

**Course Title: Food and Nutrition**

<b>Unit: 1</b>	<b>Food</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Analyze national and international food production and distribution systems to determine the influence of each on the food supply.</li> <li>2. Explain how food choices and food production are influenced by psychological, social, cultural, nutritional, economical, global, environmental, geographical, and technological factors.</li> <li>3. Interpret legislation and regulations related to food production and consumption.</li> </ol>
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Determine how changes in national and international food production and distributions systems impact the food supply.</li> <li>2. Evaluate physical, emotional, social, psychological, spiritual components of food choices.</li> <li>3. Compare the impact of psychological, cultural, and social influences on food choices and other nutrition practices.</li> <li>4. Analyze the impact of global and local events and conditions on food choices and practices.</li> <li>5. Examine legislation and regulations related to nutrition and wellness issues.</li> </ol>
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<b>Essential Question(s):</b>	<p>What is the impact of food choices on food production and distribution?          How do national and international food production and distribution systems influence food supply?          What is the role of federal legislation and regulations on food production and consumption?</p>
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<b>Content Knowledge</b>	<b>Suggested Instructional Activities Rigor &amp; Relevance Framework (Quadrant)</b>	<b>Suggested Materials, Equipment and Technology Resources</b>
<p>I. Food</p> <p>A. Food Supply</p> <ol style="list-style-type: none"> <li>1. Food production systems</li> <li>2. Food distribution systems</li> </ol>	<p><b>Advance Planning for The Food Supply Lesson:</b></p> <p>The teacher prepares for the unit by:</p> <ul style="list-style-type: none"> <li>• Obtaining orange juice in aseptic packaging, orange juice in a regular carton, and extra orange juice for a display.</li> <li>• Creating a list of foods that have to be inspected by a U S Federal agency.</li> <li>• Obtaining foods with artificial sweeteners or fat substitutes for a taste test.</li> </ul>	<p>One or more of the advance planning activities can kick off your standards.</p> <p>Supply ingredients or supplies for the activity you pick.</p> <p>Guidelines for Activities</p> <p>Rubrics</p> <p>Computer</p> <p>Internet</p> <p>References</p>

<p>B. Factors that Influence Food Choices and Food Production</p> <ol style="list-style-type: none"> <li>1. Psychological</li> <li>2. Nutritional</li> <li>3. Economical</li> <li>4. Global</li> <li>5. Environmental</li> <li>6. Geographical</li> <li>7. Technological</li> </ol>	<ul style="list-style-type: none"> <li>• Obtaining recent articles about the safety of our food supply; copy them.</li> <li>• Gathering a variety of food products; copy their food labels.</li> <li>• Creating a scrapbook of photos, pictures, and articles representing developing nation’s food supplies.</li> <li>• Setting up a display of major staple foods of the world.</li> <li>• Obtaining colored flags for map identification.</li> <li>• Inviting an agriculture specialist, food researcher, or nutritionist to speak to the class on the development of new food sources.</li> </ul> <p><b>Research Poster:</b> Students research and create a poster on how international food production and distributions systems influence the food supply. Share Out.</p> <p><b>PowerPoint Presentation:</b> Factors that Influence Food Choices and Food Production</p> <p><b>Motivators:</b> Divide the class into small groups and have each group select five processed foods. Ask groups to list the steps each basic food underwent between field, orchard, or farm and purchase.</p> <p><b>Food Package Activity:</b> Students bring one empty food package to class,</p>	<p>Guidelines for Activity Rubric Computers Internet Web sites References Art Supplies</p> <p>PowerPoint Presentation Computer CTX Lead Questions Examples</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Art Supplies</p> <p>Guidelines for Activity Rubric Computers</p>
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<p>C. Legislation and Regulations</p> <ol style="list-style-type: none"> <li>1. Food production</li> <li>2. Food consumption</li> </ol>	<p>preferably one that they believe is unique or technologically advanced. Students display their packages and describe the use of each. Set up a package display.</p> <p><b>Posters:</b> Students research at least one product that is being developed to increase the food supply, particularly in developing nations. Students compile the main points of their research onto posters with drawings (if possible) of the identified, potential food products.</p> <p><b>Language Arts Activity:</b> Using library or online sources, students investigate the history of a food additive that has been in use for at least 100 years. They write a short autobiography, in which they take the point of view of the additive. They discuss the reason they were “born” (original purpose), what kind of popularity they have enjoyed, and any controversies that might lead to their untimely demise. The autobiography may be humorous, but keep it informative. Students read their work aloud to classmates.</p> <p><b>Social Studies Activity:</b> Using library sources or online sources, students locate five farming regions on at least three different continents. For each region, students identify the main crops, describe the geography and climate conditions that make the crops successful, and tell what products they are used in. They share findings in a brief report.</p> <p><b>Food Safety Research Activity:</b> Students list federal agencies responsible for food safety in the U.S. They list foods that are inspected in the U.S. Students categorize the foods with the appropriate agencies on their lists.</p>	<p>Internet Web sites References Food Packages</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Art Supplies Poster Board</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References</p> <p>Guidelines for Activity Rubric Computers Internet Web sites</p>
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	<p>Report Out.</p> <p><b>Research on Federal Agencies:</b> Students research the histories of the federal agencies responsible for food safety. Among questions to be answered are: Why was the agency established? What is its role in ensuring food safety? What major contributions has the agency made to food safety? What are the agency's limitations? Students share and compare the agencies they have learned about.</p> <p><b>Taste Test:</b> Students sample and evaluate foods that contain artificial sweeteners or fat substitutes. They compare these foods with foods containing natural sweeteners and fat, as well as foods made with sweet spices and less fat (for example, roasted versus fried chips). Students discuss their reactions.</p> <p><b>Debate:</b> Divide the class into two teams. Students stage an informal debate on the benefits and risks posed by genetically engineered foods. Prior to the debate, allow time for students to research their team's position.</p>	<p>References</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References</p> <p>Guidelines for Taste Test Food for Taste Test Taste Testing Checklist Lead Questions</p> <p>Computers/Internet Guidelines for Activity Rubric Computer Internet References Guidelines for Debate</p>
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<b>Unit Assessment:</b>	Motivators, Research Poster, Food Package Activity, Posters, Language Arts Activity, Social Studies Activity, Food Safety Activity, Research on Federal Agencies, Taste Test, Debate, Class Participation, and Rubrics
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<b>Unit/Course CTSO Activity:</b>	FCCLA Environmental Community Service Project
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<b>Unit/Course Culminating Product:</b>	Research Posters Research on Federal Agencies
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**Course/Program Credential(s):**  Credential  Certificate  Postsecondary Degree  University Degree  
 Other: AAFCS Pre-Professional Assessments – Nutrition and Food Science and/or Broad Field Family and Consumer Sciences

