HUMAN NUTRITION AND FOODS HNF

Department of Food Science and Human Nutrition
College of Agriculture and Natural Resources

101 Personal Nutrition and Health
Summer. 3(3-0)
Application of nutritional science to personal health and every-day life. Tools, strategies, and resources related to personal diet, nutrition, and wellness.

102 Dietary Supplements: Evidence vs Hype
Summer. 3(3-0)
Effects of dietary supplements such as vitamins, herbs, performance enhancers and functional foods on health and performance. Evaluation of supplement safety and effectiveness. Laws and policies relative to health claims.

150 Introduction to Human Nutrition
Fall, Spring, Summer. 3(3-0)
Nutrient function and metabolism. Food and nutrients in health and disease. Socioeconomic and environmental influences on food and health. Incorporation of healthy food choices into daily living.

220 History of Food and Alcohol
Spring. 3(3-0) Interdepartmental with History. Administered by History.
How food and alcohol have shaped world history. Relationship to politics, nationalism, religion, economics and culture. Consumption, trade, migration, slavery, globalization, environmental impacts.

250 Contemporary Issues in Human Nutrition
Fall. 3(2-2) P: (HNF 150) and completion of Tier I writing requirement R: Open to students in the Nutritional Sciences Major or in the Lyman Briggs Nutritional Sciences Coordinate Major.
Current topics and controversies in nutrition, health, and chronic disease. Concepts of health. Credible sources of nutrition information and research. Governing agencies and policy. Ethical issues related to nutrition.

250L Professional Development and Career Planning in Nutrition
Fall, Spring. 1(0-2) P: HNF 150 R: Open to students in the Nutritional Sciences Major and open to students in the Lyman Briggs Nutritional Sciences Coordinate Major.
Experiential learning and career opportunities in nutrition. Skills for professional and career development.

300 Experimental Approaches to Foods
Fall, Spring. 4(2-4) P: ((CEM 143 or concurrently) or (CEM 251 or concurrently)) and completion of Tier I writing requirement R: Open to juniors or seniors in the Dietetics Major or in the Food Science Major.
Effects of preparation methods and ingredient substitutions on chemical and physical properties of food constituents. Effects of changes in chemical and physical properties on functional and sensory attributes of foods.

310 Nutrition in Medicine for Pre-Health Professionals
Spring, Summer. 3(3-0) P: (HNF 150) and ((PSL 250 or concurrently) or (PSL 310 or concurrently) or (PSL 431 or concurrently)) R: Not open to freshmen.
Relationship of nutrition and dietary practices to human health and treatment of clinical conditions. Health care team approach to nutrition issues.

320 Professional Practice of Dietetics and Nutrition
Spring. 3(4-0) P: HNF 150 R: Open to sophomores or juniors or seniors in the Dietetics Major. SA: HNF 220
Scope of the profession of dietetics. Foundation knowledge and skills for dietetics. Food patterns for health and disease management.

350 Advanced Human Nutrition and Metabolism
Spring. 4(5-0) P: (HNF 250 or HNF 320) and (PSL 250 or PSL 310 or PSL 431) and (BMB 200 or BMB 401 or BMB 461) R: Open to juniors or seniors in the Dietetics Major or in the Nutritional Sciences Major or in the Lyman Briggs Nutritional Sciences Coordinate Major. SA: HNF 461, HNF 462
Nutrient function, metabolism, and interaction in humans at the molecular, cellular, tissue, organ and system level. Mechanistic relationships of nutritional status to health and disease.

375 Community Nutrition
Summer. 3(3-0) P: HNF 150 R: Open to sophomores or juniors or seniors.
Guidelines for dietary and anthropometric components of nutritional status, including health surveys. Agencies and programs that address food and nutritional needs of target populations throughout the life cycle.

377 Applied Community Nutrition
Fall. 3(3-0) P: HNF 250 or HNF 320 R: Open to juniors or seniors in the Dietetics Major or in the Nutritional Sciences Major or in the Lyman Briggs Nutritional Sciences Coordinate Major.
Skills necessary for a community nutrition practitioner including community needs assessment and relevant related programs. Health policy, advocacy, and education evaluation and development.

377L Applied Nutrition Assessment Laboratory
Fall. 1(0-2) P: HNF 377 or concurrently R: Open to juniors or seniors in the Dietetics Major or in the Nutritional Sciences Major or in the Lyman Briggs Nutritional Sciences Coordinate Major.
Nutrition assessment development for practitioners including community needs, communication skills, anthropometric, dietary, and clinical assessments.

385 Public Health Nutrition
Fall, Summer. 3(3-0) P: (HNF 150) and ((STT 200 or concurrently) or (STT 201 or concurrently) or (STT 224 or concurrently) or (STT 231 or concurrently) or (STT 421 or concurrently) or (STT 464 or concurrently) or approval of department) R: Not open to freshmen.
Nutrition from a public health perspective. Overview of public health research, evidence-based recommendations and epidemiology. Diet and nutrition assessment. Ethical issues surrounding public health nutrition recommendations.

