic Intern Entry exam

**OM5806 Clinical Internship 2** **2 credits**

See description preceding OM5805. Prerequisite: OM5805

**OM5807 Clinical Internship 3** **2 credits**

See description preceding OM5805. Prerequisite: OM5806

**OM5808 Clinical Internship 4** **2 credits**

See description preceding OM5805. Prerequisite: OM5807

**OM5809 Clinical Internship 5** **2 credits**

See description preceding OM5805. Prerequisite: OM5808

**OM5810 Clinical Internship 6** **2 credits**

See description preceding OM5805. See OM6801-OM6810 for Clinic Internship 7-16 Prerequisite: OM5809

**OM5836 Internship Interim Clinic** **1.5 credits**

See description preceding OM5805. 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: Third-year status in AOM program

**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 to the MSA or MSAOM program

**OM6111 Practice Management 1** **2 credits**

This is the first class 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: OM5807

**OM6112 Practice Management 2 1 credit**

This is the second class 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

**OM6305 Survey of Biophysics and Electroacupuncture 2 credits**

This course presents an overview of the theories and research in the field of biophysics that impact the practice of electroacupuncture. Principles and various applications of electroacupuncture are presented, a variety of devices demonstrated, and hands-on experience encouraged. Prerequisite: OM5436

**OM6310 Case Review 2 credits**

This course runs concurrently with Clinic Internship and provides a forum for the discussion of cases seen in the teaching clinic. Prerequisite: OM5805

**OM6315 Clinical Theatre 2 credits**

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, patient care and management. Prerequisite: OM5805

**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

**OM6801 Clinical Internship 7 2 credits**

See description preceding OM5805. Prerequisite: OM5810

**OM6802 Clinical Internship 8 2 credits**

See description preceding OM5805. Prerequisite: OM6801

**OM6803 Clinical Internship 9 2 credits**

See description preceding OM5805. Prerequisite: OM6802

**OM6804 Clinical Internship 10 2 credits**

See description preceding OM5805. Prerequisite: OM6803

**OM6805 Clinical Internship 11 2 credits**

See description preceding OM5805. Prerequisite: OM6804

**OM6806 Clinical Internship 12 2 credits**

See description preceding OM5805. Prerequisite: OM6805

**OM6807 Clinical Internship 13 2 credits**

See description preceding OM5805. Prerequisite: OM6806

**OM6808 Clinical Internship 14 2 credits**

See description preceding OM5805. Prerequisite: OM6807

**OM6809 Clinical Internship 15 2 credits**

See description preceding OM5805. Prerequisite: OM6808

**OM6810 Clinical Internship 16 2 credits**

See description preceding OM5805. Prerequisite: OM6809

**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 internships in Chengdu or Shanghai. Major topics include: professional hospital conduct in the Chinese hospital, Chinese cultural topics (dining, etiquette, studying tai chi, Chinese), safety, practical travel tips (money, packing, purchases in China, etc.). The course is taught with lecture, role play, video and guest speakers. Prerequisite: Prior approval for China internship or permission of the dean

**Acupuncture Clinic in China 1-4**

Students in good academic standing are encouraged to apply for advanced studies in China. Currently, Chengdu and Shanghai Universities of TCM are the main sites for Bastyr acupuncture internships. 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 MSA or MSAOM internship 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

**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

**OM7110 Mechanisms and Pathology of Pain 2 credits**

Understanding the mechanisms and pathology of pain is key to clinical management and resolution. This course covers the anatomical, neurological and biochemical components and biomedical aspects of pain. Prerequisites: Admission to DAOM program, ND, ExSc and/or permission of dean

**OM7200 Huang Di Nei Jing 2 credits**

The Neijing is the earliest known book on Chinese medical theory and is also included as one of the four major classical texts of Chinese medicine. This course provides highly developed studies in theories pertaining to yin/yang, five element, zang/fu and meridians. Building on these theories, the course provides a deeper understanding of disease etiology, which is critical to development of sophisticated clinical treatment plans. Prerequisite: Admission to DAOM program or permission of dean

**OM7205 Shang Han Lun 2 credits**

The Shang Han Lun is one of the four most important classics of traditional Chinese Medicine. The course provides an advanced analysis and ensuing clinical application of diseases caused by the external pathogen of Cold. This course prepares students to apply its diagnostic and treatment protocols to complex clinical care and treatment strategies. Prerequisite: Admission to DAOM program or permission of dean

**OM7210 Jing Gui Yao Lue 2 credits**

The Jin Gui Yao Lue is included as one of the four most important classics of traditional Chinese medicine. This course provides students with advanced clinical concepts in diagnostic and therapeutic systems in the areas of differential diagnosis, treatment principles and Chinese herbal formula selection, utilizing the six classic stages of disease as the structure for the course. The lectures are followed by case studies, some of which are from the Bastyr Center for Natural Health patient population. Prerequisite: Admission to DAOM program or permission of dean

**OM7215 Wen Bing Xue 2 credits**

The Wen Bing Xue medical classic is the one of the four major traditional Chinese medical classic texts. This text pertains to "seasonal febrile diseases." The course analyzes the four classic stages of disease as they pertain to the external pathogen of Heat. The analysis and clinical application of this course material are applied to the diagnostic and treatment protocols of complex patient care protocols. Prerequisite: Admission to DAOM program or permission of dean

**OM7311 OM Pain Management 1 2 credits**

This is the first of three courses covering the diagnosis and treatment of neuromusculoskeletal conditions. The class discusses the TCM differential diagnosis of pain, treatment for the various types of pain with various types of tissue involvement, acupuncture systems of point selection, and the broad topics of TCM bi syndrome, wei syndrome and zhong-feng or windstroke. Prerequisite: Admission to DAOM or approval of the dean

