

Food Service/Culinary Arts – Grades 11-12

Short description of course: Students will be trained for career opportunities in the food service/culinary arts industry. Students will have the opportunity to learn and practice safety and sanitation procedures, and use and maintain commercial food service equipment. They will perform quantity food preparation as it relates to catering, bakery, restaurant, hospitality, and fast food business operations.
Concurrent enrollment: May be available for this course
Pathway(s): Foundation course for Food Services & Culinary Arts and Hospitality Services pathways

COURSE STANDARDS / OBJECTIVES	INTEGRATED MATH CONCEPTS	INTEGRATED LITERACY CONCEPTS	INTEGRATED SCIENCE CONCEPTS
<p>S-1 Students will discuss career options and employment skills required in the food service industry.</p> <p>O-1: Identify various career opportunities and educational requirements.</p> <p>O-2: Identify and discuss trends in the food service industry.</p> <p>O-3: Identify various food production areas such as fast food, catering, institutional food, family dining, and fine dining.</p>		<p>O-1, O-2, O-3 - Writing Standards for Technical Subjects Gr. 9-12 – Range of Writing #10 – “Write routinely over extended time frames (time for reflection and revision) and short time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.”</p>	
<p>S-2 Students will discuss the importance of human relations and customer service.</p> <p>O-1: Explore appropriate interpersonal employment skills.</p> <p>O-2: Discuss the job title and duties of food service employees.</p>		<p>O-1, O-2 - Speaking and Listening Standards Gr. 11-12 – Comprehension and Collaboration #1b – “Work with peers to set rules for collegial discussions and decision-making (e.g., informal consensus, taking votes on key issues, presentations of alternate views), clear goals and deadlines, and individual roles as needed.”</p>	
<p>S-3 Students will discuss the importance of sanitation and safety.</p> <p>O-1: Identify standards of personal grooming and hygiene.</p> <p>O-2: Identify proper sanitation techniques used with tools,</p>		<p>O-2, O-3, O-4 - Reading Informational Text Gr. 9-12 – Craft and Structure #4</p>	<p>O-2, O-3 – Biology and MaP - Bacterial growth in food and illness cause by</p>

<p>equipment, and surfaces.</p> <p>O-3: Identify the factors contributing to food-borne contamination, illness, and prevention strategies.</p> <p>O-4: Apply basic safety and first-aid procedures.</p> <p>O-5: Demonstrate appropriate food handler safety and sanitation procedures. – PO #1</p>		<p>- Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings...”</p> <p><i>Reading Standards for Literacy in Technical Subjects Gr. 9-12 - Craft and Structure #4</i> – “Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific ... technical context...”</p>	<p>consuming contaminated food</p> <p>O-4 - First Aid – Health Education Core Standard 4 - Students will demonstrate the ability to apply prevention and intervention knowledge, skills, and processes to promote safety in the home, school, and community.</p>
<p>S-4 Identify and practice the basic concepts of food production.</p> <p>O-1: Utilize proper measuring techniques and identify equivalents.</p> <p>O-2: Demonstrate proper mis en place and clean up. – PO #2</p> <p>O-3: Apply knowledge of equivalents and substitutions</p> <p>O-4: Apply knowledge of cost calculation.</p> <p>O-5: Identify and demonstrate appropriate use of food service equipment. – PO #3</p> <p>O-6: Apply the basics of menu/meal planning.</p> <p>PO #4: Plan, calculate costs and present a quantity menu item(s).</p> <p>O-7: Demonstrate quality presentation using the principles and elements of design.</p>	<p>O-1, O-3 - Number System Gr. 6 – “6.NS.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions.... <i>How many 1/4-cup servings are in 2/3 of a cup of yogurt?</i> ... “</p> <p><i>Ratios and Proportional Relationships Gr. 6</i> – “6.RP.3. Use ratio and rate reasoning to solve real-world and mathematical problems, ... Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p> <p><i>Number System Gr. 7</i> – “7.NS.3. “Solve real-world and mathematical problems involving the four operations with rational numbers.”</p> <p><i>Expressions and Equations Gr. 6 - 6.EE.4.</i> Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).</p> <p><i>Expressions and Equations Gr. 7-</i></p>	<p>O-2, PO #2 - Writing Standards for Technical Subjects Gr. 9-12 – <i>Production and Distribution of Writing #4</i> – “ Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.”</p> <p>*mis en place, quantity food production terms,</p>	

