

School of Health Professions

Department of Nutritional Sciences Coordinated Program in Dietetics NUTR 4150 Advanced Nutritional Physiology

Course Description:

The course covers the integration of nutrition sciences with physiology. The course content follows a sequence of lectures about the major body systems along with case studies and exercises designed to stimulate the student to think about how the body integrates various physiologic functions to maintain homeostasis. The course content and application of human physiological principles are essential for dietetics majors. The course provides a foundation for students planning to study medical nutritional therapy.

Credits: Four (4)

Course Format and Modes of Instruction:

This course is a web-based class consisting of readings from the textbook, discussion activities posted on the discussion board, links to informational cites on the internet, lecture handouts, written assignments, and practice quizzes.

Prerequisites:

None

Course Goals and Objectives:

The course will focus on the study of the human body and the structure-function relationships contributing to homeostasis. A functional approach is used to cover the nervous, muscular, cardiovascular, respiratory, digestive and urinary systems with specific reference to nutrients involved in the specific body system. Throughout the course basic ideas and principles are referenced to develop an understanding of how nutrients function at the cellular level, determining observable events in tissues, organs, organ systems, and the human organism.

In addition to teaching the topics associated with nutritional physiology, the class is also designed to provide dietetics students with a learning experience to promote critical thinking and written and communication skills, attributes critical to succeeding in the professional career setting. Students will be required to use literature searches, reading comprehension, and written communication skills to explain how the body integrates various physiological factors to maintain homeostasis.

The global objective of this course is to provide students with an environment to develop the critical thinking skills and problem solving abilities to be successful in their professional endeavors. Although the primary focus of this course is to provide students with an understanding of the complex interactions among the various systems of the human organism, the subject matter is only a *tool* to develop a sense of maturity and professionalism required to be successful in meeting individual goals and expectations in their professional lives. Much of the course will focus on building a fundamental understanding of the workings of the human body, but also will allow students to explore topics in more detail through the weekly assignments.

Requirement	Weight
Exam 1	15%
Exam 2	15%
Weekly Discussion	30%
Case Studies	20%
Comprehensive Final Exam	20%

Course Requirements: