223. Cognitive Neuroscience (4) Lecture—3 hours; discussion—1 hour. Prerequisite: graduate student standing in Psychology or Neuroscience or consent of instructor. Graduate core course for neuroscience. Neurobiological bases of higher mental function including attention, memory, language. One of three in a three-quarter sequence. (Same course as Psychology 261.)—S. S. Szwab

224A. Molecular and Developmental Neurobiology (2) Lecture/discussion—2 hours. Prerequisite: consent of instructor. Key issues in developmental and molecular neurobiology. Discussion emphasis on critical evaluation of the experiments and methods described in research papers. Readings of seminal, primary research papers, reviews, and book chapters. Reading materials will be distributed one week in advance. —W. W. Cheng, Díaz

224B. Molecular and Developmental Neurobiology (2) Lecture/discussion—2 hours. Prerequisite: course 224A or consent of instructor. Continuation of course 224A. Key issues in developmental and molecular neurobiology, focusing on developmental topics. Discussion emphasis on critical evaluation of experiments and methods described in associated literature. Offered in alternate years. —S. Cheng, Díaz

225. Translational Research in the Neurobiology of Disease (2) Lecture—1 hour; discussion—1 hour. Prerequisite: Past or concurrent enrollment in Neuroscience courses 221, 222, 223, or permission of instructor; restricted to current graduate student enrollment or permission of instructor. This course will provide an overview of major neuropathological and neurodevelopmental disorders from both the clinical and fundamental science perspectives. Offered in alternate years. —W. Carter, McAllister

226. Molecular and Developmental Neurobiology (4) Lecture/discussion—4 hours. Prerequisite: consent of instructor. Introduction to molecular and developmental neurobiology. Topics range from nucleation to development of sensory systems and include modern molecular methods and their application in developmental neuroscience. —W. W. McAllister

243. Topics in Cellular and Behavioral Neurobiology (2) Discussion—1 hour; seminar—1 hour. Prerequisite: consent of instructor. An advanced examination of several current problems in neurobiology. Topics will vary in different years; may be repeated for credit. (S/U grading only.)—S. Ishida

247. Topics in Functional Neurogenomics (2) Lecture—1 hour; discussion—1 hour. Prerequisite: graduate standing or consent of instructor. The theory, methods and principles of functional neurogenomics with emphasis on the relationship to molecular mechanisms involved in development and disease of the nervous system. (Same course as Neurobiology, Physiology, and Behavior 247.) Offered in alternate years. —W. Choudary

250. Biology of Neuroglia (2) Lecture/discussion—1.5 hours. Prerequisite: consent of instructor. The properties and functions of non-neuronal cells in the mammalian central nervous system with relevance to neuronal development, physiology and injury response. Offered in alternate years. (S/U grading only.)—S. Ishida

261. Topics in Vision: Eyes and Retinal Mechanisms (2) Lecture/discussion—2 hours. Prerequisite: graduate standing, Neurobiology, Physiology, and Behavior 100 or 112 or the equivalent. Structure and function of the visual system with emphasis on the eye and retina, including optics, anatomy, transduction, retinal synapses, adaptation, and parallel processing. (Same course as Neurobiology, Physiology, and Behavior 261A.) Offered in alternate years. —S. Ishida

261B. Topics in Vision: Systems, Psychophysics, Computational Models (2) Lecture/discussion—2 hours. Prerequisite: consent of instructor, course 261A. Functions of the central visual pathways and their underlying mechanisms. Recent research on aspects of anatomy, biochemistry, psychophysics, development, and genetics of the visual system. (Same course as Neurobiology, Physiology, and Behavior 261B and Molecular, Cellular, and Integrative Physiology 261C.) (S/U grading only.) Offered in alternate years. —W. Britten

261C. Topics in Vision: Clinical Vision Science (2) Lecture/discussion—2 hours. Prerequisite: courses 261A and/or consent of instructor. Causes and mechanistic bases of major blinding diseases. Recent research on aspects of anatomy, biochemistry, electrophysiology, psychophysics, development, and genetics of the visual system related to disease. (Same course as Neurobiology, Physiology, and Behavior 261C and Molecular, Cellular, and Integrative Physiology 261C.) (S/U grading only.) Offered in alternate years. —S. Ishida

267. Computational Neuroscience (5) Lecture—4 hours; lecture/laboratory—3 hours. Prerequisite: one course in general neuroscience at the level of course 100; one year college-level Calculus at level of Mathematics 7A, B, C; one year Physics at the level of Physics 7A, B, C; strongly recommended; students from other departments should contact the instructor. Mathematical models and data analysis techniques used to describe computations performed by nervous systems. Lecture topics include single neuron biophysics, neural coding, network dynamics, memory, plasticity, and learning. Lab topics include programming mathematical models and data analysis techniques in MATLAB. Offered in alternate years. (Same course as Neurobiology, Physiology & Behavior 267.)—F. Goldman

283. Neurobiological Literature (1) Seminar—1 hour. Prerequisite: consent of instructor. Critical presentation and analysis of recent journal articles in neurobiology. May be repeated for credit. (S/U grading only.)—F, W, S. (F, W, S.)

284. Development of Sensory Systems (1) Seminar—1 hour. Prerequisite: consent of instructor. Presentation and discussion of recent literature on the development of sensory systems. May be repeated for credit. (S/U grading only.)—F, W, S. (F, W, S.)

