

Planned Course of Study

CONCEPTS OF FOOD

Family and Consumer Sciences Department
Salisbury Township School District

RATIONALE

Today's supermarkets carry thousands of food products. How do you know which of these foods to buy and how you will prepare them? **CONCEPTS OF FOODS** introduces the students to the many facets of food choices and preparation techniques while promoting healthful eating habits. By combining the fundamental areas of consumer skills, food preparation and meal management techniques along with critical thinking, problem solving and decision-making, **CONCEPTS OF FOOD** goes beyond learning how to cook. The course encourages students to adapt what they learn for use in everyday life – now and in the future.

COURSE CONTENT

CONCEPTS OF FOOD investigates food from each of the food groups – from breads to nuts - with emphasis on storage, selection, preparation techniques, and nutrition. Along with learning how to properly prepare and present food, students will understand how to make sure the food that is served is wholesome and safe to eat. Through kitchen experiments, the science of food preparation will be explored. Students will be challenged to use critical thinking and decision making skills to solve real life food and nutrition problems.

COURSE ESSENTIAL QUESTIONS

1. How can kitchen management skills help save time and energy?
2. How are sanitation and safety in the kitchen ensured?
3. What resources are needed to prepare nutritionally sound and aesthetically pleasing food?
4. What do I need to know before I get started in the kitchen?
5. How do I identify, store, and prepare foods from the Food Pyramid?
6. How is science involved when food is prepared?
7. How have technological advances affected food?

COURSE SYLLABUS

I. Food Management

- A. Kitchen principles/ Food preparation skills
- B. Cooking methods
- C. Kitchen equipment
- D. Recipe
- II. Preparing Food Safely
 - A. What is food-borne illness
 - B. Store food right
 - C. Keep it clean
 - D. Control temperatures
- III. Grain Products-Cereal, rice, pasta
 - A. Grains... For energy and more
 - B. Shopping and storing grain products
 - C. Preparing grain products for healthful eating
- IV. Breads- quick vs. yeast
 - A. What are breads made of?
 - B. Chemical properties
 - C. Types
 - D. Preparation techniques
- V. Vegetables and Fruits
 - A. Types and classification of vegetables and fruits
 - B. Keeping vegetables and fruits at their peak
 - C. Preparing vegetables and fruits for healthful eating
- VI. Dairy Foods
 - A. Shopping and storing dairy foods
 - B. Cooking with dairy foods
- VII. Protein alternatives- eggs, beans, and nuts
 - A. Shopping for eggs, beans, and nuts
 - B. Cooking eggs
 - C. Preparing legumes
- VIII. Career Opportunities

CONCEPTS OF FOOD
10-12
Semester

Food Management

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Identify characteristics that make a recipe easy to follow. 2. Describe the proper procedures for measuring different types of ingredients. 3. Identify kitchen equipment used for various techniques. 	<ul style="list-style-type: none"> • Compare and contrast two recipes. Discuss which is best and why? • Choose a recipe and practice adapting for changes in yield, temperatures, ingredient substitutions and metric units. • Speaker/demonstration – chef or kitchen equipment storeowner. • Discuss advantages, disadvantages, and costs in terms of time, energy, money, etc. • Find old cookbooks and kitchen equipment (50 years old or more). Discuss how they have changed. • Solve a consumer problem related to kitchen equipment. 	<ul style="list-style-type: none"> • Lab practical Assessment • Create a “new recipe” • “Equipment/appliance purchase with written justification.- Rubric assessment. 	<p>11.1.12.D 11.2.12.E 11.2.12.F</p>

Resources/Materials

Culinary Essentials
Guide to Good Food

Resource speaker

Additional Resources/Inter-disciplinary Relationships

CONCEPTS OF FOOD
10-12
Semester

Food Management (cont.)

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> 2. Identify specific types of conventional cooking methods. 3. Demonstrate techniques necessary for successful microwaving 	<ul style="list-style-type: none"> • Experiment with boiling point and altitude • Brainstorm the basic differences among moist and dry methods of cooking. • Lab experiment using moist heating methods. • “Pan placement in the oven” quiz activity. • Investigate and report on smoke point, flash point, and fire point. • Compare conventional versus microwave cooking. 	<ul style="list-style-type: none"> • Lab report forms. • Poster project on success in using a cooking method. Rubric assessment. • Lab experiment-analyze conventional Vs microwaving. 	<p>11.1.12.D 11.2.12.E 11.2.12.F</p>