**Course Title: Food and Nutrition**

<b>Unit: 2</b>	<b>Nutrition</b>
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<p><b>Content Standard(s) and Depth of Knowledge Level(s):</b></p>	<p>Students will:</p> <ol style="list-style-type: none"> <li>4. Determine nutritional and fitness needs of individuals and families across the life span.</li> <li>5. Analyze nutritional standards in planning recipes and menus to meet nutritional needs of individuals across the life span. Examples: Dietary Guidelines for America, Food Guide Pyramid</li> <li>6. Evaluate the impact of diet fads, food addictions, and eating disorders on fitness and wellness.</li> <li>7. Describe the impact of daily food choices on health and wellness.</li> <li>8. Determine current trends and issues in health, wellness, and nutrition.</li> </ol>
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<p><b>Learning Objective(s) and Depth of Knowledge Level(s):</b></p>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Analyze the relationship of nutrition and wellness to individual and family health through the life span.</li> <li>2. Apply various national standards, dietary guidelines, in planning to meet nutrition and wellness needs.</li> <li>3. Determine strategies that meet the health and nutrition requirements of individuals and families with special needs.</li> <li>4. Assess the impact of food and diet fads, food addictions, and eating disorders on fitness and wellness.</li> <li>5. Evaluate the effect of nutrients on health, appearance, and peak performance.</li> </ol>
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<p><b>Essential Question(s):</b></p>	<p>How do food choices of individuals influence their health and wellness?          What are the nutritional standards used in planning recipes and meals?          What is the impact of diet fads, food addictions, and eating disorders on fitness and wellness?          How do your nutritional needs change as you grow?          What current issues and trends influence health, wellness, and nutrition?</p>
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<b>Content Knowledge</b>	<b>Suggested Instructional Activities Rigor &amp; Relevance Framework (Quadrant)</b>	<b>Suggested Materials, Equipment and Technology Resources</b>
<p>II. Nutrition</p> <p>A. Nutritional and Fitness Needs Across the Life Span</p> <ol style="list-style-type: none"> <li>1. Individuals</li> <li>2. Families</li> </ol>	<p><b>Motivators:</b>            Create a bulleting board entitled, ‘You Can Solve the Dietary Puzzle By Following These Guidelines.’ Label large jigsaw puzzle pieces with the six Dietary Guidelines for Americans. Discuss how each piece of the puzzle increases your chances of living a long and healthy life.</p>	<p>Bulletin Board Supplies</p>

