

Nutrition (NTR)

NTR 306 Fundamentals of Nutrition 3 Hours

Essential food components and their functions in life processes.

NTR 307 Introductory Food Science 3 Hours

Application of the principles of food chemistry to processing and preparation techniques.

NTR 107L Introductory Food Science Laboratory 1 Hour

NTR 312 Introduction to Nutritional Sciences 3 Hours

Biochemical, physiological, and cellular functions of energy macronutrients, vitamins and minerals, and the scientific basis for current dietary and nutrient recommendations. Designed for science majors.

NTR 312H Introduction to Nutritional Sciences: Honors 3 Hours

Biochemical, molecular, and cellular functions of nutrients with emphasis on primary scientific literature and current methodology.

NTR 112L Introduction to Nutritional Science Laboratory 1 Hour

Collection and evaluation of dietary intake data, nutrient composition of food, and survey of dietetic practice.

NTR 312R Research in Nutritional Sciences 3 Hours

Introduction to biochemical and molecular biological techniques, enzyme and coenzyme assays, dietary analysis and assessment protocols, and statistical methods in nutritional sciences. Preparation of a scholarly paper and oral presentation of research findings.

NTR 315 Nutrition through the Life Cycle 3 Hours

Adapting nutrition recommendations to physiological changes throughout the life span.

NTR 316 Culture and Food 3 Hours

Influence of culture on foodways around the world.

NTR 317L Introduction to Nutrition Assessment and Education 3 Hours

Explore the fundamentals of nutrition assessment, nutrition education, and behavior change theories as well as their application to the care of individuals and groups in community and clinical settings. Analyze the use of anthropometric, biochemical, clinical, and dietary intake data assessments for effective care of individuals. Identify strategies for successful development and implementation of nutrition education planning using behavior change theory as the guide for development.

NTR 218 Assessment of Nutritional Status 2 Hours

Assessment of nutritional status using anthropometric, biochemical, clinical, and dietary intake data, and development and implementation of effective care for individuals.

NTR 118L Assessment of Nutritional Status Laboratory 1 Hour

NTR 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S Topics in Nutrition 1-9 Hours

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Human Ecology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program.

NTR 321 International Nutrition: The Developing World 3 Hours

Nutrition-related issues in the developing world, including nutrient deficiency and disease, concerns in vulnerable populations (pregnancy, infancy, childhood, and old age), and food aid.

NTR 324 Advanced Food Science 3 Hours

Application of the principles of food chemistry to the development of food products.

NTR 124L Advanced Food Science Laboratory 1 Hour

Individual research project on food product development and evaluation.

NTR 326 Intermediate Nutrition and Metabolism 3 Hours

Integration of nutrition, genetics, cell biology, and molecular biology.

Focuses on the cellular and molecular basis of nutrition-related diseases and nutrient-gene interactions.

NTR 126L Nutritional Sciences Laboratory 1 Hour

Basic laboratory techniques in nutritional sciences.

NTR 327L Advanced Food Science Laboratory 3 Hours

Apply fundamentals of nutrition science, food science, and chemistry to scientific research in creating a novel food product for a chosen target audience. Explore food science, food research and development, fundamentals of nutrition, ingredient functionality, food product sensory evaluation, scientific inquiry, study design, and science communication. Design and execute a scientific study by engineering a unique food product, create scientific abstracts, and create and participate in scientific poster sessions.

NTR 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S Topics in Nutrition 1-9 Hours

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NTR 330 Nutrition Education and Counseling 3 Hours

Application of counseling and learning theories to the care of individuals and groups in community and clinical settings.

NTR 330L Advanced Nutrition Assessment and Counseling 3 Hours

Examine the fundamentals and application of nutrition assessment, nutrition education, counseling, and behavior change theories to the care of individuals and groups in community and clinical settings. Explore the use of nutrition focused physical exam, nutrition care process standardized language, anthropometric, biochemical, clinical, and dietary intake data assessments for effective care of individuals. Identify the implementation of nutrition counseling techniques and communication skills through the understanding of behavior change in individuals.

