Tennessee CTE

Culinary Arts I

Safety & Sanitation

1 **Synthesize research from government publications such as Food and Drug Administration (FDA) Food Codes to identify the pathogens found in foods. Create an alphabetical index of pathogens, citing the research, which illustrates the required environmental factors for transmission, symptoms, and categories.** 1

2 **Summarize the requirements for proper disposal and storage of chemicals used in the commercial foodservice laboratory and adhere to laboratory work requirements throughout the course. Create or update an existing binder of Material Safety Data Sheets (MSDS) outlining how to work with chemicals and potential hazards. Develop a list of, and demonstrate, procedures to schedule when cleaning and sanitizing the commercial foodservice laboratory using the proper chemicals and disposal of waste; include the list in the student portfolio.** 2

3 **Compile, practice, and critique safety and sanitation procedures related to handling, preparing, storing, and serving food from industry-approved technical manuals and government published fact sheets. Identify, review, and demonstrate general laboratory safety procedures including but not limited to prevention and control procedures of pest, insects, and rodents and personal hygiene expectations. Incorporate safety procedures and complete safety test with 100 percent accuracy; include exam in course portfolio.** 3

History & Influences on the Food Service Industry

4 **Articulate important historical events and milestones that influenced culinary practices from ancient times to the present. Create a timeline or other graphic to illustrate the major impacts of these culinary practices on the progression of various styles of cuisine, citing specific textual evidence from research.** 4

5 **Research the growth and development of the foodservice industry, focusing on the influence of significant contributors. Craft an explanatory text to outline significant contributions and the impact on the modern day industry. Examples of significant contributors include, but are not limited to:** 5

- a Maire-Antoine Careme 5A
- b Auguste Escoffier 5B
- c Catherine de Medici 5C
- d Fernand Point 5D
- e Alexis Soyer 5E

6 **Evaluate factors that influence the foodservice industry. Form a hypothesis about how specific factors may impact the foodservice industry. Develop claim(s) and counterclaim(s) fairly, supplying data and text-based evidence. Influential factors may include:** 6

- a Economic climate 6A
- b Social changes 6B
- c Globalization of cuisines 6C
- d Green technologies 6D
- e Farm to Table 6E

Foodservice Careers

7 **Compile and analyze real-time labor market data, including economic and demographic trends, and compare with authentic vacancy announcements on local and national job boards. Use this information to compare and contrast occupations by education requirements, job availability, salaries, and benefits. Outline an educational pathway to obtain the necessary level of education and relevant certifications for a chosen occupation in the foodservice industry, review and revise throughout the program of study.** 7

8 **Create an organizational diagram of the kitchen workstations in the brigade system, labeling each workstation with its unique list of roles and responsibilities. Examine the licensing, certification, and credentialing requirements for each position. Craft an explanatory essay describing modern variations of the brigade system and how it enhances productivity.** 8

9 **Conduct research to develop a persuasive essay on contemporary issues and challenges facing the foodservice industry. Synthesize multiple perspectives and advance an original argument to address the issues. Develop claim(s) and counterclaim(s) fairly, supplying data and text-based evidence. Contemporary issues and challenges may include but are not limited to:** 9

- a Living wage 9A
- b Labor demands 9B
- c Customer demands 9C
- d Technology advances impacting labor needs 9D

10 **Compare and contrast the qualities of effective and ineffective teams. Work collaboratively to correct and refine the actions of team members to ensure productivity. Throughout the course, demonstrate teamwork, problem solving, and decision making skills when working collaboratively.** 10

