Family & Consumer Sciences: Baking & Pastry Arts

Resources: *no textbook*; assorted handouts and teacher-produced materials Adopted April 2018

Major Topics	**Concepts**	**Time** Daily classes 41 minutes/36 weeks	**The students will know:**	**Skills**	**Assessment**	**Standard(s)**
The Basics • Safety & sanitation • Reading recipes and terminology • Kitchen math • Common ingredients and their functions • Scaling and measuring • Preparation techniques and Baking methods • Bakeshop equipment and tools	Characteristics of foodborne pathogens Safe food handling practices Safe kitchen work habits	10 weeks	Identify characteristics of major foodborne illness pathogens, their role in causing illness, potentially hazardous foods and methods of prevention Role of gluten development in the texture and final Importance of precision in measurements Function of ingredients and their impact on baked goods Characteristics of a variety of flours Recognize the accuracy of a recipe and correct where necessary	Demonstrate procedures for safe and secure storage of equipment and tools Demonstrate food safety and sanitation procedures Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods and food groups Develop a time/work management plan for effective and timely combining of ingredients Determine equivalents, substitutions and conversions of recipes	Safety & Sanitation exam *(must be passed with 73% to work in kitchens)*	PA FCS Academic Standards: 11.3.12.B National Standards for Family & Consumer Sciences (Nat'l FCS Standards): 8.2.1 8.2.5 8.2.6 9.2.1 9.2.5 9.2.6

				To identify ingredients and understand their function in baking. Recognize standards of quality for baked goods. Expand and reinforce knowledge of weights and measure, recipe conversion, bakeshop equipment, and technical vocabulary		
Topic	**Concepts**	**Time**	**The students will know**	**Skills**	**Assessment**	**Standard(s)**
Quick Breads • Muffin Method of Mixing • Biscuit method of mixing • Creaming method of mixing • Griddle quick breads	Basic baking ingredients and their functions/effects Alterations of fat/sugar quantities in baking recipes Baking techniques and processes	3 weeks	Role of gluten development in the texture and final Importance of precision in measurements Function of ingredients and their impact on baked goods Biscuit method works for various applications	Describe the difference between batters and doughs Prepare baking ingredients according to selected recipes To identify ingredients and understand their function in baking. Recognize	Formative and summative assessments	PA FCS: 11.3.12.A 11.3.12.B 11.3.12.G Nat'l FCS: 9.5.1 14.1.2 14.4.3 14.5.3

				standards of quality for baked goods. Expand and reinforce knowledge of weights and measure, recipe conversion, bakeshop equipment, and technical vocabulary. STEM related: science, math, technology, and life literacy (interpersonal skills, teamwork, problem solving, etc)		
Topic	**Concepts**	**Time**	**The student will know**	**Skills**	**Assessment**	**Standard(s)**
Pies and Tarts • 1 and 2 crust pies • Tarts • Handling rolling and shaping • Fillings and assembly • Savory applications	Basic baking ingredients and their functions/effects Alterations of fat/sugar quantities in baking recipes Baking techniques and processes	5 weeks	Role of gluten development in the texture and final Importance of precision in measurements Function of ingredients and their impact on baked goods	Perform accurate measurements of ingredients To identify ingredients and understand their function in baking. Recognize standards of quality for baked goods.	Formative and summarize assessments (test and quizzes, both formal and informal) Vitamin & Mineral project "My Plate" menu adaptation activity	PA FCS: 11.3.12.C 11.3.12.D 11.3.12.E 11.3.12.F Nat'l FCS: 8.5.14 9.3.1 9.3.3 9.3.4 9.3.5 9.3.7 9.4.4 14.3.3

			Different types of pies/sweet tart doughs and their uses	Expand and reinforce knowledge of weights and measure, recipe conversion, bakeshop equipment, and technical vocabulary. Demonstrate the ability to determine the "doneness" in baked goods STEM related: science, math, technology, and life literacy (interpersonal skills, teamwork, problem solving, etc)		
Topic	**Concepts**	**Time**	**The students will know:**	**Skills**	**Assessments**	**Standard(s)**
Yeast Breads and rolls • Mixing procedures • Cool fermentation • Hard lean dough	Heat transfer and the cooking process Basic baking ingredients and their functions/effects Alterations of fat/sugar quantities in baking recipes	5 weeks	How heat energy changes food How does the interaction of ingredients produce chemical changes in food preparation	Explain the action or yeast and other leavening agents in batter and dough mixtures Demonstrate the ability to combine ingredients to produce batters and doughs	Formative and summative assessments Food Labs w/rubrics	PA FCS: 11.3.12.C 11.3.12.D 11.3.12.E 11.3.12.F Nat'l FCS: 8.4.2 8.5.1 8.5.3 8.5.4 8.5.13