400 Art and Science of Food Preparation
Spring. 2(3-2) P: HNF 300 R: Open to seniors in the Dietetics major.
Art and science of food preparation in relation to cost, health, dietary modification, and historical, regional, ethnic, and religious customs. Product evaluation using sensory techniques. Offered half of semester.

406 Global Foods and Culture
Spring. 3(3-0) P: HNF 150 or concurrently RB: ISS course or concurrently. R: Open to juniors or seniors.
Factors impacting food consumption from a human ecological perspective. International and national food consumption patterns. Geographic, political, and economic aspects of food consumption. Food availability and distribution. Family structure, taboos, religion, and food-related health problems.

415 Global Nutrition
Spring. 3(3-0) P: HNF 350
Burdens, causes, and consequences of undernutrition globally. Interaction of nutrition with illness, obesity, and reproductive health. Approaches, policies, and programs to prevent undernutrition.

440 Foodservice Operations
Fall. 3(3-0) P: HNF 150 and (HNF 300 or concurrently) R: Open to juniors or seniors in the Dietetics Major.
Principles, processes and control strategies in foodservice operations. Menu planning, procurement, and on-premise storage and issuance. Purchasing, ethics, production, safety and sanitation.

444 The Business of Nutrition Services
Fall, Spring. 3(2-2) P: HNF 440 or concurrently RB: CSE 101 R: Open to juniors or seniors in the Dietetics major.
Human resources, budget and financial resources. Technology and marketing in food and nutrition services management. Utilizing prototype computer software for procurement, receiving, inventory management, recipe adjustment, nutrient analysis, budgets and accounting.

445 Foodservice Management Practicum
Fall, Spring. 2 credits. P: HNF 440 or concurrently R: Open to seniors in the Dietetics major and open to graduate students in the Human Nutrition major. Approval of department.
Receipt, storage, preparation and service of foods. Safety and sanitation. Design, layout, and care of equipment. Costing of food services. Students must purchase meal ticket. Offered half of semester.

446 Applied Culinary Nutrition
Spring. 2(3-3) P: HNF 300 and HNF 440
Person-centered approach to dining through food selection, culinary preparation techniques, menu extension planning, food safety, and quality assurance. Offered half of semester.

450 Nutrition in the Prevention and Treatment of Disease
Spring. 3(4-0) P: (HNF 250 and HNF 350) and completion of Tier I writing requirement SA: HNF 464
Nutrition and its relationship to health and disease using a basic research approach.

453 Nutrition and Human Development
Spring. 3(3-0) P: (HNF 375 or HNF 377) and (PSL 250 or PSL 310 or PSL 431) R: Open to juniors or seniors in the Dietetics Major or in the Nutritional Sciences Major or in the Lyman Briggs Nutritional Sciences Coordinate Major. SA: HNF 376
Role of nutrients in anatomical, physiological, and biochemical processes as related to human growth and development. Nutrition throughout the life cycle. Nutritional assessment integrating the nutrition care process and age specific programs.

457 Sports and Cardiovascular Nutrition
Spring. 3(3-0) Interdepartmental with Kinesiology. Administered by Human Nutrition and Foods. P: (HNF 150) and (PSL 250 or PSL 310 or PSL 431) and (BMB 200 or BMB 401 or BMB 461 or KIN 310)
Nutrition for optimizing sport training, recovery, and performance; power, intermittent, and endurance sports. Role of nutrition, physical activity and exercise on cardiovascular and overall health.

471 Medical Nutrition Therapy I
Fall. 4(3-2) P: (HNF 350) and ANTR 350 and (PSL 250 or PSL 310) and Completion of Tier I Writing Requirement R: Open to juniors or seniors in the Dietetics Major. SA: HNF 470
Anatomical, physiological and biochemical changes associated with diabetes, gastrointestinal, cardiovascular and bariatric conditions. Nutrition assessment, nutrition diagnoses, interventions, monitoring and evaluation, documentation and quality improvement as guided by Academy of Nutrition and Dietetics' Nutrition Care Process. Interactions of diet therapies with other therapies including pharmacologic and complementary and alternative medicine.

472 Medical Nutrition Therapy II
Spring. 4(3-2) P: HNF 471 R: Open to juniors or seniors in the Dietetics Major. SA: HNF 470
Anatomical, physiological and biochemical changes associated with hematologic, musculoskeletal, renal, respiratory, hepatobiliary, cancer, HIV/AIDS, metabolic stress and multiple organ failure. Nutrition assessment, nutrition diagnoses, interventions, monitoring and evaluation, documentation and quality improvement as guided by Academy of Nutrition and Dietetics' Nutrition Care Process. Interactions of diet therapies with other therapies including pharmacologic and complementary and alternative medicine.

