

FREEHOLD REGIONAL HIGH SCHOOL DISTRICT
OFFICE OF CURRICULUM AND INSTRUCTION
CULINARY ARTS ACADEMY

CULINARY ARTS I/CULINARY MATH

COURSE DESCRIPTION

Grade Level: 11

Department: Culinary Arts Academy

Course Title: Culinary Arts I/Culinary Math

Credits: 10

Course Code: 271000

Board of Education adoption date: August 22, 2011

FREEHOLD REGIONAL HIGH SCHOOL DISTRICT

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Introduction - Culinary Arts I/ Culinary Math

Introduction

Course Philosophy

The Freehold Regional High School District's Culinary Arts Academy is an occupational, technical and career exploration program that consists of a wide range of courses, training, experiences and activities. It is specifically designed to enhance skills to not only prepare students for employment positions within the food industry job cluster, but also for entrance into colleges, culinary colleges, universities or other post-secondary schools.

Culinary Arts I/Culinary Math provide students with the opportunity for "hands-on" learning through their involvement in all phases of operations in the licensed restaurant, the *5 Star Café*. This furnishes intensive training, with specific job objectives relative to current industry standards and meshes with the students' skill abilities and interests.

This approach contributes to the development of a well- rounded student; one that demonstrates good citizenship, critical thinking and problem solving skills, sound mental and physical health and the ability to establish personal and professional goals commit to a plan of action to achieve them.

Course Description

Culinary Arts I/Culinary Math are the first levels of a two-year course available to juniors enrolled in the four- year Culinary Arts Academy Course. It is intended to provide students with a solid foundation, through a combination of direct instruction and practical applications, of the skills necessary to successfully function in a multiphase food service operation. Culinary Math consists of course work, activities, and projects that are specifically designed to develop and enhance student knowledge of culinary math as it relates to the food service industry through application in a restaurant setting.

Paramount and foremost is the introduction of federal, state and local mandatory guidelines for the essentials of safety and skill application in a commercial foods environment. The course encompasses basic and advanced culinary arts preparation techniques, inclusive of presentation and proper service.

Nutrition is investigated through dietary considerations, cultural foods, and captive audience situations. Food preparation labs are conducted and are inclusive of breakfast, lunch and dinner menu items with specialty baking applications. Dining room service is explored.

Students will develop marketable job skill for entry level positions in a variety of fields within the food service industry through their work in a student operated licensed restaurant, the *5 Star Café*.

Course Map and Proficiencies/Pacing

Course Map

Relevant Standards	Enduring Understandings	Essential Questions	Assessments		
			Diagnostic	Formative	Summative
<p>9.4.12. I. (1).8</p> <p>9.4.12. I.56</p> <p>9.4.12. I.55</p> <p>9.4.12. I.51</p> <p>9.4.12.I.46</p> <p>9.4.12. I.45</p> <p>9.4.12. I.43</p> <p>9.4.12. I.42</p> <p>9.4.12. I.41</p> <p>9.4.12. I.40</p> <p>9.4.12. I.39</p>	<p>Current industry standards for commercial food service operations mandate through understanding and effective application of safety and sanitation measures appropriate for the facility.</p>	<p>What are the guideline and practices for preparing and serving safe foods?</p> <p>Why is it important to follow safe work place procedures and guidelines?</p> <p>What is the role of governing and regulatory and agencies that govern and set standards for all commercial food service establishments?</p> <p>Why is it important to have understanding of and apply basic math operations as they apply to culinary technology?</p>	<p>Anticipatory set questions and answer:: followed by class discussion</p> <p>Survey chapter</p> <p>Outline</p> <p>Review previous career portfolio entries and notebooks</p> <p>NRA <i>ServSafe</i> pre-test</p>	<p>Benchmark assessments</p> <p><i>On Cooking</i> text and <i>ServeSafe</i> course book chapter reading assignments with chapter questions</p> <p>NRA <i>ServSafe</i> training videos for food service employees</p> <p>Unit outline with industry based hand-outs</p> <p>Notebook entries</p> <p>State mandated safety/sanitation test: facility based with 100% accuracy grade</p> <p>Chef instructor observations: Daily/weekly grading rubric for safety/ sanitation and professionalism on production and formal labs</p> <p>Hand-outs: Culinary Academy facility based rules and guidelines, journals</p>	<p>Portfolio entries of unit work including, formal lab sheets with safety/sanitation application with grading rubric</p> <p>Chef instructor observation of application of learned material and skill proficiency in the student run restaurant, the <i>5 Star Café</i>/pure sanitation labs</p> <p>Midterm examination</p> <p>Final examination</p>

