



## COURSE OUTLINE

<b>Course Number</b> HOS 116	<b>Course Title</b> TECHNIQUES OF HEALTHY COOKING	<b>Credits</b> 3
<b>Hours:</b> Lecture/Lab/Other 1/4/0	<b>Co- and/or Pre-requisites</b> HOS 101 – Food Preparation I HOS 118 – Sanitation and Safety In Food Service Operations	<b>Implementation</b> Semester & Year Spring 2022

### Catalog description:

Study of nutritional guidelines for selecting, preparing, and cooking a wide variety of food products, including desserts. Cooking techniques include sautéing, roasting, steaming, and grilling. Healthful menu planning applies “trick of the trade” techniques to trim calories and fats. Chef whites required.

### General Education Category:

Not GenEd

Choose an item.

### Course coordinator:

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### Required Texts & Other Materials:

The Culinary Institute of America. (2013). *Techniques of healthy cooking*, 4<sup>th</sup> Ed. Hoboken, New Jersey: John Wiley & Sons, Inc.

### Course Student Learning Outcomes (SLO):

Upon successful completion of course students will be able to:

1. Develop healthy patterns of eating. (**Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7**)
2. Recognize evolution of human physiology is responsible for nutritional requirement. (**Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7**)
3. Appreciate importance of sustainable agriculture to the Earth, Earth’s biodiversity, and Earth’s human population. (**Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7**)
4. Assess the potential benefits, implications, and consequences toward the use of biotechnology. (**Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7**)
5. Select ingredients with care. (**Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7**)
6. Store, and preserve, all foods with the aim of preserving their best possible flavor, texture, color, and overall nutritional value. (**Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7**)

7. Incorporate a variety of plant-based dishes on the menu in all categories. (Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7 )
8. Manage the amount of fat used as an ingredient and as part of a preparation or cooking technique. (Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7 )
9. Serve appropriate portions of food. (Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7 )
10. Use salt with care and purpose. (Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7 )
11. Understand the importance of offering wide varieties of beverages that compliment a food menu. (Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7 )
12. Understand hospitality industry standards and units of measure. (Supports ILGs 1, 2, 3, 10, 11; PLOs 1, 2, 4, 5, 6, 7 )

### **Course-specific Institutional Learning Goals (ILG):**

**Institutional Learning Goal 1 – Written and Oral Communication in English** – Students will communicate effectively in both speech and writing.

**Institutional Learning Goal 2 – Mathematics** – Students will use appropriate mathematical and statistical concepts and operations to interpret data and solve problems.

**Institutional Learning Goal 3 – Science** – Students will use scientific method of inquiry through acquisition of scientific knowledge.

**Institutional Learning Goal 10 – Information Literacy** – Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

**Institutional Learning Goal 11 – Critical Thinking** – Students will use critical thinking skills to understand, analyze, or apply information or solve problems.

### **Program Learning Outcomes for Hotel, Restaurant, and Institutional Management (PLO)**

1. Apply safe and sanitary practices within any food production department compliant with laws and safety regulations.
2. Develop appropriate menus and recipe selections and recognize costs incurred and apply cost control techniques.
4. Develop professional written and verbal communication and computational skills related specifically to hospitality.
5. Demonstrate proficiency in a variety of professionally recognized culinary/pastry skills/techniques.
6. Apply practical culinary/pastry techniques that stress creativity and innovation with respect to flavor and texture in food production.
7. Work in any production or food preparation station within a food service department.

### **Units of study in detail – Unit Student Learning Outcomes:**

**Unit I [Unit I An Introduction to Healthy Cooking] [Supports Course SLO 1-9, 12]**

#### **Learning Objectives**

***The students will be able to:***

- Recognize common biological hazards, chemical hazards, and physical hazards found in a foodservice kitchen.
- Utilize units of measure.
- Recognize the methodological importance of the “buzz-words” for this

- course: substitution and moderation.
- Assess The Seven Principles of Healthy Cooking: (a) Select ingredients with care; (b) Store, and preserve, all foods with the aim of preserving their best possible flavor, texture, color, and overall nutritional value; (c) Incorporate a variety of plant-based dishes on the menu in all categories; (d) Manage the amount of fat used as an ingredient and as part of a preparation or cooking technique; (e) Serve appropriate portions of food; (f) Use salt with care and purpose; and (g) Offer a variety of beverages, both alcoholic and nonalcoholic, that complement the food menu.
- Define the term calorie with respect to both energy and nutritional content.
- Define the phrase omnivore's paradox.
- Identify how optimal foraging/hunting/scavenging impacted human physiological evolution and nutritional need and evaluate the effectiveness of paleodiets upon current populations.
- Define the terms metabolism, basal metabolic rate (BMR), and activity level as they pertain to caloric expenditure and need.
- Cite the importance of the Nutrition Labeling and Education Act (NLEA) and distinguish differences between: (a) absolute claims; (b) dietary guidelines; (c) health claims; (d) implied claims; (e) nutrient content claims; (f) reference amounts; and (g) relative claims.
- Assess the potential benefits, implications, and consequences toward the use of biotechnology.