NTR 331 International Nutrition: Social and Environmental Policies 3 Hours

Explores the nutritional concerns of different countries, environmental aspects of food supply, and social policies needed to balance supply with demand in a sustainable manner.

NTR 332 Community Nutrition 3 Hours

National and international issues in public health and nutrition programs.

NTR 334 Foodservice Systems Management 3 Hours

Procurement, production, and service delivery in foodservice systems.

NTR 234L Laboratory in Foodservice Systems 2 Hours

NTR 337 Principles of Epidemiology in Nutritional Sciences 3 Hours
Introduction the role of epidemiology methods as the basis for selection of study design and data collection tools in nutrition research such as dietary tools, biomarkers of diet or disease, and anthropometric measurements like obesity. Emphasis on interpretation of study results in nutrition research.

NTR 338H Issues in Nutrition and Health: Honors 3 Hours

Identifying, reading, analyzing, writing, and presenting scientific research on selected subjects in nutrition and human health. Detailed literature review as preparation for an honors research thesis.

NTR 338W Issues in Nutrition and Health 3 Hours
Identifying, reading, analyzing, writing, and presenting scientific research on selected topics in nutrition and human health.

NTR 339L Experimental Methods and Design in Nutritional Sciences 3 Hours
Explore nutritional sciences methods and research. Examine overall study design, observational and intervention studies, animal and cell-based research in nutritional sciences, nutritional research assessment methods (such as dietary assessment and biomarkers), and research ethics. Practice assessing and interpreting research findings to evaluate scientific research in nutritional sciences and nutritional epidemiology.

NTR 342 Advanced Nutritional Sciences 3 Hours
Biochemical and molecular biological aspects of carbohydrate, fat, and amino acid metabolism.

NTR 343 Vitamins and Minerals 3 Hours
Biomedical, cellular and molecular, and clinical aspects of vitamins, minerals, and water.

NTR 144M Advanced Nutrition II Laboratory 1 Hour
Advanced laboratory techniques in nutrition assessment and research.

NTR 245C Clinical Practice in Medical Nutrition Therapy I 2 Hours
Application of principles of medical nutrition therapy to the care of clients in the practice setting.

NTR 345M Clinical Practice in Medical Nutrition Therapy II 3 Hours
Application of principles of medical nutrition therapy to the care of patients in health care facilities.

NTR 152, 252, 352 Topics in Field Experience in Nutrition 1-3 Hours

NTR 353 Field Experience in International Nutrition 3 Hours
Supervised study abroad experience designed to help students understand nutrition science issues, applications, related health care practices in a global environment, and other cultures. Students work in schools, hospitals, or similar settings to gain professional experience with food science and dietetics.

NTR 155, 255, 355, 455 Undergraduate Research in Nutrition 1-4 Hours
Supervised individual undergraduate research in nutrition.

NTR 355H Honors Research 3 Hours
Research in biological, biochemical, or nutritional science, coordinated with readings of scientific literature, and a written research report for each semester in which credit is sought.

NTR 355M Advanced Food Systems Management 3 Hours
Financial control, quality assurance, personnel administration, foodservice equipment, layout and design in foodservice operations. Analysis and evaluation of an organized foodservice operation.

NTR 360 Selected Topics in Applied Nutrition 3 Hours

NTR 162 Standards, Ethics, and Credentialing for Dietetic Practice 1 Hour
Identification of standards and discussion of current issues in ethics and credentialing for dietetics practice.

NTR 365 Selected Topics in Nutritional Sciences 3 Hours

NTR 365.2 Nutrition and Genes 3 Hours
Interactions between nutrients and gene expression, including heredity, gene regulation, metabolic disease, developmental abnormalities, and molecular techniques.

NTR 365.4 Obesity and Metabolic Health 3 Hours
Examines the prevalence, prevention, and treatment of adult and childhood obesity, and the metabolic disorders related to obesity.

