



Northern York County School District

Curriculum Overview

Course: Baking and Confectionary Fundamentals	
Grade Level: 10-12	
Approval Date: January 2025	Length of Time: 180 days
Course Description: <p>As part of the Family and Consumer Sciences (FCS) curriculum, the Baking and Confectionary Fundamentals course introduces students to the essential skills and knowledge necessary for baking and pastry arts. Over the course of a full year, students will explore various baking techniques, recipes, and industry standards. Through hands-on experiences and theoretical lessons, students will learn the science behind baking, proper food handling, kitchen safety, and equipment usage. This course also emphasizes creativity, precision, and time management, while building a foundation for careers in culinary arts or enhancing practical life skills.</p> <p>Students will progress from basic baking methods to more advanced topics, including bread-making, pastries, cakes, and candies. They will be encouraged to experiment with flavor combinations and presentation techniques while understanding the importance of nutrition and dietary considerations in baking.</p> <p>Prerequisite: Introduction to Culinary</p>	
Course Objectives: <ul style="list-style-type: none">• Demonstrate proficiency in foundational baking methods essential for producing a wide variety of baked goods.• Analyze the role and function of key baking ingredients and the scientific processes occur during baking.• Practice proper food handling, storage, and sanitation techniques in adherence to industry health and safety standards to ensure a safe baking environment.• Create a range of baked items, including but not limited to breads, cakes, cookies, pastries, and pies, applying proper techniques and time management.• Learn and apply methods for creating confections while understanding the temperatures and tools required for sugar work.• Utilize basic and advanced decorating techniques to enhance the aesthetic appeal of baked products.• Troubleshoot common baking problems and adjust recipes or techniques accordingly to ensure product quality.• Develop effective time management strategies by planning, executing, and presenting multi-step baking and confectionery projects, from recipe selection to final presentation.• Work both independently and as part of a team to complete baking assignments, learning how to manage responsibilities, and collaborate effectively in a kitchen environment.	

- Encourage creativity by experimenting with flavors, textures, and presentation techniques, and participating in occasional classroom challenges or competitions.
- Develop critical tasting and evaluation skills, learning to assess texture, flavor, presentation, and consistency to improve baking outcomes and refine techniques.

Related Standards:

National Standards for Family & Consumer Sciences

1.0 Career Community and Family
 2.0 Consumer and Family Resources
 3.0 Consumer Services
 8.0 Food Production and Services
 9.0 Food Science, Dietetics, and Nutrition
 14.0 Nutrition and Wellness

Pennsylvania Academic Standards for Career Education and Work

13.1.11.B Analyze career options based on personal interests, abilities, aptitudes, achievements and goals.

Pennsylvania Academic Standards for Reading in Science and Technology

CC.3.5.11-12.C. Follow precisely a complex multi-step procedure when carrying out experiments, taking measurements, or performing technical tasks; analyze the specific results based on explanations in the text.

Pennsylvania Standards for Writing in Science and Technology

CC.3.6.11-12.F. Conduct short as well as more sustained research projects to answer a question (including the self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Units:

Introduction to Baking & Kitchen Safety
 The Science of Baking: Ingredient Functions
 Quick Breads
 Cookies and Bars
 Cakes and Cake Decorating
 Pies, Tarts, and Pastry Doughs
 Yeast Breads and Rolls
 Laminated Doughs and Pastries
 Confectionery Techniques
 Healthy Baking & Dietary Considerations

<p>Concepts:</p> <ul style="list-style-type: none"> • Ingredient Functions and Baking Science: Understand the roles and functions of key baking ingredients such as flour, fats, sugars, and leavening agents, exploring how these components interact scientifically during baking to affect texture, flavor, and structure. • Baking Techniques and Methods: Focus on mastering essential baking techniques, including mixing, kneading, proofing, and baking, to produce a wide variety of baked goods with consistency and precision, while understanding how different methods impact the final product. • Confectionery Techniques and Methods: Learn specialized techniques in confectionery production, such as tempering chocolate, working with sugar at different stages, and crafting candies and sweets, with an emphasis on precise temperature control and detailed craftsmanship. • Cake and Pastry Decoration and Presentation: Develop artistic and technical skills in cake and pastry decoration, focusing on techniques like piping, fondant application, and creating edible designs, enhancing the aesthetic appeal and presentation of baked goods. • Food Safety and Kitchen Sanitation: Emphasize the importance of food safety and sanitation practices in the kitchen, ensuring proper food handling, storage, and cleanliness to prevent contamination, reduce foodborne illness risks, and maintain a professional baking environment. 	<p>Competencies: Students will:</p> <ul style="list-style-type: none"> • Demonstrate the ability to use a variety of baking techniques (mixing, folding, kneading) to produce consistent and high-quality baked goods. • Identify and explain the functions of key baking ingredients and make informed decisions about ingredient substitutions based on desired outcomes. • Adhere to food safety and sanitation practices, ensuring proper handling, storage, and preparation of food to prevent contamination and foodborne illnesses. • Create and modify recipes to accommodate dietary restrictions (gluten-free, vegan, etc.) while maintaining flavor and texture quality. • Master techniques for preparing confections, including tempering chocolate, making candies, and performing sugar work, with attention to detail and precision. • Apply cake decorating and plating techniques to create visually appealing desserts and pastries, showcasing creativity and artistic expression. • Efficiently manage time and resources to complete multi-step baking projects, demonstrating the ability to plan and execute tasks effectively in a kitchen environment. • Evaluate baked goods based on flavor, texture, and presentation, providing constructive feedback, and utilizing tasting techniques to improve baking practices.
<p>Learning Activities:</p> <ul style="list-style-type: none"> • Students will participate in hands-on baking labs where they prepare a variety 	<p>Performance Tasks:</p> <p>Classwork Projects Lab planning</p>

<p>of baked goods to practice techniques and reinforce their learning.</p> <ul style="list-style-type: none"> • Students will conduct ingredient exploration to investigate the functions of various baking ingredients. • Students will read and analyze recipes for structure, clarity, and technical terms. • Students will modify traditional recipes for dietary needs (e.g., gluten-free, vegan) and discuss the changes made and their effects. • Students will engage in sessions focused on confectionery skills where they learn techniques for making candies and confections. Students will participate in cake decorating to showcase their cake decorating skills, using various techniques to create themed cakes. • Students will participate in demonstrations and practice exercises related to kitchen safety, proper food handling, and sanitation procedures. • Students will participate in taste testing and peer critique sessions where they evaluate their classmates' baked goods based on taste, texture, and presentation, providing constructive feedback to foster improvement. • Students will engage with guest speakers from the baking fields, such as a dietitian or chef, and ask questions about their career. Alternatively, they will research various careers related to nutrition and food science and present on job requirements, roles, and future career prospects. • Students will read baking related articles and write responses. 	<p>Cooking labs Lab evaluations/reflection (both peer and self) Unit tests</p>
<p>Other Assessment Measures: In class discussions Knowledge checks AAFCS Pre-Professional Assessment and Certification: Culinary Arts ServSafe: Food Handlers Certification OSHA- 10-hour General Industry- Culinary Certification</p>	
<p>Textbook/Primary Resource: On Baking: A Textbook of Baking and Pastry Fundamentals, 4th Edition © 2020 Sarah R. Labensky, Priscilla A. Martel, Eddy Van Damme</p>	
<p>Supplemental Resource Materials: Online resources Teacher generated notes and presentations Teacher generated activities Multimedia resources</p>	

Recipe book or access to online culinary resources

Kitchen equipment and supplies for hands-on labs (stoves, utensils, ingredients etc.)