

# Nutritional Sciences (NUT SCI)

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## Courses

**NUT SCI 32TUL. UPPER LVL TRNSFR SUSP HUM ETP. 1 Credit.**

**NUT SCI 198. First Year Seminar. 3 Credits.**

First Year Seminar, topics vary.  
Reserved for New Incoming Freshman.

**NUT SCI 201. Survey of Nutrition Related Professions. 1 Credit.**

An overview of the educational, credentialing and practice opportunities for dietetic and related professions. Explore career options for graduates, examine current trends that impact on future jobs, conduct a self-assessment and develop personal career goals.  
Fall and Spring.

**NUT SCI 202. Ethnic Influences on Nutrition. 3 Credits.**

This course examines the ways in which ethnicity influences food habits and can affect nutrition and health status.  
Fall and Spring.

**NUT SCI 208. Art and Science of Healthy Food Preparation. 3 Credits.**

Students will learn principles, practices and techniques of healthy food preparation. Emphasis will be on learning to combine textures, spices, and ingredients to optimize flavor, aesthetic appeal, and nutritional value of prepared foods. Additionally, students will learn to prepare foods appropriate to health maintenance and disease prevention. The course, taught in the food lab, will incorporate both lecture and hands-on (lab) components.  
Fall Only.

**NUT SCI 212. Science of Food Preparation. 4 Credits.**

Studies the chemical, physical and microbiological characteristics of food and the manipulation of these factors to meet quality standards. Laboratory activities demonstrate principles of food science as applied to food preparation, sanitation and safety.  
P: Chem 108 with at least a C grade or Chem 211 with at least a C grade.  
Fall Only.

**NUT SCI 242. Food and Nutritional Health. 3 Credits.**

Food and Nutritional Health emphasizes and evaluates the practical personal application of nutritional concepts in promoting a healthy diet and lifestyle.  
Fall and Spring.

**NUT SCI 250. World Food and Population Issues. 3 Credits.**

World hunger and population growth as interrelated problems. Dimensions of the world food situation and its implications; scope, complex causes and effects of malnutrition; general strategies and obstacles to the solution of world food and population problems.  
Fall and Spring.

**NUT SCI 270. Sport and Performance Nutrition. 3 Credits.**

Nutrition is essential to sustain and enhance fitness, performance, and health. This course will analyze nutritional and metabolic factors that optimize peak performance. Scientific methods will be put into practice to develop individualized plans to manage nutrition needs. Nutrition periodization practices will be explored in relation to exercise, sport, and human performance to promote energy, recovery, and health.  
Fall Only.

**NUT SCI 299. Travel Course. 1-6 Credits.**

Travel courses are conducted to various parts of the world and are led by one or more faculty members. May be repeated to different locations.  
P: cons of instr & prior trip arr & financial deposit.

**NUT SCI 300. Human Nutrition. 3 Credits.**

Examines the physiologic and metabolic roles of nutrients and their food sources. Analysis of the nutrient content of diets and requirements for maintenance of health and prevention of chronic diseases.  
P: Biology 201/202 with at least a C grade; and Chem 108 with at least a C grade or Chem 212 with at least a C grade.  
Fall and Spring.

**NUT SCI 312. Quantity Food Production and Service. 4 Credits.**

Principles of quantity food preparation, service, and budgeting in food service systems. Projects and laboratories afford pertinent practical experiences.  
P: Nut Sci 212 with at least a C grade.  
Spring.

**NUT SCI 327. Nutritional Biochemistry. 4 Credits.**

A lecture/laboratory course of applied organic chemistry and biochemistry with an emphasis on human nutrition and disease. Examines structure/function relationships and reactions of molecules, metabolic regulation and the roles of nutrients in normal and abnormal metabolism.  
P: Biology 201/202 with at least a C grade; and both Chem 300 and 301 with at least a C grade or both Chem 303 and 305 with at least a C grade.  
Fall Only.

**NUT SCI 350. Life Cycle Nutrition. 3 Credits.**

Covers nutrient needs and physiologic changes relevant to stages of the life cycle. Also examines psychosocial and environmental conditions that impact on nutrition status in each stage.

P: Nut Sci 300 with at least a C grade.

Spring.

**NUT SCI 402. Management in Dietetic Practice. 3 Credits.**

Examines management roles and functions in dietetic practice with an emphasis on a system's approach to management. Focuses on leadership skills and tools needed for operational change and quality improvement.

P: Nut Sci 312 or conc enroll.

Spring.

**NUT SCI 421. Community and Public Health Nutrition. 3 Credits.**

Application and integration of the principles of nutrition concepts and their delivery in the context of social, economic, and cultural environments in various scales of community settings. At the graduate level, emphasis will be placed on agency needs assessment, management and coordination of public health or nutrition programming, and project outcome assessment. At the undergraduate level, a major focus will be on the development and implementation of a nutrition intervention program for a selected target group with measurable goals and objectives.

P: Junior standing, Declared major in Human Biology with a Nutritional Science emphasis or an Applied Public Health emphasis, and NUT SCI 300 with at least a C grade; Concurrent enrollment in Nut Sci 423

Fall Only.