285. Literature in Visual Neuroscience (2) Seminar—2 hours. Critical presentation and discussion of current literature in visual neuroscience. (Same course as Neurobiology, Physiology, and Behavior 285.) May be repeated for credit if topic differs. (S/U grading only.)—F, W, S. (F, W, S.)

287A. Topics in Theoretical Neuroscience (2) Seminar—2 hours. Prerequisite: consent of instructor. In-depth exploration of topics in theoretical neuroscience. Topic varies each year. Fall quarter (287A): foundational material from books and review articles. Spring quarter (287B): continuation of year’s topic through readings of seminal articles from the primary literature. May be repeated for credit. (Same course as Neurobiology, Physiology & Behavior 287A.) (S/U grading only.)—F. Ditterich, Goldman

287B. Topics in Theoretical Neuroscience (2) Seminar—2 hours. Prerequisite: consent of instructor. In-depth exploration of topics in theoretical neuroscience. Topic varies each year. Fall quarter (287A): foundational material from books and review articles. Spring quarter (287B): continuation of year’s topic through readings of seminal articles from the primary literature. May be repeated for credit. (Same course as Neurobiology, Physiology & Behavior 287B.) (S/U grading only.)—S. Ditterich, Goldman

289. Topics in Molecular and Developmental Neurobiology (2) Seminar—2 hours. Analysis and discussion of seminal and current research papers in molecular and developmental neurobiology. Different topics will be covered each quarter. In the past topics have included, “Synaptic vesicle dynamics,” “Neuronal polarity,” and “Glutamate receptors.” May be repeated ten times for credit when topic differs. (S/U grading only.)—F, S. (F, S.) Diaz, Zito

290C. Research Conference in Neurobiology (1) Discussion—1 hour. Prerequisite: graduate standing in Neuroscience or consent of instructor; course 299 (concurrently). Presentation and discussion of faculty and graduate student research in neurobiology. May be repeated for credit. (S/U grading only.)—F, W, S. (F, W, S.)

292. Cortical Plasticity and Perception (2) Lecture/discussion—2 hours. Prerequisite: Neurobiology, Physiology, and Behavior 100 or 112 or equivalent or consent of instructor. Examination of research articles on cortical plasticity and changes in perception. Examples drawn from studies of the somatosensory, visual, auditory, and motor cortex. Offered in alternate years. (S/U grading only.)—W.

298. Group Study (1-5) (S/U grading only.)

299. Research (1-12) (S/U grading only.)

Neurology

See Medicine, School of, on page 427.

Neurosurgery

See Medicine, School of, on page 427.

Nursing, Betty Irene Moore School of

Heather M. Young, Ph.D., R.N., F.A.A.N.; Associate Vice Chancellor for Nursing, UC Davis, and Dean, Betty Irene Moore School of Nursing

Theresa A. Harvath, Ph.D., R.N., F.A.A.N.; Associate Dean for Academic Affairs, Director for Clinical Education and Clinical Professor

Jill G. Joseph, M.D., Ph.D., M.F.H.; Associate Dean for Research and Professor

4610 X St., Suite 4202, Sacramento, CA 95817 916-734-2145; http://nursing.ucdavis.edu

Mission Statement

The Betty Irene Moore School of Nursing at UC Davis cultivates academic excellence through immersive, interprofessional and interdisciplinary education and research. The School prepares nurses, researchers and faculty in a unique interdisciplin ary and interprofessional environment. The full-time, academic, doctoral program prepares gradu-
Nursing, Betty Irene Moore School of

ates as leaders in health care, health policy and nurse faculty/researchers at the university level. The master’s-degree Physician Assistant Studies program prepares graduates to deliver care as physician assistants. Graduates of the professional master’s-degree leadership program are prepared for health-care leadership at various levels, e.g., community health improvement projects, collaboration with community members and nursing faculty. May be repeated for credit. —F, W, S. (F, S)

210. Community Connections (2-5)
Prerequisite: current enrollment in the Nursing Science and Health-Care Leadership Graduate program or consent of instructor. Open to NSHL MS students only. Community-based learning and experiences including community participation, assessment, data collection and analysis using multiple approaches, community health improvement projects, collabora- tive leadership practice, all with the guidance of community members and nursing faculty. May be repeated for credit. —F, W, S. (F, S)

210Y. Applied Health Informatics (4)
Lecture/discussion—1 hour; web virtual lecture—3 hours. Prerequisite: consent of instructor. Open to current student in one of the four tracks or consent of instructor. Within the conceptual framework of the Foundation of Knowledge model, this course integrates nursing science, information science, computer science, and applications to acquire, process, generate and disseminate knowledge. —W. (W)

211Y. Rural Health (2-3)
Lecture/discussion—2 hours; fieldwork. Prerequisite: consent of instructor. Open to current student in one of the four tracks or consent of instructor. Foundations for analyzing research, health, and systems data to answer clinical, systems, or policy questions. Use and examine multiple sources of data and information as a basis for understanding change and transformation in health care. —F. (F)

205. Research Design in Nursing and Health Care (4)
Lecture/discussion—4 hours. Prerequisite: current enrollment in the Nursing Science and Health-Care Leadership graduate program or consent of instructor. Major types of quantitative and qualitative research design and their application to nursing and health care research. Implications of choosing alternative research designs and critical analysis of philo-
sophical underpinnings. Evaluation of control and validity, sampling, instruments to measure health concepts. —205A. Overview of Research in Nursing Science and Health Care (2)
Lecture—2 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Provides an overview of qualitative and quantitative paradigms in scientific inquiry and the major designs related to each paradigm. First of two prerequisite courses on research design and methods in nursing science and healthcare research. —F. (F)

