

Summit Public Schools
Summit, NJ

Content Area: Family and Consumer Science
Grades 10,11,12

Length of Course: Semester
Curriculum: Advanced Baking
(Revised Summer 2017)

Course Description: This one semester course provides opportunities for students in grades 10 - 12 who have successfully completed Foods and Nutrition 1 to pursue advanced baking skills. Students will be challenged in preparing a large variety of baked goods including breads, cakes, pastries, cookies, and more. They will participate in the creative art of cake decorating and other finishing techniques. Each baking unit will address nutritional concerns such as low fat baking, gluten free baking, avoiding additives, and healthy substitutions.

Pacing Guide:

Unit 1:

Safety and Sanitation - 1 week

Terms, Tools, Techniques, and Measuring - 1 week

Unit 2:

Quick breads and Yeast Breads - 5 weeks

Unit 3:

Cakes, Cupcakes, Cookies, Donuts, Decorating - 5 weeks

Unit 4:

Pastry

Pies, Tarts, Puff Pastry, Phyllo - 5 weeks

<p>Unit 1: Safety, Sanitation, Terms, Tools, Techniques, and Measuring</p>	<p>Big Ideas for Unit:</p> <ol style="list-style-type: none"> 1. Understanding the importance of safety and sanitation will help prevent accidents and foodborne illness. 2. The successful preparation of a recipe is dependent on the proper knowledge and use of terms, tools, and techniques.
<p>Course Objectives: Students will understand the need for safety and sanitation when working with food. Students will gain knowledge of proper terms, tools and techniques and their importance for successful baking.</p>	
<p>Essential Questions: <i>What provocative questions will foster inquiry, understanding, and transfer of learning?</i></p> <ol style="list-style-type: none"> 1. Why is it important to practice safe food handling? 2. What could be a potential outcome of not following safety rules when working in the kitchen? 3. How is the final outcome of a recipe dependent on the knowledge of terms, tools, techniques, and measurement? 4. In what ways might the tools used for baking in mass quantity, as in a bakery or restaurant, differ from the tools used at home? 	<p>Enduring Understandings: <i>What will students understand about the big ideas?</i></p> <p>Students will understand that...</p> <p>Not following safety and sanitation procedures in food preparation may lead to accidents resulting in personal injury and/or foodborne illness.</p> <p>The knowledge of culinary vocabulary is important in following a recipe to insure successful results.</p> <p>It is critical to follow a recipe exactly and follow proper culinary practices in order to achieve desired outcome.</p> <p>Mass production requires the use of weights and scales for quality and quantity control.</p>
<p>Areas of Focus: Proficiencies (Cumulative Progress Indicators) Students will:</p> <p>9.2.A.1 Apply communications and data analysis to the problem solving and decision making processes in a variety of life situations.</p> <p>9.2.A.3</p>	<p>Examples, Outcomes, Assessments <i>(see note below about the content of this section)</i></p> <p>Instructional Focus:</p> <p>Students will discuss safety concerns and create a do's and don'ts safety awareness bulletin.</p> <p>Students will investigate the causes of</p>

Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings.

9.2.C.2

Communicate effectively in a variety of settings with a diverse group of people.

9.2.F.1

Engage in an informal discussion about rules and laws designed to promote safety and health.

9.2.F.2

Describe and demonstrate basic first aid and safety procedures.

9.2.F.4

Practice the safe use of tools and equipment.

9.2.F.5

Implement safety procedures in the classroom and workplace, where appropriate.

foodborne illnesses and present possible scenarios of poor food handling such as cross contamination.

Students will experiment with use of scale in weighing ingredients such as flour.

Sample Assessments:

Safety and sanitation multiple choice quiz

Matching game: tools with correct name

Measurement equivalents: increasing and decreasing the yield of a recipe.

Teacher observation of group and individual work: safety and sanitation, communication skills, time management, and product evaluation.

Formative Assessments / Checking for Understanding

Instructional Strategies:

Pre-test

Discussion

Identifying

Collaborative learning

Matching

Measuring

Demonstration

Interdisciplinary Connections:

Mathematical skills - measuring, equivalents in recipes, changing yield

Vocabulary - terminology used in recipes

Technology Integration - proficiency in use of kitchen appliances , use of internet to research and evaluate recipes.