Resources/Materials

Culinary Essentials
Guide to Good Food

Resource speaker

Additional Resources/Inter-disciplinary Relationships

Food Science

CONCEPTS OF FOOD
10-12
Semester

<i>Preparing Food Safely</i>			
Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Describe the causes and effects of food-borne illnesses. 2. Explain principles of storage and handling, cleanliness, and temperature control that can reduce the risk of food-borne illnesses. 3. Identify ways to prevent kitchen accidents. 	<ul style="list-style-type: none"> • Microbiology lab • Video on pathogens • Hand washing activity • Locate recent report on food borne illness outbreak. Complete "Outbreak worksheet". Report findings to class. • Plan and prepare Picnic food. • Role-play skit on food borne illness prevention. • Speaker on how to care for injuries in the kitchen. • Create posters on basic kitchen safety rules. 	<ul style="list-style-type: none"> • Microbiology Lab report Form • Food lab evaluation – Written paragraph on precautions taken. • Objective test • Lesson development for younger students 	<p>11.3.12.B 11.3.12.G</p>
Resources/Materials			
CDC website Video	<u>Nutrition and Wellness</u> Institute of Food Technologists	SLIC – PA Dept of Ed. FDA	
Additional Resources/Inter-disciplinary Relationships			
Science Health and Wellness			

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Grain Products

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Identify different grain products and their uses. 2. Compare the nutrients in grains and grain products. 3. Explain the general principles for grain cookery. 4. Justify the importance of grains in the global diet. 	<ul style="list-style-type: none"> • Research a specific grain. Identify sensory characteristics, processing, origin, uses, nutritional value, etc. for Great Grains booklet. • Identify parts of the grain. • Gelatinization experiment • Taste test comparison of various grains. • Nutritional analysis comparison of breakfast cereals. • Prepare and compare grain product for taste, appearance, texture, time. • Debate the importance/practicality of grain consumption. • Calculate fiber content for 1 day. Discuss implications. 	<ul style="list-style-type: none"> • Great grains page. Rubric assessment. • Lab experiment report form • Food preparation lab report • Class participation. • Objective test 	<p>11.2.12.A 11.2.12.C 11.2.12.E 11.3.12.A 11.3.12.C 11.3.12.F 11.3.12.G</p>

Resources/Materials

Food for Today
Guide to Good Food

Cookbooks
Culinary Essentials

Additional Resources/Inter-disciplinary Relationships

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Breads - Quick vs. Yeast

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Identify the basic ingredients in baking and the function of each. 2. Describe the characteristics of a successfully prepared quick bread. 3. Identify ways to simplify bread baking. 4. Explain the significance of bread as the staff of life. 	<ul style="list-style-type: none"> • Lab experiments – leavening agents and missing ingredient. • Worksheet, “What did I do wrong?” • Alter recipe by using different ingredients. • Research sweeteners used in baking – compare and contrast. • Gluten experiment • Develop a baking demonstration for younger children. • Foods labs – quick breads and yeast breads. • Identify cultural quick and yeast breads. • Report – What appliances can help speed up bread baking? 	<ul style="list-style-type: none"> • Lab report form • Recipe alteration - sensory evaluation sheet • Baking demonstration project • Foods lab • Compare and contrast quick vs. yeast breads 	<p>11.2.12.A 11.2.12.C 11.2.12.E 11.3.12.A 11.3.12.C 11.3.12.F 11.3.12.G</p>

Resources/Materials

Food for Today
Guide to Good Food

Cookbooks
Culinary Essentials

Additional Resources/Inter-disciplinary Relationships

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Vegetables and Fruits

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Describe how to properly select and store fruits and vegetables. 2. Discuss food science principles for cooking fruits and vegetables. 3. Prepare fruits and vegetables, preserving their flavor color, texture and nutrients. 4. Analyze the role of fruits and vegetables in lowering the risk of certain lifestyle diseases. 	<ul style="list-style-type: none"> • Brainstorm ways to classify fruits and vegetables • Discuss the changes in fresh produce that have occurred during the history of the US. “What factors have been responsible for these changes?” “How have they affected the consumer?” • Speaker – produce manager. • “Nutrients in Fruits and Vegetables”- Critical thinking worksheet • Food Science experiment – “Effects of cooking with fruits and vegetables.” 	<ul style="list-style-type: none"> • Class participation • Graded lab report forms • Food preparation lab 	<p>11.2.12.A 11.2.12.C 11.2.12.E 11.3.12.A 11.3.12.C 11.3.12.F 11.3.12.G</p>
Resources/Materials			
<p><u>Food for Today</u> <u>Guide to Good Food</u></p>	<p><u>Cookbooks</u> <u>Culinary Essentials</u></p>		
Additional Resources/Inter-disciplinary Relationships			
<p>Food Science</p>			

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Fruits and Vegetables (cont.)