205B. Quantitative Research in Nursing Science and Health Care (4)
Lecture—4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Introduces principles of quantitative data collection and analysis as applied to major study designs in nursing and health-care research. Provides a basic foundation for producing, interpreting, and applying quantitative research findings to answer clinical, system, and policy questions. —W. (W)

205C. Qualitative Research in Nursing Science and Health Care (4)
Lecture—4 hours. Prerequisite: consent of instructor. Restricted to current students in NSHL graduate or consent of instructor. Introduces principles of qualitative data collection and analysis as applied to major study designs in nursing and health-care research. —W. (W)

206. Community Connections (2-5)
Prerequisite: current enrollment in the Nursing Science and Health-Care Leadership Graduate program or consent of instructor. Open to NSHL MS students only. Community-based learning and experiences including community participation, assessment, data collection and analysis using multiple approaches, community health improvement projects, collabora- tive leadership practice, all with the guidance of community members and nursing faculty. May be repeated for credit. —F, W, S. (F, S)

243A. Leadership in Professional Practice (2)
Lecture/discussion—2 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Course introduces professional role topics including history of the profession, the role in interprofessional teams and the health care system, transitioning to the role from other health professions, scope of practice, certification and licensure and professional organizations. —W. (W)

243B. Leadership in Professional Practice (1)
Lecture/discussion—1 hour. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Course introduces professional role topics including history of the profession, the role in interprofessional teams and the health care system, transitioning to the role from other health professions, scope of practice, certification and licensure and professional organizations. —W. (W)

243C. Leadership in Professional Practice (1)
Lecture/discussion—1 hour. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Course introduces professional role topics including history of the profession, the role in interprofessional teams and the health care system, transitioning to the role from other health professions, scope of practice, certification and licensure and professional organizations. —W. (W)

Pre-Fall 2011 General Education (GE) Courses

Health Informatics

200. Introduction to Health Informatics (3)
Lecture—2 hours; laboratory—3 hours. Prerequisite: consent of instructor. Provides an overview of what health informatics is, and what informatics professionals do. The 3 course series is conducted across three quarters in the 1st, 3rd and 8th quarters. —Su. (Su)

210. Community Connections (2-5)
Prerequisite: current enrollment in the Nursing Science and Health-Care Leadership Graduate program or consent of instructor. Open to NSHL MS students only. Community-based learning and experiences including community participation, assessment, data collection and analysis using multiple approaches, community health improvement projects, collabora- tive leadership practice, all with the guidance of community members and nursing faculty. May be repeated for credit. —F, W, S. (F, S)

210Y. Applied Health Informatics (4)
Lecture/discussion—1 hour; web virtual lecture—3 hours. Prerequisite: consent of instructor. Open to current student in one of the four tracks or consent of instructor. Within the conceptual framework of the Foundation of Knowledge model, this course integrates nursing science, information science, computer science, and applications to acquire, process, generate and disseminate knowledge. —W. (W)

211Y. Rural Health (2-3)
Lecture/discussion—2 hours; fieldwork. Prerequisite: consent of instructor. Open to current student in one of the four tracks or consent of instructor. Foundations for analyzing research, health, and systems data to answer clinical, systems, or policy questions. Use and examine multiple sources of data and information as a basis for understanding change and transformation in health care. —F. (F)

205. Research Design in Nursing and Health Care (4)
Lecture/discussion—4 hours. Prerequisite: current enrollment in the Nursing Science and Health-Care Leadership graduate program or consent of instructor. Major types of quantitative and qualitative research design and their application to nursing and health care research. Implications of choosing alternative research designs and critical analysis of philo-
sophical underpinnings. Evaluation of control and validity, sampling, instruments to measure health concepts. —205A. Overview of Research in Nursing Science and Health Care (2)
Lecture—2 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Provides an overview of qualitative and quantitative paradigms in scientific inquiry and the major designs related to each paradigm. First of two prerequisite courses on research design and methods in nursing science and healthcare research. —F. (F)

205B. Quantitative Research in Nursing Science and Health Care (4)
Lecture—4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Introduces principles of quantitative data collection and analysis as applied to major study designs in nursing and health-care research. Provides a basic foundation for producing, interpreting, and applying quantitative research findings to answer clinical, system, and policy questions. —W. (W)

205C. Qualitative Research in Nursing Science and Health Care (4)
Lecture—4 hours. Prerequisite: consent of instructor. Restricted to current students in NSHL graduate or consent of instructor. Introduces principles of qualitative data collection and analysis as applied to major study designs in nursing and health-care research. —W. (W)

206. Community Connections (2-5)
Prerequisite: current enrollment in the Nursing Science and Health-Care Leadership Graduate program or consent of instructor. Open to NSHL MS students only. Community-based learning and experiences including community participation, assessment, data collection and analysis using multiple approaches, community health improvement projects, collabora- tive leadership practice, all with the guidance of community members and nursing faculty. May be repeated for credit. —F, W, S. (F, S)

