

Department of Nutritional Sciences Coordinated Program in Dietetics NUTR 3610 Nutritional Aspects of Organic Chemistry

Course Description:

This course is designed to provide an organic chemistry background to students in the Coordinated Program. It is a 3-credit course, which covers organic chemistry principles and concepts related to the field of nutrition and dietetics. Nutritional Aspects of Organic Chemistry serves as a fundamental course for understanding how organic compounds are assimilated into the body by digestion, absorption, and intermediary metabolism. The significance and role of these compounds found in the food supply and in the body is emphasized. The course foundation of knowledge prepares the student for the Nutrition Biochemistry course of the program. The course is tailored to meet the needs of students who intend to pursue their education in the field of nutrition and dietetics.

Credits: Three (3)

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 goals for students of this course are:

- to demonstrate knowledge of organic chemical compound nomenclature including alkanes, alkenes, alkynes, and aromatic compounds.
- to identify compound classifications that relate directly to food constituents and the human body.
- to explain the role of organic compounds and functional groups found in foods and the human body.
- to demonstrate knowledge of the chemical role of catalysts and enzymes.

Upon course completion the student should be able to:

- interpret the basic concepts and underlying principles of organic chemistry.
- utilize the principles of organic chemistry in the study of nutrition and dietetics.
- demonstrate an understanding of the role that organic compounds play in the food supply and in the body
- apply the principles of organic chemistry to the science of nutrition and practice of dietetics.
- analyze the role of organic chemical compounds in metabolic processes within the human body.

Course Requirements:

Requirements	Points
Course Expectation Quiz	15
Weekly Homework Assignments	135
Weekly Quizzes	90
Weekly Discussion Boards	110
Midterm Examination	100
Final Examination	100