



Course Name: Introduction to Nutrition

Course Number: BIO* E111

Credits: 3

Catalog description: An introduction to the fundamental principles of nutrition. The six essential nutrients are discussed in relationship to energy, growth and metabolism. Investigation of the scientific research on foods and their effect on health, disease and weight management. Students will perform a computerized analysis of their diet and make dietary modifications on their findings.

Prerequisite, Corequisite, or Parallel: *none*

General Education Competencies Satisfied:

HCC General Education Requirement Designated Competency Attribute Code(s):

SCKX **Scientific Knowledge & Understanding**

Embedded Competency(ies):

None

Discipline-Specific Attribute Code(s):

SCI **Science elective**

Course objectives:

General Education Goals and Outcomes:

Scientific Knowledge & Understanding: Students will gain a broad base of scientific knowledge and methodologies in the natural sciences. This will enable them to develop scientific literacy, the knowledge and understanding of scientific concepts and processes essential for personal decision making and understanding scientific issues.

Course-Specific Objectives:

1. Determine the major and minor nutrients in food, their food sources, nutrient requirements and role in human body.
2. Describe the digestive and absorption process of foods by the human digestive system.
3. Specify factors that determine energy balance.
4. Differentiate between evidence based nutrition research and anecdotal nutrition information.



5. Collect and analyze specific dietary data and formulate dietary recommendations.
6. Compare and contrast nutrition research based on correlation vs causation.
7. Evaluate the American diet using tools from the US government.
8. Propose and support nutrition recommendations for nutrition related conditions.
9. Identify, evaluate and discuss solutions for the ethical issues in the USA food system.

Course Content:

1. The Science and Scope of Nutrition
2. Healthy Diets
3. Digestion
4. Carbohydrates
5. Diabetes
6. Lipids
7. Cardiovascular Disease
8. Protein
9. Plant Based Diets
10. Cancer
11. Vitamins
12. Minerals
13. Energy Balance and Weight Management
14. Nutrition and Fitness

Date Course Created:

Date of Last Revision: 01/23/2017