**OM7312 OM Pain Management 2 2 credits**

This is the second of three courses covering the diagnosis and treatment of neuromusculoskeletal conditions, many of which involve pain. This course discusses site-specific neuromuscular problems including tendonitis, bursitis, neuralgia, sports injuries, and trigger point pain patterns of the lower extremities. Prerequisite: OM7311 or approval of the dean

**OM7313 OM Pain Management 3 2 credits**

This is the third of three courses covering the diagnosis and treatment of neuromusculoskeletal conditions, many of which involve pain. This course explores painful conditions of the spine, neck, head, shoulder and upper limbs, including the hand. Prerequisite: OM7311, OM7312, or approval of the dean

**OM7400 Acupuncture in Oncology 2 credits**

This course provides advanced acupuncture techniques that are vital to the clinical care and management of oncology patients. Advanced clinical theories and techniques, as they pertain to acupuncture, are given for the management of pain, immune support, treatment of anxiety/depression and modifying the side effects of medication. This course provides a sophisticated understanding and application of acupuncture in the oncology clinical setting. Prerequisite: Admission to DAOM program

**OM7401 AOM Orthopedics 2 credits**

This course provides an introduction to orthopedic assessment as it applies to the acupuncture clinical setting. Students gain skills in orthopedic assessment, which will enhance their clinical work and ability to provide advanced clinical care. Prerequisite: Admission to DAOM program or OM5323

**OM7402 Clinical Orthopedics 2 credits**

This course addresses the clinical issues of orthopedic management, including imaging, pharmaceuticals, labs and specific physical modalities. Patient co-management issues are also addressed, including recognition of advanced conditions requiring referral. Prerequisites: Admission to DAOM program, ND, ExSc and/or permission of dean

**OM7403 Advanced Tui Na 1 credit**

There are many advanced Tui Na techniques that can enhance resolution of pain. This course covers a variety of common clinical conditions including headache, TMJ, upper extremities, carpal tunnel syndrome, wrist pain, injury of lower extremities including the gastrocnemius muscle, ankle sprains and traumatic synovitis. Prerequisite: Admission to DAOM or approval of the dean

**OM7405 Chinese Herbs in Oncology 3 credits**

This course provides an analysis of the herbs and formulas that are commonly used in cancer treatment to treat both the acute phase of illness as well as to support health maintenance. Utilizing the standard Chinese herbal categories of clearing, releasing, invigorating, softening, reducing, draining and tonification, the course leads to a sophisticated understanding and application of Chinese herbal medicine in the oncology clinical setting. Prerequisite: Admission to DAOM program

**OM7411 TCM Cancer Therapeutics 1 2 credits**

This course is the first in a two-part series. The focus of the course is to provide an advanced analysis of traditional Chinese medicine etiology, pathology, treatment principles and clinical application including nutrition and rehabilitation. This course develops skills in building sophisticated treatment plans for oncology care. Prerequisites: BC7101 and admission to DAOM program

**OM7412 TCM Cancer Therapeutics 2 2 credits**

This course is the second in a two-part series and covers the most common types of cancer found in the U.S. The course focuses on the clinical treatment of cancer utilizing both Chinese medicine and Western clinical intervention. The course provides an analysis of the strengths and limitations of Western and Chinese medicine in the oncology setting which leads to greater skills in understanding their integration in the clinical arena. Prerequisite: OM7411

**OM7415 Advanced Acupuncture Techniques for Pain 2 credits**

There are many advanced acupuncture techniques that can enhance needle manipulation skills, leading to stronger clinical outcomes. In addition to covering commonly used acupuncture techniques for pain, the course also covers techniques from the Huang Di Nei Jing, penetrated needling and traditional therapeutic artistic needling. Prerequisite: Admission to DAOM

**DAOM Internships**

Doctoral students rotate through six different clinical sites. The first rotation is done at Bastyr Center for Natural Health and trains students in the basics of clinical supervision. Students then complete internships at the Seattle Cancer Treatment and Wellness Center and Skagit Valley Hospital Regional Cancer Care Center. Internships in advanced pain management are done in integrated shifts at Bastyr Center for Natural Health. In the final quarter, students have an opportunity to do advanced clinical work through sister school affiliations with Chengdu and Shanghai Universities of Traditional Chinese Medicine. Students spend a total of six weeks in clinical rotations in China.

The purpose of the clinical training is to give students a strong foundation in traditional Chinese medicine care within integrated Western clinical settings that provide oncology and pain care. The student training experience provides clinical experience with developing and applying advanced acupuncture and Oriental medicine treatment plans as well as opportunities to observe oncologists and other health providers.

**OM7800 Clinic Entry for Supervisors 1 credit**

This course provides the skills and information needed to provide clinical supervision at Bastyr Center for Natural Health. The course covers key concepts that are important to working with adult learners including conducting mini-assessments, constructive feedback techniques and evaluation/grading. The course also assists students in conducting interdepartmental referrals and in skill building in co-management of patients. Prerequisite: Admission to DAOM program

**OM7801 Clinic Supervision Internship 1 2 credits**

See description preceding OM7800. Prerequisite: Concurrent with OM7800, Admission to DAOM program

**OM7802 Clinic Supervision Internship 2 2 credits**

See description preceding OM7800. Prerequisite: OM7801

**OM7811 Oncology Clinic 1 2 credits**

See description preceding OM7800. Prerequisite: completion of or concurrent with OM7412

**OM7812 Oncology Clinic 2 2 credits**

See description preceding OM7800. Prerequisite: OM7811

**OM7813 Oncology Clinic 3 2 credits**

See description preceding OM7800. Prerequisite: OM7812

**OM7821 Pain Clinic 1 2 credits**

See description preceding OM7800. Prerequisite: OM7110, OM7401

**OM7822 Pain Clinic 2 2 credits**

See description preceding OM7800. Prerequisite: OM7821

**OM7823 Pain Clinic 3 2 credits**

See description preceding OM7800. Prerequisite: OM7822

**OM7901, OM7902, OM7903 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

**Research Practicum 1-3**

This course provides students with a forum to discuss contemporary research topics as well as a place to discuss challenges or breakthroughs with their own doctoral research. Research Practicum 3 is the forum for final project presentations. The group discussions are particularly focused on complementary and alternative medicine issues, including analyzing the work going on nationally through NIH funding. An introduction to the research application process itself is also covered.

