HUMAN NUTRITION AND FOODS

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.

150 Introduction to Human Nutrition
Fall, Spring, Summer. 3(3-0)
Nutrition needs in life stages from a human ecological perspective. Domestic and international factors affecting the availability of a safe, nutritious food supply. Relationships of food choices to health and disease.

240 Epidemiological Investigations in Nutrition and Health
Summer. 3(3-0) Interdepartmental with Epidemiology.
P: (HNF 150 or concurrently) or (HNF 260 or concurrently) or approval of department. Integration of epidemiology with human nutrition concepts to understand the role of dietary intake and nutritional status as determinants of health-related issues in populations.

260 Principles of Human Nutrition
Fall, Spring, Summer. 3(3-0) P: BS 161 or BS 181H or LB 145 or BMB 200 or PSL 250 SA: HNF 311
Identification, function and food sources of nutrients required by humans. Normal metabolism. Effects of deficiencies or excesses of specific nutrients and food components on metabolism and health.

300 Experimental Approaches to Foods
Fall, Spring. 4(2-4) P: Completion of Tier I Writing Requirement RB: CEM 143 R: Open to juniors or seniors in the Department of Food Science and Human Nutrition.
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.

320 Professional Practice of Dietetics and Nutrition
Spring. 3(4-0) P: HNF 150 or HNF 260 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.

375 Community Nutrition
Fall, Summer. 3(3-0) P: HNF 150 or HNF 260 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. 4(2-3) P: HNF 320 R: Open to juniors or seniors in the Dietetics major.

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) or (HNF 260 or concurrently) R: ISS 143 R: Open to juniors or seniors.

440 Foodservice Operations
Fall. 3(3-0) P: (HNF 150 or HNF 260) and (FSC 342 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, nutritional analysis, budgets and accounting.

445 Foodservice Management Practicum
Fall, Spring. 2 credits. P: HNF 440 or concurrently R: Open to seniors in the Human Nutrition major. Approval of department.

453 Nutrition and Human Development
Spring. 3(3-0) P: (HNF 375 or HNF 377) and (PBL 250 or concurrently) 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 Nutritional Sciences minor. 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.

456 Eating Disorders
Summer. 3(3-0) P: HNF 150 or HNF 260
Treatment and prevention of anorexia nervosa, bulimia nervosa, and other eating disorders.

457 Sports and Cardiovascular Nutrition
Spring. 3(3-0) Interdepartmental with Kinesiology.
P: (HNF 150 or HNF 260) and (PBL 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.

461 Advanced Human Nutrition: Carbohydrates, Lipids and Proteins
Fall. 3(3-0) P: (BMB 200 or BMB 401 or BMB 461) and (PBL 250 or PSL 310 or PSL 432) SA: HNF 460
Energetics and metabolism of carbohydrates, lipids, and proteins as related to dietary requirements and disease processes in humans. Recommended dietary allowances. Food sources of nutrients.

462 Advanced Human Nutrition: Vitamins and Minerals
Fall. 3(3-0) P: HNF 461 or concurrently SA: HNF 462

463 Nutritional Sciences Laboratory
Fall. 3(1-4) P: (CEM 255 and (HNF 461 or concurrently) and (HNF 462 or concurrently) and completion of Tier I writing requirement)
Principles and methods used in nutrient analyses and nutritional assessment.

464 Nutrition in the Prevention and Treatment of Disease
Spring. 4(0-4) P: (HNF 461 and HNF 462) and (BMB 401 or BMB 461) and Completion of Tier I Writing Requirement
Nutrition and relationship to health and disease using a basic research approach.

471 Medical Nutrition Therapy I
Fall. 4(3-2) P: (HNF 461 or concurrently) and (HNF 462 or concurrently) and completion of Tier I writing requirement) and (PBL 250 or PSL 310 or PSL 431) and (PSL 432 or ANTR 350) R: Open to juniors or seniors. 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 American Dietetic Association’s 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. SA: HNF 470
Anatomical, physiological and biochemical changes associated with hematologic, musculoskeletal, renal, respiratory, hepatoobliterary, cancer, HIV/AIDS, metabolic stress and multiple organ failure. Nutrition assessment, nutrition diagnoses, interventions, monitoring and evaluation, documentation and quality improvement as guided by American Dietetic Association’s Nutrition Care Process. Interactions of diet therapies with other therapies including pharmacologic and complementary and alternative medicine.
Human Nutrition Research Methods
Spring, 3(1-6) P: (HNF 461 and HNF 462 and HNF 463) and completion of Tier I writing requirement
Issues and techniques involved in nutrition research with humans and animals. Independent research and public presentation of projects.

Independent Study
Fall, Spring, Sumner. 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.

Honors Independent Study
Fall, Spring, Sumner. 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.

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 or HNF 260
Selected topics of current interest in human nutrition

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.

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

Advanced Vitamins and Minerals
Spring. 2(2-0) P: HNF 820 or approval of department
The function of vitamins and minerals in human nutrition

Research Methods in Human Nutrition
Spring. 1(2-0) RB: Statistics course
Survey of research methods used in human nutrition.

Nutrition Policies and Programs
Fall. 1(2-0) P: HNF 150 or HNF 260 or approval of department
Overview of U.S. nutrition policies and programs, including case studies, development and methods of evaluation.

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

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.

International Nutrition
Summer. 1(1-0) 
Major issues in international nutrition that influence health, survival, and development capacity of people living in developed and developing societies. Approaches to improving nutritional well-being of populations.

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.

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.

Supervised Individual Study
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.

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.

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. 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.

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 masters students in the Human Nutrition major. Directed scholarly participation in support of Plan B master's degree requirements in human nutrition.

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 masters students in Human Nutrition and Foods. Master's thesis research.