

Indiana CTE

# Culinary Arts

## Culinary Arts - Baking and Pastry

### A Principles of Culinary and Hospitality 7173

#### a Domain: Basic Food Theory and Skills 7173.D1

- 1 Define hospitality and the philosophy of the hospitality industry. 7173.D1.1
- 2 Trace the growth and development of the hospitality and tourism industry. 7173.D1.2
- 3 Describe the various cuisines and contributions of leading culinarians. 7173.D1.3
- 4 Identify professional organizations within the field; explain purposes and benefits. 7173.D1.4
- 5 Outline the organization, structure, and functional areas in various hospitality organizations as a perspective for later courses. 7173.D1.5
- 6 Discuss/evaluate industry trends as they relate to career opportunities and the future of the industry. 7173.D1.6
- 7 Discuss and evaluate industry trade periodicals and social media 7173.D1.7
- 8 Demonstrate how to read and follow a standard recipe. 7173.D1.8
- 9 Demonstrate knife skills, hand tools, and equipment operation, emphasizing proper safety and sanitation. 7173.D1.9
- 10 Identify and use utensils, pots and pans. 7173.D1.10
- 11 Utilize weights and measures to demonstrate proper scaling and measurement techniques. 7173.D1.11
- 12 Define, describe and demonstrate basic cooking methods to include boiling, steaming, poaching, roasting, pan frying, deep fat frying, sautéing, broiling, grilling, braising and sous vide. 7173.D1.12
- 13 Demonstrate process of recipe yield adjustment. 7173.D1.13
- 14 Identify and use herbs, spices, oils and vinegars. 7173.D1.14
- 15 Identify and prepare fruits, vegetables, starches and farinaceous items. 7173.D1.15

#### b Domain: Safety and Sanitation 7173.D2

- 1 Identify the critical control points during all food handling processes as a method for minimizing the risk of food borne illness (HACCP system). 7173.D2.1
- 2 Identify microorganisms, which are related to food spoilage and food borne illnesses; describe their requirements and methods for growth. 7173.D2.2
- 3 Recognize symptoms common to food borne illnesses and how these illnesses can be prevented. 7173.D2.3
- 4 Demonstrate knowledge of good personal hygiene and health habits. 7173.D2.4
- 5 Develop acceptable procedures when preparing potentially hazardous foods to include time/temperature principles. 7173.D2.5

- 6 Differentiate the major reasons for and recognize signs of food spoilage. 7173.D2.6
- 7 Describe the requirements for proper receiving and storage of both raw and prepared foods. 7173.D2.7
- 8 Recognize sanitary and safety design and construction features of food production equipment and facilities. (i.e., NSF, UL, OSHA, ADA, etc.). 7173.D2.8
- 9 Differentiate current types of cleaners and sanitizers and their proper use. 7173.D2.9
- 10 Review Material Safety Data Sheets (MSDS) and understand their requirements in handling hazardous materials. Discuss right-to-know laws. 7173.D2.10
- 11 Develop cleaning and sanitizing schedule and procedures for equipment and facilities. 7173.D2.11
- 12 Identify proper methods of waste disposal and recycling. 7173.D2.12
- 13 Differentiate signs of pest infestation and conclude appropriate measures for insects, rodents, and pest eradication appropriate measures for insects, rodents, and pest control eradication. 7173.D2.13
- 14 Understand steps of a sanitation self-inspection and identify modification necessary for compliance with standards. 7173.D2.14
- 15 Differentiate appropriate types and use of fire extinguishers used in the foodservice area. 7173.D2.15
- 16 Recall laws and rules of the regulatory agencies governing sanitation and safety in foodservice operation. 7173.D2.16
- 17 Demonstrate knowledge of how blood-borne pathogens can spread. 7173.D2.17
- 18 Demonstrate knowledge of basic first-aid techniques and CPR. 7173.D2.18

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**B Nutrition 7171****a Domain: Nutrition 7171.D1**

