



GEORGIA

PEACH STATE PATHWAYS

Career, Technical, & Agricultural Education

CULINARY ARTS

PATHWAY: Culinary Arts

COURSE: Introduction to Culinary Arts

UNIT: 6.1 Herbs, Spices and Flavor Development



INTRODUCTION

Annotation:

As one chef describes it, “Flavor development means appealing to all of the diner’s senses.” In this unit, students will be able to explain how chefs use herbs, spices and seasonings in recipes to enhance and improve the flavor of the foods.

Grade(s):

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

Time:

10 Hours

Author:

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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:

CA-ICA-10 (d) Students will identify various food products used in a commercial foodservice operation and list the proper handling and storage procedures for each.

- d. Identify and distinguish between herbs, spices, seasonings, and their uses.

GPS Academic Standards:

National / Local Standards / Industry / ISTE:



UNDERSTANDINGS & GOALS

Enduring Understandings:

The correct selection and use of herbs and spices with various foods is critical knowledge that a chef must have in order to prepare flavorful and appealing recipes. Students will identify and distinguish between herbs, spices, seasonings and their uses. Students will also be introduced to flavor development principles.

Essential Questions:

- How do herbs, spices, and seasonings serve to enhance the flavor of foods?
- Why is flavor development an important component of the culinary arts?
- Why do chefs attempt to incorporate all five of the senses when preparing foods?

Knowledge from this Unit:

- Students will understand what is meant by the term “flavor development” and how flavor development relates to food preparation and the diner’s experience.
- Students will understand the distinction between herbs and spices.
- Students will understand that different herbs and spices contribute different flavors to foods, some of which vary based on regional cuisines.

Skills from this Unit:

- Students will be able to identify various herbs and spices through touch, taste, smell, and sight.
- Students will be able to use spices and herbs in their own recipes to enhance flavor development.

- Students will be able to explain how various cooking methods change the flavor of foods.



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
- ☐ Objective assessment - multiple-choice, true- false, etc.
 - ☐ Quizzes/Tests
 - ☐ Unit test
- ☐ 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
- ☐ Subjective assessment/Informal observations
 - ☐ Essay tests
 - ☐ Observe students working with partners
 - ☐ Observe students role playing
- ☐ Peer-assessment
 - ☐ Peer editing & commentary of products/projects/presentations using rubrics
 - ☐ Peer editing and/or critiquing
- ☒ Dialogue and Discussion
 - ☐ Student/teacher conferences
 - ☐ Partner and small group discussions
 - ☒ Whole group discussions
 - ☐ Interaction with/feedback from community members/speakers and business partners
- ☐ Constructed Responses
 - ☐ Chart good reading/writing/listening/speaking habits
 - ☐ Application of skills to real-life situations/scenarios
- ☐ Post-test

Assessment(s) Title:

Herbs and Spices Identification

Assessment(s) Description/Directions:

Students will identify, through the five senses, various herbs and spices that have been preselected by the instructor for the lab activity.

Attachments for Assessment(s): Please list.



LEARNING EXPERIENCES

Sequence of Instruction

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

CA-ICA-10 (d) Students will identify various food products used in a commercial foodservice operation and list the proper handling and storage procedures for each.

d. Identify and distinguish between herbs, spices, seasonings, and their uses.

2. Review Essential Questions.

- How do herbs, spices, and seasonings serve to enhance the flavor of foods?
- Why is flavor development an important component of the culinary arts?
- Why do chefs attempt to incorporate all five of the senses when preparing foods?

3. Identify and review the unit vocabulary.

Flavor Development
Taste
Smell
Touch
Sound
Sight
Herbs
Spices

4. Flavor Development.

Flavor development is the term used to describe the cultivation of various flavor experiences by using different ingredients, such as herbs, spices, or fruits, and preparation techniques.

5. Flavor Development refers to the total stimulation of the senses: taste, smell, touch, sight, and sound.

- a. *Taste* is the sensation we experience whenever we eat certain foods. Taste is categorized as sweet, sour, bitter, or salty.
- b. *Smell* is the aroma or fragrance of foods. It is very difficult to taste or recognize foods without a good sense of smell.
- c. *Touch* relates to the texture and temperature of the food. Foods can be soft or firm, wet or dry, thick or thin, hot or cold. These sensations are often referred to as *mouthfeel*.

- d. *Sound* refers to the noise that food makes when it is consumed. For example, food can snap, crackle, pop, or fizz when we eat it.
- e. *Sight* helps us distinguish between various foods and is an important aspect in our mental selection of foods. We are more likely to choose foods that are visually appealing than those that are not.