	<p>“Use properties of operations to generate equivalent expressions – Solve real-life and mathematical problems using numerical and algebraic expressions and equations.”</p> <p><i>Mathematics 1 Gr.9 – Relationships between Quantities – “N.Q.2. “Define appropriate quantities for the purpose of descriptive modeling.</i></p> <p>*doubling a recipe is multiplying rational numbers, cutting down a recipe is dividing rational numbers</p> <p>*equivalent measures – 3 t. = 1 T., 16 T. = 1 c., 16 c. = 1 gal., 2 pt. = 1 qt., 2 c. = 1 pt., 4 qt. = 1 gal.</p> <p>O-4, PO#4 – Relationships between Quantities Gr. 9 – A.CED.3. “Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.”</p> <p>*Calculate the cost of a recipe.</p>		
<p>S-5 Students will discuss and participate in bakery food production.</p> <p>O-1: Identify the function of each ingredient used in bakery products.</p> <p>O-2: Identify the types, mixing, and storage methods of various bakery products including cookies, quick breads, yeast breads, icings, frosting, fillings, cakes, and pastries.</p> <p>O-3: Prepare and present quality bakery item(s). – PO #5</p>	<p>O-3, PO #5 - Mathematics 1 Gr.9 – Relationships between Quantities – “N.Q.2. “Define appropriate quantities for the purpose of descriptive modeling.</p> <p>*Have students increase standard recipes for larger production. Doubling a recipe is multiplying rational numbers.</p>	<p>O-3, PO #5 – Reading Standards for Literacy in Technical Subjects Gr. 11-12 – Key Ideas and Details #3 – “</p> <p>Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.”</p>	<p>O-1 - Chemistry – chemical form and function of CHO</p> <p><i>Biology Core Standard 2 Objective 1.b. “Identify the function of the four major macromolecules (i.e., carbohydrates, proteins, lipids, nucleic acids).”</i></p> <p><i>Map 02.11 “Describe the structures and functions of carbohydrates,</i></p>

	<p>*equivalent measures – 3 t. = 1 T., 16 T. = 1 c., 16 c. = 1 gal., 2 pt. = 1 qt., 2 c. = 1 pt., 4 qt. = 1 gal.</p>	<p>*follow a recipe and make quality bakery items – evaluate items using qualifiers from text</p>	<p>proteins, lipids, and nucleic acids.” <i>Chemistry, AP Biology</i> – gluten formation, acid-base reactions <i>Chemistry Core Standard 4 Objective 1.f.</i> “Investigate everyday chemical reactions that occur in a student's home (e.g., baking, rusting, bleaching, cleaning).” <i>Chemistry Core Standard 6 Objective 3.a.</i> “Relate hydrogen ion concentration to pH values and to the terms acidic, basic or neutral.” <i>Chemistry Core Standard 6 Objective 1.b.</i> “Using an indicator, measure the pH of common household solutions and standard laboratory solutions, and identify them as acids or bases.”</p>
<p>S-6 Students will discuss and participate in restaurant food production. O-1: Identify terminology and classifications of stocks, soups, and sauces. PO #6: Prepare and present a quality soup. PO #7: Prepare and present a quality sauce with an appropriate food item. O-2: Identify high protein foods and appropriate safe cooking methods. PO #8: Prepare and present a quality protein entrée. O-3: Identify characteristics of fruits and vegetables and appropriate storage and cooking methods. PO #9: Prepare and present a quality fruit/vegetable item. O-4: Identify the characteristics of starch products, storage, and appropriate cooking methods.</p>	<p>PO #6, PO #7, PO #8, PO #9, PO # 10 – Mathematics 1 Gr.9 – Relationships between Quantities – “N.Q.2. “Define appropriate quantities for the purpose of descriptive modeling. *Have students increase standard recipes for larger production. Doubling a recipe is multiplying rational numbers. *equivalent measures – 3 t. = 1 T., 16 T. = 1 c., 16 c. = 1 gal., 2 pt. = 1 qt., 2 c. = 1 pt., 4 qt. = 1 gal.</p>	<p>PO #6, PO #7, PO #8, PO #9, PO # 10 – Reading Standards for Literacy in Technical Subjects Gr. 11-12 – Key Ideas and Details #3 – “ Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.” *follow a recipe and make quality food items – evaluate items using qualifiers from text O-5 - Writing Standards for Technical Subjects Gr. 9-12 – Production and Distribution of Writing #4 – “ Produce clear and coherent writing in which the development, organization, and</p>	<p>PO #6, PO # 7 - Chemistry Standard 6 Objective 1a – “Use the terms solute and solvent in describing a solution.” PO #6, PO # 7 - Chemistry Standard 6 Objective 2b – “Measure change in boiling and/or freezing point of a solvent when a solute is added.” O-3, PO #9 - Chemistry Standard 6 Objective 3b – “Using an indicator, measure the pH of common household solutions and standard laboratory solutions, and identify them as acids or bases.” *acid-base reactions when cooking, Enzymatic browning, oxidation-reduction reactions of iron in vegetables</p>

<p>PO #10: Prepare and present a quality starch product.</p> <p>O-5: Identify terminology, types and preparation methods of salads and dressings.</p>		<p>style are appropriate to task, purpose, and audience.”</p> <p>*stocks, soups, and sauces terminology; meat terminology; poultry terminology; seafood terminology; salad and salad dressing terminology</p>	
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