

# Nutrition (NUTR)

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## Courses

### **NUTR 12001. Introduction to the Dietetic Profession. 1 Hour.**

Introduction to profession of dietetics and nutrition including history, scope and future of professionals with emphasis on academic preparation, internships, acquisition of professional credentials, career laddering and career opportunities. Guest speakers will supplement lectures and assignments. Prerequisite: HNAD or FNAH majors only or by department consent. (Typically offered: Fall and Spring)

### **NUTR 12103. Fundamentals of Nutrition. 3 Hours.**

The functions of food, body processes, optimum diets in relation to health and physical fitness. (Typically offered: Fall and Spring)

### **NUTR 21101. Principles of Foods Laboratory. 1 Hour.**

Laboratory exercises and practice applicable of Principles of Foods. Lab 3 hours. Corequisite: NUTR 21103. (Typically offered: Fall and Spring)

### **NUTR 21103. Principles of Foods. 3 Hours.**

Physical and chemical characteristics of foods, organized by food science and nutrition, protein foods, phytochemicals, complex and refined carbohydrates, and fats. Emphasis on food preparation and storage methods and effect on foods. Investigation and practice of food preparation basics, cooking and baking techniques, knife skills, food safety, and sensory evaluation of food. Corequisite: NUTR 21101. Prerequisite: NUTR 12103, a C or higher in HOSP 26101, (CHEM 12103, or CHEM 14103, or CHEM 12073), one of the following programs, minors or concentrations: (HNADBS, FNAHBS, HESCBS, NUTR-M, or CATEBS-FCSE) and students must also have a current ServSafe Manager's Certification. (Typically offered: Fall and Spring)

### **NUTR 22003. Sports Nutrition. 3 Hours.**

The integration of concepts from nutrition and exercise physiology into an applied multidisciplinary study of how food, beverages and dietary supplements influence physical performance. Prerequisite: NUTR 12103. (Typically offered: Summer)

### **NUTR 31041. Culinary Nutrition Lab. 1 Hour.**

Students will explore ways to apply evidence based nutrition research to culinary application. It addresses the fundamental culinary skills and knowledge required to prepare meals that impact the nutritional and sensory appeal of food. Corequisite: NUTR 31043. Prerequisite: NUTR 21103 and NUTR 21101. (Typically offered: Fall)

### **NUTR 31043. Culinary Nutrition. 3 Hours.**

This course is grounded in a food first approach to health and wellness with an emphasis on disease prevention. Students will study the physical and chemical characteristics of foods that increase nutritional value and will include exploration of the culinary nutrition modification process and application of these concepts to planning nutritionally balanced meals. Corequisite: NUTR 31041. Prerequisite: NUTR 21103 and NUTR 21101. (Typically offered: Fall)

### **NUTR 32003. Human Nutrition. 3 Hours.**

Fundamental human nutrition; nutritive value of foods and general functions of nutrients based on concepts derived from inorganic and organic chemistry. Examples relating nutrition to disease used as illustrations to deepen understanding of normal nutrition. Lecture 3 hours per week. Corequisite: CHEM 26103 and CHEM 26101 or CHEM 36053 and CHEM 36051. Prerequisite: NUTR 12103. (Typically offered: Fall)

### **NUTR 32103. Nutrition Education and Counseling. 3 Hours.**

Introduction to development of communication skills related to educational theory and techniques, development of educational materials, interpersonal communication skills, group dynamics, public speaking, and interviewing techniques. Includes discussion of counseling theory and methods, and how education and counseling are intertwined for nutrition professionals. Includes development of skills in nutrition counseling. Prerequisite: NUTR 12103, HNAD or FNAH majors only, and Junior or Senior standing. (Typically offered: Fall)

### **NUTR 33003. Nutrition Assessment. 3 Hours.**

Principles of nutritional assessment and methodology including anthropometric, biochemical, clinical, and dietary evaluation. Emphasis placed on Nutrition Focused Physical Assessment, the interpretation of indices for all age groups in health and disease for both individuals and groups, and the application of nutrition assessment data in the nutrition care process. Prerequisite: NUTR 32003, junior standing and HNAD/FNAH majors only. (Typically offered: Spring)