<p>9.4.12. 1.10 9.4.12. 1.11 9.4.12. 1.12 9.4.12.1.13 9.4.12. 1.15 9.4.12. 1.19 9.4.12. 1.3 9.4.12. 1.28 9.4.12. 1.29 9.4.12. 1.55 9.4.12. 1.66 9.4.12. 1.69 9.4.12. 1.72 9.4.12. 1.81 9.4.12.1.9 9.4.12. 1.76 9.4.12.1.2 9.4.12.1.8</p>	<p>Professionalism in the kitchen brigade and front house restaurant mirrors the industry standards of the National Restaurant Association guidelines and regulations.</p>	<p>How did the 18th –early 20th century chefs influence the progression of current day standardized recipes and modern day cuisine?</p> <p>How do advanced technology, nutrition, and consumer trends influence the modern food service industry?</p> <p>What role does a food service manager and other professionals, such as dietitian, food scientist and food journalists play in the front and back house food service operation?</p> <p>Why is record-keeping important for food service operations?</p> <p>Why is it important to understand and apply perpetual and physical inventory control?</p> <p>How do you interpret an invoice and what are the various parts of an invoice?</p>	<p>Anticipatory set: What specific jobs in local restaurants would have the same or similar job descriptions as the “station assignments” in the student run restaurant, the <i>5 Star Café</i>?</p> <p>Survey Chapter Outline Hand-out and review notebook/ portfolio entries</p> <p>What information needs to be entered?</p>	<p><i>On Cooking</i>, (classroom text) chapter reading assignment/ questions.</p> <p>Unit outline</p> <p>Direct instruction</p> <p>Note-taking</p> <p>Teacher observation of demonstrated professionalism through daily/weekly grading rubric</p> <p>Research professionalism in relation to front and back house positions</p>	<p>Portfolio entries of unit work, formal lab sheets, pictures and documentation of community service projects/work</p> <p>Teacher observation of professional work attitudes and skill proficiency in student run restaurant the <i>5 Star Café</i></p> <p>Research project: Professionalism in the food service industry</p> <p>Midterm examination</p> <p>Final examination</p>
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<p>9.4.12. 1.15 9.4.12. 1.3 9.4.12. 1.28 9.4.12. 1.29 9.4.12. 1.55 9.4.12. 1.66 9.4.12. 1.69 9.4.12. 1.72 9.4.12. 1.81 9.4.12.1.9 9.4.12. 1.12 9.4.12. 1.76 9.4.12. 1.10 9.4.12.1.8 9.4.12. 1.19 9.4.12. 1.35 9.4.12.1.83 9.4.12.1.84 9.4.12.1.(1).1 9.4.12.1.(1).3 9.4.12.1.81 9.4.12.1.80 9.4.12.1.77 9.4.12.1.74 9.4.12.1.62 9.4.12.1.56</p>	<p>Identifying terminology and characteristics of cooking principles is necessary to develop advanced culinary practices and skill proficiencies.</p>	<p>What nutrition and menu planning role do starches, grains and pastas, play in standardized recipe preparation?</p> <p>How do you develop standardized recipes for a food service operation?</p> <p>What are the classic categories of stocks, soups, and mother sauces and how are they used to compliment basic proteins of poultry, seafood and meat in a menu and food production?</p> <p>What are the scientific and mathematical implications on all cooking applications to produce a saleable product through standardized recipe preparation?</p> <p>What are the implications of matching small wares, measuring devices, and equipment for all cooking tasks and standardized recipe preparation?</p> <p>What are the methods used for portion size?</p> <p>How should you estimate preparation amounts and the number of serving portions?</p>	<p>Review of career portfolio entries: notebook entries/ formal labs with verbal pre-test</p> <p>Review a variety videos of basic cooking application with post-test</p>	<p>Do now Math: standardized Recipe yields/ conversions</p> <p>OPEN ENDED QUESTIONS: product development and production for saleable products</p> <p>Unit outline/note-taking</p> <p>Formal and production labs</p> <p>Chapter quiz/tests</p> <p>Chef instructor observation/professionalism grading according to daily/weekly rubric</p>	<p>Recipe development project</p> <p>Portfolio entries</p> <p>Midterm examination</p> <p>Final examination</p>
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<p>9.4.12.1.16 9.4.12.1.30 9.4.12.1.33 9.4.12.1(1).1 9.4.12.1(1).3 9.4.12.1(1).4 9.4.12.1(1).6 9.4.12.1(1).7 9.4.12.1(1).9 9.4.12.1(1).10</p>	<p>Career exploration and management activities applied to the kitchen brigade provide informed decisions for professional job opportunities and career planning.</p>	<p>What skills are needed to make an informed career decision in food service?</p> <p>What would be a logical course of action to explore culinary and management positions such as rounds man/short order line cook or quantity baker considering the task analysis or job descriptions?</p> <p>How would you gain knowledge of business communications in commercial food service operations?</p>	<p>Anticipatory set questions</p> <p>Skill ability/career interest survey</p>	<p><i>On Cooking</i> chapter reading assignments with related chapter questions/activities</p> <p>Unit outline</p> <p>Guest speakers and demonstrators</p> <p>Direct instruction/demonstrations with student note-taking</p> <p>Formal/production labs</p> <p>Unit quiz/ test</p> <p>Teacher observation with daily/weekly grading according to rubric</p> <p>Community service work</p>	<p>Portfolio entries</p> <p>Research action project</p> <p>Midterm examination</p> <p>Final examination</p>
<p>9.4.12.1.3 9.4.12.1.35 9.4.12.1.83 9.4.12.1.84 9.4.12.1(1).1 9.4.12.1(1).3 9.4.12.1.81 9.4.12.1.80 9.4.12.1.77 9.4.12.1.74 9.4.12.1.62 9.4.12.1.66 9.4.12.1.56</p>	<p>Basic concepts of nutritional food science are inherently the foundation for product development and menu delivery.</p>	<p>What are the agencies guidelines, organizations and cultural considerations that influence the commercial food service industry?</p> <p>How do nutritional choices effect product development and menu delivery?</p> <p>How do the five senses influence seasonings and flavorings in product/recipe development and adjustments?</p> <p>What is the purpose of record keeping in a food service establishment?</p>	<p>Anticipatory set questions</p> <p>Pre-test</p>	<p><i>On Cooking</i> chapter reading assignments with related chapter questions/activities</p> <p>Internet research</p> <p>Unit outline</p> <p>Direct instruction/ demonstrations/ with note taking</p> <p>Unit test/ quizzes</p> <p>Formal/production labs</p> <p>Teacher observations with daily/weekly grading according to rubric</p>	<p>Standardized recipe and nutrition project</p> <p>Portfolio entries</p> <p>Midterm examination</p> <p>Final examination</p>

