

# COURSE DESCRIPTIONS

Curriculum and course changes in the 2006-2007 *Bastyr University Catalog* are applicable to students entering during the 2006-2007 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

### AV5100 Fundamentals of Ayurvedic Medicine 2 credits

This 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 required for the naturopathic medicine program and is recommended prior to taking other Ayurvedic electives. Prerequisite: Admission to Bastyr University

## BASIC SCIENCES

Sheryl Berman, 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. This course can be used as a prerequisite for the ND program. Offered only summer quarter, if sufficient enrollment. Prerequisite: College algebra or precalculus

### General Chemistry 1 and 2 Intensive

This eight-week summer quarter course is 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.

### BC2111 General Chemistry Intensive 1 Lecture 4 credits

The first four weeks of summer quarter. (See General Chemistry 1 & 2 Intensive description.) Prerequisite: College algebra or precalculus

### BC2112 General Chemistry 1 Intensive Lab 1 credit

Prerequisite: College algebra or precalculus. Corequisite: BC2111

### BC2113 General Chemistry 2 Intensive Lecture 4 credits

The second four weeks of summer quarter. (See General Chemistry 1 & 2 Intensive description.) Prerequisite: BC2111 or equivalent

### BC2114 General Chemistry 2 Intensive Lab 1 credit

Prerequisite: BC2112 or equivalent. Corequisite: BC2113

### BC3106 Biochemistry Overview 1 Lecture (AOM) 4 credits

Topics include a study of functional organic molecules and the structure and function of proteins, lipids, carbohydrates and nucleic acids. Enzyme functions are also discussed. Prerequisites: At least a C in BC2113 or in an equivalent college level general chemistry course for health science majors and at least a C in one quarter of college level general biology with lab

### BC3107 Biochemistry Overview 2 (AOM) 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: Passing grade in BC3106

### BC3113 Living Anatomy 3 credits

Required for exercise science students and prerequisite for the Brenneke Massage Intensive. This course emphasizes musculoskeletal anatomy through 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. Winter quarter only. Prerequisite: None

### BC3115 Organic Chemistry 1 Intensive 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 BC2113 and BC2114 or equivalent college level courses elsewhere.

### BC3116 Organic Chemistry 1 Lab 1 credit

Prerequisite: At least a C in BC2113 and BC2114 or equivalent college level courses elsewhere. Corequisite: BC1115

### 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 BC3129. This course offers a survey of the chemistry and reactivity of organic compounds with an emphasis on those modules of biological importance. Prerequisite: At least a C in either BC2113 and BC2114 or an equivalent college level chemistry course with lab

### BC3125 Organic Chemistry 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 2 Lab 1 credit

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

**BC3129 Biochemistry for Life Sciences 1 Lecture****4 credits**

This course is offered both in winter and summer quarters. Topics include fuel metabolism, carbohydrates and lipids. Nutrition program undergraduates are required to take the lab, BC3135, within one calendar year of completion of the lecture, BC3129. 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.

**BC3131 Biochemistry for Life Sciences 1 Lab 1 credit**

This course is offered in winter quarter only. Prerequisite: Either concomitant registration in BC3129 or completion of BC3129 with a grade of at least a C within the previous calendar year.

**BC3132 Biochemistry for Life Sciences 2 Lecture****4 credits**

This course is offered in both spring and summer. Topics include eicosanoids, cholesterol metabolism, amino acid metabolism, and nucleotide metabolism. Nutrition program undergraduates are required to take the lab, BC3133, within one calendar year of completion of the lecture, BC3132. Prerequisite: A passing grade in BC3129

**BC3133 Biochemistry for Life Sciences 2 Lab 1 credit**

This course is offered in spring quarter only. Prerequisite: Either concomitant registration in BC3132 or completion of BC3132 with a grade of at least a C within the previous calendar year

**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**

Required for AOM students. 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 & 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, blood and the integumentary, nervous, muscular, and endocrine systems. Prerequisite: BC3134 or permission of basic sciences dept

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

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

**Anatomy and Physiology 1-3**

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 and exercise science programs. Prosected cadavers are used for lab demonstrations.

**BC3141 Anatomy and Physiology 1 Lecture/Lab****3 credits**

See description above. This course is designed for nutrition students and covers general histology and skeletal, muscular and nervous systems. Prerequisites: General chemistry and general biology with labs

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

See description preceding BC3141. Systems covered in this course include endocrine, cardiovascular, digestive and blood. Prerequisite: BC3141

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

See description preceding BC3141. Systems covered in this course include respiratory, urinary and reproductive, immune and special senses. 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

**BC4101 Disease Processes 1****3 credits**

This course is designed for nutrition and herbal science students and is an introduction to pathology. Included are the inflammatory process, cell repair and basic immunology. (This course fulfills a requirement for the Brenneke summer massage intensive.) Prerequisites: BC3132 and BC3143

**BC4103 Disease Processes 2****2 credits**

This course is designed for nutrition students. It is a continuation of BC4101. 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. Prerequisite: BC4101

**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. (This course fulfills a requirement for the Brenneke summer massage intensive.) Prerequisites: BC3106 and BC3135 or BC3142

**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 mechanism of action is discussed and possible areas of drug-herb interactions are noted. Prerequisites: BC3132, BC3143

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

This course explores the world of microorganisms and human health. Organisms 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 for AOM students in BC4120

**BC4125 Pharmacology Overview for AOM****4 credits**

Awareness of medications common to Western therapeutics is essential to proper patient assessment and care. In this general overview course, students explore naming, dosing and general mechanisms for the activity and clearance of over-the-counter and prescription medications, as well as various recreational substances. Herbs may be included where appropriate. Actions, therapeutic rationale, benefits, risks and potential interactions are emphasized. Prerequisites: BC3107 or BC3132, 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. Prerequisites: Admission to naturopathic medicine program; at least a C in BC3125 and BC3126 or equivalent college level organic chemistry courses with lab; or at least a C in BC3124, BC3129/3131 and BC3132/33; and at least a C in college level biology with lab required for all students

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

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

**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

**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 class discussions, 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. This course may be offered more than once during the academic year. 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. May be offered more than once during academic year. Prerequisite: BC5122

**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**

The three-dimensional aspects of the body are best studied by hands-on dissection. The dissection courses have been designed to provide the naturopathic student with the state-of-the-art experience in studying the human body. **Note: Students must take the Gross Human Anatomy Lecture & 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 lecture 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, BC5112, BC5123

**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 research, including basic concepts of scientific methodology and statistics. 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 literature. Prerequisite: Admission to MSA or MSAOM program

**BC5141 Research Methods and Design 2 credits**

The scientific method is examined, and students study quantitative and qualitative aspects of medical research. Basic statistical concepts are reviewed, and their role in designing, executing and analyzing data in research is studied. Emphasis is placed on gaining an understanding of how to read and evaluate the medical literature. May be offered more than once during academic year. Prerequisite: Admission to naturopathic medicine program

**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: BC3107, BC4122

**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**

See description above. This course includes the study of medical terminology, definitions, concepts, and the basic mechanisms of pathological change. The processes of cell injury, inflammation, necrosis, cancer, and healing are considered in depth. Also included are immune and genetic disorders. Prerequisites: BC5106, BC5109, BC5110, BC5112, BC5124



**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 BC5141

**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 course work 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. Prerequisite: Admission to DAOM program or permission of 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. Prerequisite: Admission to DAOM program

**BC8410 Clinical Pharmacology in Midwifery** 1 credit

This course covers medication use during pregnancy and intrapartum, along with substances commonly used in healthy neonates. It 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 it 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

**BC9101 Medical Terminology** 3 credits

This is an excellent preparatory course for those persons entering the following programs: ND, AOM, Herbal Sciences, Health Psychology (Counseling and Health Psychology premed tract), Nutrition and Exercise Science. The emphasis is on improving written and oral communication of medical terminology. Course may be offered in summer or fall. Prerequisite: Admission to Bastyr University or permission of dean

**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; BC4122 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

**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. 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

**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

**BC9525 Probiotics and Human Health 2 credits**

The number of health benefits ascribed to probiotics and fermented foods grows by leaps and bounds. Separating the hype from the data can prove challenging, but the body of research multiplies annually, with hundreds of original research papers published in 2005 alone. This class explores the landscape of the gut flora, the immune system, their interactions, and the influence diet and probiotic supplements have on them. Students should have a general understanding of nutrition, digestion, and microbiology. Course may be offered every other year. Prerequisites: None

## APPLIED BEHAVIORAL SCIENCE

Leadership Institute of Seattle (LIOS)

Dan Leahy, MA/ABS, Dean and President

Diane Schachter, MA, fall program Lead Faculty; Phyllis Romano, MN, winter program Lead Faculty

Pamela Johnson, PhD, Lead Faculty, MA consulting and coaching in organizations (CCO) track

Timothy Weber, PhD, Lead Faculty, MA systems counseling (SC) track

**BH5101 Adult and Experiential Learning 2 credits**

Credits vary by quarter for a total of two. The ability to learn effectively from one's experience is a core competency required both to thrive in an experiential learning community and to lead in an increasingly chaotic and turbulent world. In this course, students learn how to position themselves as proactive lifelong learners in the LIOS/Bastyr University community and in the world at large. They discover how their unique learning style influences their approach to learning, leading and teaching others. Students participate in activities that lead to the creation of the self-directed learning plan for each year of the master's program. (CCO & SC)

**BH5103 Human Diversity in Systems 3 credits**

Credits vary by quarter for a total of three. In this course students apply the theories of Hall, Bennett and Allen-Agbro to explore the characteristics of diverse cultural paradigms and systems, understand the influence and dynamics of their own cultures of origin and identity, and examine the impact of power and dominance in systems and in interpersonal and intergroup relations. Focusing on issues of age, race and ethnicity, gender, socioeconomic status, sexual/affectional orientation and religion, students develop self-awareness, intercultural communication skills and practitioner competencies. Special attention is given to creating healthy cross-cultural and power relationships in systems. (CCO & SC)

**BH5105 Group Membership 3 credits**

This course focuses on the development of fundamental interpersonal communication skills, self-awareness and effective participation in groups from the member role. Students learn the skills required of self-defined, self-correcting, open learners and practitioners by participating in an intensive, small group, learning laboratory based on Lewin's T-group model. Emphasis is given to the importance of gender in its relationship to individual behavior and personality development in the adult life cycle. (CCO & SC)

