Discipline: Agriculture Sub-discipline: Food Safety

General Course Title: Introduction to Food Safety Min. Units: 1.5 Semester

Proposed Suffix:

Course Description: An introductory course in food safety for those interested in exploring career positions. Covers conditions and practices that cause food borne illnesses, organisms responsible, elements of a food safety control system, worker sanitation, an introduction to best practices at the processing, retail and home kitchen.

Field trips may be required.

Required Prerequisites or Co-Requisites<sup>1</sup>

Advisories/Recommended Preparation<sup>2</sup>

Course Objectives: At the conclusion of this course, the student should be able to:

- describe the conditions or practices that lead to food borne illness.
- discuss the types of microorganisms that can cause food borne illness.
- evaluate risks and propose mitigating actions commonly employed in a specific food commodity.
- discuss the importance of food safety training for workers.
- identify food borne illness hazards in the home kitchen and select alternative practices.
- discuss the pros and cons of careers in food safety.

## Course Content:

- 1. Why do we have food borne illnesses?
  - a. Causes of contamination on food products.
  - b. Overview of microorganisms responsible for food borne illness
    - 1) E-Coli
      - a) Raw/undercooked meat
      - b) Unpasteurized milk
      - c) Raw produce
    - 2) Salmonella Campylobacter
      - a) Poultry, meat, eggs
      - b) Unpasteurized milk/dairy products
      - c) Raw produce
    - 3) Listeria
      - a) Raw milk, soft cheese
      - b) Luncheon meats/hot dogs
      - c) Raw produce
  - c. Identifying risks and hazardous practices
  - d. Persistence of microorganisms in the environment
- 2. Specific issues and sources of food borne illnesses
  - a. Meat, poultry and egg products
  - b. Fish and fish products
  - c. Leafy greens
  - d. Watermelons, tomatoes and other fruits and vegetables
- 3. Elements of a food safety control system
  - a. Food law and regulations
  - b. The food chain, from field to fork
  - c. Pathogen reduction strategies
  - d. Food sampling
  - e. Food inspection and government agencies

<sup>&</sup>lt;sup>1</sup> Prerequisite or co-requisite course need to be validated at the CCC level in accordance with Title 5 regulations; co-requisites for CCCs are the linked courses that must be taken at the same time as the primary or target course.

<sup>&</sup>lt;sup>2</sup> Advisories or recommended preparation will not require validation but are recommendations to be considered by the student prior to enrolling.

- - c. Wash utensils and cutting boards after each use
  - d. Keep kitchen surfaces clean
  - e. Keep raw meat and ready-to-eat foods separate
  - f. Cook food to proper temperatures
  - g. Refrigerate food promptly to below 40°F
  - h. Pay close attention to use-by dates
  - 7. Careers in food safety
    - a. Career jobs/career paths
    - b. Training & educational requirements
    - c. Working conditions and hours
    - d. Pay levels and benefits

Methods of Evaluation: Lecture	Methods of Evaluation:
Comprehensive Quizzes and Exams	
Written Critical Thinking Scenarios	
Problem Analysis and Solution	
Research Papers	
Typical Textbooks, Online "Best practices" Manuals, or Other Support Materials	
CSU GE Area	
Statewide Articulation: TBD	
FDRG Lead Signature:	Date:
Neil Ledford, Hartnell College	
[For Office Use Only]	Internal Tracking Number