- 1 List the six food groups in the current USDA food guide, MyPlate, and the recommended daily servings from each. List the major nutrients contributed by each of the food groups. 7171.D1.1
- 2 Discuss the current Dietary Guidelines for Americans and adapt recipes accordingly. 7171.D1.2
- 3 Evaluate diets in terms of the Recommended Dietary Allowances. 7171.D1.3
- 4 Describe the characteristics, functions, and best sources of the major nutrients. 7171.D1.4
- 5 List the primary functions and best sources of each of the major vitamins and minerals. 7171.D1.5
- 6 Describe the process of human digestion. 7171.D1.6
- 7 Discuss energy balance in terms of calories consumed and daily energy expenditure. 7171.D1.7
- 8 Discuss healthy cooking techniques and menu planning. 7171.D1.8
- 9 Identify common food allergies and determine appropriate substitutions. 7171.D1.9
- 10 Discuss contemporary nutritional issues such as vegetarianism, heart healthy menus and religious food preferences. 7171.D1.10
- 11 Understand careers related to nutrition and the health industry. 7171.D1.11

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**C Culinary Arts 7169****a Domain: Soups, Stocks, and Sauces 7169.D1**

- 1 Demonstrate knife skills, hand tool and equipment operation, emphasizing proper safety and sanitation. 7169.D1.1
- 2 Identify and prepare various stocks, soups and sauces. 7169.D1.2
- 3 Identify and select pre-made soup bases. 7169.D1.3
- 4 Gain a working knowledge of the use of bases and flavorings for the preparation of various sauces and gravies. 7169.D1.4
- 5 Demonstrate the use of bases in stock preparation. 7169.D1.5
- 6 Describe the basic types of stocks. 7169.D1.6
- 7 List ingredients and seasonings used in stock preparation. 7169.D1.7
- 8 Identify and select stocks. 7169.D1.8
- 9 Demonstrate the preparation and uses of glazes prepared from stocks. 7169.D1.9
- 10 Identify, select and prepare thickening agents. 7169.D1.10
- 11 Identify the seasoning forms. 7169.D1.11
- 12 Identify and select bones for stocks. 7169.D1.12
- 13 Identify and select ingredients for soups. 7169.D1.13
- 14 Outline the major classifications and uses of sauces. 7169.D1.14
- 15 Demonstrate food presentation techniques. 7169.D1.15
- 16 Discuss and demonstrate cooking techniques and storage principles for maximum retention of nutrients. 7169.D1.16

**b Domain: Baking and Pastries 7169.D2**

- 1 Define baking terms. 7169.D2.1
- 2 Identify equipment and utensils used in baking and discuss proper use and care. 7169.D2.2
- 3 Demonstrate proper selection of equipment and utensils for specific application. 7169.D2.3
- 4 Identify ingredients used in baking. 7169.D2.4
- 5 Demonstrate proper scaling and measurement techniques. 7169.D2.5
- 6 Apply basic math skills to recipe conversions. 7169.D2.6
- 7 Describe properties and list function of various ingredients. 7169.D2.7
- 8 Prepare crusty, soft and specialty yeast products; observe reactions. 7169.D2.8
- 9 Prepare quick breads. 7169.D2.9
- 10 Produce a variety of types of pies and tarts. 7169.D2.10
- 11 Produce a variety of types of cookies. 7169.D2.11

- 12 Prepare laminated doughs such as puff pastry, croissant, and Danish pastry doughs. 7169.D2.12
- 13 Prepare creams, custards, puddings, and related sauces. 7169.D2.13
- 14 Discuss the application of mixes and other labor-saving products. 7169.D2.14
- 15 Discuss nutritional concerns as they apply to baking, including recipe modifications. 7169.D2.15
- 16 Prepare fritters, cobblers and crisps. 7169.D2.16
- 17 Prepare a variety of fillings and toppings for pastries and baked goods. 7169.D2.17

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## **D Baking and Pastry Capstone** 7235

