# HARTNELL COLLEGE COURSE OUTLINE

CC Approval: 05/21/2009 Board of Trustees: 07/07/2009 Last Revised:

### DESIGNATOR & NUMBER: ABT 133

COURSE TITLE: Facility Management for Food Safety

CREDIT UNITS: 1.5

FACULTY INITIATOR: Larry Adams

### **SEMESTER HOURS**:

| 24.00 - 27.00                              | Lecture Contact Hours        |  |
|--|------------------------------|--|
| 0.00                                       | Lab Contact Hours            |  |
| 0.00                                       | Total Contact Hours          |  |
| 0.00                                       | Total Out-of-Class Hours     |  |
| 0.00                                       | Total Student Learning Hours |  |
| TOTAL CONTACT HOUDS (DASED ON 16-19 WEEKS) |                              |  |

TOTAL CONTACT HOURS (BASED ON 16-18 WEEKS)

| 24.00 - 27.00 | Lecture                        |
|---------------|--------------------------------|
| 0.00          | Lab                            |
| 0.00          | By Arrangement Lab Hours (DHR) |

GRADING BASIS:

Grade Only

PREREQUISITE:

COREQUISITE:

ADVISORY:

OTHER:

### COURSE DESCRIPTION:

Covers food safety issues and concerns in the manufacturing facility including such: facility sanitation, recognizing potential hazards, analysis of problems in the cold chain, developing improved practices, HACCP principles, employee training, and the inspection process. Field trips may be required.

### COURSE OBJECTIVES:

Upon satisfactory completion of the course, students will be able to

- 1. describe the critical conditions that can lead to growth of food borne pathogens.
- 2. recall the practices to ensure food safety.
- 3. describe the elements of a Hazard Analysis and Critical Control Plan (HACCP).
- 4. prepare a checklist of good manufacturing practices for an assigned facility.
- 5. evaluate a facility and inventory practices for food safety risks.
- 6. formulate verification procedures for detection of foreign objects, weight specifications, and equipment calibration.
- 7. compose standard operating procedures for security issues.

### COURSE CONTENT:

- I. The Sanitation challenge
  - A. Risks in a cooler environment
  - B. Conditions influencing contamination
- II. Biological, chemical and physical hazards
  - A. During transit
  - B. Product handling operations
  - C. Within the facility
  - D. During distribution
- III. Food safety issues and potential problems related to the cold chain
  - A. The dangers of food borne illness
  - B. The four key practices to ensure food safety
- IV. Developing the Hazard Analysis and Critical Control Point (HACCP) plan
  - A. The seven basic principle
    - 1. Conduct a hazard analysis
    - 2. Determine the Critical Control Points (CCPs)
    - 3. Establish critical limit(s)
    - 4. Establish a system to monitor control of the CCP
    - 5. Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control
    - 6. Establish procedures for verification to confirm that the HACCP system is working effectively
    - 7. Establish documentation concerning all procedures and records appropriate to these principles and their application
  - B. Developing standard operating procedures
  - C. Security program
    - 1. Security issues within the facility
    - 2. Bioterrorism threat
  - D. Crisis Management and media training
  - E. Employee training
- V. The verification procedure
  - A. Metal, foreign objects
  - B. Weight specifications
  - C. Calibration of tools and equipment
- VI. Good Manufacturing Practices
  - A. Incoming product area and receiving
  - B. Facility management and storage
  - C. Lights and glass policy
  - D. Operational methods and personnel practices
  - E. Pest control
  - F. Food borne illness and blood policy

Course Outline

- G. Food plant security
- H. Sanitation policies and practices
- I. Importance of documentation
- J. Trace back and recall
  - 1. Media relations
  - 2. Risk communications
- VII. The inspection process
  - A. Preparation
  - B. Identifying the proper procedures
  - C. Regulating agencies
    - 1. Food and Drug Administration
- VIII. Customer requirements, standards, and relations

## **INSTRUCTIONAL METHODOLOGY:**

Lecture Individual Assistance Audiovisual (including PowerPoint or other multimedia) Demonstration Discussion Group Activity Requires a minimum of three (3) hours of work per unit including class time and homework.

# METHODS OF EVALUATING OBJECTIVES OR OUTCOMES:

Methods of evaluation to determine if students have met objectives may include, but are not limited to the following:

| CLASSROOM           | EXPLANATION   |
|---------------------|---|
| Class Activity      | Class discussions, group projects, internet based assignments |
| Oral Assignments    | Class discussions and oral report assignments                 |
| Written Assignments | Short, written answers on tests, written homework assignments |
|                     |   |
| EXAMS               | EXPLANATION   |
| Comprehensive Final | Written answers and multiple choice                           |
| Problem Solving     | Evaluating and preparing a critique of a food facility.       |
|                     | Recommending alternative practices.                           |
| Skill Demonstration | Identifying food safety problems in a facility                |
| Objective Test      | Multiple choice and T-F on a portion of the midterm and final |
| Quizzes             | Weekly  |

# MINIMUM STUDENT MATERIALS:

Textbook(s) similar to:

Marriott, Norman G. *Principles of Food Sanitation*. 5th Ed, Springer Science Business Media, 2006

Binder containing handouts, research papers, trade publications, protocols, FDA and industry guidelines, and other current information.

# COURSE ASSIGNMENTS

Course Outline

### **Examples of Reading Assignments**

Textbook assignments, news and periodical articles, and internet based reading.

### **Examples of Writing Assignments**

Written outside assignments, assigned projects, quizzes and final exam.

### **Examples of Outside Assignments**

Facility evaluation and improvement project. Questions on weekly reading assignments. 2175