

CENTRAL TEXAS COLLEGE
CHEF 1305
SANITATION AND SAFETY

Semester Hours Credit: 3

INSTRUCTOR: _____

OFFICE HOURS: _____

I. INTRODUCTION

- A. A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness causes by food contamination (Hazard Analysis Critical Control Points); and work place safety standards.

CHEF 1305, Sanitation and Safety, is a required course in the Culinary Arts, Restaurant Skills, Baking, Restaurant Operations, Institutional Food Service Operations and Food and Beverage Management Certificates of completion. CHEF 1305 is also a required course for Restaurant & Culinary Management, Hotel Management Specialization, Culinary Arts, Baking and Pastry Specialization, and Food and Beverage Management Specialization Associates in Applied Science degree programs.

- B. This course is occupationally related and serves as preparation for careers in food service.
- C. Prerequisite: None

II. LEARNING OUTCOMES

Upon successful completion of this course, Sanitation and Safety, the student will be able to:

- A. Describe what a foodborne illness is and determine when one has occurred. **(C5, C6, F1, F2, F5, F6, F11, F12)**
- B. Distinguish how food becomes unsafe. **(C5, C6, F1, F2, F5, F6, F11, F12)**
- C. Summarize food safety responsibilities of the person in charge of a foodservice operation. **(C5, C6, C15, F1, F2, F5, F6, F9, F11, F12)**
- D. Identify the factors that affect the growth of foodborne pathogens (FAT TOM). **(C5, C6, F1, F2, F5, F6, F11, F12)**

- E. Summarize the major foodborne pathogens and their sources'; resulting illnesses and their symptoms. **(C5, C6, C15, F1, F2, F5, F6, F9, F11, F12)**
- F. Determine points in the operation where food is at risk from deliberate contamination. **(C5, C6, F1, F2, F5, F6, F11, F12)**
- G. Identify methods of preventing allergic reactions. **(C5, C6, F1, F2, F5, F6, F11, F12)**
- H. Explain how food handlers can contaminate food. **(C5, C6, C15 F1, F2, F5, F6, F9, F11, F12)**
- I. Describe hand-maintenance requirements including fingernail length, false fingernails, and nail polish. **(C5, C6, F1, F2, F5, F6, F11, F12)**
- J. Demonstrate how to use single-use gloves and when to change them. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- K. Explain policies regarding eating, drinking and smoking as they relate to food safety. **(C5, C6, C15, F1-12)**
- L. Differentiate illnesses that need to be reported to the regulatory authority. **(C5, C6, F1, F2, F5, F6, F11, F12)**
- M. Identify way of preventing cross-contamination and time-temperature abuse. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- N. Demonstrate how to calibrate and maintain different temperature-measuring devices. **(C5, C6, C15 F1, F2, F5, F6, F9, F11, F12)**
- O. Explain guidelines for receiving deliveries. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- P. Describe temperature, packaging, and documentations required when receiving food. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- Q. Outline receiving criteria for specific food items. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- R. Describe requirements for labeling and date marking food. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- S. List temperature requirements for food in storage including meat, poultry, fish shellfish, eggs, procedures, and dry food. **(C5, C6, F1, F2, F5, F6, F11, F12)**

- T. Identify methods and time-temperature requirements for cooling and reheating TSC food. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- U. Describe how to prevent staff and customers from contaminating food during service. **(C5, C6, C15, F1-12)**
- V. Explain the possible hazards of transporting and serving food and ways of preventing them. **(C5, C6, F1, F2, F5, F6, F11, F12)**
- W. Identify the seven HACCP principles for preventing foodborne illness. **(C5, C6, F1, F2, F5, F6, F11, F12)**
- X. Outline how to prepare for, respond to, and recover from a crisis and a foodborne-illness outbreak. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- Y. Identify the characteristics of correct flooring and interior finishes. **(C5, C6, C15, F1, F2, F5, F6, F11, F12)**
- Z. Outline the requirements for restrooms, hand-washing stations and food-contact surfaces. **(C5, C6, C15, F1, F2, F5, F6, F9, F11, F12)**
- AA. Describe methods for prevent cross-connection and backflow. **(C5, C6, C15, F1, F2, F5, F6, F9, F11, F12)**
- BB. Explain factors affecting the efficiency of sanitizers. **(C5, C6, C15, F1, F2, F5, F6, F9, F11, F12)**
- CC. Identify correct machine dishwasher procedures and how to clean and sanitize items in a three-compartment sink. **(C5, C6, F1, F6, F9, F11, F12)**
- DD. Describe methods for denying pests access to an operation. **(C5, F1, F6, F9, F11, F12)**
- EE. Identify signs of pest infestations and activity. **(F1, F2, F6, F11, F12)**
- FF. Describe how to correctly store pesticides. **(F1, F2, F6, F11, F12)**
- GG. Explain the importance of regulatory inspections and self-inspections. **(C5, C12, F1, F2, F5, F6, F9, F11, F12)**
- HH. Describe the corrective actions you should take when violations of regulations are found. **(C5, C12, C16, F1, F2, F5, F6, F9, F11, F12)**
- II. List ways to train specific to staff and their duties. **(C5, C6, C15, F1, F2, F9, F11, F13)**

