Lehighton Area School District
Curriculum Framework

Course Title: Advanced Baking
Content Area: Family Consumer Sciences
Grade Level(s): 9-12

Course Overview:

Advanced Baking is a hands-on culinary course designed for students in grades 9–12 who are interested in expanding their baking knowledge and refining their technical skills. This course explores the science and artistry of baking by examining the functions of ingredients, proper use of baking equipment, essential baking techniques, and the principles necessary for producing consistent, high-quality baked goods.

Students will develop a deeper understanding of how ingredients interact and how different mixing methods influence the texture, structure, flavor, and appearance of baked products. Through demonstrations, discussions, research, and extensive laboratory experiences, students will apply baking principles while preparing a variety of products including quick breads, cookies, bars, cakes, pies, and yeast breads.

Emphasis is placed on accuracy, precision, problem-solving, time management, sanitation, and creativity. Students will learn to follow and modify master recipes, evaluate finished products using industry standards, and troubleshoot common baking challenges. By combining food science concepts with practical baking applications, students will build advanced culinary skills that prepare them for personal use, postsecondary culinary programs, and careers within the food and hospitality industries.

Throughout the course, students will demonstrate safe food handling practices, effective kitchen management, and the ability to work independently and collaboratively in a professional kitchen environment.

PA Core Standards: Academic Standards for Family and Consumer Sciences

Key Course Text and Materials:

Teacher-created notes, presentations, worksheets, and study guides
Baking textbook, "Baker Bettie's Better Baking Book", by Kristin Hoffman, and other culinary reference mater
Standardized recipes and baking formula collections
Baking ingredients and consumable lab supplies
Commercial and residential baking equipment (mixers, ovens, scales, thermometers, pastry tools, etc.)
Measuring tools, baking pans, and specialty bakeware
Demonstration materials and instructional videos
Food safety and sanitation resources
Online culinary and baking resources
Product evaluation rubrics and recipe analysis tools
Research materials related to baking science and food chemistry
Individual and group laboratory experiences

Key Assessments/Projects:

Reflection Journals
Culminating Assessments
Skills Demonstrations
Performance Tasks

Big Idea/Unit:	Before You Start Baking			
Pacing:	21-28 Days			
Standards	**Objective/Skill**	**Vocabulary**	**Additional Resources**	**Assessment/Project**
11.3.9 11.3.12	Baking Ingredients and Their Functions	Whole Wheat Flour, White Flour (bleached/unbleached), all-purpose flour, Bread Flour, Cake Flour, Self-rising flour, fats (butter, vegetable shortening, lard, oils), sugars (gtranulated sugar, caster sugar, brown sugar, powdered sugar, turbinado sugar) , eggs, leavening agents (baking powder, baking soda, yeast, air and steam), milk, cream, buttermilk, sour cream, yogurt, salt, cocoa powder, extracts and spices and liquid sweeteners	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Any one or combination of projects, personal reflections, food labs and/or written evaluations.
11.1.9.-12. E	Essential Baking Equipment	bundt pan, pastry blender, tube pan, bowl scraper, disher/scoop, offset spatula, liquid measuring cup, dry measuring cups, measuring spoons, fine mesh sieve, oven thermometer, bench knife, candy thermometer, digital scale	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Any one or combination of projects, personal reflections, food labs and/or written evaluations.

11.1.9.-12.E 11.1.9.-12 F	Common Baking Techniques and Terminology	batter, blind baking, bulk-ferment, caramelize, creaming, cut-in, crimp, crumb, dock, dough, emulsion, ferment, folding, gluten, knead, leaven, leavening, peaks, proof or prove, score, sift, softened, tempering,	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Any one or combination of projects, personal reflections, food labs and/or written evaluations.
11.1.	Essential Rules of Baking	ounces, fluid ounces, mise en place	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Any one or combination of projects, personal reflections, food labs and/or written evaluations.

Big Idea/Unit:	Mixing Methods & Master Recipes			
Pacing:	Minimum 28 days			
Standards	**Objective/Skill**	**Vocabulary**	**Additional Resources**	**Assessment/Project**
11.1	Quick Breads	The Muffin Mixing method The Biscuit Mixing method	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Either or a combination of labs or written evaluation.

11.1.9-12. E 11.1.9-12. F 11.1.9-12. G	Cookies & Bars	One bowl method Creaming method for cookies	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Either or a combination of labs or written evaluation.
11.1.9-12. E 11.1.9-12. F 11.1.9-12. G	Cakes	The blending method The creaming method for cakes The angel food method The chiffon mixing method	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Either or a combination of labs or written evaluation.
11.1.9-12. E 11.1.9-12. F 11.1.9-12. G	Pies	Crusts Fillings Toppings	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Either or a combination of labs or written evaluation.
11.1.9-12. E 11.1.9-12. F 11.1.9-12. G	Yeast Breads	The Stages of Making Bread	Any one or combination of textbook readings, teacher-made materials, class discussions, projects, web research, and observations.	Either or a combination of labs or written evaluation.