Global Perspectives - Exploration of cultural differences in preparation, tools and techniques used to prepare baked goods.

<p>Unit 2: Quick Breads and Yeast Breads</p>	<p>Big Ideas for Unit: The two types of breads are yeast breads and quick breads, which are prepared using different methods.</p>
<p>Course Objectives for Unit: Students will identify the functions of ingredients in baked breads. Students will prepare a variety of quick breads and yeast breads. Students will be able to analyze the nutritional value of different breads and prepare healthy alternatives for people on special diets. Students will learn the art of bread sculpture.</p>	
<p>Essential Questions: What are the similarities and differences between quick and yeast breads? In what ways can preparing your own breads be healthier than purchasing convenience products? What are some artistic ways to prepare yeast bread dough?</p>	<p>Enduring Understandings: Different leavening agents and mixing methods are used to produce quick breads and yeast breads. Because quick breads have chemical leaveners and do not rely on yeast, they are quick and easy to make. Preparation of breads allows recipes to be customized for individual dietary needs and preferences. Baked products can be used as a form of art.</p>
<p>Areas of Focus: Proficiencies (Cumulative Progress Indicators) Students will: (Enter Standards here) 9.2.A.1 Apply communications and data analysis to the problem-solving and decision making processes in a variety of life situations. 9.2.A.3 Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings. 9.2.B.2 Apply project planning and management skills in academic and/or occupational</p>	<p>Examples, Outcomes, Assessments (see note below about the content of this section) Instructional Focus: Conduct food science experiments which compare the results of different leaveners and using different amounts of ingredients. Prepare a variety of quick breads including muffins, biscuits, scones, loaf breads. Prepare a variety of yeast breads. Compare and contrast results of kneading by hand vs mechanical kneading. In group, plan a brunch menu featuring a variety of breads. Research recipes, order groceries. Invite faculty members for taste testing.</p>

<p>Settings. 9.2.B.3 Compare and contrast methods for maximizing personal productivity. 9.2.C.1 Model interpersonal and effective conflict resolution skills. 9.2.C.2 Communicate effectively in a variety of settings with a diverse group of people. 9.2.D.1 Analyze how character influences work performance. 9.2.E.5 Use comparative shopping techniques for the acquisition of goods and services. 9.2.F.4 Practice the safe use of tools and equipment. 9.2.F.5 Implement safety procedures in the classroom and workplace, where appropriate.</p>	<p>Examine the nutritional value of breads prepared in class. Compare the cost of preparing white bread vs. buying the store brand equivalent. Prepare low fat and gluten free breads and evaluate taste, texture, and cost. Design and prepare an artistic bread loaf.</p> <p>Sample Assessments: Formative assessments/ checking for understanding Student/teacher product evaluations. Written multiple choice quiz.</p> <p>Instructional Strategies: Discussion Identifying Collaborative learning Measuring Demonstrations Hands-on learning Discovery/Inquiry based learning</p> <p>Interdisciplinary Connections: Technology Integration- use of web tools in research and projects, use of kitchen appliances in advanced food preparation. Global Perspectives- breads from all over the world will be prepared.(ex.: pita, tortillas, naan) Science- food science experiments Language - culinary vocabulary terms, reading and following recipe Art - bread artistry Mathematical skills - measuring, equivalents in recipes, changing yield</p>
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<p>Unit 3: Cakes, Cupcakes, Cookies, Donuts, and Decorating.</p>	<p>Big Ideas for Unit: Cakes, cupcakes, and donuts are flavorful and appealing treats that are made by carefully and precisely following recipes.</p> <p>Decorating cakes can be creative, fun, and add appeal to the finished product.</p>
<p>Course Objectives for Unit: Students will be able to describe the function of basic ingredients used in cakes. Students will advance their skills as they prepare a variety of cakes, cupcakes, and donuts. Students will learn new techniques in decorating baked products.</p>	
<p>Essential Questions: Why is it important to follow instructions exactly when following cake recipes? What are reasons we decorate cakes? What are similarities and differences in cakes, cupcakes, donuts, and cookies? What ingredients can be added and/or substituted to make baked products meet the needs of those with special dietary requirements?</p>	<p>Enduring Understandings: Baked products are made from just a few basic ingredients which each have a specific function. Different products result from differences in amounts of ingredients, the order in which ingredients are combined, how they are mixed, and how they are baked. Decorating cakes adds a personal touch and can be the centerpiece for special occasions such as birthdays, anniversaries, religious celebrations, and other holidays. When baking for special diets, ingredients may be substituted which results in healthier alternatives.</p>
<p>Areas of Focus: Proficiencies (Cumulative Progress Indicators) Students will: (Enter Standards here) 9.2.A.1 Apply communications and data analysis to the problem-solving and decision making processes in a variety of life situations.</p>	<p>Examples, Outcomes, Assessments (see note below about the content of this section) Instructional Focus: Prepare a variety of shortened and foam cakes and compare methods of mixing, ingredients, and results. Experiment with the use of cake flour vs. all-purpose flour, and whole wheat flour.</p>