- JJ. Describe how to maintain food safety training records. (C5, C6, C12, F1, F2,)

III. INSTRUCTIONAL MATERIALS

- A. The instructional materials identified for this course are viewable through www.ctcd.edu/books
- B. Additional references may be required that are available in the Central Texas College library

IV. COURSE REQUIREMENTS

- A. Reading Assignments: Read text assignments prior to class and be prepared to discuss the text material, answering instructor questions orally with well-organized thoughts and ideas.
- B. Class Attendance: (Refer to CTC Catalog, Pages 44 & 45, for detailed policy). You are expected to attend each class period, be on time and stay the full class period or are counted absent. You are responsible for all course material missed due to absence. The instructor does not provide class notes for classes missed.
- C. A student must be present for all examinations. No makeup examinations will be given.
1. Students who know in advance they will be absent from an examination due to valid reasons must arrange to take an early examination. Unexpected absences due to illness or extenuating circumstances will require the student to see the instructor about individual make-up work in lieu of the missed examination.
- D. Students without excused absences will be given a zero for the examination missed.

V. EXAMINATIONS

- A. There will be two examinations.
1. Exam 1 (Mid-Term)
 2. Exam 2 (Final Exam)
- B. A student must be present for all examinations. No make-up examinations will be given. Students who know in advance that they will be absent from an examination due to valid reasons must arrange to take an early examination. Unexpected absences due to illness or extenuating circumstances will require the student to see

the instructor about individual make-up work in lieu of the missed examination.

- C. Students without excused absences will be given a zero for the missed examination.
- D. The instructor will publish specific examination dates and will give an in-class review concerning the nature and type of test questions to be given.

VI. SEMESTER GRADE COMPUTATIONS

A.	Exam 1 (Mid-Term)	150 points
	Exam 2 (Final Exam)	150 points
	Lesson Quizzes	240 points
	Lesson Assignments	160 points
	Vocabulary Assignments	160 points
	Written Report (7-9 pgs)	<u>140 points</u>
	Total Points	1000 points

A (1000 – 900) **B** (899 – 800) **C** (799 – 700) **D** (699 – 600) **F** (Below 600)

- B. A student must take the final examination to receive a grade for this course.

VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM COURSE INSTRUCTOR

A. Course Withdrawal: It is the student's responsibility to officially withdraw from a class if circumstances prevent attendance. Any student who desires to, or must, officially withdraw from a course after the first scheduled class meeting must file a Central Texas College Application for Withdrawal. The Withdrawal form must be signed by the student.

CTC Application for Withdrawal will be accepted at any time prior to Friday, the 12th week of classes during the 16-week fall and spring semesters. The deadline for sessions of other lengths is:

Friday of 3rd week for 5-week courses
Friday of 4th week for 6-week courses
Friday of 6th week for 8-week courses
Friday of 7th week for 10-week courses
Friday of 9th week for 12-week courses
Friday of 12th week for 16-week courses

The equivalent date (75% of the semester) will be used for sessions of other lengths. The specific last day to withdraw is published each semester in the Schedule Bulletin.

A student who officially withdraws will be awarded the grade of "W", provided the student's attendance and academic performance are satisfactory at the time of official

withdrawal. Students must file a withdrawal application with the College before they may be considered for withdrawal.

A student may not withdraw from a class for which the instructor has previously issued the student a grade of "F" or "FN" for nonattendance.