**BH5106 Group Development 3 credits**

Credits vary by quarter for a total of three. This course provides an overview of the major theories of group process and group development. Students develop facilitation skills focused on enhancing healthy group development and influencing effective group process by participating in an intensive, small group, learning laboratory based on Lewin's T-group model. Emphasis is given to the importance of gender in its relationship to interpersonal interaction, group process, and group development. (CCO & SC)

**BH5108 Family of Origin Theory and Practice 2 credits**

Credits vary by quarter for a total of two. Students apply the theories of Bowen, Williamson, Friedman and Framo to the exploration of their own family of origin histories and issues. Emphasis is placed on the student's identification and resolution of key family of origin issues, leading to increased personal and professional competence. Special attention is given to connecting these issues to the student's effective functioning in practitioner roles and work systems through participation in small group and personal activities. (CCO & SC)

**BH5112 Systems Theory in the Applied Behavioral Sciences 2 credits**

Credits vary by quarter for a total of two. In this course, students learn the key principles of systems theory and apply them within the LIOS/Bastyr learning community. This course lays the groundwork for the student's ongoing examination of the relationship of self in systems, surfacing the inherent paradoxes and polarities contained therein. Students are encouraged to see the systems in which they are a part as emerging narratives, in which they play a role. (CCO & SC)

**BH5118 Statistics and Research Methodologies****4 credits**

Credits vary by quarter for a total of four. This course provides an overview of basic statistics used in the social sciences and reviews the principles of empirical investigation and the primary research methods used in the social sciences. Both qualitative and quantitative methods of conducting research are reviewed. Emphasis is given to evaluating, interpreting and critiquing published research. Empirical research is examined within a larger exploration of epistemology and the development of critical thinking skills necessary in the evolution of all knowledge. (CCO & SC)

**BH5122 Organizational Development****4 credits**

Credits vary by quarter for a total of four. This course focuses on the fundamental theories and skills of influencing effective organizational functioning and change from the member or employee role. Essential elements of work team and organizational development, emphasizing key process and maintenance issues, are presented and integrated through learning laboratory activities. The interactive nature of the relationship between individuals and their organizational context is examined. Special emphasis is placed on a systemic approach to understanding the influence of member behavior (functional or pathological) on organizational health. (CCO & SC)

**BH5127 Fundamentals of the Counseling and****Coaching Relationship****3 credits**

Credits vary by quarter for a total of three. This course presents theories of interpersonal dynamics emphasizing the systems perspective in the circular relationship between helper and helpee. Based on this systems perspective, focus is placed on the practitioner skills essential to creating and maintaining an effective helping relationship. The foundational principles of Roger's and Carkhuff's work are supplemented by the related communication and human relation skills of Wallen, Short and Miller, and Nunnaly and Wackman in a skill practice format emphasizing the counseling/coaching relationship and approach to resolving human problems. (CCO & SC)

**BH5133 Creating Healthy Social Systems****2 credits**

Credits vary by quarter for a total of two. This course is an introduction to the theory and practice of what constitutes well-functioning organizations. Using the theories of Short, the class covers the elements of the learning organization, the roles of sponsor/agent/target/advocate and the four sectors or contexts in which companies and organizations are involved. A learning laboratory experience is used to integrate the key concepts. (CCO & SC)

**BH5200 Human Development and Life Cycle****3 credits**

Credits vary by quarter for a total of three. This course examines the stages and cycles in child, adolescent and adult development across the life span, giving attention to how personality is shaped within multicultural contexts. The biopsychosocial model is emphasized as a means of understanding how the whole self develops within a systems perspective. Normal and abnormal manifestations of development across the life span are explored with a particular emphasis on the development of strength and resiliency. The development and functioning of human sexuality as well as spirituality within the life cycle are reviewed. (SC)

**BH5205 Models of Understanding Problem Behavior****3 credits**

Credits vary by quarter for a total of three. This course examines problem human behavior along with the major philosophical, cultural and clinical assumptions behind the definition and interpretation of behavior. Interpreting the meaning and messages embedded within human behavior is accented as a means of understanding the person. Specific theories of understanding behavior are addressed, including psychodynamic, gestalt and cognitive-behavioral. The systemic view that the meaning of human behavior is best understood in the context of a larger system is underscored. Attention is given to understanding and developing skill in using the conventional categories of psychopathology as outlined in the DSM IV in professional communication. Sexual abuse, chemical abuse and dependency are addressed. (SC)

**BH5210 Methods of Systemic Assessment and****Diagnosis****3 credits**

Credits vary by quarter for a total of three. Major theoretical approaches to a psychological understanding of individuals, couples and families from a systemic orientation are studied. Particular emphasis is placed on examining interactional and intergenerational contexts. Students are familiarized with methods of gathering personal and interpersonal information, including interviewing clients. The relationship system between the practitioner and the client is emphasized as the context for understanding assessment and diagnosis. (SC)

**BH5301 Organizational Visions, Goals, and Strategies for Change****1 credit**

The theories and skills of forming and implementing an organization's visions, goals and strategies are critical and foundational to all subsequent courses in the consulting and coaching in organizations track. Students are taught to develop visions, missions, core values, goals and strategies for change as central to their work as leaders and professional change agents. Students also learn to assist their client managers in this essential leadership endeavor. In developing strategies, students are introduced to the basic concepts, theories and models of change management. (CCO)



**BH5305 Practitioner Theory Seminar** **1 credit**  
 Students write their emerging practitioner theory. They further explicate it in a seminar of their peers and faculty who criticize and build on the theory of the writer. (CCO)

**BH6100 Group Leadership** **3 credits**  
 Credits vary by quarter for a total of three. This course presents major theories of group leadership. Students are placed in the leader role to develop skills in guiding groups through appropriate stages of development in an intensive small group learning laboratory based on Lewin's T-group model. Emphasis is given to the importance of gender in its relationship to leadership theory and skills. (CCO & SC)

**BH6200 Research in Marriage and Family Therapy** **1 credit**  
 In this course students examine seminal studies in marriage and family therapy literature. An overview of the critical factors in analyzing and evaluating data based research is given. Emphasis is placed on achieving a basic understanding of experimental design and the clinical implications that can be drawn from generated data. (SC)

**BH6205 Professional Studies** **2 credits**  
 Credits vary by quarter for a total of two. This course focuses on the development of a systemic professional perspective and identity. Ethical and legal issues encountered by the counselor are emphasized. A general orientation to the mental health field, the role of the systems counselor and consultant, counseling agencies, larger health care systems and private practice are explored. Students are oriented to current issues in the field and familiarized with professional socialization and the role of professional organizations, licensure/certification, legal responsibilities and liability, and inter-professional cooperation. (SC)

**BH6210 Human Sexuality** **1 credit**  
 This course provides an overview of normal and abnormal sexual behavior across the life span. Content includes the sexual response cycle, sexual health and dysfunction in couples, and the range of clinical symptoms encountered by the family therapist. Attention is given to assessment for either referral to a specialist or treatment in the context of the couple relationship. (SC)

**BH6215 Systemic Theory and Process** **2 credits**  
 Credits vary by quarter for a total of two. This course is a fundamental introduction to systemic thinking and the systems approach to intervention with individuals, couples, families, small groups and larger organizations. The evolution of psychotherapy and the development of the systemic approach within that history are explored. The systemic approach examines the multiple contexts critical to assessment and intervention with clients from individuals to larger cultural contexts. Critical multicultural issues currently impacting family life are addressed. (SC)

**BH6220 Couple and Family Therapy** **4 credits**  
 Credits vary by quarter for a total of four. The focus of this course is on the major systemic orientations and procedures for working with couples and families. Theoretical models include the structural, strategic, experiential, communications, contextual and solution-focused approaches with the intergenerational perspective as the undergirding model. Videotape presentations by major theorists, case presentations and simulations are used to illustrate the various theories in practice. Live demonstrations are used to illustrate these models. By viewing each individual as a "personal narrative" and the family as a "group story," psychotherapy is taught as the art of using language skillfully. Students are assisted in crafting the skillful use of language in psychotherapy. Emphasis is placed on integrating principles from a variety of systemic approaches in crafting the student's own perspective. (SC)

**BH6225 Systemic Practicum** **5 credits**  
 Credits vary by quarter for a total of five. This course uses an intensive, experiential format throughout the entire curriculum to assist students in examining their own family of origin, the development of the "self of the therapist" and in using leadership skills to intervene with individuals, couples, families, groups and larger organizations. Role-plays, simulations, videotape feedback and small group work are used extensively to help students develop and refine their clinical skills. (SC)

**BH6306 Change Management Consultation** **1 credit**  
 Students build on basic concepts, theories and models of change management begun in the Organization Visions, Goals and Strategies curriculum (BH5301). More advanced concepts of change practice are introduced. These are applied to the master's thesis field project the students are conducting as change agents in organizations. Students are also encouraged to think critically about theories of change as they relate to the students' own emerging notions about healthy functioning in organizations and intervention strategies. (CCO)

**BH6308 Consulting Theory and Action** **4 credits**  
 Credits vary by quarter for a total of four. Action research, a fundamental method in applied behavioral science, is introduced as a means for practitioners to improve organizational effectiveness. The stages of action research are identified and explored. An introduction of the master's thesis field project, based on the principles of action research, is included. In this course, students learn the survey feedback approach to organization development based on the theories of: Lewin, Mann, Likert, Lippitt, Scherer, and Crosby. Methods of gathering relevant data, providing focused feedback, and facilitating effective action planning, are examined. The essence of this approach is to enable work teams to identify and solve their own problems and retain responsibility for the quality and productivity of their work unit. The course also covers using measurement tools in survey feedback. (CCO)

**BH6314 Management and Supervision 2.5 credits**

The fundamentals of management and supervision are taught in the context of a large-scale experiential activity where students compete for real dollars within the parameters of an overall economy. Students are challenged to integrate previous learnings from the core curriculum with new theory and skills in the roles of manager and supervisor. Employing fundamental management theories, leaders create functioning organizations. This includes developing appropriate organizational structures, functions and processes to effectively produce products or deliver services at a profit. (CCO)

**BH6317 Managing and Facilitating Cross-Functional****Work Teams****1 credit**

Students explore issues generally related to task team dynamics in work settings, and particularly teams in which multiple functional perspectives make developing a cohesive and well-functioning team challenging. Emphasis is given to role clarification, decision making and accountability for cross-functional teams involved in restructuring or product development processes. (CCO)