<p>9.2.A.3 Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings.</p> <p>9.2.B.2 Apply project planning and management skills in academic and/or occupational Settings.</p> <p>9.2.B.3 Compare and contrast methods for maximizing personal productivity.</p> <p>9.2.C 1 Model interpersonal and effective conflict resolution skills.</p> <p>9.2.C.2 Communicate effectively in a variety of settings with a diverse group of people.</p> <p>9.2.D.1 Analyze how character influences work performance.</p> <p>9.2.E.5 Use comparative shopping techniques for the acquisition of goods and services.</p> <p>9.2.F.4 Practice the safe use of tools and equipment.</p> <p>9.2.F.5 Implement safety procedures in the classroom and workplace, where appropriate.</p>	<p>Science experiment with air as leavening agent for baked goods. Compare the cost of purchasing cakes and preparing cakes, cupcakes, and donuts. Demonstrate/ practice decorating techniques for cakes and cupcakes. Group cake competition. Students will select recipes, order ingredients, prepare, and decorate cakes. Students will invite teachers to judge. Experiment with baking donuts and creating personalized flavors of donuts. Prepare baked goods for special diets. Compare use of conventional, convection, and microwave baking methods. Make mug cakes in microwave.</p> <p>Sample Assessments: Product evaluation sheets (appearance, taste, texture, overall) Formative assessments/ checking for understanding Written multiple choice quiz. Cake contest results</p> <p>Instructional Strategies: Teacher lecture Discussion Collaborative learning Web activities Hands on food preparation Decorating food and presentation Demonstration Guest speakers Field trip to bakery</p> <p>Interdisciplinary Connections: Technology Integration- use of web tools in research and projects, use of kitchen appliances in advanced food preparation. Science- food science experiments Language - culinary vocabulary terms, reading and following recipe Global Perspectives - students will prepare</p>
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	<p>cakes representative of different ethnic regions</p> <p>Art - cake decorating</p> <p>Mathematical - measuring, equivalents in recipes, changing yield</p> <p>Language - culinary vocabulary, reading and following recipes</p>
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<p>Unit 4: Pastry</p>	<p>Big Ideas for Unit: Pastry can be sweet or savory. It is used to make pies, tarts, turnovers, appetizers, and shells for main dishes.</p>
<p>Course Objectives for Unit: Students will be able to explain how to prepare and roll pastry dough. Students will be able to prepare a variety of light and flaky pastries. Students will discover how to prevent problems while baking pies and tarts. Students will be able to make a variety of decorative crusts.</p>	
<p>Essential Questions How is the preparation of pastry dough similar to the preparation of biscuits? What are the similarities and differences between pastry, puff pastry, and phyllo dough? What kinds of menu items might be made with pastry, puff pastry, and phyllo? What type of crust and fillings might be used to make a low fat pie?</p>	<p>Enduring Understandings: To make pastry that is both tender and flaky, you must use the correct ingredients and measure them exactly. Pastry dough should be handled as little as possible or it will become tough. Pastry, puff pastry, and phyllo dough are very different. If used interchangeably, will yield different results. Most pastry desserts are high in fat and sugar but the use of alternate ingredients can offer healthier options.</p>
<p>Areas of Focus: Proficiencies (Cumulative Progress Indicators) Students will: (Enter Standards here) 9.2.A.1 Apply communications and data analysis to the problem-solving and decision making processes in a variety of life situations. 9.2.A.3 Apply the use of symbols, pictures, graphs, objects, and other visual information to a selected project in academic and/or occupational settings. 9.2.B.2</p>	<p>Examples, Outcomes, Assessments (see <i>note</i> below about the content of this section) Instructional Focus: Demonstration of preparing pie crust and various edging techniques. Students will prepare homemade crust and compare taste and cost to prepackaged crusts. Students will learn about and prepare fruit, cream, custard, and savory pies and tarts. Students will plan dinner menus featuring pastry as appetizer, main dish, and dessert. Students will compare the use and outcome of puff pastry, phyllo dough, and traditional</p>

