

NUTRITION (NUTR)

Courses

NUTR 490. Topics in Foods and Food Preparation. 1 Unit.

On-line course provides an introduction to foods and food preparation. Includes relationship of food composition to food preparation, cultural and ethnic food patterns, sensory evaluation of food, and culinary techniques.

NUTR 506. Nutritional Metabolism. 3 Units.

Macronutrient structure, chemistry and functions as well as their metabolic roles in human health, including the prevention and pathogenesis of various diseases. Topics will cover the fundamentals of macronutrient metabolism. Prerequisite: General and organic chemistry.

NUTR 508. Plant-Based Nutrition for Life Cycle. 2 Units.

Comprehensive study of nutritional and metabolic requirements throughout the life cycle and how these are supplied by plant-rich diets. Includes contemporary issues related to plant-based nutrition. Helps the learner evaluate current scientific literature and develop informed dietary guidance.

NUTR 509. Public Health Nutrition and Biology. 3 Units.

Introduces the concepts of nutrition and biology as related to public health. Includes life-cycle issues and discussion of major nutrition-related diseases and their prevention. Integrates molecular and biological approaches to public health problems; and addresses the role of nutritional assessment, intervention, and policy to solve public health issues.

NUTR 510. Advanced Public Health Nutrition. 3 Units.

Advances in public health nutrition and the science base for application to the prevention of disease in the community. Includes nutritional guidelines, policies, monitoring systems, efficacious interventions throughout the life cycle, and interactions between genetic and nutritional factors. Prerequisite: NUTR 506 or equivalent.

NUTR 517. Advanced Nutrition I: Carbohydrates and Lipids. 4 Units.

Provides advanced study of the nutrition, metabolism, and function of carbohydrates and lipids as related to health and disease. Prerequisite: NUTR 506; or biochemistry equivalent; or consent of instructor.

NUTR 518. Advanced Nutrition II: Proteins, Vitamins, and Minerals. 4 Units.

Advanced study of the nutrition, metabolism, and function of proteins, vitamins, and minerals as related to health and disease.

NUTR 519. Phytochemicals. 2 Units.

Discusses the role of phytochemicals in disease prevention and treatment. Reviews current research in this area.

NUTR 520. Sustainable Food Systems. 3 Units.

Introduces the concept of sustainable food systems in relation to nutrition. Discusses the evolution of the food system from historical to modern context and what challenges food systems pose to sustainability. Explains strategies to address these challenges, including plant-based diets and reducing food loss and food waste. Provides a foundation for understanding and commenting on contemporary issues in food systems sustainability.

NUTR 525. Nutrition Policy, Programs, and Services. 3 Units.

Develops professional skills in management of nutrition programs. Includes legislative advocacy and analysis of current nutrition programs at local, state, and federal levels. Laboratory.

NUTR 526. Nutrition Counseling and Education. 2 Units.

Counseling skills, specifically counseling one-on-one and groups, in order to facilitate changes in nutrition status. Teaching/learning styles, development of therapeutic relationships with patients/clients, and development of listening skills. Case-study evaluation and development of group education lesson plans. Includes 1 unit of laboratory.

NUTR 527. Assessment of Nutritional Status. 3 Units.

Provides a foundation for understanding how to collect and interpret anthropometric, biochemical, clinical, and dietary data; and for understanding how to use such data in analyzing food and nutrient intake and needs in individuals, groups, and populations of varying health statuses. Includes 1 unit of laboratory.

NUTR 529. Health Aspects of Vegetarian Eating. 3 Units.

Introduces concepts of vegetarian nutrition as related to health and longevity. Addresses nutritional adequacy, as well as the benefits of vegetarian eating related to the prevention of major chronic diseases, such as heart disease, cancer, obesity, diabetes, and osteoporosis. Covers the interplay between the risks and benefits of vegetarian eating.

NUTR 530. Dietary Assessment of Populations. 2 Units.

Presents an overview of dietary assessment of populations. Discusses methodological issues in the context of the study population, research design, and data collection. Critically evaluates dietary assessment literature. Topics include: variation in diet, advantages and limitations of different dietary assessment techniques, study design, development of food frequency questionnaires, nutrient biomarkers, and assessment of anthropometric measures and physical activity. Prerequisite: Basic nutrition course.