**BH6323 Executive Coaching 1.5 credits**

Coaching managers and others to increase their effectiveness with employees is the central skill for directors, consultants, trainers and social change agents. Several phases of coaching are discussed and practiced: contracting to coach, preparation of the client's next steps, in "live-action" coaching and debriefing both the client's and the coach's effectiveness. The importance of identifying systemic patterns is emphasized throughout all phases of coaching. (CCO)

**BH6326 Third Party Conflict Coaching 1 credit**

Students examine their personal conflict resolution style and learn to expand their own range of responses to conflict. These concepts and skills are integrated with Walton's theory of interpersonal conflict management, enabling the student to function effectively in the role of third party to an interpersonal conflict. (CCO)

**BH6332 Designing and Facilitating Training Events and Meetings 3 credits**

Credits vary by quarter for a total of three. Students learn the fundamentals of conducting successful trainings and meetings, including the identification of desired outcomes, the creation of appropriate designs, the delivery of effective presentations and leading productive meetings. The course is based on utilizing the three classical domains of learning: cognitive (knowledge and understanding), affective (values, feelings and attitudes), and motoric (skill). (CCO)

**BH6336 Current Issues 1 credit**

Students explore emerging issues in the field by engaging intradisciplinary or interdisciplinary systemic perspectives and discussing how these may be applicable to change management in organizations. This course provides flexibility for faculty to introduce current and/or cross-disciplinary thinking with possible relevance for organizational development work, or based on their own interests in the field. The following examples are curriculum segments that have been previously offered at the discretion of the track faculty: Managing Polarities has explored fundamental paradoxes of organizational life and how a change agent may work productively with these; Murray Bowen: Concepts and Applications has examined system thinking from the Bowen's family therapy perspective and its relevance to change agents. (CCO)

**BH6340 Legal, Ethical, and Professional Issues****1 credit**

The focus of this course is on the development of a professional attitude and identity. Current legal and ethical issues confronting practitioners are explored. Developing and maintaining a consulting practice (internal and/or external to organizations), career development as a manager, professional affiliation and continuing education are explored. (CCO)

**BH6702 Lifelong Sexual Health (elective) 2 credits**

Sexuality is viewed as a lifelong process involving biological, psychological and social aspects of being human. Sexual health is emphasized as part of general health and well being. Students explore ten different sexuality themes including aging, masturbation, sexual dysfunction, sexual diversity, the sex industry and making referrals. Diverse points of view regarding the meaning of sexuality to individuals and society are explored. Students consider cultural and socioeconomic perspectives from their own life experiences. Explicit language and educational materials are used with the goal of increasing students' skills and comfort level for examining and communicating about sexuality in their personal and professional lives. (CCO & SC)

**BH6800 Counseling Internship 15 credits**

Credits vary by quarter for a total of 15. This four-quarter, sequenced 600 hour or more counseling internship includes 300 client contact hours in a minimum nine-month internship. It is designed to provide students with supervised, practical experience in the field of mental health counseling. The internship is also intended to help students relate clinical practice to other professional concerns including legal and ethical issues, multicultural diversity, collaborating with other health care providers and conducting clinical practice within the larger system of courts, educational institutions, government, community agencies and professional organizations. Upon its completion, students write a counseling internship paper in which they discuss their theoretical orientation toward counseling, present a case study, summarize their learnings and discuss their professional goals. The counseling internship is designed to meet the requirements of the state of Washington for certification as a mental health counselor. (SC)

**BH6801 Professional Seminar** 3 credits

Credits vary by quarter for a total of three. This course is concurrent with the student's clinical internship and serves as an adjunct to the student's internship experience. The focus during this yearlong small group experience is on developing clinical skills, examining ethical and legal issues, themes within the student's clinical work, relationships with other professionals and organizations and the student's development as a person and as a professional. (SC)

**BH6805 Master's Thesis Field Project** 13 credits

Credits vary by quarter for a total of 13. This four-quarter, sequenced project provides students a field experience as a means to apply key behavioral theories as a method for achieving organizational/group transformation. Students follow a written format to document, for the purpose of reflection and learning, their intervention and approach. (CCO)

**BH6812 Professional Consult Group** 2 credits

Credits vary by quarter for a total of two. This course is concurrent with the master's thesis field project option and serves as an adjunct to the student's experience. The focus during this yearlong, small group experience is on developing consulting skills, examining legal and ethical issues, exploring themes within the student's consulting work, relationships with other professionals and organizations, and the student's development as a professional. (CCO)

**BOTANICAL MEDICINE**

Robin DiPasquale, ND, Department Chair

**BO3101 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

**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: BO3101, BO3111, BO3122

**BO3110 Foundations of Health** 2 credits

This course introduces the student to concepts of individual health. Parameters of health such as sleep, nutrition, exercise and stress management are explored. The manner in which these parameters affect physiology, psychology and spiritual well being are discussed. This is an experiential class. Prerequisite: None

**BO3111 Herbal Sciences 1 Lecture/Lab** 3 credits

Herbal Sciences 1-6 courses are the herbal foundation of the program. Herbal Sciences 1 introduces students to diverse aspects of herbalism including historical development, 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

**BO3120 First Aid for Herbalists** 1 credit

This class covers a wide range of first aid situations including safety protocols, acute-care diagnosis, 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: None

**BO3122 Herbal Sciences 2** 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: BO3111

**BO3133 Herbal Sciences 3 (Medicine-making Lab)****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. Student 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: BO3111, BO3122

**BO4101 Advanced Botany Lecture/Lab****3 credits**

This course takes a more in-depth look at the evolution of plants and their responses to an ever-changing environment. Ecological principles and the role of ecosystems within the living systems of our planet are a focus. Prerequisite: BO3101, BO3105, BO3133

**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: BO3113

**BO4104 Herbal Sciences 4 Lecture/Lab****5 credits**

This course is the introduction to the HS 4-6 series of materia medica, 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: BC3132, BC3133, BC3143, BO3105, BO3133,

**BO4105 Herbal Sciences 5 Lecture/Lab****5 credits**

HS 5 is a continuation of materia medica with an emphasis on a different set of botanical families through lecture, lab and experimentation. See description of BO4104. Prerequisite: BO4104

**BO4106 Herbal Sciences 6 Lecture/Lab****5 credits**

HS 5 is a continuation of materia medica with an emphasis on a different set of botanical families through lecture, lab and experimentation. See description of BO4104. Prerequisite: BO4105

**BO4118 Pharmacognosy****2 credits**

This course begins with an overview of pharmacognosy, the study of natural substances, principally plants, that find use in medicines. The term is derived from "pharmakon," meaning a drug, and "gignosco," meaning to acquire knowledge of. This topic is explored through the constituent classes of plants. Prerequisite: BC3132, BC3133, BC3143, BO3133

**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: BC3133, BO3105, BO3133

**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: BC3132, BC3133, BC3143, BC4122, BO4102, BO4105, BO4118

**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: BC4121, BO4104, 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

**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 and development of botanical medicine. The philosophies and contributions of important historical figures in herbal medicine are presented. Students review the terminology of botanical medicine, how plants are medicinally categorized and botanically classified, and how those categories are pharmacologically recognized. Overviews of botany, pharmacognosy and formulation principles are covered. Students associate major medicinal herbs with particular organ systems and explore botanical pharmacy by examining differences and advantages of a variety of herbal preparations. *Materia medica* of the gastrointestinal system is introduced. Students explore the vitalistic and intuitive understanding of botanicals as well as the scientific and rational knowledge of botanicals. Students are also introduced to the importance and principles of sustainable agriculture and ecological harvesting. Students participate in one or more herb walks to begin their botanical plant identification skills. Labs reinforce didactic learning and bring the plant medicine more alive through hands-on experience. See BO6301, BO6302, BO7300 and BO7301 for Botanical Medicine 2-5 descriptions. 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 help students gain the necessary knowledge and skills to assess and evaluate botanicals in the naturopathic *materia medica* and to apply this knowledge in the development of botanical treatment protocols. Students evaluate botanicals from an organ system perspective. These include gastrointestinal, hepatic/gallbladder, respiratory, immune, cardiovascular, urinary, female and male reproductive, skin, endocrine, musculoskeletal, and nervous system. 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 students' understanding of the presented botanicals. In BM 4&5, the labs reinforce didactic learning and clinical application and bring the plant medicine more alive through hands-on experience. These perspectives and information are used to critically analyze the application of botanicals into therapeutic formulations. Students apply this information in 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 the currently used preparations of medicinal herbs. Students actively participate in the making of herbal tinctures, glycerites, infusions, decoctions, poultices, compresses, syrups, creams, ointments, emulsions, liniments, soaps, suppositories and capsules. With hands-on experience students examine the comparable advantages and disadvantages of each type of preparation and incorporate pharmacognosy into their understanding of each medicinal preparation. Prescription writing is reviewed. Also taught is organoleptic testing to assess medicinal preparation identity and quality. Plant identification in the field is reinforced through a series of 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

**BO9111 Pharmacy of Flowers 1 credit**

This course is a visionary and inspirational synthesis of medicine, ecology and spirituality. The faculty member brings a celebration of exotic essential oils and attars, guided meditations on the unity of body and nature, and a photographic exploration of what our world could become if cared for as a garden of medicine. Prerequisite: None



**BO9115 Herbs and Ayurvedic Medicine 2 credits**

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

**BO9116 Cascade Herb Experience 2 credits**

This is a three-day herbal medicine field course designed to introduce students to native plant species in the North Cascades and cultivated herbal gardens at Sunny Pine Farm in the Methow Valley. Activities throughout the weekend include plant identification, wild crafting, harvesting cultivated plants, medicine making, and discussions about the many plants and their medicinal applications. Prerequisite: BO3133 or BO5301

**BO9117 Herbal Medicine in Tuscany 3 credits**

This course is an on-site study combining herbal medicine and Italian culture. Throughout the two weeks in Italy, students learn an overview of the history of herbal medicine, walk through cultivated fields, explore mountains and meadows of spontaneous plants, visit herbal manufacturing facilities, and study the medical applications of the plants we are visiting. The group utilizes the facilities and exquisite museum of the Italian herb company Aboca and travels south to collaborate with the University of Salerno. Students are responsible for their own airfare to Italy and any other personal expenses. The student fee for this course covers group accommodations, transportation, one meal a day and any group events while in Italy. Prerequisite: A passionate interest in herbs and herbal medicine and a curiosity about the history and culture of Italy