**NUT SCI 423. Community and Public Health Nutrition - Lab. 1 Credit.**

Application and integration of the principles of nutrition concepts and their delivery in the context of social, economic, and cultural environments in various scales of community settings. At the undergraduate level, a major focus will be on the development and implementation of a nutrition intervention program for a selected target group with measurable goals and objectives. In the lab component of this course, students will engage in hands-on experiences that serve as a bridge between theoretical knowledge and practical application, fostering the development of essential professional competencies for effective nutrition program management.

P: Junior standing, Declared major in Human Biology with a Nutritional Science emphasis or an Applied Public Health emphasis, and NUT SCI 300 with at least a C grade, concurrent enrollment required in Nut Sci 421

Fall Only.

**NUT SCI 427. Nutrigenomics and Advanced Nutrient Metabolism. 3 Credits.**

This course examines several biochemical pathways associated with diet and lifestyle related diseases, with emphasis on the role of nutrition in modulating these pathways and disease risk. Nutrigenomics, oxidation/antioxidants, eicosanoid and inflammation mechanisms, and diet and cancer are covered.

P: NUT SCI 300 with at least a C grade; REC: NUT SCI 327.

Spring.

**NUT SCI 470. Advanced Nutrition for Sport and Fitness. 3 Credits.**

This course will address the role of nutrition in enhancing exercise performance. Topics include the principles of energy metabolism during aerobic and anaerobic exercise; biochemical roles of macronutrients, vitamins, and minerals; endocrine and immunological alterations with exercise and diet; fluid balance; sports supplements; and planning diets for athletes.

P: NUT SCI 300 with a grade of C or better; and HUM BIOL 240/241 with a grade of C or better, or HUM BIOL 221/222 with a grade of C or better.

Spring.

**NUT SCI 478. Honors in the Major. 3 Credits.**

Honors in the Major is designed to recognize student excellence within interdisciplinary and disciplinary academic programs.

P: min 3.50 all cses req for major and min gpa 3.75 all UL cses req for major.

Fall and Spring.

**NUT SCI 485. Medical Nutrition Therapy I: An Integrative and Functional Approach. 3 Credits.**

Theory, principles and application of communication and counseling as applied to behavior changes; application of nutrition assessment and the nutrition care plan process. Health care systems, managed care, and reimbursement.

P: PSYCH 102 or PSYCH 203 with at least a C grade; and NUT SCI 300 with at least a C grade

Fall Only.

**NUT SCI 486. Medical Nutrition Therapy II: An Integrative and Functional Approach. 3 Credits.**

Principles and applications of nutrition therapy in the prevention and treatment of common and complex diseases.

P: NUT SCI 485 with a least a C grade

Spring.

**NUT SCI 487. Nutritional Science Seminar. 1 Credit.**

Exploration of the role of the nutrition professional in food and nutrition-related public policy; application of the code of ethics for the dietetics profession.

P: Senior status and enrollment in Nut Sci/Dietetics emphasis

Fall Only.

**NUT SCI 488. Medical Nutrition Therapy II: An Integrative and Functional Approach - Discussion. 1 Credit.**

Practicum learning opportunities to apply counseling and assessment skills in integrative medical nutrition therapy.

P: NUT SCI 485 with a least a C grade; concurrent enrollment in NUT SCI 486.

Spring.

**NUT SCI 495. Teaching Assistantship. 1-6 Credits.**

The student and supervising teacher must prepare a statement that identifies the course with which the assistantship will happen, objectives for the assistantship, and expectations in order to fulfill the course objectives. Students are not eligible to receive credit in both the course they assist the instructor with and the teaching assistantship in the same semester. Typically student has previously taken the course prior to enrollment in the assistantship. Course is repeatable for credit.

Fall and Spring.

**NUT SCI 496. Project/Research Assistantship. 1-6 Credits.**

The student must prepare a research proposal, and both parties should identify the research arrangement and how the student will complete the work to fulfill the course objectives within the assigned term.

P: Chem 207 and approval by faculty mentor.

**NUT SCI 497. Internship. 1-12 Credits.**

Supervised practical experience in an organization or activity appropriate to a student's career and educational interests. Internships are supervised by faculty members and require periodic student/faculty meetings. Course is repeatable for credit.

P: jr st.

Fall and Spring.

**NUT SCI 498. Independent Study. 1-4 Credits.**

Independent study is offered on an individual basis at the student's request and consists of a program of learning activities planned in consultation with a faculty member. A student wishing to study or conduct research in an area not represented in available scheduled courses should develop a preliminary proposal and seek the sponsorship of a faculty member. The student's advisor can direct him or her to instructors with appropriate interests. A written report or equivalent is required for evaluation, and a short title describing the program must be sent early in the semester to the registrar for entry on the student's transcript.

P: fr or so st with cum gpa > or = 2.50; or jr or sr st with cum gpa > or = 2.00.

Fall and Spring.

**NUT SCI 499. Travel Course. 1-6 Credits.**

Travel courses are conducted to various parts of the world and are led by one or more faculty members. May be repeated to different locations.

P: cons of instr & prior trip arr & financial deposit.