- B. Administrative Withdrawal: An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The instructor will assign the appropriate grade on CTC Form 59 for submission to the registrar.
- C. Incomplete Grade: The College catalog states, "An incomplete grade may be given in those cases where the student has completed the majority of the course work but, because of personal illness, death in the immediate family, or military orders, the student is unable to complete the requirements for a course..." Prior approval from the instructor is required before the grade of "I" is recorded. A student who merely fails to show for the final examination will receive a zero for the final and an "F" for the course.
- D. Cellular Phones and Beepers: Cellular phones and beepers will be turned off while the student is in the classroom or laboratory.
- E. Americans with Disabilities Act (ADA): Disability Support Services provides services to students who have appropriate documentation of a disability. Students requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Review the website at www.ctcd.edu/disability-support for further information. Reasonable Accommodations, in accordance with federal and state laws, will be given through the DSS office.
- F. Students requiring accommodations for disabilities are responsible for notifying the instructor. Reasonable accommodations will be granted in full compliance with federal and state law and Central Texas College policy.
- G. Instructor Discretion: The instructor reserves the right of final decision in course requirements.
- H. Civility: Individuals are expected to be cognizant of what a constructive educational experience is and respectful of those participating in a learning environment. Failure to do so can result in disciplinary action up to and including expulsion.
- I. Honesty and Integrity: All students are required and expected to maintain the highest standards of scholastic honesty in the preparation of all course work and during examinations. The following will be considered examples of scholastic dishonesty:

1. *Plagiarism*: The taking of passages from writing of others without giving proper credit to the sources.
2. *Collusion*: Using another's work as one's own; or working together with another person in the preparation of work, unless joint preparation is specifically approved in advance by the instructor.
3. *Cheating*: Giving or receiving information on examinations.

Students guilty of scholastic dishonesty will be administratively dropped from the course with a grade of "F" and will be subject to disciplinary action.

VIII COURSE OUTLINE

A. Unit One: Chapters 1, 2, Keeping Food Safe, Understanding the Microworld.

1. **Unit Objectives:** Upon successful completion of this unit, the student will be able to:
 - a. Define foodborne illnesses and determine when one has occurred.
 - b. Describe the challenges to food safety.
 - c. Estimate the cost of a foodborne illness.
 - d. Identify contaminants that can make food unsafe.
 - e. Describe how food becomes unsafe.
 - f. Identify food most likely to become unsafe.
 - g. Identify the populations at high-risk for foodborne illness.
 - h. Outline food safety responsibilities of the person in charge of a foodservice operation.
 - i. Identify the characteristics of TCS food
 - j. List ways of preventing viral, bacterial, parasitic, and fungal contamination.
 - k. Identify naturally occurring toxins and ways of preventing illnesses from them.
2. **Learning Activities:**
 - a. Classroom lecture/discussion (**F1, F2, F5, F6**)
 - b. Homework and other assignments designated by the instructor (**F1, F2, F5, F6, F8, F11, F12, F16**)

B. Unit Two: Chapters 3 & 4 Contamination, Food Allergens, and Foodborne Illness; The Safe Food Handler

1. **Unit Objectives:** Upon successful completion of this unit, the student will be able to:
 - a. Identify physical and chemical contaminants and methods of prevention.
 - b. Describe points in the operation where food is at risk from deliberate

- contamination.
- c. List the most common food allergens and their associated symptoms.
- d. Describe methods of preventing allergic reactions.
- e. Describe the correct hand-washing procedures.
- f. Outline when and where hands should be washed.
- g. Identify hand antiseptics and when to use them.
- h. Explain how to correctly cover an infected wound.
- i. Describe how to use single-use gloves and when to change them.
- j. Identify the requirements for staff work attire.
- k. Describe the criteria for excluding staff from the operation or restricting them from working with or around food.

2. Learning Activities:

- a. Classroom lecture/discussion **(F1, F2, F5, F6)**
- b. Homework and other assignments designated by the instructor **(F1, F2, F5, F6, F8, F11, F12, F16)**

C. Unit Three: Chapters 5, 6, & 7, The Flow of Food: An Introduction; The Flow of Food: Purchasing and Receiving; The Flow of Food: Storage.

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Explain how cross-contamination can occur and how to prevent it.
- b. Identify way to prevent time-temperature abuse.
- c. Demonstrate the use of different types of temperature-measuring devices.
- d. Identify the characteristics of an approved supplier
- e. List the guideline for receiving deliveries
- f. Identify temperature, packaging, and documentation requirements when receiving food.
- g. Identify government inspection stamps for meats, poultry, and fish.
- h. Describe how to check for quality when receiving food.
- i. Describe Inspecting specific types of food
- j. Outline the requirements for labeling and date making food.
- k. Identify storing specific food to include meat, poultry, fish, shellfish, eggs, produce and dry food.
- l. Explain how to use first-in, first-out
- m. List temperature requirements for various food storage areas.
- n. Identify practices that can prevent cross-contamination during storage

2. Learning Activities:

- a. Classroom lecture/discussion **(F1, F2, F5, F6)**
- b. Homework and other assignments designated by the instructor **(F1, F2, F5, F6, F8, F11, F12, F16)**