475 International Studies in Human Nutrition
Fall, Spring, Summer. 2 to 6 credits. A student may earn a maximum of 12 credits in all enrollments for this course. P: HNF 150 or FSC 211 R: Approval of department; application required.
Education abroad experience. Contemporary problems affecting food science and human nutrition in world, national and local communities.

485 Advanced Public Health Nutrition
Spring. 3(2-2) P: HNF 250 and HNF 385 and STT 422 R: Open to students in the Nutritional Sciences Major and open to students in the Lyman Briggs Nutritional Sciences Coordinate Major.
Survey design, data collection and analysis of nutrition and health data. Use of statistical analysis software (SPSS/SAS). Interpretation and presentation of research results.

490 Independent Study
Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open to seniors. Approval of department.
Individual study of selected topics in foods, foodservice management or nutrition.

490H Honors Independent Study
Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open to juniors or seniors. Approval of department.
Individual study of selected topics in foods, foodservice management or nutrition.

491 Topics in Human Nutrition
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 10 credits in all enrollments for this course. P: HNF 150
Selected topics of current interest in human nutrition.

494 Practicum
Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 10 credits in all enrollments for this course. R: Open to undergraduate students in the Department of Food Science and Human Nutrition. Approval of department.
Professional experience in selected settings and organizations under faculty supervision.

820 Advanced Biochemical Nutrition
Fall. 3(3-0) RB: Undergraduate biochemistry and upper-level undergraduate nutrition
Biochemical aspects of advanced human nutrition

821 Advanced Vitamins and Minerals
Spring. 3(3-0) P: HNF 820 or approval of department
The function of vitamins and minerals in human nutrition

823 Research Methods in Human Nutrition
Fall. 3(3-0) RB: Statistics course, epidemiology course
Survey of research methods used in human nutrition.

824 Nutrition Policies and Programs
Fall of even years. 1(2-0) RB: prior course work in nutrition
Overview of U.S. nutrition policies and programs, including case studies, development and methods of evaluation.

825 Nutritional Immunology
Fall. 1(2-0) RB: Undergraduate physiology, biochemistry, cell biology, epidemiology
Role of nutritional status on immune function and infectious disease.

826 Obesity and Chronic Disease
Spring. 1(2-0) P: HNF 820 RB: Undergraduate physiology, biochemistry, cell biology, epidemiology
Adipose biology and the role of obesity in chronic disease including diabetes, heart disease and cancer.

832 Advanced Clinical Nutrition
Spring. 3(3-0) P: HNF 823 RB: Undergraduate course(s) in Medical Nutrition Therapy
Advanced topics in clinical nutrition.

840 Human Nutrition and Chronic Diseases
Fall of odd years. 3(3-0)
Dietary intervention and treatment of chronic diseases: obesity, cardiovascular disease, diabetes, gastrointestinal disorders and cancer.

843 Community Nutritional Assessment
Spring of odd years. 3(2-2)
Nutritional assessment of population groups in community settings. Interpretation of national and international health data.

890 Supervised Individual Study
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 6 credits in all enrollments for this course. A student may earn a maximum of 10 credits Students are limited to a combined total of 10 credits in HNF 890 and HNF 894. R: Open only to graduate students in the Department of Food Science and Human Nutrition.
Faculty supervised study of nutrition areas of individual interest.

891 Topics in Human Nutrition
Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Open only to graduate students.
Current topics in applied and basic human nutrition.

892 Nutrition Seminar
Fall, Spring. 1(1-0) A student may earn a maximum of 6 credits in all enrollments for this course.
Presentations by students on current topics in nutrition.

894 Human Nutrition Practicum
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. A student may earn a maximum of 10 credits Students are limited to a combined total of 10 credits in HNF 890 and HNF 894. Approval of department. R: Open only to graduate students in the Department of Food Science and Human Nutrition.
Experience in agencies or offices related to Human Nutrition. Field experience required.

898 Master's Project
Fall, Spring, Summer. 1 to 5 credits. A student may earn a maximum of 5 credits in all enrollments for this course. R: Open to master's students in the Human Nutrition major.
Directed scholarly participation in support of Plan B master's degree requirements in human nutrition.

899 Master's Thesis Research
Fall, Spring, Summer. 1 to 10 credits. A student may earn a maximum of 20 credits in all enrollments for this course. R: Open only to master's students in Human Nutrition and Foods.
Master's thesis research.

936 Protein Nutrition and Metabolism
Spring of odd years. 3(3-0) Interdepartmental with Animal Science. Administered by Animal Science.
Nutritional and endocrine regulation of protein synthesis and degradation, protein quality assessment, protein status, and protein-energy malnutrition. Protein metabolism during exercise. Metabolism, digestion, and absorption of amino acids and proteins.

999 Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 36 credits in all enrollments for this course. R: Open to doctoral students in the Human Nutrition major.
Doctoral dissertation research.