### NTR 505 Advanced Nutrition  
**3 Credits**

This course examines the metabolism, physiological actions and interrelationships of carbohydrates, protein, fats, vitamins, minerals and water. Topics discussed include 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.

**Prerequisite:** ALH 502, unless student is a Registered Dietician (RD).

**Offered:** every fall, online only.

### NTR 510 Adult and Pediatric Obesity  
**3 Credits**

This course addresses the epidemiology, etiology, and risk factors associated with obesity across the lifespan. The medical management and complications of obesity will be discussed in depth. Students will review and critically assess current treatment strategies such as pharmacotherapy, bariatric surgery, and behavioral approaches. Review and discussion of current research and theory will allow students to gain a broad understanding of the causes, prevention, and treatment of obesity.

**Prerequisite:** ALH 502, unless student is a Registered Dietician (RD).

**Offered:** every spring, online only.

### NTR 512 Eating Disorders in Children and Adults  
**3 Credits**

This course is an in-depth examination of eating disorders in children and adults, including the definition and clinical presentation of eating disorders. Medical complications of eating disorders will be considered, as well as the relationship between eating disorders and obesity. Family issues, especially for children and adolescents, in the etiology and treatment of eating disorders will be examined. Existing approaches to treatment will be examined, as well as new and experimental treatments.

**Prerequisite:** ALH 502, unless student is a Registered Dietician (RD).

**Offered:** every spring, online only.

### NTR 536 Exercise Physiology  
**3 Credits**

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.

**Offered:** every summer, online only.

### NTR 603 Nutrition Seminar  
**3 Credits**

This course is to provide graduate students in nutrition with experience in formal presentation of research results, with emphasis on the components of quality research. The students will present a research seminar on a research topic (relating to their required project) in a clear, concise and logical manner. Students will write an abstract, with references, that summarizes the research seminar.

**Prerequisite:** permission of program director.

**Offered:** fall, spring, & summer; online only.

### NTR 612 Sociology of Nutrition  
**3 Credits**

This course addresses the effects of family and society on food availability and the development of eating habits, food rituals and norms, and body acceptance across the lifespan. The influence of family systems and cultural contexts on psychosocial development and the adoption of pathogenic eating behaviors will be explored. Theoretical perspectives related to the epidemiology, prevention and treatment of eating disorders and obesity will be examined in depth.

**Offered:** every fall, online only.