### **a** Domain: Human Relations Management 7235.D1

- 1 Describe the process of management through effective communication skills. 7235.D1.1
- 2 Summarize leadership styles and analyze when each is most appropriate. 7235.D1.2
- 3 Outline the supervisor's role in ethical decision-making, problem solving, and delegation of duties. 7235.D1.3
- 4 Explain the role of job descriptions and specifications and develop written examples. 7235.D1.4
- 5 Perform mock interviews; analyze results. 7235.D1.5
- 6 Describe procedures of new employee orientation. 7235.D1.6
- 7 Compare training methods; construct an effective employee-training program to include follow-up training and cross training. 7235.D1.7
- 8 Analyze types and methods of employee evaluation. 7235.D1.8
- 9 Describe necessity of change and ways of implementing change with the least employee resistance. 7235.D1.9
- 10 Evaluate methods of conflict resolution. 7235.D1.10
- 11 Identify reasons for disciplinary problems and discuss the supervisor's role in handling them. 7235.D1.11
- 12 Describe the procedure for terminating employees. 7235.D1.12
- 13 Analyze motivational techniques/problems; discuss procedures for attitudinal changes. 7235.D1.13
- 14 Analyze ways of dealing with stress in the workplace. 7235.D1.14
- 15 Discuss time management and other organizational management techniques. 7235.D1.15

### **b** Domain: Cakes, Icing, and Fillings 7235.D2

- 1 Identify, select, and use and care for tools and equipment used in baking and decorating cakes. 7235.D2.1
- 2 Prepare and describe techniques used in mixing, panning, and baking cakes. 7235.D2.2
- 3 Produce a variety of cakes including butter, sponge, high ratio, and other cake variations. 7235.D2.3
- 4 Understand how to correct cake failures and defects. 7235.D2.4
- 5 Produce a variety of icings used in cake assembly and production. 7235.D2.5
- 6 Prepare a variety of fillings and toppings. 7235.D2.6
- 7 Construct classical and special occasion cakes, including layer cakes and sheet cakes. 7235.D2.7

- 8 Develop and utilize different decorating techniques. 7235.D2.8
  - 9 Identify and assess practical approaches to marketing. 7235.D2.9
- c Domain: Classical Pastries and Chocolates 7235.D3
- 1 Utilize proper cake mixing methods to produce quality scratch baked cakes, icings and fillings for classical cake formulas. 7235.D3.1
  - 2 Develop basic icing, piping, decorating and finishing skills for cakes. 7235.D3.2
  - 3 Produce pastry dough for tart crusts. 7235.D3.3
  - 4 Produce fillings for pastry tarts with finishing techniques for proper presentation. 7235.D3.4
  - 5 Prepare Choux pastries. 7235.D3.5
  - 6 Prepare the three basic meringue types. 7235.D3.6
  - 7 Prepare a variety of dessert sauces. 7235.D3.7
  - 8 Discuss the application of mixes and other value-added products. 7235.D3.8
  - 9 Identify types of chocolate and demonstrate proper technique in tempering chocolate and use chocolate effectively for garnishes. 7235.D3.9
  - 10 Demonstrate proper technique in cooking sugar and producing basic sugar works. 7235.D3.10
  - 11 Prepare ice creams, sorbets and other frozen desserts. 7235.D3.11
  - 12 Prepare hot and cold soufflés. 7235.D3.12
  - 13 Produce and prepare marzipan figurines. 7235.D3.13
- d Domain: Yeast Breads 7235.D4
- 1 Demonstrate intermediate knowledge of baking terms, ingredients, equipment and utensils. 7235.D4.1
  - 2 Apply basic math skill to recipe conversions. 7235.D4.2
  - 3 Demonstrate proper scaling and measurement techniques. 7235.D4.3
  - 4 Demonstrate proper selection of equipment and utensils for specific application. 7235.D4.4
  - 5 Demonstrate basic knowledge and proficiency in the production of principle yeast bread products: lean yeast doughs, crusty European-style hearth/artisan breads (French bread varieties), sourdough bread, rich yeast doughs, soft-roll yeast doughs, sweet yeast doughs, laminated yeast doughs (croissant & Danish), specialty yeast doughs (Baba & Savarin, pizza dough, focaccia), and yeast biscuits. 7235.D4.5
- e Domain: Baking Science 7235.D5
- 1 Understand the nature of the combination of ingredients in baking formulas. 7235.D5.1
  - 2 Understand the methods of mixing and its importance in baking. 7235.D5.2
  - 3 Understand the importance of standardized formulas and the science of substitutions. 7235.D5.3