210Y. Applied Health Informatics (4)
Lecture/discussion—1 hour; web virtual lecture—3 hours. Prerequisite: consent of instructor. Open to current student in one of the four tracks or consent of instructor. Within the conceptual framework of the Foundation of Knowledge model, this course integrates nursing science, information science, computer science, and applications to acquire, process, generate and disseminate knowledge. —W. (W)

211Y. Rural Health (2-3)
Lecture/discussion—2 hours; fieldwork. Prerequisite: consent of instructor. Open to current student in one of the four tracks or consent of instructor. Foundations for analyzing research, health, and systems data to answer clinical, systems, or policy questions. Use and examine multiple sources of data and information as a basis for understanding change and transformation in health care. —F. (F)

205. Research Design in Nursing and Health Care (4)
Lecture/discussion—4 hours. Prerequisite: current enrollment in the Nursing Science and Health-Care Leadership graduate program or consent of instructor. Major types of quantitative and qualitative research design and their application to nursing and health care research. Implications of choosing alternative research designs and critical analysis of philo-
sophical underpinnings. Evaluation of control and validity, sampling, instruments to measure health concepts. —205A. Overview of Research in Nursing Science and Health Care (2)
Lecture—2 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Provides an overview of qualitative and quantitative paradigms in scientific inquiry and the major designs related to each paradigm. First of two prerequisite courses on research design and methods in nursing science and healthcare research. —F. (F)

205B. Quantitative Research in Nursing Science and Health Care (4)
Lecture—4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Introduces principles of quantitative data collection and analysis as applied to major study designs in nursing and health-care research. Provides a basic foundation for producing, interpreting, and applying quantitative research findings to answer clinical, system, and policy questions. —W. (W)

205C. Qualitative Research in Nursing Science and Health Care (4)
Lecture—4 hours. Prerequisite: consent of instructor. Restricted to current students in NSHL graduate or consent of instructor. Introduces principles of qualitative data collection and analysis as applied to major study designs in nursing and health-care research. —W. (W)

206. Community Connections (2-5)
Prerequisite: current enrollment in the Nursing Science and Health-Care Leadership Graduate program or consent of instructor. Open to NSHL MS students only. Community-based learning and experiences including community participation, assessment, data collection and analysis using multiple approaches, community health improvement projects, collabora- tive leadership practice, all with the guidance of community members and nursing faculty. May be repeated for credit. —F, W, S. (F, S)
Degree programs or by consent of instructor. Course introduces primary health care concepts essential to the care of common medical problems seen in primary care settings. Module content will focus on various organ systems and specialty areas. — F (F)  

251B. Foundations of Primary Health Care (8)  
Lecture/discussion—8 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Course introduces primary health care concepts essential to the care of common medical problems seen in primary care settings. — W (W)  

251C. Primary Health Care (8)  
Lecture/discussion—8 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Course introduces primary health care concepts essential to the care of common medical problems seen in primary care settings. — S (S)  

251D. Primary Health Care (6)  
Lecture/discussion—6 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Course introduces primary health care concepts essential to the care of common medical problems seen in primary care settings. — SU. (SU)  

260. Foundations of Behavioral Health (1)  
Lecture/discussion—1 hour. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Course focuses on the spectrum of normal psychological development over the lifespan for children, adults and elders. Theories of stress and coping mechanisms are presented as a framework for the assessment of individuals. — SU. (SU)  

270. Foundations of Pharmacology (2)  
Lecture/discussion—1 hour; laboratory—3 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Course introduces the student to major concepts in pharmacology and relevant human physiology related to pharmacotherapeutics and toxicology. — SU. (SU)  

271A. Pharmacology (2)  
Lecture/discussion—1 hour; laboratory—3 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Systems based pharmacology focused on classes of drugs used to treat disorders in specialty systems. — W (W)  

271B. Pharmacology (2)  
Lecture/discussion—1 hour; laboratory—3 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Systems based pharmacology focused on classes of drugs used to treat disorders in specialty systems. — W (W)  

272. Foundations of Pharmacology (2)  
Lecture/discussion—2 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Group or by consent of the instructor. Theoretical background to providing safe and effective care related to drugs and natural products. — SU. (SU)  

273. Pharmacology Concepts in Nursing (2)  
Lecture/discussion—2 hours. Prerequisite: courses 221, 272, 420, 421, consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Group or by consent of the instructor. Application of principles for safe and effective use of medications and natural products; use of current, reliable information to make clinical decisions. — F (F)  

290. Master’s Seminar (2)  
Discussion—2 hours. Prerequisite: current enrollment in the Nursing Science and Health Care Leadership graduate program or instructor. Open to NSHLS MS students only or by consent of course instructor. Subject varies from quarter to quarter. Current knowledge and issues relevant to one of two fields of emphasis: population health or health systems. May be repeated 10 times for credit. — F, W, S, F, W, S. (F, W, S)  

291. Doctoral Seminar (2)  
Discussion—2 hours. Prerequisite: current enrollment in the Nursing Science and Health Care Leadership graduate program or consent of instructor. Focus on the theory, research and knowledge relevant to one of two fields of emphasis: population health or health systems. Emphasis placed on reading, critique and synthesis of classic and cutting-edge research in nursing and health care. May be repeated 10 times for credit. — F, W, S, F, W, S. (F, W, S)  

