Course Information

Division: Business
Course Number: HRM 110
Title: Safe Food Handling and Sanitation
Credits: 3
Developed by: Webb Evans
Lecture/Lab Ratio: 2 Lecture/2 Lab
Transfer Status:

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Activity Course: No
CIP Code: 52.0901
Assessment Mode: Pre/Post Test (25 Questions/25 Points)
Semester Taught: Upon Request
GE Category: None
Separate Lab: No
Awareness Course: No
Intensive Writing Course: No

Prerequisites
None

Educational Value
This course is designed for students aspiring to enter the restaurant and catering industry.

Description
A study of personal cleanliness; sanitary practices in food preparation; causes, investigation and control of illness caused by food contamination and work place sanitation standards.

Supplies
Notebook
Pen/Pencil
Access to computer and Internet

EASTERN ARIZONA COLLEGE
Safe Food Handling and Sanitation
Course Design
2011-2012
Competencies and Performance Standards

1. Identify the characteristics of potentially hazardous food.

Learning objectives

What you will learn as you master the competency:

a. Analyze evidence to determine the presence of foodborne-illness outbreaks.
b. Recognize risks associated with high-risk populations.
c. Identify the characteristics of potentially hazardous foods.
d. Identify factors that affect the growth of foodborne pathogens (FAT TOM).
e. Differentiate between foodborne infections, intoxications, and toxin-mediated infections.
f. Recognize major foodborne illnesses and their symptoms.
g. Identify characteristics of major foodborne pathogens including courses, food involved in outbreaks, and methods of prevention.
h. Define biological, chemical, and physical contaminants.
i. Identify methods to prevent biological, chemical, and physical contamination.
j. Identify eight most common allergens, associated symptoms, and methods of prevention.
k. Identify personal behaviors that can contaminate food.
l. Identify proper hand washing procedures.
m. Identify the proper procedure for covering cuts, wounds, and sores.
n. Identify proper attire for professional food handlers.
o. Identify criteria for excluding or restricting employees from working within establishment that serve high-risk populations.
p. Identify illnesses that must be reported to health agencies.

Performance Standards

Competence will be demonstrated:

o by written exams

Criteria - Performance will be satisfactory when:

o learner can outline in writing the process used to determine the presence of foodborne-illness outbreaks

o learner can recite the high-risk populations associated with foodborne illness including young children, pregnant women, people taking medications, and those who are ill.

o learner can outline in writing that potentially hazardous foods contain moisture, protein, and slightly acidic pH. Student also must outline the fact that these types of food need time-temperature control to prevent the growth of microorganisms and toxin production.

o learner can in writing with 100% accuracy, list the six (6) conditions that support the growth of foodborne microorganisms with the exception of viruses including types of food, acidity, temperature, time, oxygen, and moisture (FAT TOM).

o learner can in writing compare and contrast the differences between foodborne infections, intoxications, and toxin-mediated infections.

o learner can in writing, list the most common major foodborne pathogens including types of food, common symptoms, and prevention measures.

o learner can recite the definition of biological, chemical, and physical contaminants.

o learner can in writing, outline procedures for preventing biological, chemical, and physical contamination.
learner can in writing, define food allergy and symptoms and list the most common food allergens including milk and dairy products, eggs and egg products, fish, shellfish, wheat, soy and soy products, peanuts, and tree nuts.

- learner can recite the most common personal behaviors of employees that can contaminate food.

- learner can demonstrate the proper method and procedures for hand washing and outline when employee should wash hands.

- learner can in writing, list the proper attire for the professional food handler including clothing, shoes, and jewelry.

- learner can recite the most common types of employee illnesses and decision-making process for excluding or not excluding the employee from the workplace.

2. Outline the flow of food from purchase to serving in order to prevent cross-contamination.

Learning objectives

What you will learn as you master the competency:

- a. Identify methods for preventing cross-contamination.
- b. Identify methods for preventing time-temperature abuse.
- c. Identify different types of temperature measuring devices and its uses.
- d. Calibrate and maintain different temperature measuring devices.
- e. Properly measure the temperature of food at each point in the flow of food.
- f. Identify the criteria for selecting a food source.
- g. Identify the criteria for accepting or rejecting basic different types of foods.
- h. Properly label and date-mark refrigerated, frozen, and dry food prior to storage.
- i. Properly storing refrigerated, frozen, dry, and canned food.
- j. Apply first in, first out (FIFO) practices as they relate to refrigerated, frozen, and dry-storage areas.
- k. Properly store raw food to prevent cross-contamination.
- l. Identify temperature requirements for refrigerated and dry-storage area.
- m. Identify proper storage containers for refrigerated, frozen, and dry food.
- n. Identify the required cooking temperature for ground beef or other ground meat, pork, pork products, chicken, and poultry.
- o. Identify the temperature of Food Danger Zone associated with Time-Temperature Principle as outlined in FAT TOM.