**OM8101 Research Practicum 1 2 credits**

See description above. Prerequisites: TR5128, Admission to DAOM program

**OM8102 Research Practicum 2 2 credits**

See description preceding OM8101. Prerequisite: OM8101

**OM8103 Research Practicum 3 2 credits**

See description preceding OM8101. Prerequisite: OM8102

**OM8199 Capstone Continuation 0 credits**

Enrollment in this course is required when a student has not yet completed the DAOM capstone project but has completed all other requirements of the doctoral program. One credit of tuition is charged. Prerequisite: OM8103

**OM8800 Cancer Care Internship (Observation) 2 credits**

See description preceding OM7800. Prerequisite: Completion of or concurrent with OM7412

**OM8805 Hospital Internship 12 credits**

See description preceding OM7800. The six-week clinical rotation in China provides doctoral students with exposure to advanced Western and TCM treatment planning and case management as it pertains to oncology care. Students are directly involved in treatment of oncology patients under supervision of the hospital teaching staff. The six-week rotation includes three weeks at Chengdu University of Traditional Chinese Medicine and three weeks at Shanghai University of Traditional Chinese Medicine. Prerequisite: OM7813

**OM8901, OM8902, OM8903 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  
*AOM Department Electives: The following courses (course numbers starting with OM9—) represent a variety of electives and special topics courses offered on a rotating basis.*

**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 or OM5120

**OM9306 Five Element****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 or OM5120

**OM9316 Advanced Five Element****2 credits**

This course is a sequel to Five Element for students who wish to learn more practical clinical applications of the integrated Five Element acupuncture theory originating from a TCM foundation. Topics covered include: energetic blocks to treatment, use of command points, spirit of the points, pulse diagnosis, and refinement of diagnosis by color, sound, odor and emotion. Prerequisites: OM5805, OM9306

**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

**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. The course includes an overview of the biochemistry of chemical dependency, outpatient treatment strategies for safely detoxifying and aftercare. The role of the acupuncturist in a clinic team is also covered. This course is the didactic portion of a larger certification program offer by the National Acupuncture Detoxification Association (NADA). Upon completion of this course plus completion of an outside clinical rotation, students are eligible to work as acupuncturists in chemical dependency treatment facilities upon graduation/licensure. Prerequisite: Intern status at clinic

**OM9501 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: OM4108, OM4212, OM4222

**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.

**OM9519 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. (For Tui Na 3-4, see OM9574 and OM9578.) Prerequisite: OM4315

**OM9520 Tui Na 5****1 credit**

See description preceding OM9519. 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 with the piriform muscle. External herbal applications also covered. Prerequisite: OM4315

**OM9523 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: OM4118 or OM5120 or permission of the dean

**OM9526 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: OM4118 or OM5120 or permission of the dean

**OM9530 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

**OM9541 TCM Sports Medicine 1****1 credit**

This course covers the theories, techniques and treatments of TCM sports medicine. The classes focus 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: Admission to AOM

**OM9551 Advanced Tongue and Pulse Diagnosis****2 credits**

This class deepens the student's ability to use tongue and pulse diagnosis in a clinical setting. In addition to an in-depth review of TCM pulse diagnostics, the class explores the yin and yang pulses, the eight extra vessel pulses, and the wave from within each organ pulse, as well as an in-depth review of tongue diagnostics. Prerequisite: OM5805 (may be concurrent)

**OM9557 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: Admission to AOM

**OM9574 Tui Na 3****1 credit**

See description preceding OM9519. 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

**OM9575 Introduction to Foot Reflexology Massage****1 credit**

This course offers an introduction to 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, backache, etc. The course includes a history of reflexology in Asia, Europe and America, preparing herbal foot soaks, reflexology foot massage instruction and practice, and walks in Bastyr's reflexology path. Prerequisites: BC3134, BC3135, BC3136 (or concurrent with BC3136), or equivalent Anatomy and Physiology series

**OM9578 Tui Na 4****1 credit**

See description preceding OM9519. 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, injury of lower extremities including the gastrocnemius muscle, ankle sprains and traumatic synovitis. Prerequisite: OM4315

**OM9581 Thai Massage 1****1 credit**

This course covers the theories and techniques of Thai massage. Classes focus on introducing the first 5 of the 10 Thai massage meridians and massage techniques and procedures on the feet, legs, neck and back. Prerequisites: BC3136 or BC3143 and BC3113 or BC3134

**OM9582 Thai Massage 2****1 credit**

This course covers the theories and techniques of Thai massage. Classes focus on introducing the last 5 of the 10 Thai massage meridians and massage techniques and procedures used on the face, abdomen, arms and fingers. Prerequisites: BC3134 or BC3113 and BC3136 or BC3143