**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, with an emphasis on plant families that contain local medicinal species. In this course students learn key characteristics distinguishing common native plant families, how to use a dichotomous key to identify any NW plant, and basic life cycles of each major plant group. This class is co-taught by a botanist and a naturopathic physician. Afternoon field trips to Washington state mountains, forests and parks emphasize plant identification topics as well as medicinal aspects of the plants encountered. Field trips include 4 hours on site plus 1-2 hours travel time before and after class. Prerequisite: College level biology

**BO9140 Seminar in Botanical Case Management****variable credit**

Seminar format for naturopathic students enrolled in Bastyr Center for Natural Health provides individualized guidance in botanical medicine case management of patients seen by student clinicians. Each student manages and monitors a minimum of three (3) patients, which entails research, literature review and case preparation. Group discussions facilitated by the seminar instructor focus upon case management. Prerequisite: BO7300

**BO9301 Advanced Topics in Botanical Medicine****2 credits**

An elective for naturopathic medicine students pursuing the art of botanical medicine. Advanced topics include system evaluations with focus on central nervous system herbs, pediatric botanical treatments, musculoskeletal applications, and cardiovascular system botanicals. Preparation of botanical formulas for various conditions is emphasized. Students review new research in medicinal plants, botanical hydrotherapy and topical applications. Constitutional botanical prescribing is explored. Prerequisite: BO7300

**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). The 38 flower remedies discovered by Dr. Bach address disease in what are believed to be its origins: our fears, anxieties, worries, faults and failings. These subtle liquid extracts, still made from many of the original plants found in the region of Dr. Bach’s home in rural England, are used to address profound 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: BO3133 or BO6301

**B09517 Pharmacognosy 2 credits**

This course begins with an overview of pharmacognosy, the study of natural substances, principally plants, that find use in medicine. The term is derived from “pharmakon,” meaning a drug, and “gignosco,” meaning to acquire knowledge of. This topic is explored through the constituent classes of plants. This elective will not be offered after the 2006-2007 academic year. In its place the B04118 Pharmacognosy course may be taken. Prerequisite: B03133 or B05301

**B09527 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. Prerequisite: None

**B09529 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. Prerequisites: None

**B09532 Plants in Ceremony: An Exploration of****Yourself 2 credits**

This course is a three-day exploration of the state of your spirit and soul through the use of plants in ceremony. The class includes both individual and group evaluation of who you are, where you come from, what you have been through and where you want to go from here. The class takes each individual and the group into sacred space for the three-day duration, where the deep level of healing that is needed to do healing work can take place. Plant spirits, masks, drumming, toning, chanting and the use of herbs both internally and externally are the tools for growth and change. Prerequisite: None

**B09545 Starting & Operating a Small Business****2 credits**

Learn how to set up and operate a small business focusing on natural medicine. The instructor's experience with three different types of small businesses (naturopathic practice, herbal extract company, publishing company) are used as examples throughout the course to highlight detailed processes and issues involved in starting and running a business. Students are given the opportunity to think through these issues and become better prepared for entering the business world. Areas of focus include incorporation options, taxes, licenses, regulations, real estate, employees, bookkeeping. Prerequisite: None

# 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 *Student Clinician Handbook*. 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

**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 Clinic 1 (fall)** 2 credits

See description above. Prerequisite: Permission of dean

**CH9802 CHM Clinic 2 (winter)** 2 credits

See description preceding CH9801. Prerequisite: Permission of dean

**CH9803 CHM Clinic 3 ( spring) 2 credits**  
See description preceding CH9801. Prerequisite: Permission of dean

**CH9804 CHM Clinic 4 ( summer) 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 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 and activities. Prerequisite: Admission to the internship program

### **DI5102 Diet Therapy 1 credit**

This course reviews nutritional aspects of health and disease, emphasizing medical nutrition therapy. Information is presented through lectures, demonstrations, discussion and case studies. Evaluation is based on written assignments and clinical cases. 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 and activities. Prerequisite: Admission to the internship program

### **DI5805 Community Practicum 1 credit**

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

### **DI5810 Diet Therapy Practicum 5 credits**

This course is the application of DI5102 through clinical dietetic planned experiences. Evaluation is based on successful completion of all learning activities. Prerequisite: Admission to the internship program

### **DI5815 Food Service Practicum 5 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

## EXERCISE SCIENCE AND WELLNESS

Tiffany Reiss, PhD, Program Chair

### **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: BC3132/3133 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 exercise, sport and locomotive activities. 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

### **EX4110 Sports Nutrition and Ergogenic Aids 3 credits**

This course examines the interactions 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 performance. The biochemical, metabolic and physiological effects of ingesting these nutrients is explored. Prerequisite: BC3132/3133 or permission of instructor

**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

**EX4118 Principles of Resistance Training 2 credits**

This four-hour lab 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

**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

**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. Students are required to design various projects, with the assistance and approval of their preceptor, to be completed by the end of the quarter. In addition to practical experiences, students meet on campus each week for planning, development and discussion of their projects. Prerequisites: All courses from exercise science and wellness program and approval of program chair

# 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. Corequisites: BC5106, BC5109, BC5124 and 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

Jacqueline Hooper, DrPH, Vice President for Academic Affairs

**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 two weekends. The first weekend meets in class, second weekend is an overnight backpacking trip. Basic backpacking skills including trip planning, gear selection 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 introduced. Prerequisites: Little or no backpacking experience/plant identification training; no physical limitations that would prevent completion of 8-12 mile backpacking trip

# NATUROPATHIC MIDWIFERY CERTIFICATE

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

## **MW7320 Normal Maternity** **3 credits**

This course presents an overview of pregnancy and childbirth as a normal, natural process that rounds out the scope of the naturopathic family practitioner. The course stresses the importance of proper prenatal care and appropriate consultation and referral relationships. Topics covered include preconception counseling, risk assessment, the diagnosis and management of normal pregnancy, review of female pelvic anatomy, prenatal nutrition and exercise, environmental and occupational hazards, naturopathic management of common complaints, comfort measures in labor, and management of labor and delivery in unintended settings and the normal postpartum period. This course is required in the naturopathic medicine curriculum. 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. Concepts of instruction and 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. 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

**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. Prerequisites: MW7320, MW7321

**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 credit**

See description above. Corequisite: MW8800

**MW8812 Birth Rounds 1 credit**

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

**MW8813 Birth Rounds 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 elective is designed to be the first course 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

**MW9115 Doula Training****3 credits**

This course is only offered in the summer. 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

**NATUROPATHIC MEDICINE**

Gannady Raskin, MD, ND, Dean

**Naturopathic Clinical Theory 1-2**

These classes are organized to aid each student's development of a comprehensive and personal understanding of what it means to be a naturopathic physician. Emphasis is placed on discussion and critical evaluation. Students examine naturopathic medicine in the context of medicine today and explore the art of medicine and the integration of philosophy with knowledge gained in the basic sciences.

**NM5131 Naturopathic Clinical Theory 1 2 credits**

See description above. Naturopathic Clinical Theory 1 introduces the philosophy of naturopathic medicine, from its historical origins to the present day. Naturopathic principles of practice, concepts of health and disease, environment, natural hygiene, nature cure, the *vis medicatrix naturae*, naturopathic therapeutics, prevention and wellness, and other topics are explored. The therapeutic order is introduced. The vitalistic context of science-based, modern naturopathic medicine is emphasized. See NM7115 for Naturopathic Clinical Theory 2 description. Prerequisite: Admission to naturopathic medicine program

**NM5135 The Determinants of Health 1.5 credits**

This course discusses the factors that determine health and healing. This course develops naturopathic strategies for the treatment of illness by addressing both general and individualized determinants of health. Teaching improvement of daily health habits and assuring patient compliance are addressed. Research updates and clinical methods are provided. Prerequisite: NM5131

**NM5136 The Vis Medicatrix Naturae 1.5 credits**

Naturopathic medicine's core clinical principle, the *vis medicatrix naturae*, is shared by traditional systems of medicine throughout the world. This course explores clinical research, writings and techniques from various systems of medicine which incorporate nature's influence on healing, the nature of the healing processes, and the vital or life force. The course introduces the clinical application of techniques to restore health, prevent illness and optimize wellness by respecting and augmenting the *vis medicatrix naturae*. Prerequisite: NM5131

**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 experiencing naturopathic modalities. Students also attend case preview and review. This class offers students clinical experience with the medicine they are studying. See NM6804 for description of Clinic Entry 2. 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: NM5131 and 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

**NM6221L 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

**NM6222L Physical/Clinical Diagnosis 2 Lab 2 credits**

See description preceding NM6221. Corequisite: NM6222

**NM6223 Physical/Clinical Diagnosis 3 Lecture****2 credits**

See description preceding NM6221. Prerequisite: NM6222

**NM6223L Physical/Clinical Diagnosis 3 Lab 2 credits**

See description preceding NM6221. Corequisite: NM6223

**NM6804 Clinic Entry 2****1 credit**

Clinic Entry 2 familiarizes students with clinic requirements, protocols and associated paperwork. This course serves to facilitate the continuity between the preclinical and clinical education. Students meet with the staff and faculty from the clinic. The standards of practice and care for the clinic are discussed. Case management skills and charting skills are reviewed to prepare students for their first quarter in clinic. Students take a clinic entrance exam at the end of the course. Prerequisite: NM5804, concurrent with NM6223

**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

**Practice Management 1-2**

This two (2) course sequence provides students with information and skills necessary to set up a practice. Included are office planning, bookkeeping, fee structures, taxes, accounting, public relations, communications skills, personnel management, licensing, market planning, practice options, referrals and practice building.

**NM7109 Practice Management 1****2 credits**

See description above. For description of Practice Management 2 see NM8109. Prerequisite: Concurrent with clinic shifts

**NM7115 Naturopathic Clinical Theory 2****1 credit**

For description of Naturopathic Clinical Theory 1, see NM5131. 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



**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

**NM 7304 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 & 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: NM6804, 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

**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: Concurrent with NM6223

**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: Concurrent with NM6223

**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, NM6804, 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: NM7109

**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: NM7109

**NM8109 Practice Management 2 2 credits**

See description preceding NM7109. Prerequisite: NM7109

**Radiographic Interpretation 1-2**

In this three (3) course sequence, students learn the fundamentals of radiographic interpretation. Lab is focused on radiographic positioning. This course includes x-ray physics, the production and effects of ionizing radiation, radiological safety, and x-ray positioning. 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.

