GEORGIA | PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

CULINARY ARTS

PATHWAY: Culinary Arts

COURSE: Culinary Arts I (CAI)

UNIT: 3.1 Principles of Hazard Analysis Critical Control Point (HAACP)

INTRODUCTION

Annotation:

The student will identify the principles of HACCP and define the flow of food within a foodservice operation.

Grade(s):

X	9th
X	10th
X	11th
X	12th

Time:

5 90-minute class periods

Author:

Jennifer Booker, Wes Goodman, Bill Hewett

Students with Disabilities:

For students with disabilities, the instructor should refer to the student's IEP to be sure that the accommodations specified are being provided. Instructors should also familiarize themselves with the provisions of Behavior Intervention Plans that may be part of a student's IEP. Frequent consultation with a student's special education instructor will be beneficial in providing appropriate differentiation.

FOCUS STANDARDS

GPS Focus Standards: Please list the standard and elements covered.

CA-CAI-2. Students will demonstrate and practice food sanitation and safety with food preparation and service.

GPS Academic Standards:

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.
NFCS-8.2. Demonstrate food safety and sanitation procedures.
NFCS-8.2.9. Use Occupational Safety and Health Administration's (OSHA) Right to Know Law and Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials.

National / Local Standards / Industry / ISTE:

NFCS-8.5.3. Utilize weights and measures to demonstrate proper scaling and measurement techniques.

UNDERSTANDINGS & GOALS

Enduring Understandings:

The students will gain an understanding of how food "flows" through a food service operation. This will allow the students to gain a better understanding of the conditions (critical control points) that may cause food borne illnesses and steps to preventing them from occurring.

Essential Questions:

- Why is HACCP - HAZARD ANALYSIS CRITICAL CONTROL POINT important in culinary arts?
- How and why is it important for you to determine if food is spoiled?

Knowledge from this Unit: Factual information.

- Students will define the flow of food within a foodservice operation.
- The student will know how to determine if food is spoiled and/or unfit to consume.

- Student will know the steps to implement a HACCP.

Skills from this Unit: Performance.

- Students are able to determine proper food practices in and out of the kitchen.
- Students will be able to demonstrate the steps to implement a HACCP.

ASSESSMENT(S)

Assessment Method Type: Select one or more of the following. Please consider the type(s) of differentiated instruction you will be using in the classroom.

____ Pre-test
X Objective assessment - multiple-choice, true- false, etc.
_X_ Quizzes/Tests
_X_ Unit test
X Group project
____ Individual project
____ Self-assessment - May include practice quizzes, games, simulations, checklists, etc.
__ Self-check rubrics
__ Self-check during writing/planning process
__ Journal reflections on concepts, personal experiences and impact on one's life
__ Reflect on evaluations of work from teachers, business partners, and competition judges
__ Academic prompts
__ Practice quizzes/tests
X Subjective assessment/Informal observations
__ Essay tests
_X_ Observe students working with partners
_X_ Observe students role playing
____ Peer-assessment
__ Peer editing & commentary of products/projects/presentations using rubrics
__ Peer editing and/or critiquing
X Dialogue and Discussion
__ Student/teacher conferences
_X_ Partner and small group discussions
_X_ Whole group discussions
__ Interaction with/feedback from community members/speakers and business partners
X Constructed Responses
_X_ Chart good reading/writing/listening/speaking habits
__ Application of skills to real-life situations/scenarios
X Post-test

Assessment(s) Title:

Quiz on HACCP from ServSafe Coursebook 4th or 5th editions. Assess lab activity. Written test encompassing flow of food, HACCP.

Assessment(s) Description/Directions:

Assessment should follow either in the form of a quiz or part of a larger unit test.

Attachments for Assessment(s): Please list.

Quiz on HACCP from ServSafe Coursebook 4th or 5th editions.

LEARNING EXPERIENCES

Instructional planning: Include lessons, activities and other learning experiences in this section with a brief description of the activities to ensure student acquisition of the knowledge and skills addressed in the standards. Complete the sequence of instruction for each lesson/task in the unit.

Sequence of Instruction

1. **Identify the Standards. Standards should be posted in the classroom for each lesson.**

   CA-CAI-2. Students will demonstrate and practice food sanitation and safety with food preparation and service.

2. **Review Essential Questions.**
   - What is HACCP - HAZARD ANALYSIS CRITICAL CONTROL POINT important in culinary arts?
   - How and why is it important for you to determine if food is spoiled?

3. **Identify and review the unit vocabulary.**

   a. Purchasing – The act of buying.
   b. Receiving – To come into possession of something.
   c. Storage – The act of keeping goods and materials in a designated place.
   d. Preparation - The activity of putting or setting in order in advance of some act or purpose.
   e. Cooking - The act of preparing something (as food) by the application of heat.
   f. Food Holding and Serving –
   g. Cooling – The process of a heated or hot object to slowly loose heat.
   h. Reheating – The process of making a cool object hot again.

