



## BIO 160: Introduction to Food Science

Food science is the multidisciplinary study of food, utilizing biology, chemistry, nutrition, engineering and other sciences. This course is designed to give students a basic overview of the food science disciplines, with a specific focus on the scientific method. Topics discussed include the physical and chemical properties of food, food microbiology, food analysis, sensory science, and the effects of food processing and preservation. Three lecture and two laboratory hours per week. Instructional Support fee applies. Gen. Ed. Competencies Met: Scientific Reasoning and Discovery.

### Course Student Learning Outcomes

After successful completion of this course, student should be able to: 1. Use the scientific method to conduct inquiry based experiments. 2. Identify and describe the importance of microorganisms in food processing, spoilage and preservation. 3. Explain how the cooking process affects food on a molecular level. 4. Identify and describe methods of food preservation including refrigeration, freezing and pasteurization. 5. Explain the role of foods and beverages as a vehicle of infection and intoxication. 6. Prepare a line graph to present experimental data. 7. Describe the regulatory oversight of the food industry in the United States.

**Credits:** 4

**Program:** Biology