**Clinical Internship 1-4 Elective**

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

**OM9801 Clinical Internship 1 (fall)****2 credits**

See description above. Prerequisite: Permission of dean

**OM9802 Clinical Internship 2 (winter)****2 credits**

See description preceding OM9801. Prerequisite: Permission of dean

**OM9803 Clinical Internship 3 (spring)****2 credits**

See description preceding OM9801. Prerequisite: Permission of dean

**OM9804 Clinical Internship 4 (summer)****2 credits**

See description preceding OM9801. Prerequisite: Permission of dean

**OM9820 Advanced Intern Shift 2 credits**

This clinic shift provides entering DAOM students an opportunity to refresh their general clinical skills under the supervision and evaluation of AOM senior clinical faculty. Students are required to demonstrate the competencies of a final term master's student. Failure to demonstrate a grade of Achieved Competency in this shift may require a repeat of the shift under the guidelines of a learning contract. Prerequisite: Admission to the DAOM program

## PHYSICAL MEDICINE

Dean Neary, ND, Department Chair

**Hydrotherapy/Physiotherapy Lecture and Lab**

This two (2) course sequence begins with a lecture class and is followed by a skills lab, which prepares students for hydrotherapy/physiotherapy therapeutics in the clinic. Topics covered in the class include the principles of nature cure and hydrotherapy, as well as specific techniques such as constitutional hydrotherapy. The physiotherapy portion covers the physiotherapy devices used in practice, such as ultrasound, diathermy, electrical stimulation, ultraviolet and infrared, and low-level laser therapy (LLIT).

**PM5301 Hydrotherapy/Physiotherapy Lecture 2 credits**

See description above. Prerequisite: BC5122

**PM5305 Hydrotherapy/Physiotherapy Lab 1 credit**

See description preceding PM5301. Prerequisite: PM5301

**PM5310 Myofascial Analysis 1.5 credits**

In this class students learn skills they will use through the rest of the physical medicine series at Bastyr University. Students identify and palpate anatomical landmarks, assess the physical structure of a patient's body, and formulate an understanding of the biomechanical basis for movement. Students also learn the basics of myofascial release techniques, Swedish massage, and how to instruct patients to stretch hypertonic muscles. Pre/Corequisite: BC3113 or BC5122

**Naturopathic Manipulation 1-4**

This four (4) course sequence in naturopathic manipulation emphasizes structure and gait analysis, evaluation of musculoskeletal conditions, differential diagnosis, assessment and treatment. A comprehensive approach to therapeutic protocols utilizing appropriate physical medicine modalities is emphasized.

**PM6300 Naturopathic Manipulation 1 2 credits**

See description above. This course includes structural analysis and gait analysis. Students are introduced to various forms of soft tissue manipulation, such as muscle energy, strain/counterstrain, trigger point therapy, and cranosacral manipulation. Prerequisites: BC5124, PM5310

**PM7301 Naturopathic Manipulation 2 3 credits**

See description preceding PM6300. Evaluation of soft tissue pathologies, differential diagnoses and rationale for use of soft tissue manipulation are covered. Soft tissue treatment — primarily muscle energy technique — is taught in the context of therapeutic massage, neuromuscular technique and strain/counterstrain. Osseous manipulation is introduced. Prerequisite: PM6300

**PM7302 Naturopathic Manipulation 3 3 credits**

See description preceding PM6300. General osseous manipulation in uncomplicated cases is covered. The course focuses primarily on spinal manipulation. Treatment protocols emphasize a well-rounded approach, including the appropriate use of osseous and soft tissue manipulation, physiotherapy and hydrotherapy. Prerequisites: PM7301, PM7305

**PM7303 Naturopathic Manipulation 4 3 credits**

See description preceding PM6300. This course covers osseous manipulation in more complicated cases requiring extensive evaluation, including indications for the use of diagnostic testing, such as radiography, CT and MRI. Extremity manipulation is also taught. Prerequisite: PM7302

**PM7305 Orthopedics 2 credits**

This course reviews the assessment of the musculoskeletal system and diagnosis of orthopedic conditions. Prerequisite: NM6224 Corequisite: PM7301

**PM7341 Sports Medicine/Therapeutic Exercise 2 credits**

Diagnosis and treatment of sports injuries likely to be seen by a general practice naturopathic physician are covered. Methods of fitness testing, exercise prescription and the use of exercise as therapy are taught. Prerequisite: PM7301

**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.

**PM9301 Traditional Naturopathic Medicine Series:****Advanced Constitutional Hydrotherapy 1 2 credits**

Advanced clinical application of constitutional hydrotherapy. Topics include clinical pearls, clinical management of the healing reaction (or crisis), use of specific gravity, heart sounds, celiac plexus, adjunctive hydro and physiotherapy techniques and case studies. This course includes laboratory application. Prerequisites: NM5131, PM5301, PM5305

**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, jejunoleum and the colon. The training is very precise and true to the body of work and research brought forth by both Dr. Barral and Alain Gehin. Prerequisite: Must be registered for at least one clinic shift. This course cannot be audited.

**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. 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: (ND) BC5124 and PM5310; (NTR, ExSc, HS) PM5310 or PM9310 and BC3143; (AOM) BC3136 and PM5310 or PM9310

**PM9315 Craniosacral Therapy 2 3 credits**

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

**PM 9501 Yoga Therapy 1 2 credits**

Yoga Therapy 1 is a foundational course in the use of yoga as a healing modality. Topics include principles and philosophy of yoga, introduction to the Eight Limbs of yoga, principles of Pranayama (breathing techniques), biomechanics of Asanas (yoga postures and movements), use of props in yoga therapy for self-correction and self-healing, and therapeutic yoga for musculoskeletal problems. Students must provide yoga mats. Prerequisites: BC5109 and BC5124 or BC3136

## COUNSELING AND HEALTH PSYCHOLOGY

Naomi Lester, PhD, Interim 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.

