Course Description

Studies food composition, dietary guidelines, and nutrients essential to healthy human life. Analyzes nutrient function and metabolism. Lecture 3 hours per week.

General Course Purpose

The purpose is to help the student recognize the relationship between good nutrition and the health, well-being, and productivity of individuals. The student must acquire knowledge of the various nutrients required by the human body, their function, and the process of how our body digests and utilizes food.

Course Prerequisites/Co-requisites

No pre-requisite courses required.

Course Objectives

Upon completion of this course, the student will be able to:

- Identify the six major nutrient classes and state their function
- Describe the role of energy nutrients in the diets
  - fats
  - carbohydrates
  - protein
- List the water and fat soluble vitamins, their functions, and major food sources
- Describe the functions of fiber and other non-nutrient components of the diet and their role in health promotion
- Describe symptoms of the most common nutritional deficiencies
- Describe the processes of digestion, absorption, and metabolism of the major energy nutrients
- Assess the adequacy of various nutrients in an individual's diet based on the RDAs and DRIs
- Understand the foundation for planning a healthy diet
- Use a computer nutritional analysis program to evaluate their diet
- Interpret the Dietary Guidelines for Americans and ChooseMyPlate.gov Guidelines.

Major Topics to be Included

- Process of digestion, absorption, and metabolism of major nutrients
- Six classes of essentials nutrients, their functions and sources
  - macro nutrients
  - micro nutrients
- Energy requirements
- Basic metabolic rate
- Fat soluble vitamins
- Water soluble vitamins
- Symptoms of nutritional deficiencies
- Evaluation of diet
- DRIs – Dietary Reference Intakes
- Food labeling
- Dietary Guidelines