291D. Doctoral Seminar (2)  
Discussion—2 hours. Prerequisite: current enrollment in the Nursing Science and Health Care Leadership graduate program or consent of instructor. Focus on the theory, research and knowledge relevant to one of two fields of emphasis: population health or health systems. Emphasis placed on reading, critique and synthesis of classic and cutting-edge research in nursing and health care. May be repeated 10 times for credit. — F, W, S, F, W, S. (F, W, S)  

298. Special Topics in Nursing Science and Health Care Leadership (1-4)  
Lecture/discussion—1-2 hours. Prerequisite: current enrollment in the Nursing Science and Health Care Leadership graduate program or consent of instructor. In-depth study of topics in Nursing Science and Health Care Leadership, selected from: policy and politics in health care, health-care disparities, current issues in health care, approaches to the conduct of science, or other related areas, with year to year variation. May be repeated for credit. Offered irreg.: — F, W, S, F, W, S. (F, W, S)  

301. Learner Centered Teaching (3-4)  
Lecture/discussion—3 hours; practice—1 hour. Open to current students in the Nursing Science and Health Care Leadership graduate programs; outside students with prior educational or work experience in education may register for this class with the consent of instructor. Students will explore best practices in learner-centered teaching using curriculum models, instructional design, and assessing/evaluating student learning. Students will have experience in planning learner-centered activities that are consistent with the desired learning outcomes. — F, W, S. (F, S)  

302. Teaching Methods—Use of Emerging Technologies to Improve Student Learning (4)  
Lecture/discussion—3 hours; practice—1 hour. Open to current students in the Nursing Science and Health Care Leadership graduate programs; outside students with prior educational or work experience in education may register for this class with the consent of instructor. Students will examine, design and develop instructional strategies that use innovative and emerging technologies to promote motivation, performance and learning in health professions education. Research findings associated with use of various emerging technologies will be examined. — F, W, S. (F, S)  

303. Professional Role Formation (2-4)  
Lecture/discussion—2 hours; practice—2 hours. Exploration of the educator role. Open to current students in the Nursing Science and Health Care Leadership graduate programs; outside students with prior educational or work experience in education may register for this class with the consent of instructor. Emphasis placed on professional role tasks. Topics include Role Expectations, Legal and Regulatory Issues, Professional Ethics, Educational Scholarship, Individual Differences, Learning Environments, and Lifelong Learning. Placements for the optional practicum are arranged in a wide variety of settings. — F, W, F, W. (F, W)  

Professional  

400. Basic Clinical Skills (1-4)  
Lecture/lab—1-4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Instruction and practice of the fundamental clinical skills necessary for patient care comprise this course with a primary focus on principles of effective communication in establishing the therapeutic provider-patient relationship. — SU. (SU)  

401. Basic Clinical Skills (1-4)  
Lecture/lab—1-4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Continuation of focus on history taking and physical examination skills associated with use of advanced/specialized content. — F, W, S, F, W, S. (F, W, S)  

410A. Advanced Clinical Skills (1-4)  
Lecture/lab—1-4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content. — F, W, S, F, W, S. (F, W)  

410B. Advanced Clinical Skills (1-4)  
Lecture/lab—1-4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content. — F, W, S, F, W, S. (F, W)  

410C. Advanced Clinical Skills (1-4)  
Lecture/lab—1-4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor.  

Professional
Continuation of focus on history taking and physical examination skills with advanced/specialized content related specified systems. — S. (S.)

410D. Advanced Clinical Skills (1-4)
Lecture/labatory—4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content related specified systems. — F (F)

410E. Advanced Clinical Skills (1-4)
Lecture/labatory—4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content related specified systems. — W (W)

410G. Advanced Clinical Skills (1-4)
Lecture/labatory—4 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content related specified systems. — W (W)

420. Foundations of Clinical Nursing Practice (3)
Clinical activity—9 hours. Prerequisite: consent of the instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of the instructor. Foundation course introduces students to core concepts of clinical nursing, including clinical reasoning, professional ethics, therapeutic communication and activities of daily living. Develop skills for the provision of safe, high quality, culturally-sensitive, person-centered care across the lifespan. — S. (S.)

421. Health Assessment Across the Lifespan (3)
Lecture/discussion—11 hour; clinical activity—6 hours. Prerequisite: consent of the instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of the instructor. Prepares students to conduct a health history assessment using developmentally and culturally appropriate approaches for individuals across the lifespan, the knowledge, understanding, and skills needed to perform, interpret and communicate a health history. — S. (S.)

422. Care of Adults with Chronic Conditions (6)
Lecture/discussion—3 hours; clinical activity—9 hours. Prerequisite: courses 221, 272, 420, and 421; consent of the instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of the instructor. Learn concepts central to the effective management of a variety of common chronic illness conditions. — F (F)

423. Psychosocial Wellness & Illness (5)
Lecture/discussion—3 hours; clinical activity—6 hours. Prerequisite: courses 221, 272, 420, and 421; consent of the instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of the instructor. Explore psychological, cultural, societal, and environmental factors that affect psychological wellness and illness. Practice providing care to individuals and families experiencing disruptions in mental health secondary to physical or psychological conditions. — S. (S.)

424. Nursing Care of Older Adults (3)
Lecture/discussion—2 hours; clinical activity—3 hours. Prerequisite: courses 221, 272, 420, 421, 273, 422, 423, 425, 223, and 426; consent of the instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Build skills for situations involving older adults, such as in the management of complex clinical and administering and interpreting standardized assessment tools. Develop plans of care for older adults experiencing a variety of geriatric syndromes. — S. (S.)