9.4.12.1.2 9.4.12.I(1).1 9.4.12.1.25 9.4.12.1.27 9.4.12.1.30 9.4.12.1.31 9.4.12.1.33 9.4.12.1.36 9.4.12.I(1).5	Understanding of mathematical fundamentals and functions in the hospitality and food industry.	What mathematical skills are necessary for the food service industry? What is the importance of menu pricing and what are the factors that influence menu pricing?	Anticipatory set questions	Culinary Math questions related to formal labs and production Quizzes Recipe conversions	Recipe development project Midterm examination Final examination
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Proficiencies and Pacing

Unit Title	Unit Understanding(s) and Goal(s)	Recommended Duration
Unit # 1: Industry Standards for Safety and Sanitation	<p>Current industry standards for commercial food service operations mandate through understanding and effective application of safety and sanitation measures appropriate for the facility.</p> <p>The student will:</p> <ol style="list-style-type: none"> 1. Identify and recognize the role of all governing agencies, regulations and guidelines that would affect the safe and sanitary production of food and the facility. 2. Establish criteria to maintain a safe and sanitary workplace recognizing Hazard Analysis Critical Control Point standards. 3. Recognize and practice set standards for receiving, storing, handling and serving safe food. 4. Demonstrate a professional and proactive role in safety and sanitation procedures in the student run restaurant, the 5 Star Café. 5. Demonstrate an understanding of and apply basic math operations as they apply to culinary technology. 	4 weeks On going
Unit # 2: Professionalism in the Kitchen Brigade and Front House Restaurant	<p>Professionalism in the kitchen brigade and house restaurant mirrors the industry standards of the National Restaurant Association guidelines and regulations.</p> <p>The student will:</p> <ol style="list-style-type: none"> 1. Examine the importance of job descriptions and task analysis to maintain an acceptable level of professionalism in the Kitchen Brigade and Front House Restaurant. 2. Recognize and practice skill and management activities according to current professional level industry standards. <p>Demonstrate a professional and proactive role in all tasks and assignments in the daily operation of the student run restaurant, the 5 Star Café.</p>	7 weeks On going

<p>Unit # 3: Advanced Food Preparation</p>	<p>Identifying terminology and characteristic of cooking principals is necessary to develop advanced culinary practices and skill proficiencies.</p> <p>The student will:</p> <ol style="list-style-type: none"> 1. Identify and classify the advanced preparation of foods in the categories of <ul style="list-style-type: none"> • Starches, grains and pasta • Stocks, soups and mother sauces • Poultry, seafood and meats 2. Summarize reasons for cooking foods. 3. Examine appropriate heat application methods. 4. Prepare foods for advanced cooking through proper processing and treatment methods. <p>Integrate the proper use of small wares, measuring devices and equipment for all cooking tasks and standardized recipe preparation.</p>	
<p>Unit # 4: Career Exploration and Management.</p>	<p>Career exploration and management activities applied to the kitchen brigade provide informed decisions for professional job opportunities and career planning.</p> <p>The student will:</p> <ol style="list-style-type: none"> 1. Identify and classify the kitchen brigade job descriptions and task analysis for: <ul style="list-style-type: none"> • Rounds man and short order line cook • Pantry, salads and cold foods cook. • Commercial baker 2. Recognize personal qualities and abilities with practical application skills appropriate for breakfast / lunch cooks and the related management duties. 3. Match the components of standardized recipes with appropriate kitchen stations and brigade personnel. 4. Identify the appropriate pre prep; prep and mise in place for each kitchen station. 5. Explore and apply in a professional manner learned skills to the daily operation of the student run restaurant, the 5 Star Café. 	<p>7 weeks On going</p>

<p>Unit # 5: Nutritional Food Science</p>	<p>Basic concepts of nutritional food science are inherently the foundation for product development and menu delivery.</p> <p>The student will:</p> <ol style="list-style-type: none"> 1. Summarize and explain basic nutritional concepts. 2. List basic food science concepts such as heat applications, the process of osmosis as it relates to salting foods; acid/ alkaline solutions and analyze the effects when applied to product development. 3. Evaluate the principles of nutritional cooking. 4. Explain the role of the five senses in tasting and describing the flavor of foods 5. Rationalize the factors for scaling a standardized recipe. 6. Define flavorings and seasonings with relation to product development. 7. Analyze the factors for selecting measurement tools/techniques appropriate for product/recipe development or adjustment. 8. Compile and analyze menu and dietary guidelines...with cultural influences. 9. Recognize the guidelines and recommendations of the United States Department of Health and Human Services (DHHS), the American Diabetes Association (ADA), the World Health Organization (WHO) and the American Heart Association (AHA) and their influence on commercial food service. 10. Test and evaluate original standardized recipes in the student run restaurant, the 5 Star Café. 	<p>7 weeks On going</p>
<p>Unit # 6: Culinary Math</p>	<p>Understanding of mathematical fundamentals and functions in the hospitality and food industry.</p> <p>Students will:</p> <ol style="list-style-type: none"> 1. Perform basic math functions relating to the food service industry. 2. Methods for accurately weighing, measuring and portioning. 3. Procedures for costing and converting a standardized recipe. 4. Use computer programs to record information needed to run a food service operation. 5. Develop food production reports for the various stations in a commercial kitchen. 6. Take a physical inventory for the 5 Star Cafe and record results on an inventory spreadsheet. 	<p>3 weeks On going</p>

Unit 01 - Culinary Arts I/Culinary Math

Industry Standards for Safety and Sanitation

Enduring Understandings: Current industry standards for commercial food service operations mandate a thorough understanding and effective application of sanitation and safety measures appropriate for the facility.