4 Utilize basic mathematics in formulas to ensure the consistency of products. 7235.D5.4

f Domain: Advanced Decorating Candies 7235.D6

1 Demonstrate knowledge of the science and art of classical and contemporary candies and confectionary decorating. 7235.D6.1

2 Develop a concise workable recipe repertoire with format and logical categorization 7235.D6.2

3 Demonstrate proficiency in the production of candy products. 7235.D6.3

4 Demonstrate proficiency in decorating confections and other patisserie. 7235.D6.4

5 Produce and merchandise confections and other patisserie. 7235.D6.5

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## **E Culinary Art Capstone** 7233

### **a Domain: Human Relations Management** 7233.D1

- 1 Describe the process of management through effective communication skills. 7233.D1.1
- 2 Summarize leadership styles and analyze when each is most appropriate. 7233.D1.2
- 3 Outline the supervisor's role in ethical decision-making, problem solving, and delegation of duties. 7233.D1.3
- 4 Explain the role of job descriptions and specifications and develop written examples. 7233.D1.4
- 5 Perform mock interviews; analyze results. 7233.D1.5
- 6 Describe procedures of new employee orientation. 7233.D1.6
- 7 Compare training methods; construct an effective employee-training program to include follow-up training and cross training. 7233.D1.7
- 8 Analyze types and methods of employee evaluation. 7233.D1.8
- 9 Describe necessity of change and ways of implementing change with the least employee resistance. 7233.D1.9
- 10 Evaluate methods of conflict resolution. 7233.D1.10
- 11 Identify reasons for disciplinary problems and discuss the supervisor's role in handling them. 7233.D1.11
- 12 Describe the procedure for terminating employees. 7233.D1.12
- 13 Analyze motivational techniques/problems; discuss procedures for attitudinal changes. 7233.D1.13
- 14 Analyze ways of dealing with stress in the workplace. 7233.D1.14
- 15 Discuss time management and other organizational management techniques. 7233.D1.15

### **b Domain: Pantry and Breakfast** 7233.D2

- 1 Prepare quick breads and muffins. 7233.D2.1
- 2 Prepare laminated doughs. 7233.D2.2
- 3 Prepare crepe and appropriate application. 7233.D2.3
- 4 Identify the preparation, presentation, and service of a variety of beverages, including coffee and tea. 7233.D2.4
- 5 Identify and use herbs, spices, oils and vinegars. 7233.D2.5
- 6 Identify and prepare various salads, dressings (emulsions), and marinades. 7233.D2.6
- 7 Identify and prepare hot and cold sandwiches. 7233.D2.7
- 8 Identify and prepare canapés and hot and cold hord'oeuvres. 7233.D2.8