425. Family Focused Nursing (9)
Lecture/discussion—3 hours; clinical activity—12 hours. Prerequisite: courses 221, 272, 420, 421, 273, 422, 423; and 423; consent of the instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Focuses on family as the unit of nursing and interprofessional care. Includes influences of family on health and illness, reproductive and gender/sexuality issues, pregnancy, birth and child-rearing, and the health and illness in children and youth. — W (W)

426. Nursing Care of Adults with Complex Illness or Injury (8)
Lecture/discussion—4 hours; clinical activity—9 hours. Prerequisite: consent of the instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Preps students to provide comprehensive, patient-centered nursing care for patients with acute or complex illness and injury. Theory portion for disease processes associated with complex physiological alterations. — S. (S.)

427. Fostering Healthy Communities (7)
Lecture/discussion—4 hours; clinical activity—9 hours. Prerequisite: consent of the instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Focuses on populations & communities, and emphasizes working with diverse communities in providing health promotion, chronic disease management, transitional support and crisis intervention. Develop skills to critically analyze and shape health policy and develop accessible community resources. — S. (S.)

428. Capstone Clinical Nursing Practicum (8)
Clinical activity—24 hours. Prerequisite: courses 220, 221, 222A, 272, 420, 421, 429A, 222B, 273, 422, 223, 426, 429E, 224, 425, 297B, 429E, 202, 223, 426, 429D, 224, 424, 427, and 429E; consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Practicum experience is designed to facilitate transition to professional practice. Opportunity to choose a clinical practice area of interest and to work with a preceptor with expertise in that area. — F (F)

429A. Collaborative Practice A (1)
Clinical activity—3 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to: communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism. — F (F)

429C. Collaborative Practice C (1)
Clinical activity—3 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to: communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism. — F (F)

429D. Collaborative Practice D (1)
Clinical activity—3 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to: communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism. — S. (S.)

429E. Collaborative Practice E (1)
Clinical activity—3 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to: communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism. — S. (S.)

429F. Collaborative Practice F (1)
Clinical activity—3 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Group or by consent of the instructor. Interprofessional course uses experiential learning activities including simulation, role play, and case studies. Concepts include but are not limited to: communication, person-centered care, ethical decision making, end-of-life decisions, culturally appropriate care, quality and safety, social justice, and professionalism. — S. (S.)

440. Preparation for Clinical Practice (1-3)
Clinical activity—3-9 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Students are placed in clinical settings and/or clinical simulation laboratories to observe and practice the integration of clinical skills with direct supervision by faculty. — S. (S.)

450A. Supervised Clinical Practice-Primary Health Care (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health Care Leadership Graduate Degree programs or by consent of instructor. Each of the required primary care rotations is a four-week supervised clinical practice experience in primary care, under the supervision of an appropriate community-based primary care provider per accreditation requirements. May be repeated five times for credit. — F, W, S, Su. (F, W, S, Su.)

450B. Supervised Clinical Practice-Primary Health Care (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Each of the required primary care rotations is a four-week supervised clinical practice experience in primary care, under the supervision of an appropriate community-based primary care provider per accreditation requirements. May be repeated five times for credit. — F, W, S, Su. (F, W, S, Su.)
munity-based primary care provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

450C. Supervised Clinical Practice–Primary Care Health (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Each of the required primary care rotations is a four-week supervised clinical practice experience in primary care, under the supervision of an appropriate community-based primary care provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

450D. Supervised Clinical Practice–Primary Care Health Care (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to open students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Each of the required primary care rotations is a four-week supervised clinical practice experience in primary care, under the supervision of an appropriate community-based primary care provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

450E. Supervised Clinical Practice–Primary Care Health (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Each of the required primary care rotations is a four-week supervised clinical practice experience in primary care, under the supervision of an appropriate community-based primary care provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

451. Supervised Clinical Practice–Pediatrics (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to open students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Four-week clinical rotation under the supervision of an appropriate community-based pediatric Medicine provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

452. Supervised Clinical Practice–Women’s Health (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Four-week clinical rotation under the supervision of an appropriate community-based women’s health and prenatal care provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

453. Supervised Clinical Practice–Mental Health (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Four-week clinical rotation under the supervision of an appropriate community-based women’s health and prenatal care provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

454. Supervised Clinical Practice–Emergency and Health Medicine (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Four-week clinical rotation under the supervision of an appropriate Emergency Medicine provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

455. Supervised Clinical Practice–Inpatient Surgery (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Four-week clinical rotation under the supervision of an appropriate surgical provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

456. Supervised Clinical Practice–Inpatient Medicine (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Four-week clinical rotation under the supervision of an appropriate inpatient provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

459. Supervised Clinical Practice–Other Specialties (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Four-week clinical rotation under the supervision of an appropriate community-based primary care provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

470. Health Care Ethics (3-9)
Lecture/discussion—2 hours; laboratory/discussion—1 hour. Prerequisite: consent of instructor. Guided independent study. Issues in biomedical ethics, with discussion of readings that are based on student interests and needs. Participation in ethics rounds. (Same course as General Medicine 470.) —F, W, S, Su. (F, W, S, Su.)