**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

**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 skills 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

**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

**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

**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 to DPD program or permission of instructor

**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. Prerequisite: Introductory psychology course

**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

**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

**PS3133 Introduction to Statistics 4 credits**

In this course, statistical procedures are examined within the context of behavioral sciences. Statistical concepts such as probability, correlation and regression, analysis of variance, binomial and normal distributions, hypothesis testing and estimation are explored. Nonparametric statistics, application of binomial and normal distribution, chi-square tests and linear regression theory are addressed. Methods by which statistical concepts and formulas can be applied to the research of behavior are discussed. Experience with the statistical package for the social sciences (SPSS) is included. Prerequisite: None

**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

**PS3146 Psychology and the Soul 3 credits**

This course provides an introduction to the spirituality and health series by reviewing theoretical and historical perspectives as well as current thinking on the relationship between psychology, spirituality and health. Students examine questions of existence such as the nature of reality and the place of humans in the natural world. 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

**PS3148 Science and Spirituality 3 credits**

The historical forces behind the separation of scientific medicine and spirituality are explored in this course. Students investigate concepts such as consciousness studies, cosmology and energy work that focus on reintegration in health and wellness. 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. Prerequisite: 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. 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. Prerequisite: PS3146, PS3147, PS3148, 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 during the student's senior year. One credit equals 33 hours of practicum-related work over the course of an academic quarter. Maximum of two credits per quarter. The student must have completed a minimum of 45 credits in the BS in psychology program. Prerequisite: Senior standing

**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

**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

**PS5113 Theories of Counseling & 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. The application of these approaches to clinical examples is emphasized. 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 plays and videos supplement readings and lecture. Prerequisite: Admission to MSN/CHP or permission of instructor

**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 co-morbid 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. Prerequisite: Admission to graduate studies and concurrent enrollment in PS6315 for MSN/CHP only

**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: Intern status or permission of the dean

**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 to graduate studies

**PS5801 Counseling and Health Psychology Clinic** **1 credit**

This class offers an orientation to clinic procedures, rooms and staff. Students learn the ethical issues and procedures for confidentiality, suicide assessment and referral process. There is training in HIPPA principles. Prerequisites: PS5301 and admission to the MSN/CHP program

**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. Prerequisites: Admission to graduate program or permission of chair

**PS6105 Diversity and Multicultural Issues in Health****Psychology** **3 credits**

This course addresses multicultural, ethnic, economic, gender, and sexual issues in the development, use and evaluation of clinical health psychology interventions with populations that are diverse. Emphasis is on cultural appreciation, respect, and communication to counseling clients and their families. Prerequisite: Admission to graduate studies or permission of instructor

**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

**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 PS5210 (NTR) or PS7203 (ND) or PS5113, PS5115, PS5301 (MSN/CHP)

**PS6303 Sexuality and Sex Therapy** **2 credits**

This course examines the role of sexuality in human functioning, contemporary cultural/psychosexual development and its impact on psychological health, sexual dysfunction and treatment, sexual abuse, and sexuality and spirituality. This course is required for midwifery certification. Prerequisite: PS6306 or permission of instructor

**Naturopathic Counseling 1-3**

Naturopathic Counseling is at the heart of the practice of naturopathic medicine. This three (3) course sequence integrates the principles of naturopathic medicine with counseling skills, holistic counseling interventions, and the practice of general medicine, with attention to body/mind/spirit interactions.

**PS6305 Naturopathic Counseling 1** **3 credits**

See description above. This course covers introductory counseling skills in light of the principles of naturopathic medicine, including therapeutic counselor qualities; communication and interview skills; the establishment and utilization of the wellness alliance; proficiency in stimulating health and well being; and suicide assessment, treatment and referral. Students create a videotape demonstrating basic counseling skills and principles. (ND only) Prerequisite: PS5103

**PS6306 Naturopathic Counseling 2** **3 credits**

See description preceding PS6305. Building on Naturopathic Counseling 1, this course offers more specific focus and skill building related to those counseling interventions whose effectiveness is supported empirically. Collaborative treatment planning is also addressed as part of an orientation to the clinical counseling shift. Students conduct ongoing counseling in a lab setting with live role models. See PS7315 for Naturopathic Counseling 3. Prerequisite: PS6305

**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

**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. Prerequisite: concurrent enrollment in 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

**PS6323 Assessment and Treatment of Children/****Adolescents in Health Psychology 3 credits**

This is an introductory course on child 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 ADHD, autism, diabetes, depression and eating disorders. Prerequisite: PS6315 or permission of instructor

**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**

The legal and ethical issues in the conduct of professional psychology are considered, including such topics as confidentiality, ethical competence, privilege, expert testimony, malpractice and the insanity defense. Business and ethical issues concerning private practice, licensing, certification, forensics and insurance reimbursement are also covered. Prerequisite: Admission to 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 to MSN/CHP or permission of instructor

**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 to 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 our Bastyr clinic or their community site. The students work in teams to develop the curriculum. Basic tenets of program evaluation are also covered. Prerequisite: Admission to MSN/CHP, PS5110, PS7803, Clinic Shift 3 or permission of instructor

**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 Psychology Thesis 1. Prerequisite: PS7121

**PS7123 Thesis Advisement 3****2 credits**

Continuation of Psychology Thesis 2. Prerequisite: PS7122

**PS7129 Career Counseling****3 credits**

This course covers the settings in which clinical health psychology is practiced and how psychologists function in those settings. Students gain the knowledge and skills required to provide meaningful consultation to health service delivery systems. The class explores career counseling theories, history and various approaches to career development. In addition, students utilize the information to develop their own professional portfolio for job "mock" interviews. Prerequisite: PS7801, PS7811