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
The student will be able to:	<ul style="list-style-type: none"> • Investigate scientific claims regarding the role of phytochemicals and cruciferous vegetables. • Chef to demonstrate garnishing techniques with fruits and vegetables. • Create “power” recipes using produce to be included as part of an eating plan for children. • Compare and contrast forms of vegetables. • Fruit and vegetable food lab. 	<ul style="list-style-type: none"> • Recipe development • Booklet on specific fruit or vegetable made for the consumer- Rubric assessment 	11.2.12.A 11.2.12.C 11.2.12.E 11.3.12.A 11.3.12.C 11.3.12.F 11.3.12.G
Resources/Materials			
<u>Food for Today</u> <u>Guide to Good Food</u>	<u>Cookbooks</u> <u>Culinary Essentials</u>	<u>Internet sites</u>	
Additional Resources/Inter-disciplinary Relationships			
Food Science			

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Dairy Foods

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Identify factors affecting the selection of dairy products. 2. Describe guidelines for preventing adverse reactions when cooking with milk. 3. Prepare many different dishes using milk, cream, cheese, and other dairy products. 	<ul style="list-style-type: none"> • Blindfold taste test – Sensory characteristics. • Dairy Products Comparison Chart with discussion questions. • Lab experiment, “Cooking with Milk” • Prepare yogurt and compare with purchased. • Debate use of BST milk. • Taste test – cheese. • Video – How is cheese made? • Research history, production, characteristics and uses of one type of cheese. • Foods lab 	<ul style="list-style-type: none"> • Bulletin board entitled “Milk Power” – nutrient contributions of milk. Rubric • Lab report form • Class participation • Graded worksheets • Cheese report presentation • Foods lab evaluation 	<p>11.2.12.A 11.2.12.C 11.2.12.E 11.3.12.A 11.3.12.C 11.3.12.F 11.3.12.G</p>

Resources/Materials

Food for Today
Guide to Good Food

Cookbooks
Culinary Essentials

Internet sites
Food Science Laboratory Manual

Additional Resources/Inter-disciplinary Relationships

Food Science

CONCEPTS OF FOOD
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Protein Alternatives

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> Describe the structure of an egg. Identify reasons for including eggs, beans, and nuts in a healthful eating plan. Summarize tips for selecting eggs, beans and nuts. Describe how to store and prepare eggs, beans, and nuts for flavor, quality, and safety. 	<ul style="list-style-type: none"> Worksheet – “The incredible edible egg.” – egg structure, size and grading. Review difference between complete and incomplete protein. Lab experiment – “Cooking Eggs” Foods Lab – Eggs alone and as an ingredient Research the health benefits of eggs for special populations. Analyze this statement – “Eggs are the most versatile food in the kitchen.” Explore the importance of egg safety. 	<ul style="list-style-type: none"> Graded worksheet Lab report form Egg menu Foods Lab evaluation Class participation 	<p>11.2.12.A 11.2.12.C 11.2.12.E 11.3.12.A 11.3.12.C 11.3.12.F 11.3.12.G</p>
Resources/Materials			
<u>Egg Board website</u> <u>Guide to Good Food</u>	<u>Food for Today</u> <u>Culinary Essentials</u>	Cookbooks	Food Science Laboratory Manual
Additional Resources/Inter-disciplinary Relationships			
Food Science			

<i>Protein Alternatives (cont.)</i>			
Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
The student will be able to:	<ul style="list-style-type: none"> Investigate tofu – find a recipe and prepare. Examine the different types of legumes. Identify country where legumes are a main source of protein Compare the nutrition labels of dry legumes and the same legumes in a can. Is there a difference in nutritional value, cost, ease of preparation? Create a poster using pictures of nuts from around the world. How do you use nuts in recipes? Locate a recipe and prepare in class. 	<ul style="list-style-type: none"> Class presentations Class participation Graded worksheet Objective test Lab evaluations 	11.2.12.A 11.2.12.C 11.2.12.E 11.3.12.A 11.3.12.C 11.3.12.F 11.3.12.G
Resources/Materials			
<u>Egg Board</u> website	<u>Food for Today</u>	Cookbooks	
<u>Guide to Good Food</u>	<u>Culinary Essentials</u>	Food Science Laboratory Manual	
Additional Resources/Inter-disciplinary Relationships			
Food Science			

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Career Opportunities

Learning Objectives/ Content	Teaching/Learning Activities	Evaluation Criteria	State Standard
<p>The student will be able to:</p> <ol style="list-style-type: none"> 1. Explore career areas in the field of foods. 2. Describe qualifications, training and education needed to work in each career area. 	<ul style="list-style-type: none"> • Speakers – describe career opportunities in the areas of foods: Food journalist Food photographer/stylist Cookbook writer Chef Caterer Food educator Food entrepreneur • Research a specific career • Locate job openings in local area vs. state 	<ul style="list-style-type: none"> • Career project; “Is this job for you?” Visual – rubric assessment 	<p>11.2.12.B</p>

Resources/Materials

CHOICES – career software
Guide to Good Food

Resource speakers

Additional Resources/Inter-disciplinary Relationships

Career and Work