Essential Questions:

What are the guidelines and practices for preparing and serving safe foods?

Why is it important to follow safe workplace procedures and guidelines?

What is the role of governing and regulatory agencies that govern and set standards for all commercial food service establishments?

Why is it important to have an understanding of and apply basic math operations as they apply to culinary technology?

Unit Goal: The students will recognize and demonstrate professional safety and sanitation practices according to industry standards.

Duration of Unit: 4 weeks and on going

Guiding/Topical Questions	Content/Themes/Skills	Resources and Materials	Suggested Strategies	Suggested Assessments
<p>How do food, acidity, time, temperature, oxygen and moisture (FATTOM) influence commercial food service?</p>	<p>Compare academy standards for professional and good personal hygiene to the NRA <i>ServSafe</i> guidelines and NJ Board of Health code 12, to determine compliance</p> <p>Understand and follow all governing regulations and guidelines</p> <p>Establish the criteria to maintain a safe workplace</p>	<p><i>ServSafe</i> course book</p> <p>Student portfolio</p> <p>Newspapers</p> <p>Professional journal and newsletters</p> <p>Videos</p> <p>Instant read thermometers</p> <p>Test strips</p> <p>Formal and production Lab materials and supplies</p>	<p>Lecture, class discussion and application of the Culinary Academy's Facility Based guidelines and Rules for Safety and Sanitation</p> <p>Read, analyze and answer review questions in the National Restaurant Association's <i>ServSafe</i> Course book</p> <p>Read and analyze the safety/sanitation chapters of at least two Culinary Academy textbooks. Prepare and list of the facts and/or concepts that appear most important as they are emphasized in all texts that were reviewed</p> <p>Review and evaluate Local Board of Health evaluation of the facility</p> <p>Demonstrations for Introduction to Commercial Foods (Peer Teaching)</p> <p>View and evaluate Culinary II Safety and Sanitation Management projects: posters and/or power point presentations</p> <p>Properly "set up a pot sink". Check and record temperatures and chemical levels</p> <p>Prior to beginning the assigned station mise en place, record refrigeration and food temperatures on log sheets</p> <p>Check temperatures of stored and prepared foods. Record and check with regulatory agency guidelines if temperatures are outside of the danger zone</p> <p>Role model proper dress and personal hygiene for safety</p> <p>Demonstrate safe food handling and storing practices at all times including labeling and proper storage containers</p>	<p>Written tests and quizzes</p> <p>Pass with 100% accuracy a facility based safety and sanitation test</p> <p>Worksheet</p> <p>Project assessments</p> <p>Formal and production lab safety/sanitation assessment criteria</p> <p>Article summaries</p> <p>Notebook assessments</p> <p>Responses to discussion questions</p> <p>Journal assessments</p> <p>Daily grade according to rubric for safety and sanitation as per chef instructor professional observation</p>