NTR 365.5 Principles and Applications in Community Engagement 3 Hours
Implement community engagement activities, such as gardening, cooking, and nutrition lessons within a school or other community environment with the goal of improving nutrition and health. Explore evidence-based nutrition programs, such as fundamental principles of food gardening with an emphasis on central Texas, application of skills in the university teaching garden and school gardens, and application of nutrition curriculum in a school setting.

NTR 365.6 Sports Nutrition 3 Hours
Explore the physiology of sports nutrition as well as its practical application such as summarizing physiological adaptations to exercise, and describing energy systems. Examine the role of sport specific body weight, composition measurement, and estimate macronutrient/hydration needs for athletes of different sports.

NTR 365.7 Nutritional Biochemistry: Busting Myths 3 Hours
Introduction to the science of nutrition. Explore components of food (macro- and micronutrients), digestion and absorption, energy metabolism, micronutrients, supplements, energy balance, and the role of nutrition in the growing epidemics of obesity and chronic illnesses.

NTR 365L Experiential Learning in Community Engagement 3 Hours
Implement hands-on community engagement activities, such as gardening, cooking, and nutrition lessons through the experiential learning laboratory within community/school settings to improve nutrition and health and decrease the incidence of chronic diseases. Apply the fundamental principles of nutrition through activities such as food gardening to planting to maintaining a school garden; work within school cultures/constraints to improve the school nutrition/gardening culture; apply effective communication, classroom management/engagement, and teaching skills in working with the public, community leaders, and administrators; and evaluate nutrition programs in schools.

NTR 366L Research Methods in Nutritional Sciences 3 Hours
Focuses on state-of-the-art research in nutrition, including biochemistry and molecular biological techniques for nutrient-gene interactions, enzyme and coenzyme functions, and nutrient analysis of biologic materials. Includes data analysis and statistical methods.

NTR 167 Undergraduate Seminar in Nutritional Sciences 1 Hour

NTR 370 Medical Nutrition Therapy I 3 Hours
The role of nutrition in prevention and treatment of chronic disease such as diabetes and heart disease.

NTR 371 Medical Nutrition Therapy II 3 Hours
Nutritional care of critically ill patients, including techniques of nutrition support.

NTR 372C Practicum in Clinical Dietetics 3 Hours
Supervised practice in health care facilities.

NTR 372F Practicum in Food Services Systems Management 3 Hours
Supervised practice in food service facilities.

NTR 373S Practicum in Dietetic Administration 3 Hours
Supervised practice in the administration of food and nutrition programs.

NTR 374C Practicum in Community Dietetics 3 Hours
Supervised practice in one or more community-based nutrition programs.

NTR 374P Advanced Practicum in Dietetics 3 Hours
Culminating experience in the practice of administrative, clinical, or community dietetics.

NTR 379H Honors Tutorial Course 3 Hours
Supervised individual research on a special topic in nutrition; oral presentation and preparation of a scholarly paper covering the research. May be based on laboratory, library, or field research.