NUTR 531. Community Nutrition Intervention I. 2 Units.

Provides training and practice identifying/assessing community health issues. Students collaborate with local associations and faculty advisers to analyze a public health issue and evaluate intervention alternatives using an asset-based, problem-solving approach.

NUTR 532. Community Nutrition Intervention II. 1 Unit.

Laboratory focusing on the implementation and evaluation of strategies to address community health issues identified and analyzed in NUTR 531. Service learning course. Prerequisite: NUTR 531.

NUTR 534. Maternal and Child Nutrition. 3 Units.

Advanced study of the role of nutrition in human growth and development during the prenatal period, lactation, infancy, and childhood.

NUTR 535. Research Applications in Nutrition. 3 Units.

Overview of research methods in nutrition. Provides an understanding of foundational issues of research design from both the quantitative and qualitative perspectives, as well as understanding of the sequence of procedures in proposal development. Laboratory included.

NUTR 556. Nutritional Applications in Lifestyle Intervention. 3 Units.

Review of literature on the basic nutrients, protein, fat, carbohydrate, vitamins, minerals, and water. Develops skills to analyze, evaluate, and prescribe dietary intake for weight loss, weight maintenance, and weight gain. Reviews current dietary guidelines and pertinent food components relative to their health effects. Trains in skills, tools, and strategies for effective nutrition education. Practical training in nutritional assessment and education skills for lifestyle interventions.

NUTR 557. Nutrition Care Process for Diabetes and Heart Disease. 2 Units.

Knowledge, application, and practice applying the nutrition care process and terminology in assessing patients with diabetes and heart disease; and developing critical thinking skills in identifying and documenting information available in patients' medical chart. Includes 1 unit of laboratory.

NUTR 564. Contemporary Issues of Vegetarian Diets. 2 Units.

Introduces scientific and social issues of vegetarian diets. Provides background information on the history and rationale of vegetarianism, as well as data on the health benefits and risks of a vegetarian diet.

NUTR 578. Exercise Nutrition. 3 Units.

Nutritional needs of professional and recreational athletes. The role of macro- and micronutrients and of supplements as ergogenic aids. Presents overview of current research in the areas of exercise nutrition.

NUTR 585. Topics in Global Nutrition. 3 Units.

Discussion of current issues of importance in international nutrition.

NUTR 595. Special Topics in Nutrition. 1-4 Units.

Current topics in nutrition. May be repeated for additional credit.

NUTR 597. Special Topics in Clinical Nutrition. 1-3 Units.

Current topics in clinical nutrition. May be repeated for additional credit.

NUTR 605. Seminar in Nutrition. 1 Unit.

Explores current major issues in nutrition. Students choose and research a topic or problem and discuss their findings in class. Written report required. May be repeated for additional credit. Prerequisite: Five graduate units in nutrition; or consent of instructor.

NUTR 608. Doctoral Seminar in Public Health Nutrition. 1-3 Units.

Enhances skills relative to scientific literature review, critical thinking, scientific discussion with peers, presentation using advanced audiovisual aids, writing review paper and abstract as per peer-reviewed journal requirements. Maximal interaction with faculty, peers, and visiting nutritional professionals. Limited to doctoral degree students in nutrition. May be repeated for additional credit.

NUTR 617. Preventive Nutrition I: Carbohydrates and Lipids. 2 Units.

Critically reviews the current scientific literature to discuss topics surrounding advances in macronutrient (CHO and lipid) metabolism, discusses the role of quantity and quality of carbohydrate and fat in disease prevention, and provides the rationale and science base of its application to practice. Prerequisite: NUTR 506, NUTR 518. or equivalent.

NUTR 618. Preventive Nutrition II: Protein, Vitamins and Minerals. 2 Units.

Advanced study of current knowledge in nutrition and the rationale and science base of its application to practice in the prevention of disorders. Focuses on the role of proteins, vitamins, and minerals. Prerequisite: NUTR 506, NUTR 517, or equivalent.

NUTR 619. Preventive Nutrition III: Phytochemicals. 3 Units.

Critically review of the current scientific literature to discuss topics surrounding advances in phytochemical metabolism and foods and food groups that are phytochemical rich; and to understand their role in disease prevention.

NUTR 620. Advanced Topics in Nutrition. 3 Units.

