DESIGNATOR & NUMBER: ABT 133

COURSE TITLE: Facility Management for Food Safety

CREDIT UNITS: 1.5

FACULTY INITIATOR: Larry Adams

SEMESTER HOURS:

<table>
<thead>
<tr>
<th>Hours</th>
<th>Description</th>
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<tbody>
<tr>
<td>24.00 - 27.00</td>
<td>Lecture Contact Hours</td>
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<tr>
<td>0.00</td>
<td>Lab Contact Hours</td>
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<tr>
<td>0.00</td>
<td>Total Contact Hours</td>
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<tr>
<td>0.00</td>
<td>Total Out-of-Class Hours</td>
</tr>
<tr>
<td>0.00</td>
<td>Total Student Learning Hours</td>
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TOTAL CONTACT HOURS (BASED ON 16-18 WEEKS)

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<td>0.00</td>
<td>By Arrangement Lab Hours (DHR)</td>
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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
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.
Recommend 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:

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

COURSE ASSIGNMENTS
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.