### **NUTR 36003. Quantity Foods. 3 Hours.**

This course focuses on menu planning for a variety of food service organizations, with consideration of age, special needs, diet type, cultural and ethical parameters. Students will design flavorful and appealing menus that meet current nutrition recommendations, guidelines and budgetary constraints. They will learn recipe standardization, quantity production, and overall quality control. Prerequisite: NUTR 12103, HOSP 26003, junior standing and Human Nutrition and Dietetics Bachelor of Science (HNADBS) or Food, Nutrition and Health Bachelor of Science (FNAHBS) majors only. (Typically offered: Spring)

### **NUTR 40001. Nutrition Seminar. 1 Hour.**

Presentation and discussion of selected nutrition topics of current interest. Prerequisite: Senior standing and HNAD or FNAH majors only. (Typically offered: Spring) May be repeated for up to 2 hours of degree credit.

### **NUTR 41003. Research Methods in Nutrition. 3 Hours.**

This course will cover applications of experimental methods for investigations in nutrition research and cookery. Pre- or Corequisite: MATH 21003. Prerequisite: Major in either Human Nutrition and Dietetics (HNAD), or Food, Nutrition and Health (FNAH) and senior standing only. (Typically offered: Spring)

### **NUTR 42103. Advanced Nutrition I. 3 Hours.**

This course will cover nutritional, physiological, and biochemical aspects of carbohydrate, protein, and lipid metabolism in humans and their implications in health and disease. Prerequisite: CHEM 38103 and NUTR 32003. (Typically offered: Fall)

### **NUTR 42203. Life Cycle Nutrition. 3 Hours.**

Study of normal nutrition emphasizing quantitative needs for nutrients as functions of biologic processes that vary during stages of the life cycle. Attention is given to preconception, pregnancy, childhood and older adults. Prerequisite: (HNAD majors and NUTR 32003) or (FNAH majors and junior standing) or (Nutrition minors and junior standing) only. (Typically offered: Fall)

### **NUTR 42303. Advanced Nutrition II. 3 Hours.**

This course will cover nutritional, physiological, and biochemical aspects of vitamins and minerals in humans, their functions and roles in metabolism, and their implications in health and disease. Prerequisite: NUTR 42103. (Typically offered: Spring)

### **NUTR 42403. Community Nutrition. 3 Hours.**

Identifying, assessing, and developing solutions for nutritional problems encountered at the local, state, federal, and international levels. Lecture 3 hours per week. Prerequisite: NUTR 12103, junior standing, and Food, Nutrition and Health Bachelor of Science in Human Environmental Science (FNAHBS) or Human Nutrition and Dietetic Bachelor of Science in Human Environmental Science (HNADBS) majors or Nutrition minors only. (Typically offered: Spring)

### **NUTR 42603. Medical Nutrition Therapy I. 3 Hours.**

Principles of medical nutrition therapy with emphasis on the Nutrition Care Process, and the pathophysiology and current standards of practice for diseases and disorders. Pre- or corequisite: NUTR 32103 and NUTR 42103. Prerequisite: BIOL 24103, BIOL 24101, CHEM 38103 and NUTR 33003. (Typically offered: Fall)

### **NUTR 42703. Medical Nutrition Therapy II. 3 Hours.**

Principles of medical nutrition therapy with emphasis on the Nutrition Care Process, and the pathophysiology and current standards of practice for diseases and disorders. Lecture 3 hours per week. Prerequisite: NUTR 42603. (Typically offered: Spring)