<p>What role does the New Jersey Sanitary Code: Chapter 12 play in serving safe food in commercial food establishments?</p>	<p>Demonstrate continued accuracy (100%) in safety and sanitation procedures for receiving, storing, handling and serving safe food in a safe and sanitary facility</p>	<p><i>ServSafe</i> course book</p> <p>Student portfolio</p> <p>Newspapers</p> <p>Professional journal and newsletters</p> <p>Videos</p> <p>Formal and production Lab materials and supplies</p>	<p>Direct instruction, class discussion and application of the Culinary Academy's Facility Based Guidelines and Rules for Safety and Sanitation</p> <p>Read, analyze and answer review questions in the National Restaurant Association's <i>ServSafe</i> Course book</p> <p>Read and analyze the Safety/Sanitation chapters of at least two Culinary Academy text books. Prepare and list of the facts and/or concepts that appear most important as they are emphasized in all texts that were reviewed</p> <p>Review and evaluate Local Board of Health evaluation of the facility</p> <p>Demonstrations for Introduction to Commercial Foods (Peer Teaching)</p> <p>View and evaluate Culinary II Safety and Sanitation Management projects: posters and/or multimedia presentations</p> <p>Properly "set up a pot sink". Check and record temperatures and chemical levels</p> <p>Prior to beginning the assigned station mise en place, record refrigeration and food temperatures on log sheets</p> <p>Check temperatures of stored and prepared foods. Record and check with Regulatory Agency guidelines if temperatures are outside of the danger zone</p> <p>Role model proper dress and personal hygiene for safety</p> <p>Demonstrate safe food handling and storing practices at all times including labeling and proper storage containers</p>	<p>Written tests and quizzes</p> <p>Pass with 100% accuracy a facility based safety and sanitation test</p> <p>Worksheets</p> <p>Project assessments</p> <p>Formal and production lab safety/sanitation assessment criteria</p> <p>Article summaries</p> <p>Notebook assessments</p> <p>Responses to discussion questions</p> <p>Journal assessments</p> <p>Daily grade according to rubric for safety and sanitation as per chef instructor professional observation</p>
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<p>What are the guidelines for proper food handling and storage?</p>	<p>Practice set standards for receiving, storing, handling and serving safe food</p>	<p><i>ServSafe</i> Course book</p> <p>Student portfolio</p> <p>Newspapers</p> <p>Professional journal and newsletters</p> <p>Videos</p> <p>Instant read thermometers</p> <p>Test strips</p> <p>Formal and production Lab materials and supplies</p>	<p>Direct instruction, class discussion and application of the Culinary Academy's facility based guidelines and rules for safety and sanitation</p> <p>Read, analyze and answer review questions in the National Restaurant Association's <i>ServSafe</i> course book</p> <p>Read and analyze the safety/sanitation chapters of at least two Culinary Academy text books. Prepare and list of the facts and/or concepts that appear most important as they are emphasized in all texts that were reviewed</p> <p>Review and evaluate local Board of Health evaluation of the facility</p> <p>Demonstrations for Introduction to Commercial Foods (Peer Teaching)</p> <p>View and evaluate Culinary II Safety and Sanitation Management projects: posters and/or multimedia presentations</p> <p>Properly "set up a pot sink". Check and record temperatures and chemical level</p> <p>Prior to beginning the assigned station mise en place, record refrigeration and food temperatures on log sheets</p> <p>Check temperatures of stored and prepared foods</p> <p>Record and check with regulatory agency guidelines if temperatures are outside of the danger zone</p> <p>Role model proper dress and personal hygiene for safety</p> <p>Demonstrate safe food handling and storing practices at all times including labeling and proper storage containers</p>	<p>Written tests and quizzes</p> <p>Pass with 100% accuracy a facility based safety and sanitation test</p> <p>Worksheets</p> <p>Project assessments</p> <p>Formal and production lab safety/sanitation assessment criteria</p> <p>Article summaries</p> <p>Notebook assessments</p> <p>Responses to discussion questions</p> <p>Journal assessments</p> <p>Daily grade according to rubric for safety and sanitation as per chef instructor professional observation</p>
