

# Nutrition - CPS (NTR)

## **NTR 6100. Advanced Nutrition and Metabolism. (4 Hours)**

Examines the metabolism, physiological actions, and interrelationships of carbohydrates, protein, fats, vitamins, minerals, and water. Discusses the regulation of the biochemical pathways and the nutritional principles of macronutrient and micronutrient metabolism; absorption, excretion, transport, and cellular metabolism; nutritional and toxicological standards for humans and animal models; and bioavailability of minerals.

## **NTR 6101. Nutrition Program Planning. (4 Hours)**

Focuses on individual and community nutritional assessment. Emphasizes development, implementation, and evaluation of nutrition intervention programs. Offers students an opportunity to practice setting realistic goals that produce outcomes that improve health and support wellness. Explores changing nutritional behavior and the barriers to such change. This course is intended for graduate students in nutrition or other health sciences and/or human services graduate students interested in developing, implementing, and evaluating community-based nutrition programs.

## **NTR 6105. Foundations of Integrative Health. (4 Hours)**

Introduces the foundational concepts and tools within integrative health and wellness. Integrative health is centered around an ecosystem of relationships, strategies, and tools. Focuses on the unique characteristics of the mind, body, spirit, and environment and their interplay. Offers students an opportunity to obtain an understanding of the impact that culture and belief systems have on wellness practices and to appreciate that people are active partners in healing. Seeks to help empower students to engage fully with opportunities to cultivate resilience and foster holistic well-being.

## **NTR 6110. Medical Nutrition Therapy. (4 Hours)**

Explores the application of nutrition principles to the treatment and prevention of diseases. This treatment can range from changes in diet to providing specialized therapies such as intravenous or tube feeding. Discusses lifestyle strategies and therapeutic nutrient intervention to correct nutritional insufficiencies; promote optimal health; and prevent, manage, or correct medical problems.

**Prerequisite(s):** NTR 6100 with a minimum grade of C-

## **NTR 6112. Research Methods in Nutrition. (4 Hours)**

Examines the varying techniques and methods used in nutritional research. Offers students an opportunity to learn how to critically analyze and interpret research literature.

## **NTR 6115. Health Promotion/Disease Prevention. (4 Hours)**

Examines health promotion—the science and art of helping people change their lifestyle to move toward a state of optimal health. Lifestyle changes can prevent chronic diseases, such as heart disease, cancer, and diabetes, which are the leading causes of death and disability in the United States. Reviews and critically assesses current efforts to influence lifestyle change, at both the individual and population levels. Offers students an opportunity to plan, organize, and conduct lifestyle change programs.

## **NTR 6118. Clinical Health Behavior Change. (4 Hours)**

Explores health behavior theories to facilitate the adoption of healthful behaviors to various groups. Includes motivational interviewing; practice of nonverbal, active listening; goal assessment; and group counseling. Explores the evaluation of nutrition education interventions.

## **NTR 6119. Pediatric Nutrition. (4 Hours)**

Explores the nutritional requirements of the healthy child from infancy through adolescence. Covers the assessment, treatment, and management of a variety of pediatric diseases and conditions, including prematurity, growth failure, food allergies and intolerances, developmental disabilities, diabetes, and obesity. Explores the global issues affecting children today, including malnutrition, obesity, and environmental health.

## **NTR 6120. Healthy Aging: Nutrition Strategies for Optimal Longevity. (4 Hours)**

Offers a general survey of the impact of aging on the nutritional status of older adults. Covers the relationship between nutrition, body composition, and activity level and their impact on rehabilitation of older adults. Encourages students to look for the clinical signs and symptoms in aging clients that may require nutritional interventions. Offers students an opportunity to acquire strategies for the treatment and prevention of diseases and conditions that are associated with aging and become familiar with various cultures known for their longevity.

## **NTR 6125. The Process of Health and Healing: Exploring Systems in the Body—Part 1. (4 Hours)**

Focuses on applying research to understand the process of health and healing. Recognizes that each person's body is its own unique ecosystem and the path toward health and wellness may differ for each individual. Examines the phenomenon of epigenetics and helps students understand that genetic makeup is not the only factor in the expression of health and wellness. Explores the systems of the body and how to identify factors that may interfere with the healing process or disrupt individual well-being. Explores the metabolic, endocrine, and cardiovascular systems, among others.