**NM8206 Radiographic Interpretation 1 Lecture**

**3 credits**

See description above. Prerequisite: NM7823

**NM8207 Radiographic Interpretation 1 Lab 1 credit**

See description preceding NM8206. Corequisite: NM8206

**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, and instructors impose attendance requirements. Prerequisites: NM8206, NM8207

**NM8213 Diagnostic Imaging 2 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. Prerequisites: NM8206, NM8207

<b>NM8303 Geriatrics</b>	<b>2 credits</b>
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	
<b>NM8308 Endocrinology</b>	<b>3 credits</b>
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	
<b>NM8309 Rheumatology</b>	<b>1.5 credits</b>
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	
<b>NM8312 Urology</b>	<b>1.5 credits</b>
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	
<b>NM8314 Pulmonary Medicine</b>	<b>1.5 credits</b>
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	
<b>NM8325 Naturopathic Case Analysis and Management</b>	
<b>2: Grand Rounds</b>	<b>1 credit</b>
Students in this clinic-based course participate in case presentations. Prerequisite: NM7325	
<b>Advanced Naturopathic Therapeutics 1-2</b>	
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.	
<b>NM8413 Advanced Naturopathic Therapeutics 1</b>	<b>2 credits</b>
See description above. Prerequisite: NM7330	
<b>NM8414 Advanced Naturopathic Therapeutics 2</b>	<b>2 credits</b>
See description preceding NM8413. Prerequisite: NM8413	
<b>Preceptorship 1-3 and Advanced Preceptorship</b>	
Students have the opportunity to preceptor with physicians (ND, MD, DO) in practice. A preceptor/outreach coordinator helps students locate appropriate preceptorships.	
<b>NM8801 Preceptorship 1</b>	<b>1 credit</b>
See description above. Prerequisite: Admission to naturopathic medicine program	
<b>NM8802 Preceptorship 2</b>	<b>1 credit</b>
See description preceding NM8801. Prerequisite: NM8801	
<b>NM8803 Preceptorship 3</b>	<b>1 credit</b>
See description preceding NM8801. Prerequisite: NM8802	
<b>NM8830 Patient Care 11</b>	<b>2 credits</b>
See description preceding NM7820. Prerequisite: NM7829	
<b>NM8831 Patient Care 12</b>	<b>2 credits</b>
See description preceding NM7820. Prerequisite: NM8830	
<b>NM8832 Patient Care 13</b>	<b>2 credits</b>
See description preceding NM7820. Prerequisite: NM8831	
<b>NM8833 Patient Care 14</b>	<b>2 credits</b>
See description preceding NM7820. Prerequisite: NM8832	
<b>NM8834 Patient Care 15</b>	<b>2 credits</b>
See description preceding NM7820. Prerequisite: NM8833	
<b>NM8835 Patient Care 16</b>	<b>2 credits</b>
See description preceding NM7820. Prerequisite: NM8834	
<b>NM8836 Patient Care 17</b>	<b>2 credits</b>
See description preceding NM7820. Prerequisite: NM8835	
<b>NM8844 Interim Patient Care</b>	<b>2 credits</b>
See description preceding NM7820. Prerequisite: NM7830	
<b>NM8901, NM8902, NM8903 Independent Study</b>	<b>variable credit</b>
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	
<b>Iris Analysis 1-2</b>	
These two (2) elective courses provide a foundation and history regarding Iris Analysis. Students learn the theory and practical concepts involved in the analysis of the iris.	
<b>NM9101 Iris Analysis 1</b>	<b>2 credits</b>
See description above. Prerequisite: Admission to Bastyr University	
<b>NM9102 Iris Analysis 2</b>	<b>2 credits</b>
See description preceding NM9101. Prerequisite: NM9101	
<b>NM9106 Sacred Contract 1</b>	<b>2 credits</b>
The sacred contract is our spiritual commitment to ourselves; and if we are physicians, those we serve. This course is designed to explore the nature of our sacred contract, help us define what that is for ourselves, and become conscious of how we engage with our patients and their healing. When the sacred is honored between patient and physician, healing takes place. This course is also designed to develop our innate skills in working at a deeper level of awareness. Prerequisite: Admission to Bastyr University	
<b>NM9111 Fasting and Natural Medicine</b>	<b>1 credit</b>
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: NM5131

**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: NM6804 or NM7115

**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/LIOS. 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 or Leadership Institute of Seattle

**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

**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

**Medical Chinese 1-3**

Medical Chinese 1-3 includes both lecture time and lab time to practice speaking.

**OM5110 Medical Chinese 1 2 credits**

Medical Chinese 1 provides basic training in the Chinese Romanization system (pin yin), as well as introducing basic Chinese characters including the use of radicals. Simple greetings are also covered. Prerequisite: OM4212, OM4222 or permission of dean

**OM5111 Medical Chinese 2 2 credits**

Medical Chinese 2 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. Prerequisite: OM5110

**OM5113 Medical Chinese 3 2 credits**

Medical Chinese 3 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. Prerequisite: OM5111

**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, 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**

This course continues with building basic needling skills and introducing moxibustion, GWA SHA, and other non-needle modalities. See description preceding OM4411. 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 1-4 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

**OM6113 Practice Management** **3 credits**

This course provides information needed to set up a practice. Included are office planning, bookkeeping, fee structures, taxes, accounting, public relations, communications skills, troubleshooting, personnel hiring and firing, city and state licensing, market planning, practice options, referrals and practice building. Prerequisite: Enrolled in third year of AOM program

**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

**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

**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 The 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

**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

**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. Prerequisite: BC7101

**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 US. 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

**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

**Clinic Supervision Internship 1-4**

The four-quarter rotation at Bastyr Center for Natural Health is a training program to develop clinical teaching skills. Over the course of the four quarters, students are paired with senior faculty to learn clinical teaching skills and case management. This clinical training culminates with the doctoral students demonstrating clinical teaching skills via supervision of master's level AOM students, under the supervision of senior faculty.

**OM7801 Clinic Supervision Internship 1** **2 credits**

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

**OM7802 Clinic Supervision Internship 2** **2 credits**

See description preceding OM7801. Prerequisite: OM7801

**OM7803 Clinic Supervision Internship 3** **2 credits**

See description preceding OM7801. Prerequisite: OM7802

**OM7804 Clinic Supervision Internship 4** **2 credits**

See description preceding OM7801. Prerequisite: OM7803

**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

**Cancer Care Internship at Seattle Cancer Treatment and Wellness Center or Highline Hospital**

Students begin rotations at these two facilities under the supervision of AOM doctoral faculty. The purpose of the clinical training is to give students a strong foundation in traditional Chinese medicine care within an integrated Western clinical oncology setting. Student training experience includes opportunities to observe the oncologists, naturopathic physicians and other health providers, and gain advanced clinical experience with developing and applying acupuncture and Oriental medicine treatment plans with oncology patients.

**OM8800 Cancer Care Internship** **2 credits**

See description above. Prerequisite: OM7412 or permission of dean

**OM8801 Clinical Internship 1** **2 credits**

See description preceding OM8800. Prerequisite: OM8800

**OM8802 Clinical Internship 2** **2 credits**

See description preceding OM8800. Prerequisite: OM8801

**OM8803 Clinical Internship 3** **2 credits**

See description preceding OM8800. Prerequisite: OM8802

**OM8804 Hospital Internship** **16 credits**

The eight-week clinical rotation in China provides doctoral students with exposure to advanced 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 eight-week rotation includes four weeks at Chengdu University of Traditional Chinese Medicine and four weeks at Shanghai University of Traditional Chinese Medicine. Prerequisite: Permission of dean

**Grand Rounds 1-2**

This two-quarter course provides a forum for case discussion, including refinement of case presentation skills utilizing SOAP format, treatment rationale and utilization of technology. The applied skills from this course enable students to present patient cases in a format commonly utilized by medical professionals and researchers, utilizing both oral and visual formats.



**OM8811 Grand Rounds 1** 3 credits

See description above. Prerequisite: Completion of first year DAOM curriculum

**OM8812 Grand Rounds 2** 3 credits

See description preceding OM8811. Prerequisite: OM8811

**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

All laws of five element acupuncture are covered in this course. 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

**OM9321 Japanese Acupuncture** 1 credit

This weekend course presents an overview and brief history of meridian therapy as commonly practiced in Japan, differentiating between this and TCM as well as other forms of Japanese acupuncture. Participants learn the basic five phase treatment protocol - the foundation of meridian therapy - in terms of diagnosis, pattern confirmation, point selection and needling technique. Prerequisite: OM4108

**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

**OM9405 Combining Western Herbs and Chinese Medicine** 1 credit

The goal of this course is to provide health care providers with information on how Western herbs can be used according to the principles of Chinese medicine to give increased clinical success. The basic materia medica of over 30 Western herbs are presented along with how to modify basic Western herbal formulas for specific diagnoses. Prerequisite: OM4108 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

**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 usage 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

**OM9531 Neuromusculoskeletal Therapeutics 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. It is strongly recommended, although not required, that students take all three courses in the NMS series. Prerequisites: OM4108 and OM4212

**OM9533 Neuromusculoskeletal Therapeutics 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. Prerequisites: OM4108, OM4212, OM9531 preferred but not required.

**OM9534 Neuromusculoskeletal Therapeutics 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. Prerequisites: OM4108, OM4212, OM9531 and/or OM9533 preferred but not required.

**Integrated Therapeutics 1-3**

This three-course series emphasizes integrated therapeutics used in naturopathic medicine, Chinese medicine, and Western medicine for difficult and complicated diseases. Each course covers a variety of diseases. Etiology, pathophysiology, signs and symptoms, and differential diagnoses are discussed through the differing points of view of Western and Eastern medical systems. The advantages and disadvantages of each medical system in treating diseases are compared. Students may take one or more classes in the integrated therapeutics series; each course covers different diseases.

**OM 9548 Integrated Therapeutics 1** **3 credits**

See description above. Prerequisite: OM4118 or OM5120

**OM9549 Integrated Therapeutics 2** **3 credits**

See description above. Prerequisite: OM4118 or OM5120

**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)

**OM9553 Integrated Therapeutics 3** **3 credits**

See description above. Prerequisite: OM4118 or OM5120

**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)

**OM9580 Advanced Five Element****3 credits**

This course is an extension of Five Element 1 for students who wish to learn practical clinical applications of Five Element acupuncture theory. Topics covered include: diagnosis and treatment of Five Element acupuncture, blocks to treatment, use of command points and spirit of the points according to Five Element theory, use of Five Element pulse diagnosis, and refinement of diagnosis by color, sound, odor and emotion. The course includes two hours of lecture, followed by a two hour lab. Prerequisite: OM 9306 and primary student status at clinic

**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: BC3103 and BC3119

**OM9582 Thai Massage 2****2 credits**

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. Prerequisite: OM9581

**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

# 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 hydrotherapy, as well as hot, cold and contrasting applications. The physiotherapy portion covers the physiotherapy devices used in practice, such as ultrasound, diathermy, electrical stimulation, ultraviolet and infrared, and low level laser therapy (LLLT).