**Unit II [Unit II Chef's Pantry] [Supports Course SLO 1, 5]**

**Learning Objectives**

***The students will be able to:***

- Identify various herbs and spices.
- Formulate ingredients required for recipes.
- Evaluate differences between: (a) white stock; (b) brown stock; (c) fish stock; vegetable stock; and (d) specialized stocks.
- Assess uses and characteristics of various thickeners.
- Distinguish differences between: (a) hot sauces; (b) cold sauces; (c) vinegars; (d) chutneys; and (e) coulis.

**Unit III [Unit III Soups, Salads, and Appetizers] [Supports Course SLO 1, 5-8, 10, 12]**

**Learning Objectives**

***The students will be able to:***

- Evaluate differences between various forms of fat: (a) polyunsaturated fat; (b) monounsaturated fat; (c) saturated fat; (d) hydrogenated fats; and (e) trans fats.
- Differentiate sources and use of cholesterol.
- Assess strategies for reducing fat, saturated fat, and cholesterol.
- Manage the amount of fat used as an ingredient and as part of a preparation or cooking technique.
- Analyze sources and roles of salt and sodium.
- Identify uses of monosodium glutamate (MSG).
- Differentiate salt and sodium labeling.
- Use salt with care and purpose.

**Unit IV [Unit IV Main Dishes for Lunches and Dinners] [Supports Course SLO 1, 5-8, 12]**

**Learning Objectives**

***The students will be able to:***

- Identify sources of protein in foods along with functions and requirements in the human body.
- Differentiate nonessential and essential amino acids.
- Explain what makes foods of animal origin “free-range.”
- Assess the role of omega-3 fatty acid in lowering cholesterol and reducing incidence of blood clots.

**Unit V [Unit V Grilled and Smoked Foods] [Supports Course SLO 1, 5-8, 12]**

**Learning Objectives**

***The students will be able to:***

- Assess the health concerns of heterocyclic amines (HCAs) and polycyclic aromatic hydrocarbons (PCAs) as they pertain to grilled and/or smoked foods.
- Assemble necessary equipment for pan-smoking.
- Identify the various hardwoods and other smoking materials routinely used in the culinary arts.
- Differentiate the requirements for hot smoking and cold smoking.

**Unit VI [Unit VI Side Dishes] [Supports Course SLO 1, 5-8, 12]**

**Learning Objectives**

***The students will be able to:***

- Evaluate the differences in vegetarian diets: (a) semi-vegetarian; (b) lacto-ovo-vegetarian; (c) lacto-vegetarian; and (d) vegan.
- Develop meals based on the requirements of vegetarian diets.
- Define the term “alternivore.”
- Assess the roles of antioxidants and free radicals in the human body.
- Utilize vegetable integration in menu development.
- Assess the roles of carbohydrates in the human body—inclusive of: (a) simple carbohydrates; (b) complex carbohydrates; (c) starch; and (d) fiber.

**Unit VII [Unit VII Breakfast] [Supports Course SLO 1, 5-8, 11, 12]**

**Learning Objectives**

***The students will be able to:***

- Evaluate the role of vitamins in the human body.
- Understand the importance of recommended daily allowances (RDAs).
- Identify and distinguish differences between fat soluble and water soluble vitamins.
- Explain what constitutes a deficiency and megadose of vitamins and minerals.
- Evaluate the role of minerals in the human body.
- Assess techniques for cooking healthy breakfasts and preparing

healthy beverages.

**Unit VIII [Unit VIII Baked Goods and Desserts] [Supports Course SLO 1, 5-8, 12]**

**Learning Objectives**

***The students will be able to:***

- Assess the nutritional values of various types of sugars.
- Define “empty calories” and identify in refined/processed foods.
- Assess techniques for cooking healthy baked goods and healthy desserts.

**Evaluation of Student Learning:**

- |                         |     |
|-------------------------|-----|
| • Student Introduction  | 1%  |
| • Research Project      | 40% |
| • Research Paper Topic  | 5%  |
| • Foodlab Participation | 14% |
| • Test 1                | 20% |
| • Test 2                | 20% |

**Grade Scale:**

100% - 93% = A  
92% - 90% = A-  
89% - 87% = B+  
86% - 83% = B  
82% - 80% = B-  
79% - 77% = C+  
76% - 70% = C  
69% - 60% = D  
59% - 0% = F