**PS7200 Psychological Assessment****2 credits**

This course trains students to make clinical assessments of psychological disease using the DSM-IV and, accordingly, to make judgments regarding which patients are appropriate for counseling at the University's clinic and within 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. Prerequisite: PS6306 (concurrent with clinic shifts) or permission of instructor

**PS7203 Addictions and Disorders****2 credits**

This course examines the nature and treatment of the following addictions and disorders from a physiological, psychological, nutritional and naturopathic perspective: alcoholism, substance abuse, anorexia, bulimia and compulsive eating. Naturopathic scope of practice in the treatment and management of addictions and eating disorders is identified, as well as community referral resources. Prerequisite: PS6306 (concurrent with clinic shifts) or permission of instructor

**PS7315 Naturopathic Counseling 3**      **2 credits**

See description preceding PS6305. The focus of this course is the recognition and consideration of psychological aspects in the practice of general medicine, including empirically proven health psychology strategies and naturopathic medicine therapeutics (i.e., nutrition, botanicals) for treating mental and emotional conditions. Topics include but are not limited to the following: assessing and promoting patient motivation and readiness, naturopathic diagnosis and treatment of psychological conditions secondary to medical problems, and family dynamics in general medical presentations. Prerequisite: PS6306 (concurrent with clinic shifts)

**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 co-facilitation 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. Prerequisite: Admission to MSN/CHP program, PS7801, PS7802, PS7803

**PS7806 MSN/CHP Practicum 2**      **2 credits**

A continuation of MSN/CHP Practicum 1. Prerequisite: PS7801, PS7802, PS7803 and PS7805

**PS7807 MSN/CHP Practicum 3**      **2 credits**

A continuation of MSN/CHP Practicum 2. Prerequisite: 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. Prerequisite: concurrent enrollment in PS7805

**PS7812 Practicum Seminar 2: Nutrition/Clinical****Health Psychology**      **1 credit**

A continuation of Practicum Seminar 1. Prerequisite: PS7811, concurrent enrollment in PS7806

**PS7813 Practicum Seminar 3: Nutrition/Clinical****Health Psychology**      **1 credit**

A continuation of Practicum Seminar 2. Prerequisite: PS7812, concurrent enrollment in 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 in 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 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: PS6305, PS6306, PS7200

**PS8110 Counseling in Chronic Pain and Chronic/****Terminal Illness**      **3 credits**

AOM doctoral level, first year. This course covers the assessment and intervention skills found to be effective in counseling those with chronic pain, a chronic illness or a terminal prognosis. Specific focus is on how to offer assistance for the emotional, social, behavioral, and cognitive aspects of an ongoing pain problem or a chronic/terminal illness. Consideration is given to the role of counseling in the overall management of a patient by a collaborative interdisciplinary care team. Prerequisite: Admission to DAOM program or permission of dean

**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

**PS9105 Psychoneuroimmunology** 2 credits

This course deals with the dynamic interplay between consciousness and the immune, nervous, and endocrine systems. The potential of the mind to enhance or suppress hormonal and immune function are examined. Newly evolving research on the efficacy of PNI are reviewed in relation to the progression and treatment of cancer, heart disease, AIDS, autoimmune disease and psychological disorders. Students develop skills utilizing mind-body interventions. Prerequisite: BC4103 or BC5132 or BC6204 or permission of instructor

**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

**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 PS6306

**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 plays. Prerequisite: Permission of department chair

**PS9405 Medical Hypnotherapy** 2 credits

This weekend intensive course includes an introduction to hypnosis, its history, and the specific vocabulary of the field, as well as an introduction to some basic techniques, in-class practice sessions with those techniques, and in-class group discussions to devise possible hypno-therapeutic strategies for various clinical applications. Prerequisite: ND students or permission of instructor

**PS9523 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

**PS9529 Clinical Biofeedback** 2 credits

This course reviews the clinical application of biofeedback techniques, with emphasis on multimodality assessment and integration with counseling and holistic health care. Modalities/instrumentation to be 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 to Bastyr degree program

**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

Doris Piccinin, MS, RD, CDE, BSN/DPD and MSN/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 emotional intelligence are highlighted to help students succeed in their internships and careers. Methods for dietetic registration and continuing education are also discussed. Prerequisite: Admission to the 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 to 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 which 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 to 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 CAM 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-foods 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 out-patient based case studies. Prerequisite: Admission to 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 I. Students continue to practice nutrition assessment and diagnosis terminology to manage a variety of chronic health conditions, including cardiovascular disease, cancer, kidney disease, liver disease and others. Nutrition intervention strategies utilize both allopathic and natural medicine perspectives. Students further develop their assessment and documentation skills from MNT I to a level adequate for entry into their Clinical Practicum. Prerequisites: RD4301 and admission to BSN/DPD. 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/corequisite: RD4301, RD4302, and admission to BSN/DPD program

## **RD4802 Clinical Dietetic Practicum** 2 credits

This course is designed to prepare students in the BSN/DPD program for dietetic internship. Clinical dietetic practicum provides the student with direct 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. Students enrolled in this practicum are referred to as clinic “secondaries” where 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 portfolio presentation. The code of ethics for dietitians and emotional intelligence are highlighted to help students succeed in their internships and careers. Methods for dietetic registration and continuing education are also discussed. Prerequisite: Admission to the MSN/DPD program

**Food Service Management 1-3**

In this three (3) 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 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 gain knowledge in quantity food production principles, 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. Prerequisite: Admission to 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 continue to learn the principles of quantity food production. Using the initial business plan concept, 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. Prerequisite: RD6131 and admission to MSN/DPD