471. Supervised Clinical Practice–Geriatrics (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Four-week clinical rotation under the supervision of an appropriate community-based Geriatric Medicine provider per accreditation requirements. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

475. Supervised Clinical Practice–Acute Care (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Two- to four-week selective rotations are available to accommodate student interest and/or accommodate a student’s clinical deficits identified by the progression of the course. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

480. Supervised Clinical Practice–Rural Health (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Rural health rotations focus on providing care in medically underserved rural sites. Students will work directly with specific inpatient units. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

490. Supervised Clinical Practice–Quality and Safety (1-16)
Clinical activity—48 hours. Prerequisite: consent of instructor. Open to graduate students in the Nursing Science and Health-Care Leadership Graduate Degree programs or by consent of instructor. Clinical rotation that work directly with patient safety and quality improvement committees in various organizations. May be repeated five times for credit. —F, W, S, Su. (F, W, S, Su.)

493A. Improving Quality in Health Care (4)
Lecture/discussion—4 hours. Open to Nursing Science and Health-Care Leadership Graduate Students and/or consent of instructor. Working in interdisciplinary teams, will explore the theory and practical methods being employed to make improvement in health care systems while providing an opportunity for interprofessional educational experience. (S/U grading only; deferred grading only, pending completion of sequence.) —F. (F.)

493B. Improving Quality in Health Care (4)
Lecture/discussion—4 hours. Open to Nursing Science and Health-Care Leadership graduate students and/or consent of instructor. Working in interdisciplinary teams, will explore advanced theory and practical methods being employed to make improvement in health care systems while providing an opportunity for interprofessional educational experience. (S/U grading only; deferred grading only, pending completion of sequence.) —F. (F.)

493C. Enhancing Patient Safety in Health Care (3)
Seminar—1 hour; clinical activity—1 hour; discussion—1 hour. Prerequisite: Nursing Science and Health-Care Leadership graduate students; consent of instructor. Inter-professional module is designed to explore the theory and practical methods being employed to improve patient safety in health care while providing an opportunity for an important educational experience. (Same course as Medical Sciences 493QC.) —S. (S.)

Courses in Physicians Assistant Studies (PAS)
Graduate
299. Research and Writing (1-4)
Extensive writing or discussion—3-12 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Students in the Nursing Science and Health-Care Leadership graduate programs conduct research and writing under the supervision of a faculty member. Students may repeat this course for credit in different quarters, depending on the length of their program of study to complete their Master’s Degree. (S/U grading only.) —F, W, S, Su. (F, W, S, Su.)

Professional
400. Basic Clinical Skills (1-4)
Lecture/laboratory—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Instruction and practice of the fundamental clinical skills necessary for patient care comprise this course with a primary focus on principles of effective communication in establishing the therapeutic provider-patient relationship. —Su. (Su.)

401. Basic Clinical Skills (1-4)
Lecture/discussion—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Continuation of focus on principles of effective physical examination skills with advanced/specialized content. —F, W, S, Su. (F, W, S, Su.)

410A. Advanced Clinical Skills (1-4)
Lecture/laboratory—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content. —F. (F.)

410B. Advanced Clinical Skills (1-4)
Lecture/laboratory—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor.
Continuation of focus on history taking and physical examination skills with advanced/specialized content related to specified systems. — W (W).

410C. Advanced Clinical Skills (1-4)
Lecture/laboratory—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content related to specified systems. — S (S).

410D. Advanced Clinical Skills (1-4)
Lecture/laboratory—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content related to specified systems. — S (S).

410E. Advanced Clinical Skills (1-4)
Lecture/laboratory—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content related to specified systems. — F (F).

410F. Advanced Clinical Skills (1-4)
Lecture/laboratory—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content related to specified systems. — F (F).

410G. Advanced Clinical Skills (1-4)
Lecture/laboratory—1-4 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Continuation of focus on history taking and physical examination skills with advanced/specialized content related to specified systems. — W (W).

440. Preparation for Clinical Practice (1-3)
Clinical activity—36 hours. Prerequisite: consent of instructor. Open to Graduate Students in the Nursing Science and Health-Care Leadership Graduate Degree programs, or by consent of instructor. Students are placed in clinical settings and/or clinical simulation laboratories to observe and practice the integration of clinical skills with direct supervision by faculty. — S (S).

Nutrition

See Clinical Nutrition, on page 216; Food Service Management, on page 342; Nutrition; Nutritional Biology (A Graduate Group), on page 493; Nutrition Science, on page 494.

Nutrition

[College of Agricultural and Environmental Sciences]
Francene M. Steinberg, Ph.D., RD., Chair of the Department
Sheri Zidenberg-Cherr, Ph.D., Vice Chairperson of the Department

Department Office. 3135 Meyer Hall 530-752-6630; http://nutrition.ucdavis.edu

Faculty

Elizabeth Applegate, Ph.D., Senior Lecturer (SOC)
Agarwal, Distinguished Teaching Award
Gary Cher, Ph.D., Professor

Nutrition, Environmental Toxicology

Kathryn G. Dewey, Ph.D., Distinguished Professor

Nilesh W. Gaikwad, Ph.D., Associate Professor
Nutrition, Environmental Toxicology