<p>B. Planning Recipes and Menus</p> <ol style="list-style-type: none"> <li>1. National standards</li> <li>2. Nutritional needs</li> </ol>	<p><b>Guest Speaker:</b>  Invite a Registered Dietitian to speak to the class on the Dietary Guidelines for Americans. He or she discusses practical ways teens can follow the guidelines. Students develop questions to ask the dietitian.</p> <p><b>Meal Analysis:</b>  Students work in groups to analyze the “typical” American teenager’s eating plan, based on their own experiences. They develop a list of teen dietary guidelines. Each group presents its guidelines to the class. The teacher also gives each group a different area like a young mother, middle age parents, elderly, etc. and has each group report their findings. Report Out.</p> <p><b>Research Report:</b>  Have students research the history of the Dietary Guidelines for Americans. Why were the Dietary Guidelines developed? Who developed them? How can the Dietary Guidelines help Americans improve their eating plans? Then, students evaluate the current guidelines. With the students research findings and evaluation, have them compile their results and write a letter to the Dietary Guidelines for Americans committee on suggestions for the next Guidelines update. Report Out.</p> <p><b>10 + 2 Discussion:</b>  Discuss the reasons why grain products, vegetables, and fruits make a good foundation for daily food choices. Ask students to give examples of breakfast, lunch, or dinner menus that illustrate the Dietary Guidelines.</p> <p><b>Posters:</b>  Have students create posters recommending people follow all six Dietary Guidelines. Tell students to be creative and make the posters</p>	<p>Arrangements for Guest Speaker  Lead Questions</p> <p>Guidelines for Activity  Computers  Internet  Web sites  References  Lead Questions  Meal Analysis  Paper  Rubric</p> <p>Guidelines for Activity  Computers  Internet  Web sites  References  Lead Questions  Rubric</p> <p>Lead Questions</p> <p>Guidelines for Activity  Computers  Internet  Web sites</p>
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<p>C. Fitness and Wellness</p> <ol style="list-style-type: none"> <li>1. Diet fads</li> <li>2. Food addictions</li> <li>3. Eating disorders</li> </ol>	<p>appealing as well as convincing. Students discuss posters. Display all the posters around the school.</p> <p><b>History of Food Guides Activity:</b> Have students trace the history of Food Guides in the U.S. Ask students to write a report of their findings. In class, discuss what changes have been made in the Food Guides as health professionals learned more about the role of food in good health? Draw one or two of the previous Food Guide diagrams for a comparison.</p> <p><b>Lab Experience on Pyramid Pizza:</b></p> <ul style="list-style-type: none"> <li>• Provide students with ingredients for making a “Pyramid Pizza”; ready-made pizza dough, tomato sauce, pineapple, mozzarella cheese, ham and almonds.</li> <li>• Divide students into 3 or 4 groups to prepare and bake pizzas, sliced into eight slices each.</li> <li>• Make sure each group records the amount of each ingredient used.</li> <li>• Each group needs to compare each ingredient used with Food Guide Pyramid serving sizes.</li> <li>• Each group will calculate how many servings of each of the pyramid groups are represented by one “Pyramid Pizza” slice. Report Out. Then enjoy.</li> </ul> <p><b>Debate:</b> Divide class into groups. Provide each group with one diet or diet product (i.e liquid meal replacement beverage, over the counter diet pills, or copy of a fad diet) Have each group split into two sides: for and against. Allow time for students to plan for their debates. Stage the</p>	<p>References Lead Questions Rubric Art Supplies Poster Board</p> <p>Guidelines for Activity Computers Internet Web sites References Lead Questions Rubric Food Guide Diagrams</p> <p>Ingredients for Pizza Lab Lab Planning Forms Recipe</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Diet Products</p>
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<p>D. Impact of Daily Food Choices on Health and Wellness</p>	<p>debates in front of the entire class. After each debate, allow time for discussion.</p> <p><b>Book Reviews:</b> Provide small groups of students with a list of books to read (or skim) and critique. Suggested titles include:</p> <ul style="list-style-type: none"> <li>• The New <i>Cabbage Soup Diet</i> by Margaret Danbrot</li> <li>• Dr. Atkins's New <i>Diet Revolution</i> by Robert C Atkins, M.D.</li> <li>• Sugar Busters! By H. Leighton Steward</li> <li>• The New Beverly Hills Diet by Judy Mazel and Michael Wyatt</li> </ul> <p>Set aside class time for groups to give critiques. What common threads run through the critiques? What do these approaches have in common?</p> <p><b>Life Cycle Research:</b> Students write a research report on the effects of nutritional intake on health, appearance, effective job performance, and personal life at each stage of the life cycle. Share Out</p> <p><b>Teacher Talk:</b> The teacher explains the relationship of activity levels and caloric intake to health and wellness, including weight management.</p> <p><b>Weight Management Activity:</b> Students create menus and exercise programs for teens who want to maintain their weight, gain weight or loose weight. Report Out.</p>	<p>Guidelines for Debate Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Have the library order these books for you to use with this activity. Check them out from a local library. Web sites with information about careers in dietetics or related fields, encourage students to contact: American Association of FACS <a href="http://www.aafcs.org">www.aafcs.org</a> American Dietetic Association <a href="http://www.eatright.org">www.eatright.org</a></p> <p>Guidelines for Research Report Rubric Life Cycle Computers Internet Web sites References</p> <p>Lead Questions</p> <p>Guidelines for Activity: Caloric/ Energy Charts Computers Internet Web sites References Lead Questions Guidelines for Activity:</p>
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	<p><b>Scenarios to Analyze Nutritional Needs:</b> Students are provided with scenarios of an individual or family at a specific stage of the life cycle. They analyze and apply various dietary guidelines that meet their nutritional needs and leads to good health and wellness.</p> <p><b>Culturally Diverse Food Choices Activity:</b> Students are assigned a diverse culture represented in the U.S. They analyze their culturally diverse food choices that are nutritionally adequate and not nutritionally adequate. They plan a week of nutritious menus using the diverse food choices. Report Out.</p> <p><b>Food Label Evaluation Activity:</b> Students collect five food labels or other food information resources. They evaluate food labels and other resources to determine the nutritional information provided and if the products are good sources of nutrition.</p> <p><b>Research Report on Long-Term Effect of Food Choices:</b> Students research the long term effects of food choices. They describe strategies for prevention, treatment, and management of diet-related diseases and eating and stress related disorders such as diabetes, hypertension, childhood obesity, anorexia, and bulimia. Share Out.</p> <p><b>Food Allergies Activity:</b> Students research food allergies. They determine the effects of food allergies and intolerances on individual and family health. They identify symptoms and treatments for the food allergies. They complete the Food Allergies Chart. Report Out.</p>	<p>Scenarios Computers Internet Web sites References Lead Questions</p> <p>Guidelines for Activity: Culturally Diverse Cuisines Computers Internet Web sites References Lead Questions</p> <p>Guidelines for Activity: Computers Internet Web sites References Lead Questions Food Labels or Other Resources</p> <p>Guidelines for Activity: Computers Internet Web sites References Lead Questions</p> <p>Guidelines for Activity: Computers Internet Web sites References Lead Questions Food Allergies Chart</p>
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<p>E. Current Issues and Trends in Health, Wellness, and Nutrition</p>	<p><b>Menu Planning Case Studies:</b> Students are provided with various case studies. They plan menus or diets for the individual or family described in the case studies. The menus are based on appropriateness to the life cycle, activity level, culture, nutritional needs, and food budget.</p> <p><b>PowerPoint Presentation:</b> Health, Wellness, and Nutrition</p> <ul style="list-style-type: none"> <li>• Current Issues</li> <li>• Trends</li> </ul> <p><b>Issues and Trends Investigation:</b> Students are provided with an issue or trend in health, wellness, and nutrition. They research their issue and trend and write a consumer report describing the affects of the issue or trend on consumer behavior in eating nutritionally. Students present their consumer report to the class.</p>	<p>Guidelines for Activity: Computers Internet Web sites References Lead Questions Case Studies</p> <p>PowerPoint Presentation Computer CTX Lead Questions</p> <p>Guidelines for Activity: Computers Internet Web sites References Lead Questions Issues and Trends Formant for Consumer Report</p>
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<p><b>Unit Assessment:</b></p>	<p>Motivators, Meal Analysis, Research Report, Posters, History of Food Guides Activity, Debate, Book Reviews, Life Cycle Research, Weight Management Activity, Scenarios to Analyze Nutritional Needs, Culturally Diverse Food Choices, Activity, Food Label Evaluation Activity, Research Report on Long-Term Effect of Food Choices, Food Allergies Activity, Menu Planning Case Studies, Issues and Trends Investigation, Class Participation, and Rubrics</p>
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<p><b>Unit/Course CTSO Activity:</b></p>	<p>FCCLA members visit local assisted living community, serve meals to residents.</p>
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<p><b>Unit/Course Culminating Product:</b></p>	<p>Project Based Learning-assign students a hypothetical person of varying ages and dietary needs; assess their nutrient needs, research appropriate recipes, design fitness schedule, prepare oral presentation with visual aids</p>
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<p><b>Course/Program Credential(s):</b> <input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input checked="" type="checkbox"/> Postsecondary Degree <input checked="" type="checkbox"/> University Degree  <input checked="" type="checkbox"/> Other: AAFCE Pre-Professional Assessment - Nutrition and Food Science and/or Broad Field Family and Consumer Sciences</p>
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**Course Title: Food & Nutrition**