- 9 Identify and prepare breakfast meats, eggs, cereals and batter products. 7233.D2.9
  - 10 Demonstrate food presentation techniques. 7233.D2.10
  - 11 Identify and prepare different fruits and vegetables. 7233.D2.11
  - 12 Demonstrate skills illustrating short order cooking techniques. 7233.D2.12
  - 13 Illustrate appropriate garnishing techniques. 7233.D2.13
  - 14 Plan a la carte, cycle, ethnic, banquet and buffet menu. 7233.D2.14
  - 15 Prepare a variety of basic hot soufflés. 7233.D2.15
- c Domain: Meat and Seafood 7233.D3
- 1 Demonstrate knife skills, hand tools and equipment operation. 7233.D3.1
  - 2 Understand the importance of proper sanitation procedures used during and after the butchery process. 7233.D3.2
  - 3 Identify and select knives to be used in the butchering of meats, poultry, fish and seafood (scimitar, boning knife – stiff and flexible, slicer, utility knife, meat handsaw, and meat cleaver). 7233.D3.3
  - 4 Describe the composition and structure of meat, poultry, fish, and seafood; explain how it relates to protein selection and cooking methods. 7233.D3.4
  - 5 Use the federal meat inspection and grading system to select and purchase meats, poultry, fish, and seafood. 7233.D3.5
  - 6 Explain proper purchasing, receiving, aging, storage and handling of meats, poultry, fish, and seafood. 7233.D3.6
  - 7 Identify the primal cuts of beef, lamb, veal, and pork and list the major fabricated cuts obtained from each of them. 7233.D3.7
  - 8 Demonstrate the various market cuts used in selling fish and seafood 7233.D3.8
  - 9 Describe a variety of techniques used in merchandising seafood. 7233.D3.9
  - 10 Explain the significance of aging meats. 7233.D3.10
  - 11 Select appropriate cooking methods for the most important meat cuts, based on the meat's tenderness and other characteristics. 7233.D3.11
  - 12 Demonstrate food presentation techniques. 7233.D3.12
  - 13 Wrap and store meats for maximum shelf life. 7233.D3.13
  - 14 Tie meats – tie string to form a net around meats for roasting. 7233.D3.14
  - 15 For poultry, explain the differences between “light meat” and “dark meat,” and describe how these differences affect cooking. 7233.D3.15
  - 16 Identify any domestic poultry item with reference to its kind, class and style. 7233.D3.16
  - 17 Cut chickens into halves, quarters and pieces of eight. 7233.D3.17
  - 18 Store poultry items properly. 7233.D3.18
  - 19 Define the concept of the “food mile.” 7233.D3.19

- 20 Discuss controlling the amount of food prepared in order to reduce waste; and what can be done with excess prepared food as an alternative to composting. 7233.D3.20
  - 21 Identify a variety of protein products that can be purchased in your local area and describe how you would procure them. 7233.D3.21
  - 22 Identify the pros and cons of purchasing locally produced (raised) proteins. 7233.D3.22
  - 23 Explain the pros and cons of purchasing organic foods. 7233.D3.23
  - 24 Research the different ways of raising sustainable proteins. 7233.D3.24
  - 25 Define (10) terms used to describe “sustainable” foods (e.g., free range, organic, heritage, heirloom, rBGH-free, etc.) 7233.D3.25
  - 26 Identify the pros and cons of purchasing locally. 7233.D3.26
  - 27 Understand the concept of sustainable seafood, and list 10 fish that are on the red, yellow and green lists. 7233.D3.27
  - 28 Research the benefits and issues related to aquaculture and wild-caught fish, along with the different wild-caught fish methods. 7233.D3.28
  - 29 List seafood that can be substituted for red-listed species, based on fish texture and flavor. 7233.D3.29
- d Domain: Customer Service 7233.D4
- 1 Demonstrate the general rules of table settings and service. 7233.D4.1
  - 2 Demonstrate specific American, English, French and Russian service. 7233.D4.2
  - 3 Discuss food delivery system such as banquets, buffets, and catering. 7233.D4.3
  - 4 Describe the functions of dining service. 7233.D4.4
  - 5 Discuss training procedures for processing guest checks. 7233.D4.5
  - 6 Discuss procedures for processing guest checks. 7233.D4.6
  - 7 Demonstrate and understanding of guest service and customer relations, including handling of difficult situations and accommodations for the disabled. 7233.D4.7
  - 8 Explain interrelationships and workflow between dining room and kitchen operations. 7233.D4.8
  - 9 Discuss sales techniques for service personnel, including menu knowledge and suggestive selling. 7233.D4.9
  - 10 Evaluate the relationship of beverages to food. 7233.D4.10
  - 11 Identify the preparation, presentation, and service of non-alcoholic and dealcoholized beverages to include coffees and teas. 7233.D4.11
  - 12 Identify equipment and glassware used for beverage preparation and service. 7233.D4.12
  - 13 Discuss opening and closing procedures of a beverage operation. 7233.D4.13
  - 14 Explain procedures for implementing internal beverage controls. 7233.D4.14

15 Create menu item descriptions following established truth-in-menu guidelines. 7233.D4.15