Performance Standards

Competence will be demonstrated:

- by objective exams
- by written assignments

Criteria - Performance will be satisfactory when:

- learner can, in writing, outline four physical barriers for preventing cross-contamination.
- learner can, in writing, outline procedures to assure food is not time-temperature abused as it flows through the establishment.
- learner can define and demonstrate proper use for the Bimetallic Stemmed Thermometer, Thermocouple, Temperature Probe, Surface Probe, Penetration Probe, and Time-Temperature Indicator.
- learner can properly demonstrate how to calibrate all types of thermometers in order to
ensure accuracy.

- learner can with 100% accuracy, properly measure food temperatures using six (6) basic temperatures.
- learner can, in writing, outline the eight fundamental criteria for selecting a supplier.
- learner can, in writing, list criteria for accepting or rejecting food including meat/poultry, seafood, milk/dairy products, eggs, fruits/vegetables, ready-to-eat food, canned goods/dry food, frozen food, and bakery goods.
- learner can demonstrate the proper technique for labeling and date-mark refrigerated, frozen, and dry food prior to storage.
- learner can demonstrate the proper method for properly storing refrigerated, frozen, dry, and canned food.
- learner can with 100% accuracy complete a quiz on FIFO practices for controlling food inventories.
- learner can demonstrate how to store raw food in order to prevent cross-contamination.
- learner can, in writing, outline the temperature requirements for refrigerated and dry-storage area.
- learner can select the proper storage containers for refrigerated, frozen, and dry food.
- learner can list with 100% accuracy the required cooking temperatures of 155 degrees Fahrenheit for ground beef and other ground meat, 145 degrees Fahrenheit for pork and pork products and 165 degrees Fahrenheit or chicken and poultry.
- learner can recite with 100% accuracy the temperature of Food Danger Zone associated with Time-Temperature Principle as outlined in FAT TOM.

3. Recognize the sanitation standards for equipment and the process for maintaining safe standards.

Learning objectives

What you will learn as you master the competency:

a. Design a floor plan for a food production facility that is appropriate for the safe handling of food.

b. Identify the requirement for installing stationary and mobile equipment.

c. Identify and prevent cross-connection and backflow.

d. Recognize the requirement for hand washing facilities including appropriate locations.

e. Identify the proper response to waste water overflow.

f. Recognize the importance of complying with ADA requirements for facility design.

g. Define porosity, resiliency, coving, cantilever-mounted equipment, booster heater, cross-connection, and backflow.

h. Identify the Integrated Pest Management (IPM) Program.

Performance Standards

Competence will be demonstrated:

- by written assignments
- by objective exams

Criteria - Performance will be satisfactory when:

- learner can draw a floor design for safe production that meets or exceeds ADA requirements.
- learner can outline, in writing, the requirement for the installation of stationary and mobile equipment.
food production equipment.

- learner can list, in writing, the procedure for preventing cross-connection and backflow.
- learner can recite the requirement for hand washing facilities including the appropriate locations.
- learner can, in writing, outline the proper response and procedure to waste water overflow situations.
- learner can, in writing, outline the importance of complying with ADA requirements for facility design.
- learner can with 100% accuracy and in writing define porosity, resiliency, coving, cantilever-mounted equipment, booster heater, cross-connection, and backflow.
- learner can list with 100% accuracy and in writing the requirements of an integrated pest management program.

4. Identify state and local regulatory agencies and regulations that require food safety compliance.

**Learning objectives**

*What you will learn as you master the competency:*

a. Identify the objectives of a Foodservice Inspection Program.
b. Identify the government regulatory system for food.
c. Locate and research the FDA Food Code.
d. Prepare for a regulatory inspection.
e. Identify the proper procedures for guiding a health inspector through the establishment.

**Performance Standards**

*Competence will be demonstrated:*

- by written assignments
- by objective exams

*Criteria - Performance will be satisfactory when:*

- learner can, in writing, list the objectives of a Foodservice Inspection Program.
- learner can use a computer and Internet to locate the FDA Food Code.
- learner can, in writing, outline the procedure for preparing for a regulatory inspection.
- learner can, in writing, outline the proper procedures for guiding a health inspector through the establishment.

**Types of Instruction**

Classroom Lecture

**Grading Information**

*Grading Rationale*

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**Grading Scale**

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