**Prerequisite(s):** NTR 6105 with a minimum grade of C-

**NTR 6130. Healthcare and Nutrition Communication. (4 Hours)**

Examines cutting-edge research and current theories in health and nutrition communication. Studies empirically proven health campaigns, offering students an opportunity to understand the key qualities of messages that can best influence health-related decision making. Analyzes the mechanisms for transmitting key knowledge to a target audience, including the potential utility of social networking tools in developing nutrition as an applied science. Offers students an opportunity to test their own messages using print and electronic media. Seeks to help nutrition scientists create communities of "healthy practice" among populations that would benefit the most from improved nutrition.

**NTR 6135. The Process of Health and Healing: Exploring Systems in the Body—Part 2. (4 Hours)**

Offers an advanced exploration of the process of health and healing and a continued examination of various systems in the body, including the immune, gastrointestinal, and nervous systems. Leverages this knowledge to consider the range of evidence-based practices influencing various health and wellness outcomes.

**Prerequisite(s):** NTR 6125 with a minimum grade of C-

**NTR 6148. Exercise Physiology. (3 Hours)**

Covers the advanced study of concepts, principles, and research in the field of exercise physiology. Discusses advanced concepts in the muscular/neuromuscular, cardiovascular, ventilatory, endocrine, and metabolic responses to exercise and exercise training. Specific study of the physiological control mechanisms regulating these systems are also addressed during periods of rest, acute exercise, and following chronic exercise training.

**NTR 6150. Sports Psychology. (3 Hours)**

Covers topics such as eating disorders among athletes, female athlete triad, and weight management. Discusses performance enhancement, motivation, and stress management of athletes. Offers students an opportunity to develop skills to counsel athletes, as well as sports teams, and to develop an understanding of behavioral change theory as it relates to sports psychology.

**NTR 6155. Nutrition Entrepreneurship. (3 Hours)**

Includes advanced analysis of the problems and considerations involved in establishing, organizing, and operating a nutrition-based business or clinical nutrition practice. Focuses on tools, techniques, and resources necessary for establishing a business, including developing a business plan, marketing and advertising, and reimbursement and legal and regulatory matters.

**NTR 6160. Survey of Integrative Practices and Interventions. (4 Hours)**

Uses an evidence-based approach from multiple sources of information to explore the realm of integrative holistic practices. Examines current scientific literature; medical and technological advances; and the intersections between conventional, ancient, and healing practices. Offers an overview of holistic practices including, but not limited to, somatic, qi gong, energy medicine, yoga, massage, and acupuncture. Identifies a wide range of approaches that leverage familial, social, and community supports that are culturally appropriate, strengths-based, and developmentally appropriate to support whole health.

**Prerequisite(s):** NTR 6105 with a minimum grade of C-

**NTR 6165. Food and Society. (4 Hours)**

Covers healthy food trends and food products that affect how we live. Includes advanced analysis of food in our society and environment. Examples are the organic movement, product and meal trends in supermarkets and restaurants, food and the economy, food politics, food labeling, and culinary nutrition trends. Focuses on how one can implement the findings into one's practice and/or area of expertise.

**NTR 6170. Epidemiology. (4 Hours)**

Introduces students to the background, basic principles, and methods of public health epidemiology. Epidemiology is the study of the distribution and determinants of health and disease in different human populations and the application of methods to improve disease outcomes. As such, epidemiology is the basic science of public health. Discusses the biological, behavioral, sociocultural, and environmental factors associated with the etiology and distribution of health and disease. Topics include basic principles of epidemiology; measures of disease frequency; epidemiologic study designs: experimental and observational; bias; confounding; outbreak investigations; screening; causality; and ethical issues in epidemiologic research. Offers students an opportunity to develop skills to read, interpret, and evaluate health information from published epidemiologic studies.

**NTR 6200. Nutrition Education. (4 Hours)**

Presents methods for creating and evaluating nutrition content for educational presentations. Offers students an opportunity to develop educational materials with an eye toward audience and context-appropriate language. Encourages students to reflect on the purpose of particular educational materials and then fashion nutrition messages that have the best chance of eliciting meaningful behavioral changes. Requires students to produce highly effective educational materials from start to finish and, in the process, practice the commonly used methods for writing, editing, and designing appropriate educational tools.