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<p>Why is it important to prepare and serve safe foods?</p>	<p>Identify and interpret factors that govern and regulate the guidelines of commercial food service operations</p>	<p><i>ServSafe</i> course book</p> <p>Student portfolio</p> <p>Newspapers</p> <p>Professional journal and newsletters</p> <p>Videos</p> <p>Instant read thermometers</p> <p>Test strips</p> <p>Formal and production Lab materials and supplies</p>	<p>Lecture, class discussion and application of the Culinary Academy's facility based guidelines and rules for safety and sanitation</p> <p>Read, analyze and answer review questions in the National Restaurant Association's <i>ServSafe</i> Course book</p> <p>Read and analyze the Safety/Sanitation chapters of at least two Culinary Academy text books. Prepare and list of the facts and/or concepts that appear most important as they are emphasized in all texts that were reviewed</p> <p>Review and evaluate local Board of Health evaluation of the facility</p> <p>Demonstrations for Introduction to Commercial Foods (Peer Teaching)</p> <p>View and evaluate Culinary II Safety and Sanitation Management projects: posters and/or multimedia presentations</p> <p>Properly "set up a pot sink"</p> <p>Check and record temperatures and chemical levels</p> <p>Prior to beginning the assigned station mise en place, record refrigeration and food temperatures on log sheets</p> <p>Check temperatures of stored and prepared foods</p> <p>Record and check with regulatory agency guidelines if temperatures are outside of the danger zone</p> <p>Role model proper dress and personal hygiene for safety</p> <p>Demonstrate safe food handling and storing practices at all times including labeling and proper storage containers</p>	<p>Written tests and quizzes</p> <p>Pass with 100% accuracy a facility based safety and sanitation test</p> <p>Worksheets</p> <p>Project assessments</p> <p>Formal and production lab safety/sanitation assessment criteria</p> <p>Article summaries</p> <p>Notebook assessments</p> <p>Responses to discussion questions</p> <p>Journal assessments</p> <p>Daily grade according to rubric for safety and sanitation as per chef instructor professional observation</p>
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<p>Who are the guiding agencies for food safety and sanitation regulations?</p>	<p>Identify agencies that govern and regulate the guidelines of commercial food service operations</p>	<p><i>ServSafe</i> Course book</p> <p>Student portfolio</p> <p>Newspapers</p> <p>Professional journal and newsletters</p> <p>Videos</p> <p>Instant read thermometers</p> <p>Test strips</p> <p>Formal and production Lab materials and supplies</p>	<p>Lecture, class discussion and application of the Culinary Academy's facility based guidelines and Rules for Safety and Sanitation</p> <p>Read, analyze and answer review questions in the National Restaurant Association's <i>ServSafe</i> Course book</p> <p>Read and analyze the Safety/Sanitation chapters of at least two Culinary Academy text books. Prepare and list of the facts and/or concepts that appear most important as they are emphasized in all texts that were reviewed</p> <p>Review and evaluate Local Board of Health evaluation of the facility</p> <p>Demonstrations for Introduction to Commercial Foods (Peer Teaching)</p> <p>View and evaluate Culinary II Safety and Sanitation Management projects: posters and/or power point presentations</p> <p>Properly "set up a pot sink"</p> <p>Check and record temperatures and chemical levels</p> <p>Prior to beginning the assigned station mise en place, record refrigeration and food temperatures on log sheets</p> <p>Check temperatures of stored and prepared foods. Record and check with Regulatory Agency guidelines if temperatures are outside of the danger zone</p> <p>Role model proper dress and personal hygiene for safety</p> <p>Demonstrate safe food handling and storing practices at all times including labeling and proper storage containers</p>	<p>Written tests and quizzes</p> <p>Pass with 100% accuracy a facility based safety and sanitation test</p> <p>Worksheets</p> <p>Project assessments</p> <p>Formal and production lab safety/sanitation assessment criteria</p> <p>Article summaries</p> <p>Notebook assessments</p> <p>Responses to discussion questions</p> <p>Journal assessments</p> <p>Daily grade according to rubric for safety and sanitation as per chef instructor professional observation</p>
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Differentiation