**Unit: 3 Meal Management & Service**

<p><b>Content Standard(s) and Depth of Knowledge Level(s):</b></p>	<p>Students will:</p> <ol style="list-style-type: none"><li>9. Prepare a nutritious menu.<ul style="list-style-type: none"><li>• Interpreting recipes in food production</li><li>• Demonstrating safe and correct use of equipment</li><li>• Practicing food safety in food production, handling, service, and storage</li><li>• Using correct hygiene and health procedures</li><li>• Organizing kitchen space</li><li>• Demonstrating a variety of creative food presentation techniques</li></ul></li><li>10. Compare the cost and nutritive value of preparing food at home versus purchasing fast foods.<ul style="list-style-type: none"><li>• Describe savings through bulk food purchasing</li></ul></li><li>11. Apply management principles when planning, purchasing, preparing, storing, and serving food.</li><li>12. Judge the quality of prepared food.</li><li>13. Demonstrate etiquette, manners, and proper table settings for various occasions.</li></ol>
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<p><b>Learning Objective(s) and Depth of Knowledge Level(s):</b></p>	<p>Students will:</p> <ol style="list-style-type: none"><li>1. Demonstrate ability to select, store, prepare, and serve nutritious and aesthetically pleasing foods.</li><li>2. Analyze criteria for optimum kitchen storage space and kitchen floor plans.</li><li>3. Determine conditions and practices that promote safe food handling.</li><li>4. Evaluate safety and sanitation practices throughout the food chain.</li><li>5. Explain foodborne illness as a health issue for individuals and families.</li><li>6. Apply various dietary guidelines in planning to meet nutrition and wellness needs.</li><li>7. Use appropriate etiquette, manners and proper table settings.</li><li>8. Determine factors that affect food costs and comparison shop to decide what foods to buy.</li><li>9. Interpret recipes to be used in planning and preparing food.</li><li>10. Demonstrate creative food preparation techniques.</li><li>11. Calculate the cost and nutritive values of foods prepared at home versus buying fast foods.</li><li>12. Judge the quality of food.</li></ol>
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<p><b>Essential Question(s):</b></p>	<p>How do you plan meals that are nutritious, economical, safe and aesthetically pleasing? How is kitchen space organized for efficiency? What creative techniques are used in food preparation?</p>
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How does the cost of food prepared at home differ from eating out?  
 How does the nutritive value of food prepared at home differ from eating out?  
 How do you judge the quality of food?  
 What management skills are needed to plan, purchase, prepare, store, and serve food?  
 What etiquette practices are appropriate for various occasions?