D. Unit Four: Chapters 8 & 9, The Flow of Food: Preparation; The Flow of Food: Service

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Identify the correct ways for preparing food to prevent cross- contamination and time-temperature abuse.
- b. Describe safe methods for thawing food.
- c. Identify the minimum internal cooking temperatures for TCS food.
- d. State the importance of informing consumers of risks when serving raw or undercooked food.
- e. Explain the methods and time-temperature requirements for cooling and reheating TCS food.
- f. Explain the time and temperature requirements for holding hot and cold TCS food.
- g. Describe ways of preventing time-temperature abuse and cross-contamination when displaying and serving food.
- h. List the requirements for using time rather than temperature as the only method of control when holding ready to eat food.
- i. Identify way of minimizing bare-hand contact with ready-to-eat food.
- j. Describe the possible hazards of transporting and serving food and way of preventing them.

2. Learning Activities:

- a. Classroom lecture/discussion (**F1, F2, F5, F6**)
- b. Homework and other assignments designated by the instructor (**F1, F2, F5, F6, F8, F11, F12, F16**)

E. Unit Five: Chapters 10 & 11, Food Safety Management Systems; Safe Facilities and Equipment

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Explain the seven HACCP principles for preventing foodborne illness.
- b. Describe how to prepare for, respond to, and recover from a crisis or a foodborne-illness outbreak.
- c. Describe how to respond to imminent health hazards including power outages, fire, flood, water interruption and sewage.
- d. Identify the characteristics of correct flooring and interior finishes.
- e. Describe the requirements for restroom, hand-washing stations, and food-contact surfaces.
- f. Identify organizations that certify equipment that meets sanitation standards.
- g. List the requirements for dishwashing facilities and installing equipment.
- h. Identify approved water sources and testing requirements.

- i. Describe methods for preventing cross-connection and backflow.
- j. Describe the correct response to a wastewater overflow.
- k. Describe the lighting-intensity requirements for different areas of the operation.
- l. Identify ways of preventing lighting sources from contaminating food.
- m. Describe ways of preventing ventilation systems from contaminating food and food-contact surfaces.
- n. Identify the requirements for handling garbage.
- o. Outline the importance of keeping physical facilities in good repair.

2. Learning Activities:

- a. Classroom lecture/discussion **(F1, F2, F5, F6)**
- b. Homework and other assignments designated by the instructor **(F1, F2, F5, F6, F8, F11, F12, F16)**

F. Unit Six: Chapters 12 & 13, Cleaning and Sanitizing; Integrated Pest Management

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Identify the correct cleaners for specific tasks
- b. Identify approved sanitizers including chlorine, iodine, and quats.
- c. List the factors affecting the efficiency of sanitizers.
- d. Describe how to clean and sanitize food-contact surfaces.
- e. Describe the required frequency for cleaning and sanitizing non- food and food-contact surfaces.
- f. Explain the correct machine-dishwashing procedures and how to clean and sanitize items in a three-compartment sink.
- g. Describe how to store and dispose of chemicals properly.
- h. Develop a cleaning program
- i. Identify and describe Integrated pest management (IPM) programs
- j. Describe how to select and work with a pest control operator (PCO)
- k. Describe how to correctly store Pesticides.

2. Learning Activities:

- a. Classroom lecture/discussion **(F1, F2, F5, F6)**
- b. Homework and other assignments designated by the instructor **(F1, F2, F5, F6, F8, F11, F12, F16)**

G. Unit Seven: Chapters 14, Food Safety Regulation and Standards.

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Identify and describe Government agencies responsible for regulating food operations.

- b. Describe the importance of regulatory inspection and self- inspections.
- c. List the key components of an inspection.
- d. Describe the corrective actions that should be taken when violation of regulations have been found.

2. Learning Activities:

- a. Classroom lecture/discussion **(F1, F4)**
- b. Homework and other assignments designated by the instructor **(F1, F4)**

B. Unit Eight: Chapter 15, Staff Food Safety Training.

1. Unit Objectives: Upon successful completion of this unit, the student will be able to:

- a. Identify staff duties and specific training needs for each duty.
- b. Identify ways of training specific to staff and their duties.
- c. Describe how to maintain food safety training records
- d. Describe how to ensure all staff are trained upon and after being hired.

2. Learning Activities:

- a. Classroom lecture/discussion **(F1, F2, F5, F6)**
- b. Homework and other assignments designated by the instructor **(F1, F2, F5, F6, F8, F11, F12, F16)**