**NTR 6201. Commercialization of Nutrition and Nutritional Information. (3 Hours)**

Examines the commercialization of food from the perspectives of the marketers and consumers. In the United States, the consumption of food and nutritional information is mediated by advertisements and infomercials. In contemporary society, the market shapes what we eat and what we think that we should eat. This course offers students an opportunity to evaluate the role that commercial enterprises play in influencing notions of healthy nutrition and nutrition education. Features images and copy found in print advertisements, television, popular online sources, and movies and product placements.

**NTR 6202. The Financing of Nutrition and Wellness. (3 Hours)**

Assesses the impact that public and private funding has on health communication and nutrition campaigns. In the United States, health campaigns are determined, in part, by the funding that they receive. Unfortunately, private and public funding of healthcare has traditionally embraced a pathological model, one in which payment was driven by curing the sick rather than maintaining the healthy. With a greater focus on controlling healthcare costs, policymakers, employers, and insurance companies have sought to promote health through nutritional information and wellness programs. The challenge is to find ways of financing these efforts. Offers students an opportunity to develop policy recommendations for supporting better nutrition practices among a diverse population.

**NTR 6866. Applied Research in Nutrition. (1-4 Hours)**

Offers graduate students in applied nutrition an opportunity to obtain experience in the formal presentation of research results. Emphasizes the components of quality research. Offers students an opportunity to conduct, analyze, and present an evaluative or applied research project in a clear, concise, and logical manner.

**Prerequisite(s):** NTR 6112 (may be taken concurrently) with a minimum grade of C-

**NTR 6962. Elective. (1-4 Hours)**

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**NTR 7130. Overweight and Obesity 1. (4 Hours)**

Addresses the epidemiology of obesity, as well as the etiology and possible causes. Discusses the medical management and complications of obesity in-depth. Students review and critically assess current treatment strategies, such as pharmacotherapy, bariatric surgery, and behavioral approaches. Considers new research and paradigms for the causes and treatment of obesity.

**NTR 7132. Overweight and Obesity 2. (4 Hours)**

Examines a variety of topics in the current literature, some controversial, related to the etiology, management, treatment, and psychosocial ramifications of obesity. Offers students an opportunity to conduct an extensive review of the existing literature on various topics connected with obesity. The goal is to critically analyze and draw conclusions on how particular topics affect certain key areas in obesity, including clinical management, health promotion and disease prevention, and policy, as well as individual perceptions.

**Prerequisite(s):** NTR 7130 with a minimum grade of C-

**NTR 7135. Eating Disorders in Children and Adults. (4 Hours)**

Examines eating disorders in children and adults, including the definition and clinical presentation of eating disorders. Considers the medical complications of eating disorders, as well as the relationship between eating disorders and obesity. Examines family issues, especially for children and adolescents, in the etiology and treatment of eating disorders. Analyzes existing approaches to treatment, as well as new and experimental treatments.

**NTR 7140. Wellness and Nutrition. (4 Hours)**

Debates the notion that ideas of wellness are culturally contingent and socially constructed. As part of that investigation, the course surveys the nexus among nutrition habits and public health, primary education and lifelong healthy habits, and emerging trends toward corporate wellness and nutrition coaching. Offers students an opportunity to study and apply the latest research and theories relating to health maintenance and preventative nutrition. Requires students to carefully reflect upon the various definitions of wellness. Explores the construction of nutrition expertise and its involvement in large public and private programs designed to motivate individuals to engage in healthy lifestyles.

**NTR 7147. Sports and Fitness Nutrition. (3 Hours)**

Focuses on understanding the specific role of energy and nutrients in fitness and athletic performance. Additional topics include the role of fluid and electrolytes, ergogenic aids, and special diets in physical activity. Explores tools for assessing body composition (body fat, muscle mass), unique dietary concerns across the life span and in special population groups (heart disease, diabetes, obesity), and the effect of diet on endurance.

**NTR 7880. Wellness in Practice. (1-4 Hours)**

Presents a guided experience that offers students an opportunity to link theory and practice. Students gain experience in the field of nutrition, integrative health, and wellness, either in-person or online, and develop or work on an established project or program that is relevant to the student's specialization. Seeks to help students construct a "portfolio" piece that can be included in job application packages and applied in their place of practice.

**NTR 7962. Elective. (1-4 Hours)**

Offers elective credit for courses taken at other academic institutions.

**NTR 7978. Independent Study. (1-4 Hours)**

Offers independent work under the direction of members of the department on a chosen topic.