Content Knowledge	Suggested Instructional Activities Rigor & Relevance Framework (Quadrant)	Suggested Materials, Equipment and Technology Resources
<p>III. Meal Management and Service</p> <p>A. Nutritious Meal</p> <ol style="list-style-type: none"> <li>1. Interpreting recipes</li> <li>2. Correct and safe use of equipment</li> <li>3. Food safety</li> <li>4. Correct hygiene</li> <li>5. Organizing kitchen space</li> <li>6. Creative presentation techniques</li> </ol>	<p><b>Project:</b>          Divide the class into three groups representing the 19<sup>th</sup>, 20<sup>th</sup>, and 21<sup>st</sup> centuries. Ask each group to investigate the workspace, tools, and food preparation techniques of the assigned era. Explain that each group is to assemble images, facts, and data for its era to be presented as part of a multimedia, walk-through in-class exhibit. For its multimedia display, each group is to make a checklist that contains the following questions: How do you interpret recipes? What are the major kitchen and food safety issues of the era? How is food stored? What concerns do people have about conserving natural resources during food preparation? What types of recipes are used? How are ingredients measured? What kitchen equipment is used? How are foods prepared and cooked?</p> <p><b>Advance Planning Guide for Nutritious Meal, Management Principles of Food Preparation, and Quality of Prepared Food:</b></p> <ul style="list-style-type: none"> <li>• Obtain a kitchen floor plan.</li> <li>• Obtain pictures of basic kitchen work centers.</li> <li>• Gather containers of hazardous chemicals.</li> <li>• Invite a local firefighter to class to speak about kitchen fire safety.</li> <li>• Prepare slides, drawings or photos that show unsafe conditions in the kitchen.</li> <li>• Arrange to have microscope slides of the</li> </ul>	<p>Guidelines for Activity          Rubric          Computer          Internet          Websites          Checklist          References          Guidelines for Presentation</p> <p>Guidelines for Activity          Rubric          Computers          Internet          References          Web sites          Magazines in Related Field          Make Arrangements for Guest Speaker          Equipment Art Supplies          Arrangements for Field Trip          Permission Slips          Floor Plans          Pictures of Kitchen Work Centers</p>

	<p>four most common harmful food borne bacteria.</p> <ul style="list-style-type: none"> <li>• Arrange for a potential school wide contest for voting on a trash-reduction advertising campaign.</li> <li>• Arrange a field trip to a local recycling plant.</li> </ul> <p><b>Application:</b> Have student groups apply principles of food sanitation to (1) holiday meals, (2) picnics, (3) brown bag lunches, and (4) parties. Ask groups to develop sanitation guidelines for each of these situations. Use the guidelines to prepare a series of articles on sanitation for potential publication in a community newspaper or Web site. Have each group divide in half: one half will write and the other half will pitch the article series idea to local publication or Web site editors. “Writers” and “Pitchers” need to coordinate efforts. Report Out.</p> <p><b>Stocking a Kitchen:</b> Have students write a brief essay describing the appliances and utensils that would be included in their “perfect kitchen.” Students may use drawings to illustrate points made in the essay but should concentrate on describing the kitchen vividly so the reader can envision it.</p> <ul style="list-style-type: none"> <li>• Give students a floor plan of a kitchen.</li> <li>• Have students identify the three basic work centers and list the items that might be included in each work center.</li> </ul> <p>Share Out.</p> <p><b>Posters:</b> Have students identify common types of kitchen accidents. Divide students into groups to create posters giving safety tips for preventing one type of kitchen accident. Have groups share their</p>	<p>Photos of Unsafe Conditions in the Kitchen Microscope Slides</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites Floor Plans of Kitchens References Kitchen Magazines Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites Floor Plans of Kitchens References</p>
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<p>B. Cost and Nutritive Value of Food</p> <ol style="list-style-type: none"> <li>1. Prepared at home</li> <li>2. Fast foods</li> <li>3. Bulk food purchasing</li> </ol>	<p>posters with the class, then post them in the foods laboratory.</p> <p><b>Motivators:</b> Display containers of hazardous chemicals such as oven cleaners, drain cleaners, pesticides, and polishes. Ask students to identify those that are poisonous. When they are finished, announce that all are actually poisonous. Students discuss the findings</p> <p><b>Hand Washing Activity Demonstration:</b> Ask for three student volunteers to demonstrate how they usually wash their hands before handling food. After all demonstrations are complete, have the class discuss the thoroughness of each washing technique. State the time of each. Have students repeat the hand washing demonstration using discussed improvements.</p> <p><b>Skits:</b> Divide the class into four groups. Have each group plan and present one of four skits on (1) use of the food waste disposal, (2) use of the automatic dishwasher, (3) procedures for washing dishes by hand, and (4) procedures for cleaning the work and eating areas of the foods lab. Encourage class discussion after each skit.</p> <p><b>Research:</b> Students research bulk food Web sites, fast food Web sites, supermarket Web sites to analyze the cost of food.</p> <p><b>Lab:</b> Students are provided with a menu, recipes, a list of food items, and their cost and the cost items</p>	<p>Art Supplies Poster Board</p> <p>Display of hazardous Chemicals Used in the Home Lead Questions</p> <p>Guidelines for Activity Soap Towels Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Skits Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Lead Questions</p> <p>Guidelines for Activity Rubric Computers</p>
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<p>C. Management Principles of Food Preparation</p> <ol style="list-style-type: none"> <li>1. Planning</li> <li>2. Purchasing</li> <li>3. Preparing</li> <li>4. Storing</li> <li>5. Serving</li> </ol>	<p>included on a fast food menu. Students select foods from the fast food establishment that uses the same ingredients. Students compare cost and nutritive value of foods.</p> <p><b>Rhymes:</b> Have students create rhymes or raps to help them remember the proper temperatures for storing, cooking, and serving food. Have all interested students read their rhymes or perform their rap for the class.</p> <p><b>Food Storing/Spoilage Charts:</b> Ask students to develop a chart of the six factors that cause nutrient loss or spoilage and how they were caused. Students are encouraged to develop their chart utilizing a computer software program. Students share charts with other students. The teacher moderates a class discussion on conditions that you can control to eliminate or slow down nutrient loss and spoilage. Share Out.</p> <p><b>Safety Check:</b> Have students brainstorm safety tips that could be followed when storing foods. Write the tips on the chalk board/white board or overhead transparency.</p> <p><b>Food Storage Activity:</b> Give students a list of 10 food items. Ask them to write down how they would store each item, why, and how long each item could be kept. They research the topic on “Food Storage” to determine if they correctly identified the proper storage techniques for their food items. Share</p>	<p>Internet Web sites References Lead Questions Menus Recipes Food Items Cost Fast Food Menu Costs</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Lead Questions Food Storing/Spoilage Chart</p> <p>Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Lead Questions</p>
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<p>D. Quality of Prepared Food</p>	<p>Out.</p> <p><b>Labs:</b> Students participate in various labs in planning, organizing, preparing, storing, and serving food items and meals.</p> <p><b>PowerPoint Presentation:</b> Judging the Quality of Food</p> <p><b>Judging the Quality of Food Lab:</b> Students participate in a lab where they judge the quality of food. Using a checklist, they evaluate several food items. Share Out.</p>	<p>Lab Planning Forms Lab Checklist Recipes Food Items Equipment Supplies</p> <p>PowerPoint Presentation Computer CTX Lead Questions</p> <p>Guidelines for Activity Food Items Quality Food Checklist</p>
<p>E. Etiquette, Manners, and Table Settings</p>	<p><b>10 + 2 Discussion:</b> Ask students to each brainstorm a list of ten reasons for using table etiquette. Each student shares and records one reason. The class as a whole discusses items on the list.</p> <p><b>Scenarios:</b> Give students several scenarios that require the proper use of etiquette. They respond to the scenarios by determining if the scenarios describe proper etiquette.</p> <p><b>Class Meal Lab:</b> Students will design a formal meal based on management principles of food preparation, correct and safe use of equipment, and proper etiquette. They prepare the meal.</p>	<p>Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Lead Questions Scenarios</p> <p>Guidelines for Activity Menus Cookbooks Food Items Lab Planning Forms Lab Checklist</p>