Fawaz G. Hatem, Ph.D., Professor
Nutrition, Internal Medicine

Carl L. Keen, Ph.D., Distinguished Professor
Nutrition, Internal Medicine

Bo L. Lannerdal, Ph.D., Distinguished Professor
Nutrition, Internal Medicine

Patricia Itoeza, Ph.D., Professor
Nutrition, Environmental Toxicology

Carolyn M. Slusky, Ph.D., Professor
Nutrition, Food Science & Technology

Francene M. Steinberg, Ph.D., R.D., Professor and Chair

Emeriti Faculty

Lindsay H. Allen, Ph.D., Professor Emerita
Kenneth H. Brown, M.D., Professor Emeritus
Andrew J. Clifford, Ph.D., Professor Emeritus
Lois E. Grivetti, Ph.D., Professor Emeritus
Lucia Kaiser, Ph.D., Specialist in Cooperative Extension Emerita

Janet King, Ph.D., Professor Emerita

Roger B. McDonald, Ph.D., Professor Emeritus

Robert B. Rucker, Ph.D., Professor Emeritus

Barbara O. Schneeman, Ph.D., Professor Emerita
Judith S. Stern, Sc.D., R.D., Professor Emerita

Affiliated Faculty

Sean Adams, Ph.D., Associate Adjunct Professor
Ellen Bonnel, Ph.D., Academic Administrator
Betty Burri, Ph.D., Adjunct Professor

Brit Burton-Freeman, Ph.D., Associate Research Nutritionist

Joan Frank, M.S., R.D., Academic Coordinator, Lecturer
Ellen Fung, Ph.D., R.D., Associate Adjunct Professor
Robert M. Hackman, Ph.D., Research Nutritionist
Marjorie Haskell, Ph.D., Associate Researcher
Peter Havel, Ph.D., D.V.M., Professor
Wayne Hawkes, Ph.D., Professor
M. Jane Heinig, Ph.D., Academic Administrator
Sonja Hess, Ph.D., Associate Research Nutritionist

Liping Huang, Ph.D., Adjunct Professor

Robert M. Hackman, Ph.D., Research Nutritionist
Darshan Kelley, Ph.D., Adjunct Professor
Kevin Laugero, Ph.D., Adjunct Professor

Nancy Keim, Ph.D., Adjunct Professor

Maryann McVeigh, Ph.D., Adjunct Professor

John Newman, Ph.D., Associate Adjunct Professor
Charles Stephensen, Ph.D., Adjunct Professor

Marilyn S. Townsend, Ph.D., R.D., Specialist in Cooperative Extension

Janet Uri-Adams, Ph.D., Associate Research Nutritionist

Marta Van Loan, Ph.D., Adjunct Professor
Sheri Zidenberg-Cherr, Ph.D., Specialist in Cooperative Extension

Susan Zumin, Ph.D., Associate Adjunct Professor

Major Programs.

1. Preparation for Clinical Practice. Plan in advance to include the required course prerequisites. Nutrition 111AY and 111B …………. 5

Nutrition 120AN or 120BN …………. 4

Food Science and Technology 100A, 100B …………. 8

Neurobiology, Physiology, and Behavior 101 …………. 5

Replacement courses; see note above: Nutrition 111AY, 111B, 114, 116A-116B, 120AN, or 120BN, Economics 1A-1B.

Nutrition and Food …………. 22

Preparation, Plan in advance to include the required course prerequisites. Nutrition 111AY and 111B …………. 5

Nutrition 120AN or 120BN …………. 4

Food Science and Technology 100A, 100B …………. 8

Neurobiology, Physiology, and Behavior 101 …………. 5

Replacement courses; see note above: Nutrition 114, 116A-116B, 116A-116B.

Nutrition Science …………. 20

Preparation, Plan in advance to include the required course prerequisites. Animal Biology 102 and 103, Biological Sciences 102 and 103 and Nutrition 111AY and 111B …………. 11-15

Neurobiology, Physiology, and Behavior 101 …………. 5

Replacement courses; see note above: Nutrition 114, 115, 116A-116B, 117, 120AN or 120BN, 122, 123, 124, 201, 204.

Minor Adviser. 3202 Meyer Hall 530-752-2521
Graduate Study. Programs of study leading to the M.S. and Ph.D. degrees are available in Nutrition. For information on graduate study contact the Nutrition Graduate Group.

Courses in Nutrition (NUT)

Lower Division

10. Discoveries and Concepts in Nutrition (3)
Lecture—3 hours. Nutrition as a science; historical development of nutrition concepts and structure of nutrients and foods. Not open for credit to students who have taken an upper division course in nutrition. GE credit: SciEng | SE, SL.—F, W, S, Su. (F, W, S, Su.)

Applegate

11. Current Topics and Controversies in Nutrition (2)
Discussion—1.5 hours; term paper. Exploration of current applications and controversies in nutrition. Students read scientific journal articles and write summaries, as well as give brief oral presentations. Topics change to reflect current interests and issues. GE credit: SciEng, Wrt|OL, SE, WE.—F, W, S, Su. (F, W, S, Su.)

Applegate

99. Individual Study for Undergraduates (1-5)
Prerequisite: consent of instructor. (P/NP grading only.) GE credit: SE.—F, W, S, (F, W, S.)

Upper Division

104. Environmental & Nutritional Factors in Cellular Regulation and Nutritional Toxicants (4)
Lecture—3 hours; discussion—1 hour. Prerequisite: Biological Sciences 101; Biological Sciences 103 or Animal Biology 103. Cellular regulation from nutritional/toxicological perspective. Emphasis: role of biofactors in modulation of signal transduction pathways, role of specific organelles in organization/ regulation of metabolic transformations, major cofactor functions, principles of pharmacology/toxicology.

Applegate