

Food Science

Credits:	3 (3/0/0)
Description:	Meets MnTC Goal Area 3. This course addresses the use of public policy and food technology to reduce or control risks in our food supply. An overview of microbiological, chemical and environmental risks will be presented, as well as government and industry controls used to ensure food safety. This course includes laboratory-like components. Students will use common laboratory techniques to identify select food-borne pathogens and utilize principles of risk assessment and hazard analysis to perform a disease outbreak investigation.
Prerequisites:	None
Corequisites:	None
Competencies:	<ol style="list-style-type: none"> 1. Apply scientific principles to problem solving. 2. Identify common sources of food contamination. 3. Investigate the magnitude and complexity of food safety issues. 4. Explain human health issues related to biological, chemical, and environmental hazards in foods. 5. Discuss the etiology and epidemiology of food-borne pathogens. 6. Discuss key components of the Hazard Analysis Critical Control Point (HAACP) program and Good Manufacturing Practices (GMPs). 7. Summarize technology and sanitation methods used to maintain food quality. 8. Analyze the efficacy of food policies and regulations designed to reduce risk. 9. Recognize value assumptions affecting interpretations and analyses of food safety issues. 10. Apply risk assessment and management principles to make decisions regarding food safety and security. 11. Examine issues surrounding food availability, production, and safety.
MnTC goal areas:	3. Natural Sciences