**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, labor unions and managing within legal regulations are emphasized. Students contribute with hands-on experience to an end-of-quarter catering, where a year's worth of knowledge is synthesized into the planning and implementation of a quantity food event. Prerequisite: RD6135 and admission to MSN/DPD

**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 to MSN/DPD program

## NUTRITION

Debra Boutin, MS, RD, Chair

BS in Nutrition major (TR) courses and MS Nutrition (TR) courses 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 3 credits**

This course introduces a basic understanding of the fundamentals of human nutrition with a whole foods perspective. Topics include the functions and food sources of carbohydrates, lipids, protein, water, vitamins and minerals. Dietary reference intakes (DRI), the food guide pyramid 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. 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: BC3124 Corequisite: BC4109 or permission of instructor

**TR3117 Experimental Foods Lecture 4 credits**

The course introduces students to the composition and the chemical and physical properties of foods; it includes a discussion of the interaction, reaction and evaluation of foods due to formulation, processing and preparation. Topics include water, carbohydrates, fruits and vegetables, fats and oils, animal foods and, in addition, relevant pigments, emulsifiers, and sweeteners are discussed. Prerequisites: BC4109, TR3115 Corequisite: BC4112

**TR3118 Experimental Foods Lab 1 credit**

In this laboratory class, students utilizes chemical, physical and sensory techniques to identify and characterize major and minor components in food systems. Topics parallel those discussed in the lecture with an applied focus. A whole foods perspective is incorporated into these laboratory exercises. Prerequisites: BC4109, TR3115 Corequisite: BC4112

**TR3131 Culinary Skills 1: Basics** 2 credits

Students develop their knife skills and practice advanced cooking techniques. Students 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 also included. Flatbread and quick bread methods are introduced. Prerequisite: TR4103/5101, Food Handlers' Permit

**TR3132 Culinary Skills 2: Applications** 2 credits

Students learn the finer points of working with animal proteins and practice advanced baking skills. Students are introduced to the basics of yeasted breads, pastries, cakes and cookies. Skills with sauces and vegetable proteins progress. Breakfast dishes are introduced. Prerequisite: TR3131

**TR3141 Therapeutic Cooking 1: Maintaining Health** 2 credits

The focus of this course is on food and diet in promoting health. Students learn how to design, adapt and prepare dishes, meals and remedies that are health-supportive for individuals or groups with acute illnesses, elevated needs and lifestyle challenges. Prerequisite: TR4103/5101

**TR3142 Therapeutic Cooking 2: Illness and Recovery** 2 credits

The focus of this course is on food and diet as medicine for illness and recovery. Students learn how to design, adapt and prepare dishes, meals and remedies that are health-supportive for individuals or groups with specific chronic medical conditions, elevated needs and lifestyle challenges. Prerequisite: TR3141

**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. During the course each student designs a cooking class that emphasizes whole foods. Students practice-teach parts of their class, learn how to assist other teachers and evaluate their peers. Proposal writing 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 prepares students for a full-time, part-time or freelance career in food writing. Students learn how to differentiate the basic structures and style for writing books, magazine/newspaper articles, academic journals, websites (such as zines), and blogs, compose a proposal suitable for editors and publishers, and practice writing for specific audiences. Researching timely topics and creating fresh perspectives are encouraged. Prerequisite: Admission into the BSN culinary arts program or permission of program director

**TR3163 The Business of Cooking** 3 credits

Personal cheffing, private cheffing, catering and food delivery services are in demand. This course helps students devise a business plan to pursue one of these occupations. Marketing, licensing and accounting are covered. Students also learn about interviewing and intake skills as well as how to purchase, store and deliver food. Prerequisite: admission into the BSN culinary arts program or permission of program director

**TR4100 Intro 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 also practice applied research skills such as use of the library and Internet, evaluation of research literature and scientific writing, and design and conduct their own research projects. Critical thinking case studies are discussed in class and used in take-home exercises. Prerequisite: Intermediate 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. General principles are stressed. Prerequisites: BC3141, BC3142, BC3143, BC4109/4110, BC4112/4113, 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. General principles are stressed. Prerequisites: 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 and TR4108 (corequisite)

**TR4117 Nutrition, Physical Activity and Disease****5 credits**

This course offers a systems approach to nutrition and physical activity-related disease, especially chronic disease. General pathophysiology of each condition is introduced, and the role of nutrition and physical activity is discussed, with emphasis on prevention and maintaining wellness. Prerequisites: BC3141, BC3142, BC3143, TR3111, TR4107, 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. Extensive use is made of audiovisual materials. Prerequisite: TR2101 or equivalent

**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. Prerequisite: TR4107, TR4108, TR4118

**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

**TR4133 Culinary Skills 3: Creations****2 credits**

Creative cuisine is emphasized, with the course culminating in a presentation dinner prepared and served by the students. A variety of appetizers and hors d'oeuvres, advanced entrée preparation, and dessert forms are covered. Students practice garnishing, presentation and plating of food. Ethnic and regional cuisines are introduced, as well as methods for preserving foods. Prerequisite: TR3132

**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: None

**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 are emphasized. Alternative methods of nutritional assessment are introduced. Prerequisites: TR3111 or equivalent, TR4107, TR4108 (corequisite)

**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 to DPD, 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 2. Prerequisite: Completion of junior year, permission of instructor

**TR4820 Culinary Practicum****4 credits**

This course enables students to obtain practical experience in one or more of the student's area of interest related to whole foods. Students work under the supervision of an approved preceptor to further their skills and experience. Prerequisite: Completion of TR3132 and TR3142

**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 program 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. Prerequisite: One course in intermediate algebra. MSA and MSAOM students are only eligible with permission of chair.