## PM5301 Hydrotherapy/Physiotherapy Lecture

2 credits

See description above. Prerequisite: BC5122

## PM5305 Hydrotherapy/Physiotherapy Lab

1 credit

See description preceding PM5304 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 craniosacral manipulation. Prerequisites: BC5124, NM6223, 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: NM6223 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 Brenneke Massage School. Only three course credits may be applied toward the total elective credits required to graduate. Prerequisites: BC5107-5109, BC5122-5124 and PM5310 (ND); BC3113, BC3141-3143, BC4105 or TR3107 or BC5118 and PM5310 or PM9310 (NTR, exercise science, herbal sciences); BC3113, BC3117-3119, BC4105 and PM5310 or PM9310 (AOM). BC3113, BC3141-3143, BC4105 and PM5310 or PM9310 (psychology). Students successfully completing first aid, CPR, AIDS awareness workshops and an approved business management course, along with course work, will be eligible to sit for the Washington state licensing examination for massage practitioners.

**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

**PM9308 Introduction to Polarity Therapy: Working with Stubborn Conditions 2 credits**

Polarity therapy is a whole health system based on ancient Ayurvedic traditions. Students learn bodywork protocols, energy exercises, grounding and centering techniques and basic theory of the relationships of the nervous system, the chakras and the five elements (ether, air, fire, water earth). This class is experiential. Be prepared to move, meditate, give and receive bodywork. Prerequisites: BC5122, BC5123, BC5124

**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. Prerequisites: BC3113 and 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.

**PM9311 Craniosacral Therapy 1 3 credits**

See description above. Prerequisites: (ND) BC5124 and PM5310 ; (NTR, exercise science, herbal sciences) PM5310 or PM9310 and BC3143; (AOM) BC3119, BC3113, and PM5310 or PM9310

**PM9315 Craniosacral Therapy 2 3 credits**

See description preceding PM9311. 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 BC3119.

# COUNSELING AND HEALTH PSYCHOLOGY

William Kelleher, PhD, 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.

## **PS2110 Psychology of Public Speaking 3 credits**

This course is designed to introduce the student to the basic concepts of public speaking by an interactive and experiential sequence of classes. Students deliver both informative and persuasive speeches during class and develop personal communication and presentation skills that equip them for various types of public speaking events. The psychological components behind the art of public speaking are explored in order to focus on both the content and process of interpersonal and group communications. Prerequisite: None

## **PS3104 Meditation and Healing 2 credits**

This course is fashioned after the model of a retreat. The course provides students with intensive training in meditative disciplines. The focus of this course is on increasing self-awareness as part of an understanding of the healing process. Prerequisite: None

## **PS3105 Science and Spirituality 2 credits**

Historical factors behind the separation of scientific medicine and spirituality are explored. Students investigate many concepts that seek to mend this separation. These concepts may include systems theory, quantum physics, principles of energy medicine and consciousness studies, as well as new and emerging areas. Prerequisite: None

## **PS3106 Care for the Soul 2 credits**

The objective of this seminar course is to help students more fully recognize and acknowledge the spiritual forces that shape their lives. During the course students explore dimensions of depth and sacredness in everyday life. Prerequisite: None

## **PS3107 Introduction to Health Psychology 3 credits**

This course introduces the student to the biopsychosocial approach to understanding health and illness. Topics such as social support, coping, health behavior and models of behavior change are covered. Students also apply the biopsychosocial approach to aid in understanding chronic illness. Prerequisite: Introduction to psychology course

## **PS3108 Developmental Psychology 3 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

## **PS3110 Cognitive and Behavioral Psychology 3 credits**

This course provides an introduction to historical and contemporary behavioral and cognitive theories. Topics such as memory, thinking, problem-solving, behavior acquisition and extinction, and reinforcement are explored. Prerequisite: Introductory psychology course

## **PS3111 Abnormal Psychology 3 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 systems for mental disorders. Introduction to the DSM (most current edition) complements this course. Prerequisite: Introductory psychology course

## **PS3112 Stress and Disease Processes 3 credits**

This course examines the effects of stress on the body and highlights the complex holistic interactions which create disease within the individual. Students investigate the physiology of stress and its effect on body systems as well as implications of those dynamics with respect to health and illness. Stress reduction interventions and their effectiveness are a main focus. Prerequisite: College level biology

## **PS3113 Foundations of Academic Psychology 2 credits**

This course serves as an introduction to academic skills and professional issues in psychology. The format of the course is primarily discussion and experiential activities. Prerequisite: Admission to the psychology program

## **Healing Practices 1-3**

This three (3) course series explores the history of healing practices, the spiritual side of healing and a holistic perspective on healing. See individual course listings (below) for detailed descriptions.

## **PS3116 Healing Practices 1: Myths and Ritual 2 credits**

See description above. The first in a three (3) course series, this course is an introduction to the history of healing and health practices. Traditions of health and healing are explored in the context of classical social myth and rituals. Students examine historical practices such as ritualistic use of roots and herbs and their efficacy in light of current scientific research. Forms of prayer and meditation as sources of healing are a focus, as well as articulation of the effect of classical myths on health. See also PS4115 and PS4116. Prerequisite: None

## **PS3121 World Religions 4 credits**

This survey course provides an introduction to the central traditions, beliefs and practices of the five major world religions (Christianity, Judaism, Islam, Buddhism, and Hinduism) as well as a variety of additional religions. Within the exploration of each religion, factors such as historical development and current practices, cosmology, and rituals and symbols are examined. Prerequisite: None



**PS3122 Psychology of Personality 3 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 inventories such as the MMPI, 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: Introductory psychology course

**PS3125 Psychology of Human Relations 3 credits**

This course is designed to provide a basic understanding of the nature and dynamics of human behavior at both the individual and organizational levels. Emphasis is placed on the development of communication skills and conflict management. Issues such as motivational strategies, self-disclosure and leadership are also explored. Students leave with an understanding of the psychological dimensions of human relationships and a practical application of the theory behind these dimensions in the modern day workplace. Prerequisite: None

**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

**PS3132 Health, Body Image and Human Sexuality 2 credits**

This course is designed to offer an interdisciplinary understanding of sexuality. Attention is focused on attitudes and body image, sexual behavior and sexually transmitted diseases. Prerequisite: None

**PS3138 Biological Psychology 3 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. Prerequisites: PS3112 or anatomy & physiology, introductory psychology course and college-level biology

**PS3142 Ethical Issues In Psychology 2 credits**

This course provides an introduction to professional ethics in psychology, including the practical application of ethical principles as they relate to contemporary practice issues. Topics such as informed consent, referral networks, professional boundaries, confidentiality, ethics in research, and dual relationships are explored. Students learn principles of ethical decision-making including autonomy and beneficence. Theoretical concepts are applied to case studies to examine the interaction of legal and ethical guidelines. Prerequisite: Introductory psychology course

**PS3600 Nutrition and Mental Health 3 credits**

This course is designed to study the importance of and correlation between nutritional imbalance and mental health disorders and between prognosis and intervention. The course includes study of nutritional needs of the aging and the psychology of eating, including attitudes and approaches to eating as well as the relationship between nutrition, brain biochemistry and mental health. Prerequisite: PS3111

**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 explore 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

**PS3610 Concepts in Jungian Psychology 2 credits**

This course familiarizes students with the basic tenets of Jungian theory and is grounded in the historical life of C.G. Jung. Basic Jungian concepts such as archetypes, anima/animus, shadow and the collective unconscious are explored, both through Jung's writings and in the light of contemporary Jungian scholarship. In addition, the role of dreams is discussed according to Jungian theory. Prerequisite: None

**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

**PS4105 Theories of Psychotherapy 3 credits**

This course examines the underlying tenets, methodologies and values in the major schools of psychotherapy, including psychoanalysis, behaviorism, cognitive, gestalt, humanism, existentialism, family and brief psychotherapy. The empirical bases for each of the schools are compared as well as their relevancy to modern health concerns. Recent trends in integrative psychotherapy are also explored. Prerequisite: PS3111

**PS4106 Multicultural Issues in Psychology 3 credits**

This course offers guidelines for working with culturally diverse populations. Topics such as treatment of diversity and diversity impact on health are a focus. Prerequisite: None

**PS4107 Buddhist and Taoist Psychology 2 credits**

This course investigates the contributions of Buddhism and Taoism to psychological understanding. Topics are drawn from the following: the four noble truths, foundational to all forms of Buddhism; the nature of the Tao; personality in terms of ego, Te (virtuosity or integrity), and being and non-being; and Taoist similarities to Jungian psychology. Prerequisite: None

**PS4108 Death and Dying 2 credits**

This introductory study of death, dying and grieving is designed to provide information, deepen understanding and create an opportunity to think and feel more deeply about life. From a variety of perspectives—psychological, historical, cultural, spiritual—the course explores some of the ways in which human beings have approached and interpreted the mystery of death, expressed their responses to dying and death, and evolved a framework of meaning for life in the face of death. Prerequisite: None

**PS4110 Social Psychology 3 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

**PS4111 Experimental Psychology 3 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 in a psychological study in preparation for PS4123. 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: PS4118, PS4120

**PS4112 Creating Wellness 3 credits**

This course offers an exploration into the emerging field of positive psychology, with a focus on resilience, wellness, optimism and well being. 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. 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

**PS4115 Healing Practices 2: Art as Spiritual Practice 2 credits**

See description preceding PS3116. The second course in the Healing Practices series, this course explores the spiritual side of healing, examining such topics as creative imagery, yoga, and art therapy as elements of a holistic healing process. Phenomenological research on the influence of art as a healing therapy, including paintings, sculptures, drawings, and carvings, are the background for this course. See also PS4116. Prerequisite: None

**PS4116 Healing Practices 3: Mind/Body/Spirit 2 credits**

See description preceding PS3116. The third course in the Healing Practices series, this course investigates holistic perspectives on healing. Contemporary healing practices ranging from massage and Reiki to complementary medicine and nutrition are examined. Prerequisite: PS3116 or PS4115