• Soft medium dough • Sweet rich dough • Laminated dough	Baking techniques and processes		Why it is important to follow order of directions when preparing a recipe The pros and cons of various bake-/cook-ware materials and their ability to transfer heat How does yeast work Procedures for mixing yeast dough Storing bread/dough for future use	Demonstrate knowledge of portion control and proper scaling and measurement techniques To identify ingredients and understand their function in baking. Recognize standards of quality for baked goods. Expand and reinforce knowledge of weights and measure, recipe conversion, bakeshop equipment, and technical vocabulary. STEM related: science, math, technology, and life literacy (interpersonal skills, teamwork, problem solving, etc)		
Topics	**Concepts**	**Time**	**The students will know:**	**Skills**	**Assessment**	**Standard(s)**
Cookies and Brownies • Mixing methods	Basic baking ingredients and their functions/effects	3 weeks	Role of gluten development in the texture and final	To identify ingredients and understand their	Formative and summative assessments	PA FCS: 11.3.12.C 11.3.12.F 11.3.12.G

• Types of cookies • Handling, scaling and planning	Alterations of fat/sugar quantities in baking recipes Baking techniques and processes		Importance of precision in measurements Function of ingredients and their impact on baked goods 6 Types of cookies and their various mixing methods Storage of cookie dough	function in baking. Recognize standards of quality for baked goods. Expand and reinforce knowledge of weights and measure, recipe conversion, bakeshop equipment, and technical vocabulary.	Gingerbread House project/Contest Food Lab w/ Rubrics	Nat'l FCS: 8.5.10 8.5.12
Topic	**Concepts**	**Time**	**The students will know:**	**Skills**	**Assessment**	**Standard(s)**
Cakes • Mixing methods • Planning and baking • Icing and Frosting • Basic decorating	Proper measurement and knowledge of portion control	5 weeks	How does the interaction of ingredients produce chemical changes in food preparation	Predict the amount of time required for meal preparation and plan a schedule for meal preparation To identify ingredients and understand their function in baking. Recognize standards of quality for baked goods. Expand and reinforce knowledge of weights and	Formative and summative assessments Food Lab w/ Rubrics	PA FCS: 11.3.12.C 11.3.12.D 11.3.12.E 11.3.12.F Nat'l FCS: 8.5.2 8.5.5 8.5.6 8.5.7

				measure, recipe conversion, bakeshop equipment, and technical vocabulary. STEM related: science, math, technology, and life literacy (interpersonal skills, teamwork, problem solving, etc)		
Custards and Creams • Stirred vs. Baked • Applications on baked goods		2 weeks		Demonstrate an understanding of dairy and egg products as ingredients used in baking Apply cooking principles to prepare dairy and egg products used in recipes To identify ingredients and understand their function in baking. Recognize standards of quality for baked goods. Expand and reinforce knowledge of weights and measure, recipe	Formative and summative assessments Food Labs w/rubrics	PA FCS: 11.3.12.C 11.3.12.D 11.3.12.E 11.3.12.F Nat'l FCS: 8.5.3 9.7.5 9.7.6

				conversion, bakeshop equipment, and technical vocabulary.		
Short Dough/Pastry elements • Doughs-pate a choux, puff pastry, phyllo • Meringues		2 weeks	Applications of each type of dough/pastry Various meringues: American. Italian and Swiss	To identify ingredients and understand their function in baking. Recognize standards of quality for baked goods. Expand and reinforce knowledge of weights and measure, recipe conversion, bakeshop equipment, and technical vocabulary.	Formative and summative assessments Food Labs w/rubrics	PA FCS: 11.3.12.C 11.3.12.D 11.3.12.E 11.3.12.F Nat'l FCS: 8.5.3 8.5.4 8.5.10 8.5.12 9.7.5 9.7.6
Final project		1 week			5 hour practical: yeast bread, decorated and filled cake, pate a choux	PA FCS: 11.3.12.C 11.3.12.D 11.3.12.E 11.3.12.F Nat'l FCS: 8.2.5 8.3.1 8.3.6 8.5.3 8.5.4 8.5.10

						8.5.12 14.1.2 14.3.3 14.4.2