



## BIO 220: Introduction to Nutrition

This course focuses on human dietary needs. The course emphasizes the health-related roles of carbohydrates, fats, proteins, and vitamins. The course also covers minerals, energy metabolism, food-product labeling, and nutritional requirements of the pregnant woman and fetus. Issues of consumer concern are considered throughout this course. Prerequisite: BIO 111 or BIO 121 or BIO 233 with a grade of C or better; CHM 111 or higher with a grade of C or better. Three class hours per week. Gen. Ed. Competencies Met: Scientific Reasoning and Discovery.

### Course Student Learning Outcomes

1. List the organs of the digestive system and their functions. 2. Define metabolism and explain its role in energy production. 3. Compare and contrast carbohydrates, proteins and lipids and list the functions of each. 4. State the recommended number of servings for each food group in the Dietary Guidelines for Americans. 5. List the 13 vitamins and state the differences between water-soluble and fat-soluble vitamins. 6. Describe the significance of body mass index and its association with overweight, underweight and obesity. 7. Discuss the importance of water and minerals in the body. 8. State the general recommendations for calories from carbohydrates, proteins and fats for an athlete. 9. Describe the two main ways that pathogenic bacteria can cause food borne illness. 10. List the most common food allergies and some of the symptoms of food allergies. 11. List the most common food preservation techniques. 12. List the 3 major concerns about genetically-engineered crops.

**Credits:** 3

**Program:** Biology