4. **Assessment Activity.**

1. Watch DVD/VHS:

   "Purchase, Receive, and Store"

   "Prepare, Cook and Serve"

2. Identify and review the 8 steps in the "flow of food" in a food service operation:
   a. Purchasing
   b. Receiving
   c. Storage
   d. Preparation
   e. Cooking
   f. Food Holding and Serving
   g. Cooling
   h. Reheating

3. What is HACCP - HAZARD ANALYSIS CRITICAL CONTROL POINT?

   Instructor will present a power point presentation of the principles of a HACCP system and explain the impact on preventing food borne illnesses in a foodservice operation.

   a. Scientific state-of-the-art food safety program originally developed for astronauts
   b. Systematic and preventative approach to the conditions which are responsible for most food borne illnesses.
   c. Anticipates how and when food safety problems are more likely to occur and follows steps to prevent them from occurring
   d. Adopted by food processors and restaurants and the FDA and USDA
   e. No federal mandate to implement HACCP system
   f. Initially requires an investment of time and human resources but has long term benefits that will save money and time and improve the quality of food

4. Critical Control Point: a step in the flow of food where contamination can be prevented or eliminated. (Have students identify examples of a critical control point such as in cooking food improperly which allows bacteria, etc. to grow)

5. The Seven Principles of a HACCP -

Principle One: Conduct a Hazard Analysis of the flow of food

- Determine where food safety hazards might occur i.e. where does food come into contact within the foodservice establishment?

Principle Two: Identify Critical Control Points

- Find these points within the flow of food where contamination can be prevented or eliminated.

Principle Three: Establish Critical Limits

- What are the safety standards for food? i.e internal cooking temperatures for food

Principle Four: Establish Critical Control Point Monitoring Requirements

- Needed to make sure the process is under control at each critical control point.

Principle Five: Identify Corrective actions

- Take action immediately. Example an employee does not use a thermometer to check the doneness of roasted chicken – remind the employee to make sure chicken internal temperature is at 165 degrees F before serving.

Principle Six: Establish procedures for recordkeeping and documentation

- Maintain written logs, flow charts, policies and procedure manuals, and records of temperature readings.

Principle Seven: Verify that the system is working.

- Manager or chef should examine record keeping for each item reviewing temperature logs, problems and corrective actions taken.

6. Ask the students: "You are preparing soup in a stockpot on the range and find a human hair floating in the soup."

- Why might this be a problem and what steps would you take to correct the problem?"

7. Class Activities:

a. Divide the students into groups of 2 or more students. Assign a "flow of food" step to each group. Students identify potential hazards that may occur within their respective steps. Suggest actions that may eliminate these hazards.

b. Divide students into groups of 2 or more. Choose one HACCP critical control point. Role play how your team could avoid potential hazards related to the assigned critical control point.

8. Lab activity:

a. Divide the students into groups of 2 or more. Each group cooks a vegetable differently from other groups i.e. Sauté, Steam, boiled, roasted, or grilled. Each team should document precautions taken in preparing, cooking and storing or serving their vegetables.

Attachments for Learning Experiences: Please list.

Notes & Reflections: May include notes to the teacher, pre-requisite knowledge & skills, suggestions, etc.

Note: If DVD/VHS not available prepare a power point explaining each step in the flow of food highlighting key potential hazardous conditions and corrective actions necessary to prevent these conditions from occurring

Note: this lesson plan can be conducted with or without the lab activity.

CULMINATING PERFORMANCE TASK

(Optional)

Culminating Unit Performance Task Title: HACCP

Culminating Unit Performance Task Description/Directions/Differentiated Instruction:

Ticket out of Class – list the 7 steps of a HACCP system or list the steps in the flow of food.

Attachments for Culminating Performance Task: Please list.

UNIT RESOURCES

Web Resources:

Attachment(s): Supplemental files not listed in assessment, learning experiences, and performance task.

Materials & Equipment:

DVD/VHS:

ServSafe DVD/VHS "Purchase, Receive and Storage"

ServSafe DVD/VHS "Preparation, Cook and Serve"

Textbooks:

Culinary Essentials (Johnson & Wales University),

Culinary Fundamentals (the ACF);

Prostart Year 1 2nd edition

What 21st Century Technology was used in this unit:

X	Slide Show Software		Graphing Software		Audio File(s)
	Interactive Whiteboard		Calculator	X	Graphic Organizer
	Student Response System		Desktop Publishing	X	Image File(s)
	Web Design Software		Blog	X	Video
	Animation Software	X	Wiki		Electronic Game or Puzzle Maker
	Email	X	Website		