



MASTER COURSE OUTLINE

A. FSCI 1015 Food Quality and Safety

B. COURSE DESCRIPTION:

This course focuses on several aspects related to producing a quality food product. Students will become familiar with safe food handling procedures and product flow, Hazard Analysis and Critical Control Point (HACCP), equipment and sanitization procedures, and the importance of governmental rules and regulations as they pertain to food safety and food defense. Students are introduced to state and federal regulatory agencies involved in ensuring safe food.

(3 Cr – 3 lect, 0 lab)

C. **Core Theme: Ethical and Civic Responsibility

D. RIVERLAND INSTITUTIONAL LEARNING OUTCOMES:

This course addresses the following Riverland Institutional Learning Outcome(s):

- ILO 1: critical thinking (*Core Theme Goal 2*)
- ILO 2: awareness of the larger global community (*Core Theme Goal 7 or 8*)
- ILO 3: ethical, engaged citizenship (*Core Theme Goal 9 or Goal 10*)
- ILO 4: communication and collaboration (*Discipline Goal 1 and by any learning outcome(s) involving communication or collaboration*)

E. MAJOR CONTENT AREAS:

- Food safety and sanitation overview
- Food safety and food defense regulations and laws
- Role of regulatory and federal agencies such as the Food and Drug Administration (FDA), United States Department of Agriculture (USDA) and Centers for Disease Control (CDC)
- Hazards to food safety: biological agents, chemical agents and physical agents
- Potential threats to food product flow, property and personal systems
- Factors that influence foodborne illness
- Food product flow

- Knowledge of HACCP (Hazardous Analysis Critical Control Point) system and significance of GMPs (Good Manufacturing Processes) and SOPs (Standard Operating Procedures)
- Personal hygiene as it relates to effective sanitation practices
- Principles and methods of sanitizing equipment and the work environment

F. GOAL TYPES, OBJECTIVES, AND OUTCOMES:

<u>GOAL</u>	<u>OBJECTIVES</u> Students will be able to	<u>OUTCOMES</u> The student will successfully
** <u>Ethical and Civic Responsibility</u>	identify ways to exercise the rights and responsibilities of citizenship.	<ol style="list-style-type: none"> 1. explain the role that the FDA, USDA, FSIS, CDC, and EPA have in protecting the food supply. 2. identify food laws and recent food initiatives. 3. demonstrate an understanding of federal regulatory agencies involved in assuring the safe production and transport of food from a national and international standpoint.
<u>CS</u>	define/describe the various food-borne illnesses and potential causes.	<ol style="list-style-type: none"> 1. identify, the biological, chemical, and physical agents that cause food-borne illness.
<u>CS</u>	describe how to prevent food-borne illness.	<ol style="list-style-type: none"> 1. identify factors (proper personal hygiene and food storage) that contribute to food-borne illness.
<u>CS</u>	identify the principal components of HACCP, a preventative food safety management system.	<ol style="list-style-type: none"> 1. demonstrate proficiency in understanding HACCP.
<u>CS</u>	demonstrate an understanding of methods and chemicals used to sanitize the food processing environment and the importance of pest control.	<ol style="list-style-type: none"> 1. explore the various types of sanitizing agents and what contributes to their effectiveness. The role of environmental sanitation as it pertains to pest control will also be examined.
<u>CS</u>	recognize and identify behaviors that may put the food product at risk for adulteration.	<ol style="list-style-type: none"> 1. apply methods to recognize and reduce the likelihood of intentional contamination of food at work and during transport of the food product.
<u>CS</u>	demonstrate a basic knowledge of the major food-borne bioterror agents and their characteristics.	<ol style="list-style-type: none"> 1. identify the foods and agricultural products are high risk targets for biological attack.

G. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact Accessibility Services at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request.

H. COURSE CODING INFORMATION: Course Code C/Class Maximum: 48; Letter Grade

Revision date: 04/30/10; 02/07/18; 3/22/2022; 10/04/22

AASC Approval date: 03/06/18; 03/22/2022; 10/18/22

*Riverland Community College Disciplines	MnTC Goal Number
Communication (CM)	1
Natural Sciences (NS)	3
Mathematics/Logical Reasoning (MA)	4
History and the Social & Behavioral Sciences (SS)	5
Humanities and Fine Arts (HU)	6

**Riverland Community College Core Themes	MnTC Goal Number
Critical Thinking (CT)	2
Human Diversity (HD)	7
Global Perspective (GP)	8
Ethical and Civic Responsibility (EC)	9
People and the Environment (PE)	10

*These five MnTC Goals have been identified as Riverland Community College Disciplines.

** These five MnTC Goals have been identified as Riverland Community College Core Themes.

NOTE: The Minnesota Transfer Curriculum “10 Goal Areas of Emphasis” are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.