NTR 380K Topics in Research Methods in Nutritional Sciences 3 Hours

- NTR 380K.1 Experimental Nutrition 3 Hours
- NTR 380K.2 Nutritional Immunology 3 Hours
- NTR 380K.3 Experimental Design and Statistics 3 Hours
- NTR 380K.4 Advanced Experimental Design and Statistics 3 Hours
- NTR 380K.5 Carcinogenesis 3 Hours
- NTR 380K.6 Nutritional Biochemistry 3 Hours
- NTR 390 Topics in Recent Advances in Nutritional Science 3 Hours
- NTR 390.1 Advances in Nutritional Sciences I 3 Hours
- NTR 390.10 Geriatric Nutrition and Metabolism 3 Hours
Study of how aging influences nutrient requirements and metabolism at the biochemical and molecular level. Discussion of dietary changes to offset the effects of aging and to improve quality of life.
- NTR 390.12 Nutritional Immunology 3 Hours
- NTR 390.13 Nutrigenomics 3 Hours
Examine the interactions between nutrition and multi-level "omics (e.g., genome, transcriptome, methylome) as they relate to chronic disease and health. Includes a focus on gene-diet interactions in the context of population genetic variation and the bidirectional molecular interactions that influence gene and protein expression as well as epigenetic modification.
- NTR 390.14 Theories of Nutrition Behavior 3 Hours
Explore and examine nutrition-related behavior through the application of health behavior theories and models. Includes theories such as the Health Belief Model, Theory of Planned Behavior, Social Cognitive Theory, Diffusion of Innovations, Transtheoretical Model, Social Support, and Social Ecological Model. Investigate theoretical constructs, benefits and limitations of each theory/model, considerations needed for unique populations or behaviors, and how to develop a theory-based program plan.
- NTR 390.15 Principles of Epidemiology in Nutritional Sciences 3 Hours
Examine the role of epidemiological methods as the basis for selection of study design and data collection tools in nutrition research such as dietary tools, biomarkers of diet or disease, and anthropometric measurements like obesity. Examine the interpretation of study results in nutrition research.
- NTR 390.2 Carbohydrates and Fiber 3 Hours
- NTR 390.3 Lipids 3 Hours
- NTR 390.4 Vitamins and Minerals 3 Hours
- NTR 390.5 Minerals 3 Hours
- NTR 390.6 Molecular Nutritional Sciences 3 Hours
- NTR 390.7 Advances in Nutritional Sciences II 3 Hours
- NTR 390.8 Clinical Nutrition 3 Hours
- NTR 392 Topics in Research Problems in Nutritional Sciences 3 Hours
- NTR 392.10 Nutrition and Metabolism 3 Hours
- NTR 392.11 Obesity 3 Hours
- NTR 392.12 Nutrition as Medicine 3 Hours
- NTR 392.13 Nutrition and Disease Prevention 3 Hours
Explore the role of nutrition as a critical preventive measure for both acute and chronic disease. Examine and evaluate the current research supporting the role of nutrition as a preventative therapy.
- NTR 392.14 Evidence Synthesis and Communications 3 Hours
Introduction to evidence synthesis and communications in nutritional sciences and dietetics. Learn how to evaluate evidence from basic, clinical, and/or translational research and translate the findings and impact to those within your respective field of study as well as across disciplines. Explore hands-on experiences through the completion of article critiques, peer and self-reviews, and the development of scientific presentations to build skills in these areas.
- NTR 392.2 Nutrient Requirements 3 Hours
- NTR 392.3 Nutrition and Cancer 3 Hours
- NTR 392.4 Nutrition and Immunology 3 Hours
- NTR 392.5 Food Sciences 3 Hours
- NTR 392.6 Clinical Nutrition 3 Hours
- NTR 392.7 Nutrition Education 3 Hours
- NTR 392.8 Developmental Nutrition 3 Hours
- NTR 392.9 Foodservice Systems 3 Hours
- NTR 392R Research Hours in Nutritional Sciences 3 Hours
- NTR 194, 294, 394 Topics in Graduate Seminar in Nutritional Sciences 1-3 Hours
- NTR 194.2, 294.2, 394.2 Clinical Nutrition 1-3 Hours
- NTR 194.3, 294.3, 394.3 Molecular and Cellular Nutrition 1-3 Hours
- NTR 194.4, 294.4, 394.4 Nutrition, Immunology, and Disease 1-3 Hours
- NTR 194.5, 294.5, 394.5 Nutrition through the Life Cycle 1-3 Hours
- NTR 194.6, 294.6, 394.6 Study Design and Research Methods 1-3 Hours
- NTR 397C, 697C Conference Course in Nutritional Sciences 3,6 Hours
- NTR 698 Thesis 6 Hours
- NTR 398R Master's Report 3 Hours
Preparation of a report to fulfill the requirement for the master's degree under the report option.
- NTR 398T Supervised Teaching in Nutrition 3 Hours
Teaching under close supervision; group meetings, individual conferences, and reports.
- NTR 399W, 699W, 999W Dissertation 3,6,9 Hours