**PS4118 Introduction to Research 3 credits**

This course is an introduction to research methods in psychology. Included are the basic concepts of scientific methods and the research methodology of psychology. Students also practice applied research skills such as use of the library and Internet, evaluation of research literature and scientific writing. Prerequisite: Intermediate algebra

**PS4119 Research Project 4 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: PS4111, PS4118 and PS4120

**PS4120 Introduction to Statistics 3 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

**PS4123 Research Presentation 2 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 PS4119. Prerequisite: PS4119

**PS4125 Contemporary Issues in Applied Psychology 3 credits**

This course offers an exploration of current issues in psychology, which may include the impact of divorce on healing, the false memory debate, ADHD in adults, and the impact of aging on overall health. Historical perspectives and results of applied psychology are contrasted with current applications and debates, such as the nature/nurture debate over the development of intelligence. Prerequisite: None

**PS4127 Indigenous Healing Practices 3 credits**

This course explores the psycho-spiritual healing practices of a variety of indigenous cultures. Healing rituals and symbols of many people, including the native cultures of North and South America and Africa are explored. Prerequisite: None

**PS4130 Psychology of Religion 3 credits**

This course is designed to study the psychological roots and effects of religion and religiosity. The focus is on the exploration of religious experience and its interpretation, as well as perspectives on religion and coping as they relate to the healthy functioning of the individual. Intrinsic and extrinsic expressions of religiosity are studied in relation to dimensions of wellness, depression, psychopathology, human development and personality. Differentiation between religiosity and spirituality are also explored throughout the course. Prerequisite: None

**PS4135 Illness as Initiation 2 credits**

Illness has long been viewed as an initiatory process or rite of passage for emotional healing and spiritual transformation. This paradigm of illness as initiation has been lost in Western culture's focus on the body as machine and the healer as technician. This course seeks to instill in students an understanding and respect for the powerful initiatory aspects of illness and the willingness and tools to honor this initiatory process. Prerequisite: None

**PS4203 Nutritional Counseling 2 credits**

Cross listed as PS5210. 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, PS3125, RD4320

**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

**PS4601 Psycho-Spiritual Issues in Healing 2 credits**

This course presents topics that include the psychology and spirituality of relationships, the nature of psychology within spirituality, impediments to psycho-spiritual growth, and the healing power of spiritual practices. Contemporary spiritual practices such as meditation, prayer, and healing touch in clinical cases are explored. In addition, students research a specific psycho-spiritual modality of healing and present studies on the validity and reliability of that modality. Prerequisite: None

**PS4605 Psychology of the Feminine 3 credits**

This course is designed to introduce students to the study of feminine and masculine archetypes, god and goddess myths, and how these influence gender identity. Psychological theories and cultural typologies illustrate both historical and contemporary perspectives used to describe the feminine and masculine psyches. Prerequisite: None

**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

**PS5103 Physician Heal Thyself****2 credits**

This unique course assists students in understanding and experiencing the healing process as it applies to themselves as persons and healers. Additionally, the course is designed to explore the relationship of the principles of naturopathic medicine to the healing process and to integrate the clinic entry experience in ways that support the development of the healer within. This class includes a required two-day outdoor team building exercise. Prerequisite: Admission to naturopathic medicine program

**PS5202 Psychopathology and Biomedical Conditions****3 credits**

This is an advanced 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. The course assumes a basic understanding of the psychopathology in the DSM-IV. Prerequisite: Abnormal Psychology course, PS7200 or equivalent

**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

**PS5210 Nutritional Counseling****2 credits**

Cross-listed as PS4203. 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 and two nutrition courses

**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

**PS5405 Fundamentals of Counseling: Group Dynamics****2 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: PS5205 or PS5301 or PS6305

**PS5801 Counseling & Health Psychology Clinic Entry****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 HIPAA principles. Prerequisites: PS5301, PS5405 and admission to the MSNCHP 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

**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 PS5301, PS5405, PS6405 (MSNGHP)

**PS6215 Cognitive and Intellectual Assessment****3 credits**

This course examines the general principles of assessment, the evaluation of intellectual and cognitive functions, basic psychometrics, report writing using intellectual/cognitive tests, and the role of intellectual/cognitive tests in an assessment battery. Particular attention is given to the Wechsler intelligence tests and WIAT achievement test. A weekly lab provides an opportunity to practice and develop testing skills. Prerequisite: PS5201

**PS6220 Behavioral and Personality Assessment****3 credits**

This course examines the general principles of objective personality assessment, diagnostic interviewing, the MMPI-2 and MMPI-A, and the Million tests. A weekly lab provides an opportunity to practice and develop testing skills. Prerequisite: PS6215

**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 covers holistic counseling interventions, advanced interviewing skills and treatment planning as part of orientation to a 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 & Treatment****3 credits**

This course utilizes a biopsychosocial and social counseling approach for the assessment and treatment of adults with mental disorders and chronic illness. Emphasis is on how to assist individuals in developing effective coping skills, greater ego strength and healthier living attitudes and behaviors. Prerequisite: PS5202 or permission of instructor

**PS6316 Counseling Adults 2: Assessment & Treatment****2 credits**

This course utilizes a biopsychosocial and social counseling approach for the assessment and treatment of adults with mental disorders and terminal illness. Emphasis is on counseling for grief and loss therapy and includes techniques for assisting such individuals toward greater interpersonal effectiveness with partners, family members and other significant persons. 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

**PS6405 Fundamentals of Counseling: Systems,****Families and Couples 2 credits**

Theory and skill training in the assessment and treatment of systems, couples and families are emphasized. Theories considered may include integrative eclectic therapy, structural-strategic, psychodynamic, behavior, Bowenian and experiential. Prerequisite: PS5205 or PS5301 or PS6305 or equivalent



**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 & Legal Issues in****Psychology 2 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

**PS7105 Alcohol & Substance Abuse 2 credit**

This course examines alcohol and substance abuse from a biological, cultural, historical, psychological, social and nutritional perspective that guides the approaches to substance abuse. 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

**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

**PS7130 Professional Development and Consultation****1 credit**

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. 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 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 psycho-emotional imbalance, and family dynamics in general medical presentations. Prerequisite: PS6306 (concurrent with clinic shifts)

**PS7400 Developing Counseling & Health Promotion****Programs 2 credits**

The basic principles of preventive paradigms are provided, with particular focus on theory and practice of primary prevention. Design and implementation of health promotion programs in a variety of settings are discussed, as are issues relating to modification of risk behaviors. Health care issues and participation in policy making are addressed. Prerequisite: Admission to MSNCHP or permission of instructor

**PS7405 Mind Body Techniques for Stress Reduction****2 credit**

In this course students explore progressive relaxation, meditation, imagery, visualization and biofeedback. Additional treatments may be taught. Prerequisite: Admission to MSNCHP or permission of instructor

**PS7801 Clinic Shift 1: Nutrition/Clinical Health****Psychology 2 credits**

This directly supervised clinical experience occurs at Bastyr Center for Natural Health or on the Bastyr campus and emphasizes exposure to psychotherapy, diagnostic interviewing and diagnostic formulation for individuals, couples, and families. Prerequisites: PS5301, PS5405, PS6405

**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, PS5405, PS6405

**PS7803 Clinic Shift 3: Nutrition/Clinical Health****Psychology** **2 credits**

This directly supervised clinical experience occurs at Bastyr Center for Natural Health or on the Bastyr campus and emphasizes psychotherapy, diagnostic interviewing and diagnostic formulation. The shift may include psychological testing, scoring, interpretation of test data and psychological report writing and/or behavioral change treatment plan incorporating lifestyle modifications. Prerequisites: PS5301, PS5405, PS6405

**PS7805 MSNCHP Practicum 1** **2 credits**

Students in the MSNCHP 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 MSNCHP Practicum 1 to 3, the level of responsibility and independence increases and different skills with a variety of clients are learned. Prerequisite: Admission to MSNCHP program, PS7801, PS7802, PS7803

**PS7806 MSNCHP Practicum 2** **2 credits**

A continuation of MSNCHP Practicum 1. Prerequisite: PS7801, PS7802, PS7803 and PS7805

**PS7807 MSNCHP Practicum 3** **2 credits**

A continuation of MSNCHP Practicum 2. Prerequisite: PS7801, PS7802, PS7803 and PS7806

**PS7811 Practicum Seminar 1: Nutrition/Clinical****Health Psychology** **1 credit**

In this bimonthly seminar, students present cases for which they have already received supervision at external practicum sites or psychology counseling clinics. Field placement at those sites emphasizes exposure to psychotherapy, especially health psychology, diagnostic interviewing and diagnostic formulation. Student case presentations may also include psychological testing, scoring, interpretation of test data and psychological report writing, for which they have previously received supervision at their placement sites. Prerequisite: PS6316

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

A continuation of Practicum Seminar 1. Prerequisite: PS7811

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

A continuation of Practicum Seminar 2. Prerequisite: PS7812

**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

**PS8301 Counseling in Chronic and Terminal Illness****2 credits**

AOM doctoral level, second year. This course covers the counseling skills needed to work with chronic and terminally ill patients. The course explores a range of counseling skills for responding to patients in the acute and chronic phases of illness. Skills related to recovery and coping with end of life issues are discussed. Special emphasis is placed on working with cancer patients. Prerequisite: Admission to DAOM program or permission of instructor

**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

**PS9104 Introduction to Psychoanalytic Theory****3 credits**

This course explores the groundwork of Freud's thought and considers the challenges implicit in an application of psychoanalytic theory to contemporary practices in psychology. This includes an overview of Freud's life and work, examining the historical context for his theories. Topics such as the unconscious, the role of Id, Ego and Superego, and issues of transference/countertransference are discussed. Classical psychoanalysis is also contrasted with the modern revisions of psychoanalytic theory made by major psychoanalytic theorists who came after Freud. 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

**PS9410 Therapeutic Applications to Disordered****Eating****1 credit**

This course is designed to add experiential training in the treatment of eating disorders and eating issues. Corequisite: PS6211

**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

**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 & 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

## **Food Service Management 1-3**

In this three (3) course sequence, students learn about the food service industry, basic accounting principles, quantity food production, marketing, quality improvement, a managerial and systems approach to food service organizations. Students employ theoretical models, techniques and leadership skills essential to being an effective manager.