<p>Apply project planning and management skills in academic and/or occupational Settings.</p> <p>9.2.B.3 Compare and contrast methods for maximizing personal productivity.</p> <p>9.2.C.1 Model interpersonal and effective conflict resolution skills.</p> <p>9.2.C.2 Communicate effectively in a variety of settings with a diverse group of people.</p> <p>9.2.D.1 Analyze how character influences work performance.</p> <p>9.2.E.5 Use comparative shopping techniques for the acquisition of goods and services.</p> <p>9.2.F.4 Practice the safe use of tools and equipment.</p> <p>9.2.F.5 Implement safety procedures in the classroom and workplace, where appropriate.</p>	<p>pastry dough in a variety of recipes. Students will prepare low fat dessert pies and calculate calories, fat, and sugar per serving. Create a pie contest....students will create and prepare their own recipe, take pictures of pies, and create google slides to showcase their work.</p> <p>Sample Assessments: Product evaluation sheets (appearance, taste, texture, overall) Formative assessments/ checking for understanding Written multiple choice quiz.</p> <p>Instructional Strategies: Demonstration Teacher lecture Discussion Collaborative learning Web activities/google slide Hands on food preparation Decorating food and presentation</p> <p>Interdisciplinary Connections: Technology Integration - google slides, You-tube, internet research Global Perspectives - different types of pastry are more popular in some areas of the world than others. Language - culinary vocabulary, reading and following recipe directions Art - decorative pastry skills Mathematics - measuring, equivalents in recipes, changing yield</p>
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NOTE re: Examples, Outcomes and Assessments

The following skills and themes should be reflected in the design of units and lessons for this

course or content area.

21st Century Skills:

Creativity and Innovation:

Experiment with adapting class recipes using different ingredients

Creating recipes

Plating and decorating baked goods

Critical Thinking and Problem Solving:

Adapting recipes using different ingredients/ amounts of ingredients

Cutting and doubling recipes

Cost comparison

Selecting proper tools and kitchen equipment

Communication and Collaboration:

Cooperation, following directions, accountability, and time management are necessary skills for group tasks.

Information Literacy:

Comparing, contrasting, selecting recipes from different sources.

Media Literacy:

Use of newspaper, magazines, television information in research

Life and Career Skills:

Students will use culinary skills in preparation of food throughout life.

Time management is an essential tool used every day.

Culinary field offers multitude of job opportunities.

21st Century Themes (as applies to content areas):

Financial, Economic, Business, and Entrepreneurial Literacy:

Cost comparison and budgeting

Civic Literacy:

Rotation of job responsibilities, holding each other accountable.

Basic understanding of problem solving as group members work together.

Health Literacy:

Safety and sanitation guidelines

Nutritional awareness and portion control

Healthy ingredient substitutions

Sources:

Text: Food for Today, McGraw Hill Education, pages 654 - 662

Text : Guide to Good Food, Deborah L. Bence, pages 379 - 418

Guide to Good Food Student Activity Guide, activities and assessments pages 109 - 117

America's Test Kitchen DVD's

America's Test Kitchen Cookbook

Betty Crocker's Best Baking Cookbook

Food Science and You Text and Resources, Glencoe, chapter 14 and 17

Foodsciencesecrets.com

Breadworld.com

www.homebaking.org/foreducators/

<https://ndb.nal.usda.gov/ndb/>