*Throughout the course, students will plan and prepare food items.*

<b>Unit Assessment:</b>	Projects, Stocking the Kitchen, Posters, Motivators, Demonstrations, Skits, Rhymes, Application, Food Storing/Spoilage, Safety Check, Table Etiquette, Participation in Laboratories, Interviews, Judge the Quality of Food, Research Project, Hands-on Inquiry, Experiments, Class Participation, and Rubrics
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<b>Unit/Course CTSO Activity:</b>	FCCLA members will conduct a seminar on etiquette luncheon.
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<b>Unit/Course Culminating Product:</b>	Students will design a formal meal based on management principles of food preparation, correct and safe use of equipment, and proper etiquette. Labs
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<b>Course/Program Credential(s):</b> <input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input checked="" type="checkbox"/> Postsecondary Degree <input checked="" type="checkbox"/> University Degree <input checked="" type="checkbox"/> Other: AAFCE Pre - Professional Assessment: Nutrition and Food Science and/or Broad Field Family and Consumer Sciences
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<p>B. Food Preparation Techniques</p> <ol style="list-style-type: none"> <li>1. National cuisines</li> <li>2. International cuisines</li> </ol>	<p>foods eaten in the country, food items available, and menus of foods eaten. They describe how the geography, climate and culture as well as traditions influence the country's cuisine. Students develop a PowerPoint Presentation on their country. They identify three recipes, one that they will prepare in lab, and evaluate the nutritive value of the foods. Report Out.</p> <p><b>10 + 5 Discussion:</b> Ask students who have visited or lived in other countries to describe the geography, climate and culture of the area. Discuss how these characteristics influenced food traditions of the area.</p> <p><b>International Cookbook:</b> Students share recipes from the countries studied and compile them in a cookbook. The cookbook contains nutritive values of the recipes. The cookbook is printed and sold in the community.</p> <p><b>Research Report on National Cuisine:</b> Students are assigned a region of the county to research the region's cuisine. They describe factors that impact the foods eaten in the region, food items available, and menus of foods eaten. They describe how the geography, climate and culture as well as traditions influence the region's cuisine. Students develop a PowerPoint Presentation on their region. They identify three recipes, one that they will prepare in lab, and evaluate the nutritive value of the foods. Report Out.</p> <p><b>10 + 5 Discussion:</b> Ask students who have visited or lived in another region. They describe the geography, climate and culture of the region. Discuss how these characteristics influenced food traditions of the</p>	<p>Web sites References Lead Questions</p> <p>Lead Questions</p> <p>Guidelines for Activity Rubric Computers Web sites Internet References</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Lead Questions</p> <p>Lead Questions</p>
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region.