6. Flavor development refers to appropriate ingredients.

- a. Select ingredients that are the freshest and of the highest quality with bright, appealing colors and exceptional smells and textures.
- b. Purchase local produce that is in season.
- c. Taste foods in various stages of ripeness and at varying temperatures. Eat raw, partially, and fully cooked versions of your ingredients to find the best taste for the recipe.

7. Flavor development refers to knowledge of cooking methods and techniques.

- a. Cooking foods changes their appearance, textures, and intensity of flavors.
- b. Color influences our expectations of the taste of certain foods. For example, we expect brightly colored foods to have a good flavor, light colored foods to be bland or undercooked, and dark colored foods to be overcooked, burnt, or scorched.
- c. Texture changes determine the doneness of foods. Certain foods require techniques and cooking methods that help soften the texture of the food, such as stewing, braising, boiling or pureeing.
- d. Intensity of flavors can be accomplished by reducing or concentrating flavors, by the addition of seasonings, or by blanching foods, a technique that diminishes or removes flavors.

8. Flavor development refers to the addition of aromatic vegetables and fruits; curing and smoking of foods; and the addition of wines for a mellow flavor or as a finishing flavor.

- a. Onions, mushrooms, celery, tomatoes, citrus, ginger, and lemongrass can be added for their distinct aroma and flavor.
- b. Regional cuisines are distinguished by the combination of certain fruits, vegetables, and spices. For example, Cajun foods are often characterized by a heavy use of onions, pepper, and celery, Mexican and Caribbean foods often contain sofrito, Indian foods often contain curry, and Italian foods contain rosemary, basil, thyme, and oregano.

9. Flavor development refers to the ability to season foods, knowing which seasonings to use as well as when and how to apply those seasonings.

- a. Salt is used to enhance and develop flavor
 - Salt enhances sweetness
 - Salt tones down sour flavors

- Salt reduces bitter tastes
 - Salt used in small amounts draws out food's natural flavors by drawing moisture to the surface of the food
 - Salt also imparts its own taste and flavor to foods
- b. Herbs are the leaves and stems of the plants. Ideally, a chef tries to create a layer of flavors using various herbs and spices.
- Fresh herbs have more intense flavor than dried herbs because the fresh herbs contain more volatile oils.
 - Herbs should be added at the end of the cooking process to diminish the loss of volatile oils.
 - Use stems to add flavors to stocks as in a "sachet bouquet" or in a "bouquet garni."
 - Mincing or shredding releases more volatile oils and flavors
 - Dried herbs should be added at the beginning of the cooking process to fully release their flavor.
- c. Spices are dried seeds, buds, bark, or roots of the plant.
- Use fresh spices that have been properly stored, usually in covered cabinets to protect from natural and artificial lighting.
 - Toasting spices brings out the volatile oils of spices, improving flavors.
 - Grinding spices releases even more flavors. Spices should be ground as near to use as possible.
 - Sauté spices in oil or butter to release flavors.
 - Use whole spices for subtle flavors or to "infuse" the food with flavor.

10. Lab Activity: Herbs and Spices Identification.

Preselect samples of dried or fresh herbs and spices and display each herb/spice in the lab. Avoid spice blends. Ask the students to walk around the lab, smelling each spice, and attempt to identify the various spices that are displayed. Choose herbs and spices that are relatively popular and commonly used. Allow students to touch, taste, and smell all the spices. Following the activity, ask the students to describe the most memorable spice to them and explain why that spice was most memorable.

Attachments for Learning Experiences: Please list.



CULMINATING PERFORMANCE TASK (Optional)

Culminating Unit Performance Task Title:

Herbs and Spices Identification

Culminating Unit Performance Task Description/Directions/Differentiated

Students will smell, taste, touch, and identify various herbs and spices that have been preselected by the instructor for the lab activity. Students will then describe the most memorable spice they encountered during the lab. More detailed instructions can be found in the Learning Experience section.

Attachments for Culminating Performance Task



UNIT RESOURCES

Web Resources:

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

Materials & Equipment:

What 21st Century Technology was used in this unit:

<input type="checkbox"/>	Slide Show Software	<input type="checkbox"/>	Graphing Software	<input type="checkbox"/>	Audio File(s)
<input type="checkbox"/>	Interactive Whiteboard	<input type="checkbox"/>	Calculator	<input type="checkbox"/>	Graphic Organizer
<input type="checkbox"/>	Student Response System	<input type="checkbox"/>	Desktop Publishing	<input type="checkbox"/>	Image File(s)
<input type="checkbox"/>	Web Design Software	<input type="checkbox"/>	Blog	<input type="checkbox"/>	Video
<input type="checkbox"/>	Animation Software	<input type="checkbox"/>	Wiki	<input type="checkbox"/>	Electronic Game or Puzzle Maker
<input type="checkbox"/>	Email	<input type="checkbox"/>	Website		