Nutrition and Health Overview	11	**Identify, analyze, and visually represent the macro- and micro- nutrients required in the human diet. Include the common food sources of those nutrients, their chemical properties, and function in the body, as well as the influence upon biological systems in reference to maintenance and growth.** 11 a Macro nutrients include: carbohydrates, lipids, and proteins 11A b Micro nutrients include: minerals, vitamins, and water 11B
	12	**Differentiate between food allergies and food intolerances, and describe the body's reaction to each. Research the eight (8) most common food allergens. Make recommendations for food substitutes and recipe modifications to avoid foods that may cause a reaction, citing specific reasoning and evidence to justify the recommendation.** 12
Recipe Basics	13	**Examine the anatomy of a recipe identifying the key points and functions of each (name, yield, portion size, ingredients, quantity, and methods). Define common recipe terminology. Use the definitions to gain a proficient working understanding of terms and characteristics used in the standardized recipes.** 13
	14	**Compare and contrast the components of a standardized recipe with a home recipe, citing evidence from each recipe format to support comparisons. Using proper formulas, apply the correct conversion factor to increase and decrease the yield according to specifications noted in recipes.** 14
	15	**Follow recipes precisely, including defining and utilizing specific culinary and measurement terms as needed. Discuss ways to reduce waste in food products.** 15
Kitchen Equipment	16	**Identify, describe, and effectively demonstrate the use of hand tools and smallwares used in commercial food preparation. Using supporting evidence from a variety of equipment manuals and fact sheets, create an informational guide to differentiate the functions, cleaning procedures, storage, and examples of proper use of tools used in commercial foodservice.** 16
	17	**Examine various pieces of large equipment employed in commercial kitchens, including refrigeration units, holding units, grills and broilers, ranges and ovens. Explain the properties of design and their relationship to functionality for each piece of equipment examined. Determine the appropriate equipment needed for various tasks performed in the commercial kitchen, properly demonstrate safe use, and outline and practice proper cleaning procedures.** 17
	18	**Identify, and be able to select, the appropriate measuring tools (i.e. measuring cups, pitchers, spoons, scales, and thermometers) for a variety of ingredients. Execute proper measuring required for ingredients for recipes in lab settings.** 18

Preparation Techniques

19 **Distinguish among the different types of knives (i.e. paring, serrated, slicers, utility, and chef's) and explain their elements of construction. Identify and demonstrate the correct use, sharpening techniques, and storage options for each type of knife examined. Create a how- to graphic outlining the proper safety handling techniques when using knifes in the kitchen, citing evidence.** 19

20 **Categorize the different types of cuts by justifying how they should be used for a given recipe or presentation. Prepare a workstation for knife work. Practice and execute the three basic knife cuts (slice, stick, and dice) using the correct safety methods. Upload either a picture or video into the student portfolio documenting correct use.** 20

Cooking Principles

21 **Using culinary resources, such as textbooks or industry magazines, compare and contrast dry, moist, and combination cooking methods in a class discussion. Create an informational artifact that describes each method, locate an example recipe for each, and demonstrate effective use of the technique in a laboratory setting. Examples may include:** 21

- a Blanching 21A
- b Baking 21B
- c Grilling 21C
- d Frying 21D
- e Poaching 21E
- f Boiling 21F
- g Broiling 21G

Kitchen Staples

22 **Create an index of basic seasonings, herbs, and spices used in professional kitchens. Research and cite evidence from digital text resources and culinary guides that describes the sources, varied forms, and uses in professional kitchens. Assess the cost of using fresh herbs or substituting dried herbs without affecting the quality of the final product. Provide an example of a recipe for which the substitution may be made successfully.** 22

23 **Distinguish the differences in form and flavor between the variety of sweeteners (i.e. sugar, molasses, honey, brown sugar, maple syrup, corn syrup, and agave nectar) from a taste test/observation in the lab setting. Discuss common substitutions for sweeteners in recipes without compromising quality, citing culinary research.** 23

24 **Compare and contrast the different types of starches used in commercial kitchens and describe the physical properties of each. Create a chart that describes which starch is best suited for each function in the kitchen, citing an example dish.** 24

- a Flour (all-purpose, semolina, rice flour) 24A
- b Cornmeal 24B
- c Cornstarch 24C
- d Arrowroot 24D
- e Breadcrumbs (panko, dried, and fresh breadcrumbs) 24E

25 **Research the roles of acids as ingredients in the kitchen using culinary journals and text. Form a hypothesis and design and conduct an experiment to identify the role of the acid ingredients in relations to food preparation techniques. Summarize experiment results into an argument making a claim about the impact of a selected acid ingredient on food composition. Compare results to findings in news media and note when findings support or contradict previous explanations or accounts. Acid ingredients may include but are not limited to vinegars, lemon juice, and lime juice.** 25

Garde Manger

26 **Salads: Compare and contrast the different types of salads (i.e. simple, composed, and bound) and the role of the ingredients in each, citing evidence from culinary textbooks. Using print or digital resources, discuss the qualities of simple and emulsified dressings, citing examples of each. Evaluate a salad recipe, analyzing the choice of ingredients, and any proposed modifications, or substitute ingredients. Draft the recipe with modification and prepare the salad. Include the recipe and a photo of the salad in the student portfolio.** 26

27 **Sandwiches: Categorize the different types of sandwiches, discussing the roles of ingredients, assembly methods, and attributes. Create a recipe for a cold sandwich that reflects the local taste of your region and culinary trends. The recipe should reflect the use of local products, taste of consumers, and connections to the region. Craft an accompanying explanatory text discussing the use of the local products, connection to the region, and description of the sandwich.** 27