Lecture and discussion of an advanced topic in nutrition bearing on the theory or practice of one aspect of the discipline. Specific content varies from year to year. May be repeated for additional credit. Topics may include: nutrigenomics and epigenetics, environment and nutrition, microbiome and diet, etc. Limited to doctoral degree students.

NUTR 634. Concepts of Nutritional Epidemiology. 3 Units.

Overview of nutritional epidemiology. Includes: nutritional epidemiology literature; variations in diet; advantages and limitations of diet-assessment techniques; design, development; validation of food-frequency questionnaires; nutrient biomarkers; implications of total energy intake; and, measurement error and correction. Prerequisite: STAT 521 or PHCJ 615; consent of instructor.

NUTR 639. Research Methods in Nutrition. 2 Units.

Introduces students to the research process related to clinical/human nutrition investigation, familiarizing them with the steps to follow as they organize their research in a logical, focused and efficient way. Covers development of a research question, a research plan, and a study design. Gives consideration to subject selection, sample size, and ethical issues. Prerequisite: STAT 521.

NUTR 643. Advanced Applications in Nutritional Epidemiology. 2 Units.

Applies critical thinking to the development of nutritional epidemiology research. Includes: expansion and enhancement of nutrition databases; critical appraisal of self-reported exposure and outcome data; and, access to and exploration of AHS-2 databases. Prerequisite: NUTR 634.

NUTR 664. Vegetarian Nutrition: Person, Population, Planet. 3 Units.

Presents and discusses the scientific and social issues related to vegetarian diets. Provides background information on the history and rationale for vegetarianism, as well as evidence for the health benefits and risks of a vegetarian diet. A forum in which to discuss personal attitudes and lifestyle approaches to vegetarianism. For doctoral students only.

NUTR 678. Advanced Exercise Nutrition. 3 Units.

Discusses current research in the field of exercise nutrition; nutritional needs of professional and recreational athletes; and the role of macro- and micronutrients as ergogenic aids. Requires a presentation and a term paper on a current research topic in exercise nutrition. Limited to doctoral students. Instructor approval required for master's degree students.

NUTR 685. Preliminary Research Experience. 1,2 Unit.

Experience in various aspects of research under the guidance of a faculty member and by participation in an ongoing project. Must be completed prior to beginning dissertation/research project. Limited to doctoral degree students.

NUTR 694. Research. 1-12 Units.

Independent research for doctoral degree candidates and qualified master's degree students on problems currently being studied in the program, or in other programs(s) with which they collaborate. Research program arranged with faculty member(s) involved. Minimum of 100 hours required for each unit of credit. Written report required.

NUTR 695. Thesis. 2 Units.

Preparation of report of individual, guided experimental-research study in nutrition, under direct faculty supervision. Limited to graduate students whose thesis project has been approved by their research committee.

NUTR 696. Directed Study/Special Project. 1-4 Units.

Individual arrangements for advanced students to study under the guidance of a program faculty member. May include readings, literature reviews, or other special projects. Minimum of thirty hours required for each unit of credit. A maximum of 4 units applicable to any master's degree program.

NUTR 697. Dissertation Proposal. 1-10 Units.

Doctoral student develops a written dissertation proposal and works in collaboration with the dissertation committee chair on mutually agreed-upon objectives that will provide the basis for evaluation. Culminates in a written and oral dissertation proposal defense and advancement to candidacy. Prerequisite: NUTR 697 and advancement to candidacy.

NUTR 698. Dissertation. 1-14 Units.

Student prepares manuscript presenting results of doctoral research study. Limited to doctoral degree students.

NUTR 799B. Dietetic Practicum. 6 Units.

Assignment to hospital or other school-approved organization where practical application of the materials studied regarding food service and medical nutrition therapy is made under the guidance of department faculty and the organization involved. Intended to meet the dietetic practice hours of the Graduate Coordinated Program in Public Health Nutrition and Dietetics.

NUTR 799D. Dietetic Practicum. 12 Units.

Assignment to hospital or other school-approved organization where practical application of the materials studied regarding food service and medical nutrition therapy is made under the guidance of department faculty and the organization involved. Intended to meet the dietetic practice hours of the Graduate Coordinated Program in Public Health Nutrition and Dietetics.