**NUTR 43003. Cultural Perspectives on Foods. 3 Hours.**

Cultural competence is growing in importance as our population becomes more culturally diverse. This course covers cuisine and culture of various regions for the purpose of promoting respect and understanding for cultural diversity. Students will learn the history of foods, ingredients, flavor profiles, religious based food practices, etiquette, and customs. Corequisite: Junior or senior standing, and (Human Nutrition and Dietetics majors (HNADBS) or Food, Nutrition and Health majors (FNAHBS) or Hospitality Management (HOSPBS) majors). (Typically offered: Fall)

**NUTR 44031. Recipe Modification Lab. 1 Hour.**

Students will use existing research to identify foods with preventative and functional properties and apply that information to develop recipes for improved nutritional quality and disease management. They will gather data to modify and refine the products and create an educational tool to promote their products. Corequisite: NUTR 44033. (Typically offered: Spring)

**NUTR 44033. Recipe Modification. 3 Hours.**

Students will use existing research to identify foods with preventative and functional properties and apply that information to develop recipes for improved nutritional quality and disease management. They will gather data to modify and refine the product and create an educational tool to promote their product. Corequisite: NUTR 44031. Prerequisite: NUTR 21103 and NUTR 21101. (Typically offered: Spring)

**NUTR 51003. Nutrition Research Design and Methodology. 3 Hours.**

This course focuses on topics such as nutrition research terminology, nutritional epidemiology methods, and experimental scientific methods, technologies, and issues involved in understanding and conducting studies on the relationship between human diet and disease. Evaluation of experimental scientific methods include problem identification, research design, preparation and evaluation of experimental research results and outcomes including techniques in the areas of physiology and biochemistry as related to nutrition and metabolism. This course also helps students refine their scientific writing and presentation skills, and introduces hypothesis and proposal development in the nutritional sciences. Prerequisite: Graduate students only. (Typically offered: Spring)

**NUTR 51103. Advanced Nutrition I. 3 Hours.**

This course will cover nutritional, physiological, and biochemical aspects of carbohydrate, protein, and lipid metabolism in humans and their implications in health and disease. Skills will be developed in critically assessing, interpreting, and presenting research literature on the roles of these macronutrients in human health, and in disease prevention and treatment. Prerequisite: CHEM 38103 and NUTR 32003. (Typically offered: Fall)

**NUTR 52203. Nutrition During the Life Cycle. 3 Hours.**

Study of normal nutrition emphasizing quantitative needs for nutrients as functions of biologic processes that vary during stages of the life cycle. Nutritive needs during pregnancy and childhood are emphasized with some attention to nourishing aging and elderly adults. Factors that affect food choices and eating behavior are also considered. Lecture 3 hours per week. Prerequisite: Graduate standing and consent of instructor. (Typically offered: Fall)

**NUTR 52303. Advanced Nutrition II. 3 Hours.**

This course will cover nutritional, physiological, and biochemical aspects of vitamins and minerals in humans, their functions and roles in metabolism, and their implications in health and disease. Skills will be developed in critically assessing, interpreting, and presenting research literature on the role of these micronutrients in human health and on supplementation of micronutrients for disease prevention and treatment, including herbal supplements. Prerequisite: NUTR 51103. (Typically offered: Spring)

**NUTR 52403. Community Nutrition. 3 Hours.**

Identifying, assessing, and developing solutions for nutritional problems encountered at the local, state, federal, and international levels. Lecture 3 hours per week. Graduate degree credit will not be given for both NUTR 42403 and NUTR 52403. (Typically offered: Spring)

**NUTR 52603. Medical Nutrition Therapy I. 3 Hours.**

Principles of medical nutrition therapy with emphasis on Nutrition Care Process, and the pathophysiology and current standards of practice for diseases and disorders. Lecture 3 hours per week. Prerequisite: Graduate standing and consent of instructor. (Typically offered: Fall)

**NUTR 52703. Medical Nutrition Therapy II. 3 Hours.**

Principles of medical nutrition therapy with emphasis on the Nutrition Care Process, and the pathophysiology and current standards of practice for diseases and disorders. Lecture 3 hours per week. Prerequisite: NUTR 52603. (Typically offered: Spring)