**Regional Cookbook:**

Students share recipes from the regions studied and compile them in a cookbook. The cookbook contains nutritive values of recipes. The cookbook is printed and sold in the community.

**Teacher Demonstration/Labs:**

The teacher demonstrates food preparation techniques for preparing foreign and regional dishes. After each demonstration, students will prepare food items for the foreign and regional cuisines. The student that researched the country and or region will be responsible for a Tablescape that depicts the country or region studied.

- International Cuisines
  - Central America
  - South America
  - Africa
  - Middle East
  - Europe
  - Asia and the Pacific
  - Canada
- National/Regional Cuisines
  - Northeast
  - Southeast
  - Midwest
  - West Coast

**Comparing and Contrasting Activity:**

Using recipe books, Web sites, or other information sources involving food, students find examples of bean dishes served in several countries from different continents. How are they similar and different? Report Out.

**International Cookbook:**

Students share recipes from the countries studied and compile them in a cookbook. The cookbook is printed and sold in the community.

Recipes  
Food Items  
Supplies  
Equipment  
Checklists of Lab  
Planning Forms

Guidelines for Activity  
Rubric  
Computers  
Internet  
Web sites  
References  
Lead Questions

<b>Unit Assessment:</b>	Research Report on International Cuisine, International Cookbook, Research Report on National Cuisine, Regional Cookbook, Labs, Comparing and Contrasting Activity, Class Participation, and Rubrics
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<b>Unit/Course CTSO Activity:</b>	FCCLA members create brochure identifying “What is diversity?” Send brochures home with elementary students asking parents to inform themselves and their child about diversity issues in today’s society. List a “child friendly” international recipe on brochure for families to cook together at home.
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<b>Unit/Course Culminating Product:</b>	Portfolio-Create portfolio of one region or country of the world, research recipes and analyze the recipes in dietary analysis software. Using recipes create a three day menu with low fat substitutions, re-analyze recipes in software. Prepare one dish, documenting the process of preparation. Research Reports International Cookbook Regional Cookbook Labs
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<b>Course/Program Credential(s):</b>	<input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input checked="" type="checkbox"/> Postsecondary Degree <input checked="" type="checkbox"/> University Degree <input checked="" type="checkbox"/> Other: AAFCE Pre – Professional Assessment – Nutrition and Food Science and/or Broad Field Family and/or Consumer Sciences
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meals.

- Have students plan a party for an occasion of their choice. Discuss how a theme helps you plan a party. Then have students think of one theme for this lab. Have them draw a table setting or create a decoration that represents the theme.
- Have students to prepare garnishes to accompany specific foods for this lab.
- Have students to decorate a cake
- Have students plan room and table decorations for special occasions

**Special Occasions Entertainment Cookbook:**  
Students create a cookbook for special occasions. In the cookbook are included directions for creative food presentation.

**Special Occasion Activity:**  
Students plan and give an “Appreciation Tea” for teachers.

**Family Theme Party:**  
Students design and implement a themed family dinner to cook at home. Use appropriate recipes, set and decorate and table, and use service etiquette. Take pictures throughout process and create a step by step portfolio.

Guidelines for Activity  
Rubric  
Computers  
Internet  
Web sites  
References

Guidelines for Activity  
Rubric  
Computers  
Internet  
Web sites  
References  
Recipes  
Labs  
Cookbooks

Guidelines for Activity  
Rubric  
Computers  
Internet  
Web sites  
References  
Cookbooks

<b>Unit Assessment:</b>	Food Labs, Room and Table Decorations, Comparing and Contrasting Activity, Comparing and Contrasting Activity, Scenarios, Lab Experiences, Special Occasions Entertainment Cookbook, Special Occasion Activity, Class Participation, and Rubrics
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<b>Unit/Course CTSO Activity:</b>	FCCLA Members participate in the Families First STAR Event.
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<b>Unit/Course Culminating Product:</b>	Design and implement a themed family dinner to cook at home. Use appropriate recipes, set and decorate and table, and use service etiquette. Take pictures throughout process and create a step by step portfolio. Teacher "Appreciation Tea" Special Occasions Entertainment Cookbook
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<b>Course/Program Credential(s):</b>	<input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input checked="" type="checkbox"/> Postsecondary Degree <input checked="" type="checkbox"/> University Degree <input checked="" type="checkbox"/> Other: AAFCE Pre – Professional Assessment – Nutrition and Food Science and/or Broad Field Family and/or Consumer Science
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**Course Title: Food and Nutrition**