**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. Building on the information in TR5100, 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. Prerequisites: TR5100, admission to MS nutrition or DAOM program 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. Prerequisite: Admission to MS nutrition, TR5120, TR5140, TR5321

**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 to MS nutrition

**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 to MS nutrition

**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, admission to the MSN or DAOM program

**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: TR5100, TR5104, or permission of instructor

**TR5136 Nutrition in the Life Cycle 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. Prerequisite: Admission to MS 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. Prerequisites: UG - TR4107, TR4108; grad - TR5120, TR5124; ND - TR6311 or equivalents

**TR5207 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: 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 foods 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. Oral/dental health and bone health, dysbiosis, food allergies and sensitivities, upper and lower GI diseases, cardiovascular disease, diabetes, hypertension, and obesity are covered. Prerequisites: BC5118, TR5120, TR5136. Corequisite: 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. Nutritional anemias, cancer, HIV/AIDS, neurological diseases, dysphagia, pulmonary disease, chronic kidney disease, 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; for DPD only - TR5207

**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 confidentiality, medical documentation, and HIPPA training. Prerequisites: TR5207, TR5320, admission into MSN/DPD program, or permission of instructor. Corequisite: TR5321

**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 program chair, admission to MS 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: TR5120, TR5124, TR5140, TR5320, TR5321

**TR6105 Nutrition and Dietary Systems****3 credits**

This course introduces AOM 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: AOM 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 to MS 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 students enroll in thesis credits. Prerequisites: TR5100, TR5104, TR5128, TR6114 (corequisite)

**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 to MS 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. Prerequisite: Admission to MS nutrition program, TR6122

**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)

**TR6310 Foods, Dietary Systems and Assessment****3 credits**

This course introduces students to the importance of foods and diets for prevention, health maintenance and health promotion. A critical analysis of Western and non-Western diet systems is presented. Students learn to do a basic food and diet assessment for their patients. Nutrition in naturopathic primary care, co-management and referral are discussed. The place of eating, foods and diet systems and interventions is considered in the context of naturopathic clinical theory, the therapeutic order and clinical practice, including an introduction to natural hygiene and public health perspectives. Prerequisites: BC5106 and BC5109

**TR6311 Macro and Micronutrients****3 credits**

This course gives an overview of the metabolism, absorption, transport functions, requirements (deficiencies and toxicities), food sources, nutrient-nutrient interactions, and general therapeutic uses of various macro- and micronutrients. This course is required for students pursuing the naturopathic medicine degree. Prerequisites: BC5106, BC5109, BC5124, TR6310

**Clinic Nutrition Practicum 1-2**

Students in the MSN/DPD and MSN/CHP tracks receive supervised experience in the clinical setting. Nutritional assessment, client counseling (both individually or in groups), interviewing and chart documentation are emphasized in skill development. Supervisor feedback, self-review 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 class may occur at a number of sites including the campus, Bastyr Center for Natural Health and community locations. As students progress from Clinic Nutrition Practicum 1 to Clinic Nutrition Practicum 2, their 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, diet assessment, nutrition intervention and charting in SOAP format.

**TR6811 Clinic Nutrition Practicum 1 2 credits**

See description above. Prerequisites: for DPD - BC5132, PS5301, TR5136, TR5207, TR5320, TR5321, TR5803; for MSN/CHP - BC5132, PS5110, PS5202, PS5801, PS6315, TR5136, TR5320, TR5321, meeting criteria for professional behavior and attitudes or permission of nutrition clinic coordinator

**TR6812 Clinic Nutrition Practicum 2 2 credits**

See description above. Prerequisite: TR6811 and meeting criteria for professional behavior and attitudes

**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

**TR7311 Maternal and Infant Nutrition 3 credits**

This course presents topics relevant to nutrition of the mother and child from preconception through infancy. Topics include nutritional needs before and during pregnancy and lactation, dietary recommendations, breast milk composition, food introduction for infants, and identification of nutritional risk in infants. Concepts are applied using case studies and class discussion. This course is required for the naturopathic midwifery program. Prerequisites: ND students currently enrolled in clinic shifts or second year MS nutrition students

**Diet and Nutrient Therapy 1-2**

This two (2) course series builds on the Food, Dietary Systems and Assessment and Macro and Micronutrients courses. Diet and Nutrient Therapy courses discuss the clinical uses, physiological and pharmacological effects of individual nutrients. Dietary management and nutrient therapy for the prevention and treatment of specific diseases and conditions are thoroughly covered. The clinical use of nutrient supplementation is discussed from the standpoint of both prevention and therapeutic interventions. Clinical indications and current research on a variety of specific nutrients are emphasized. These courses are required for students pursuing the naturopathic medicine degree.

**TR7411 Diet and Nutrient Therapy 1 3 credits**

See description above. This course specifically outlines the clinical uses, physiological and pharmacological effects of individual nutrients and specific diets for specific diseases and conditions. Prerequisite: TR5321 or TR6311

**TR7412 Diet and Nutrient Therapy 2 3 credits**

See description preceding TR7411. This course specifically discusses the nutritional management of specific disease conditions by detailing the clinical indications and current research on various specific nutrients and diets for specific diseases and conditions. Prerequisite: TR7411

**TR8401 Nutrition Issues in Cancer Care 3 credits**

This course provides an analysis of the nutritional needs of the cancer patient, including the role of nutritional supplementation, management of clinical side effects of cancer treatment and an introduction to whole foods nutritional strategies. Students are taught to recognize and triage potential nutritional deficiencies in patients as well as analyze the dietary protocols often utilized in cancer treatment planning. Prerequisites: BC7105, OM7412, admission to DAOM or permission of AOM dean, or second year of MS nutrition program

**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 dietary 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 students’ 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