# **Nutritional Sciences (NUT SCI)**

## Courses

# NUT SCI 602. Entrepreneurship in Dietetics. 2 Credits.

This course examines strategies to build, grow, and maintain a successful business in nutrition and dietetics-related practices with an emphasis on effective communication and leadership.

Spring.

#### NUT SCI 612. Supervised Experiential Learning Practicum I - Food Service & Systems. 2 Credits.

This course provides supervised experiential learning (SEL) in professional foodservice environments (university and/or public school food service) for students to further develop knowledge and skills needed to demonstrate competency in food systems principles, day-to-day operations, and management.

P: Graduate Standing in the MS/RDN track of the Master of Science in Nutrition and Integrated Health program.

## NUT SCI 614. Supervised Experiential Learning Practicum II - Food Service & Systems. 2 Credits.

This course provides supervised experiential learning (SEL) in professional and clinical foodservice environments (e.g. hospital) for students to further develop knowledge and skills needed to demonstrate competency in food systems principles, day-to-day operations, and management.

#### NUT SCI 621. Community and Public Health Nutrition. 4 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.

P: graduate standing

Fall Only.

#### NUT SCI 627. 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: Graduate standing

Spring.

## NUT SCI 670. 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.

Spring.

# NUT SCI 685. Medical Nutrition Therapy I: An Integrative and Functional Approach. 3 Credits.

This course explores the theory and application of nutrition assessment and counseling skills needed to provide personalized nutrition to diverse clients and patients. It also addresses issues relevant to professional practice including professional ethics and self-care.

P: graduate standing

Fall Only.

## NUT SCI 686. Medical Nutrition Therapy II: An Integrative and Functional Approach. 4 Credits.

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

P: Graduate standing

Spring.

#### NUT SCI 712. Culinary Medicine. 3 Credits.

This course is designed to provide students with fundamental culinary skills combined with knowledge of foods and their nutrients to improve human health, and for prevention and treatment of disease. Emphasis will be placed on culinary skills for the preparation of healthy and delicious whole foods and meals. These skills and knowledge are key to effectively counsel and teach patients/clients the role of diet and lifestyle in health and disease, and empower them to make lasting dietary changes.

P: Graduate standing

Fall Only.

#### NUT SCI 721. Supervised Experiential Learning Practicum - Community Nutrition. 4 Credits.

This course provides supervised experiential learning (SEL) for the student to develop knowledge and skills required to address nutrition-related health issues at the community and public health level. The student spends the majority of their time in community/public health professional settings.

P: Graduate Standing in the MS/RDN track of the Master of Science in Nutrition and Integrated Health program.

#### NUT SCI 750. Nutrient Metabolism Across the Lifespan. 3 Credits.

Vitamins and minerals (micronutrients) are essential for normal development, health, and disease prevention throughout the life span. This course examines the biochemical roles of specific micronutrients in normal developmental physiology from pregnancy through late adulthood, and their role in disease prevention and pathophysiology.

P: graduate standing

Fall Only.

#### NUT SCI 753. Biostatistics and Research Methods. 3 Credits.

This course will cover research designs/methodologies and statistical tools and procedures commonly used across the nutrition sciences field. The course experiences will provide students with the competencies to effectively critique research literature, use statistical tools to analyze and interpret data, improve biomedical research writing skills, and begin to design a capstone/research project.

P: Graduate standing; Introductory Statistics with a grade of C or better

Spring.

#### NUT SCI 754. Nutritional Epidemiology. 3 Credits.

This course introduces students to epidemiological principles and methodologies used in studying the role of diet and lifestyle in chronic disease within and throughout societies and populations. An in-depth understanding of the challenges, limitations and controversies inherent in nutritional epidemiological research is necessary to plan and conduct nutrition-related research, and critically interpret the literature findings to appropriately inform public health nutrition policy and clinical nutrition decision making.

P: Graduate standing

Fall Only.

#### NUT SCI 786. Supervised Experiential Learning Practicum - Medical Nutrition Therapy Long-term Care. 2 Credits.

This course provides supervised experiential learning (SEL) for students to develop knowledge and skills needed to demonstrate competency in the provision of medical nutrition therapy to residents in long-term care settings. The student spends the majority of their time in the clinical setting interacting with real-life patients/residents.

P: Graduate Standing in the MS/RDN track of the Master of Science in Nutrition and Integrated Health program.

#### NUT SCI 787. Medical Nutrition Therapy III: An Integrative and Functional Approach. 3 Credits.

Principles and applications of advanced nutrition therapy in the critical care population, and populations with more complex disease states.

P: Graduate standing

Fall Only.

## NUT SCI 788. Supervised Experiential Learning Practicum - Medical Nutrition Therapy Inpatient. 3 Credits.

This course provides supervised experiential learning (SEL) in the hospital inpatient setting for the student to develop knowledge and skills needed to demonstrate competency in the provision of medical nutrition therapy for a variety of acute and chronic conditions. The student spends the majority of their time in the clinical setting interacting with real-life patients.

P: Graduate Standing in the MS/RDN track of the Master of Science in Nutrition and Integrated Health program.

#### NUT SCI 789. Supervised Experiential Learning Practicum - Medical Nutrition Therapy Outpatient. 2 Credits.

This course provides supervised experiential learning (SEL) for the student to develop knowledge and skills needed to demonstrate competency in the provision of medical nutrition therapy in the outpatient setting. The student spends the majority of their time in the clinical setting interacting with real-life patients/clients.

P: Graduate Standing in the MS/RDN track of the Master of Science in Nutrition and Integrated Health program.

## NUT SCI 796. Special Topics in Nutrition. 3 Credits.

This course explores in depth emerging/controversial nutrition-related topics from the three domains of nutrition/dietetics  $\hat{A}_{\xi}$  food systems, community/public health nutrition and clinical nutrition. The goal is to further hone the student  $\hat{A}_{\xi}$  knowledge and skills in learning about, searching for, critically analyzing and using evidence-based information to inform decisions in food systems, community and/or clinical nutrition.

P: Graduate standing

Spring.

# NUT SCI 799. Capstone Project, Thesis. 3 Credits.

In this course students complete and submit their capstone project/thesis for Approval of Thesis Defense or Project Presentation (GR-4 Form) in completion of their master¿s degree. Course activities include draft submission, peer editing, final submission, and presentation/defense of their capstone project/thesis in an open forum.

P: Graduate standing

Spring.