<b>Unit: 6</b>	<b>Technology and Careers</b>
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<b>Content Standard(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>18. Determine the impact of technology on food production, choices, and nutrition.             <ul style="list-style-type: none"> <li>• Examples: biotechnology, hormone injection</li> </ul> </li> <li>19. Identify careers and entrepreneurial opportunities in the field of food and nutrition.</li> </ol>
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<b>Learning Objective(s) and Depth of Knowledge Level(s):</b>	<p>Students will:</p> <ol style="list-style-type: none"> <li>1. Assess how the scientific and technical advances in food processing, storage, product development and distribution impact nutrition and wellness.</li> <li>2. Assess the effects of food science and technology on meeting nutritional needs.</li> <li>3. Analyze the wide variety of food-related careers and entrepreneurial opportunities in the food industry.</li> <li>4. Determine the skills and qualities needed for career success.</li> </ol>
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<b>Essential Question(s):</b>	<p>How does technology affect daily food intake?          What skills and qualities are required to be a successful professional in a food-related career?</p>
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<b>Content Knowledge</b>	<b>Suggested Instructional Activities Rigor &amp; Relevance Framework (Quadrant)</b>	<b>Suggested Materials, Equipment and Technology Resources</b>
VI. Technology and Careers A. Food Production <ol style="list-style-type: none"> <li>1. Food choices</li> <li>2. Nutrition</li> <li>3. Biotechnology</li> <li>4. Hormone injection</li> </ol>	<p><b>Download Resources:</b>            Identifying Food Production Processes:            Example: “Modern Marvels,” Food Network etc.</p> <p><b>Research Report on Technology:</b>            Students research the how technology is used in the field of food and nutrition. They create a PowerPoint presentation on their research to present to the class. Students list all of the technology identified in their presentations.</p> <p><b>Article Critiques:</b>            Students critique articles on technology and its impact on the field or nutrition and foods. They</p>	<p>Computer            Internet            Web sites</p> <p>Guidelines for Activity            Rubric            Computers            Internet            References            Guidelines for PowerPoint Presentation            Rubric for Presentation</p> <p>Guidelines for Research            Rubric            Computer</p>

discuss their articles with the class.

**Inventing Technology for the Future:**

Working in groups, students are assigned to one of the following categories. They invent technology that may be used in five years. They research the category. They invent the technology based on the information obtained in their research. They draw a picture of their new invention, the purpose of the technology, how it is used, care, cost, and safety features.

Categories:

- Food choices
- Nutrition
- Biotechnology
- Hormone injection
- Food Preparation
- Food Storage

**Technological Laboratory Experiments:**

Students work in groups. They are provided with a recipe and ingredients. They prepare the recipe in the microware, convection oven, and conventional. They use the Experimental Chart to record the cooking time, taste, and appearance. Groups display their products and share their results with the class.

**Field Trip:**

Students participate in a field trip to a restaurant, fast food establishment, a deli in a grocery store, or a utility company to observe the technology being used or sold. Share Out.

**Essay:**

Students write an essay on the importance of technology on food production, choices, and nutrition. Report Out.

Internet  
References  
Industry Magazines

Guidelines for Lab  
Rubric  
Supplies/Equipment  
Computers  
Internet  
References  
Web sites  
Arrangements for Job Shadowing  
Permission Slips

Guidelines for Activity  
Experimental Chart  
Planning Sheet  
Recipes  
Ingredients

Arrangements for Field Trip  
Permission Slips

Guidelines for Essay  
Rubric  
Computers  
Internet  
Web sites

<p>B. Careers and Entrepreneurial Opportunities in the Field of Food and Nutrition</p>	<p><b>Panel:</b> Various professionals from the field of nutrition discuss their careers with the class.</p> <p><b>Career Profiles:</b> Each student is provided with five careers or entrepreneurial opportunities available in the field of nutrition and food. They research the education training and requirements, licensure required, job description, salary range, supply and demand. They record their information on the career profile cards. Students share their profile cards. Cards are placed in a Career Profile Box. Students select three Career Profile Cards of a possible career choice. They research the careers and then select the “one” career of their choice. They share their career choice with the class.</p> <p><b>Job Shadowing:</b> Students are assigned to a professional in the field to shadow. Students keep a log of their observations.</p> <p><b>Field Trip:</b> Students participate in a field trip to an establishment that houses professional related to the field of food and nutrition. Examples: Southern Progress Test Kitchens, Oxmoor House Test Kitchens, Opryland Hotels, Sister Shubert’s. They share their observations</p> <p><b>Career Fair:</b> Students plan and offer a Career Fair on careers in field of nutrition and foods.</p>	<p>References</p> <p>Make Arrangements for Guests Lead Questions</p> <p>Guidelines for Activity Rubric Computers Internet Web sites References Note Cards</p> <p>Guidelines for Activity Rubric Shadowing Arrangements Permission Slips</p> <p>Arrangements for Field Trip Permission Slips Lead Questions</p> <p>Guidelines for Activity Arrangements for Career Fair Invitations for Career Fair Evaluation of Career Fair</p>
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<b>Unit Assessment:</b>	Research Report on Technology, Article Critiques, Inventing Technology for the Future, Career Profiles, Class Presentation, and Rubrics
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<b>Unit/Course CTSO Activity:</b>	FCCLA will sponsor a school wide program highlighting a sports nutritionist that addresses the use and misuse of hormones in sports.
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<b>Unit/Course Culminating Product:</b>	Students plan a Career Fair and invite professionals in several food-related professions including scientist that study any aspect of food and nutrition. Research Report Career Profile Essay
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<b>Course/Program Credential(s):</b>	<input type="checkbox"/> Credential <input type="checkbox"/> Certificate <input checked="" type="checkbox"/> Postsecondary Degree <input checked="" type="checkbox"/> University Degree <input checked="" type="checkbox"/> Other: AAFCE Pre - Professional Assessment - Nutrition and Food Science and/or Broad Field Family and Consumer Science
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