## **RD4131 Food Service Management 1** 2 credits

See description above. This course, the first of a three-part series, introduces the student to the food service industry. Students learn the principles of basic accounting, theoretical models and leadership skills for effective food service management. The course introduces the student to the food service industry. Students develop a "marketplace" in which they employ management techniques, create organizational structures, gain experience in marketing and develop a business plan. Students gain knowledge in quantity food production principles, including procurement, production, distribution, service, sanitation and maintenance. Emphasis is placed on quality control and organizational/business management. Prerequisite: TR3117 and TR3118, admission to BSN/DPD program

## **RD4135 Food Service Management 2** 2 credits

See description preceding RD4131. This course is a continuation of Food Service Management 1. Students continue to learn the principles of quantity food production. Students participate in food service operations including menu planning, ordering, receiving, inventory and quantity food preparation. During the two-hour lab, students continue to participate in the activities of the food service system, increasingly assuming more responsibility. Prerequisite: RD4131

## **RD4140 Food Service Management 3** 2 credits

See description preceding RD4131. This course, the third of a three part series, focuses on the management of the food service system, including personnel and financial resources. Working with personnel from diverse populations and serving diverse populations are highlighted. During the two-hour lab, students participate in the management of the food service system, e.g., assist in marketing the operation, prepare and/or critique job specifications and performance standards, assist with scheduling, complete a time-management study, contribute to a quality assurance report, and conduct inservice trainings. Prerequisite: RD4135

## **Nutrition Assessment and Therapy 1-2**

In this two-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 record, are included.

## **RD4320 Nutrition Assessment and Therapy 1** 5 credits

Crosslisted as TR5320. This course introduces disease prevention, nutrition assessment and therapeutic interventions using both traditional and natural medicine approaches. Medical terminology and abbreviations, "food-as-medicine," whole foods menu writing and medical documentation are included. Anthropometric, biochemical, clinical observation and dietary/nutrient assessment measures are defined, interpreted and applied. Oral/dental health, maldigestion, dysbiosis, food allergies/sensitivities, GI tract disorders, cardiovascular disease, hypertension, obesity, and bone health are covered. Prerequisites: BC4101, TR3111, TR4112 or equivalent and admission to BSN/DPD. Corequisite: BC4103, PS4203

## **RD4321 Nutrition Assessment and Therapy 2** 5 credits

Crosslisted as TR5321. See description preceding RD4320. This course is a continuation of Nutrition Assessment and Therapy 1. Students continue to practice application of nutrition assessment and intervention therapies as described in RD4320. Rheumatic disorders, anemia, neoplastic disorders, upper and lower GI disorders, HIV/AIDS, pancreatic and biliary disorders, pulmonary disease, renal disease and liver disease are covered. Assessment in individuals with multisystem disease states is emphasized. Prerequisites: RD4320 and admission to BSN/DPD

## **RD4403 Medical Nutrition Therapy** 3 credits

Cross-listed as RD6403. 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. Successful completion of this course is required in order to sit for the DPD exit exam. Prerequisite/corequisite: RD4320, admission to BSN/DPD program. Corequisite: RD4321

**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 “primaries.” In the role of a primary clinician, each student works in a team with other students (under faculty supervision) for consultation management and nutritional interventions. Prerequisites: RD4320 and PS4203. Corequisite: RD4321

**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 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, 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. Prerequisites: TR5115 and 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

**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

**RD6403 Medical Nutrition Therapy 3 credits**

Cross-listed as RD4403. This course prepares dietetic students for the clinical rotation of an internship. Course content emphasizes SOAP writings, biochemical analysis, drug-nutrient-herbal interactions, and enteral and parenteral nutrition using case studies. Successful completion of this course is required in order to sit for the DPD exit exam. Prerequisites: TR5321 and admission to MSN/DPD program



# NUTRITION

Jennifer Lovejoy, PhD, Dean

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.

## **TR2100 Introduction to Human Nutrition 5 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, minerals and accessory nutrients. Influences of diversity, culture and religion on diet are discussed. 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

## **TR3107 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

## **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: TR2100 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 toxicants. Prerequisite: BC3124 Corequisite: BC3129 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. Prerequisites: BC3129, TR3115 Corequisite: BC3129, BC3132, TR3115

## **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 include carbohydrates, lipids, pigments, emulsions/emulsifiers, enzymes and browning reactions in foods. A whole foods perspective is incorporated into these laboratory exercises. Prerequisites: BC3129, TR3115 Corequisite: BC3132

## **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. Critical thinking case studies are discussed in class and used in take-home exercises. Prerequisite: Intermediate algebra, TR2100 or equivalent

## **TR4103 Whole Foods Production 3 credits**

Cross listed as TR5101. This course covers the identification, selection, storage, preparation and production of whole foods. Cooking techniques and menu planning are stressed. With weekly cooking practica, students develop familiarity with minimally processed foods and use these foods to build culinary expertise. 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: BC3129, BC3131, BC3132, BC3133, BC3141, BC3142, BC3143, 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. Structure, function, digestion, absorption, food sources, requirements, nutrient interactions, deficiencies and toxicity of selected minerals 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)

## **TR4114 Nutrition for Herbalists 4 credits**

This course is designed to provide a basic understanding of the fundamentals of human nutrition. An overview of macro and micro nutrients is presented. The use of herbs as food is woven in to promote and enhance nutritional status. Topics of interest include organic versus commercial versus genetically modified foods, water as a nutrient, and the phytoestrogens found in foods. Prerequisites: BC3124, BC3132/3133, BC3143

**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: TR2100 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

**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)

**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 during year 2. Prerequisite: Permission of instructor

**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: 1 course in intermediate algebra

**TR5101 Whole Foods Production 3 credits**

Cross listed as TR4103. This course covers the identification, selection, storage, preparation and production of whole foods. Cooking techniques and menu planning are stressed. With weekly cooking practica, students develop familiarity with minimally processed foods and use these foods to build culinary expertise. 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

**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 program, TR5120, TR5135, 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: 5 quarter credits of nutrition, one 300 or 400 level biochemistry course or equivalent, admission to MS nutrition program

**TR5124 Advanced Nutrition: Micronutrients 5 credits**

Nutritional biochemistry of the micronutrients (vitamins, accessory nutrients and minerals) is discussed, including chemical structure, 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 program

**TR5128 Applied Research Skills 3 credits**

This course emphasizes gaining skills required to plan and execute research studies in health sciences. Topics that are 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

**TR5135 Advanced Nutrition: Bioactive Compounds in Foods** 2 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 their chemical structure and nomenclature, biological effects, food sources, absorption and metabolism, potential therapeutic uses and toxicity. Some examples of compounds to be discussed include bioflavonoids, carotenoids, tocopherols/tocotrienols, plant sterols, pre/probiotics, indoles/glucosinolates, and alkenyl cysteine sulfoxides. Prerequisites: TR4107, TR4108 or TR5120 and TR5124 or TR6311 or equivalents

**TR5136 Nutrition in the Life Cycle** 3 credits  
The physiological and metabolic 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, five-credit introductory nutrition course

**TR5320 Nutrition Assessment and Therapy 1** 5 credits  
Crosslisted as RD4320. 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, clinical observation and dietary assessment measures are defined, interpreted and applied. Oral/dental health and bone health, dysbiosis, food allergies and sensitivities, upper and lower GI diseases, cardiovascular disease, hypertension and obesity are covered. Prerequisites: BC5118, TR5120, TR5136. Corequisite: BC5132, TR5124

**TR5321 Nutrition Assessment and Therapy 2** 5 credits  
Crosslisted as RD4321. 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 Corequisite for DPD only: PS5210

**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, SOAP noting, and HIPAA Training. Prerequisite: Admission to the MS Nutrition program, PS5301, TR5320, TR5321 or permission of instructor

**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 value of supplements and herbal products. Production, safety and regulation of supplements and herbs are discussed. Students learn basic botanical concepts, terms, and pharmacology. The principles of sustainable agriculture and ecological harvesting are introduced. Prerequisites: TR5120, TR5124, TR5135, 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 & 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

**TR6112 Contemporary Nutrition: Legislative & Cultural Issues** 2 credits  
This is the second class in a three-course series that focuses on the importance of food and food choice in a broad context, addressing legislative and cultural issues. The legislative component enables students to study the factors influencing the development of food laws and regulations in the United States. The cultural component focuses on the exploration of cultural factors that influence food habits and explains different meals and meal cycles for various ethnic groups. Prerequisite: Admission to MS nutrition program

**TR6113 Contemporary Nutrition: Educational Issues****2 credits**

This is the third class in a three-course series that focuses on the importance of food and food choice in a broad context, addressing educational issues. The ethical and philosophical complexities related to nutrition education are discussed, and the fundamentals of producing and marketing food and nutrition services are outlined. The various learning styles/theories/models involved in affecting dietary behavior change are also covered. 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 are enrolled in thesis. Prerequisites: TR5100, TR5104, TR5128, TR6114 (corequisite)

**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. 1 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, TR6310

**TR6800 Community Practicum****2 credits**

This course provides practical experience in various community settings connected with food service and community and clinical nutrition, depending on the student's area of interest. Sites are arranged with assistance of the instructor. A minimum of one presentation at an approved site is required. This course may be waived only if a student has completed a DPD program and has been given a letter of verification by the DPD director. Prerequisites: Two nutrition courses

**Clinic Nutrition Practicum 1-2**

Students in the MS clinical/counseling track 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 main 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 standardized patients. The student's role in direct client contact increases in Clinic Nutrition Practicum 2, where students are expected to take a leadership role in nutrition consults, including client interviewing, diet assessment, nutrition intervention and charting in SOAP format.

**TR6811 Clinic Nutrition Practicum 1****2 credits**

See description above. Prerequisites: BC5132, PS5210, TR5136, TR5320 and meeting criteria for behavior and attitudes

**TR6812 Clinic Nutrition Practicum 2****2 credits**

See description above. Prerequisite: TR6811

**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, RDAs, DRIs, dietary recommendations, breast milk composition, food introduction for infants and identification of nutritional risk in infants. This course is required for the naturopathic midwifery program. Prerequisites: two nutrition courses

**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 or permission of instructor

**TR9125 Advanced Whole Foods Production 3 credits**

Advanced Whole Foods is a continuation of Whole Foods Production. Students refine their cooking techniques while exploring ethnic cooking, herbs, healing diets, and cooking for nursing mothers and infants. Prerequisites: TR4103 or TR5101 or permission of instructor

**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 does not count towards clinic requirements for clinic students. Prerequisite: Open to all students who have completed at least one clinic shift or permission of nutrition clinic program coordinator.