Students with individual learning styles can be assisted through adjustments in assessment items and time restraints, one-to-one teacher support, extended testing time, and use of visual and auditory teaching methods. This wide variety of assessments, strategies, and hands-on evaluations complement the individual learning experience. Skill performance tasks can be broken down into smaller tasks (when safety appropriate).

Technology

Students have use of a Culinary Academy computer lab and lap top lab to complete internet research projects and literacy assignments. Digital cameras are used to document student work and pictures of equipment, small wares and food displays for teaching samples and consistent products. Overhead LCD projector is used to present teacher materials and student work.

College and Workplace Readiness

The skills in this unit can be applied to any work environment in the hospitality and food service job cluster as the demonstrated skills are mirrored to and in compliance with all national, state and local mandates/ guidelines. All labs are completed in a licensed commercial food service operation with NSF approved small wares, knives and equipment. The setting provides for job shadowing and sampling in an authentic setting. This curriculum is articulated with several colleges and universities providing four year program of study Culinary Arts Academy students a smooth transition from high school to post secondary education and career.

Unit 02 - Culinary Arts I/Culinary Math

Professionalism in the Kitchen Brigade and Front House Management

Enduring Understandings: Professionalism in the kitchen brigade and front house restaurant mirrors the industry standards of the National Restaurant Association guidelines and regulations

Essential Questions:

How did the eighteenth and early twentieth century chefs influence the progression of current day standardized recipes and modern day cuisines?

How do advanced technology, nutrition, and consumer trends influence the modern food service industry?

What role do food service managers and other professionals, such as dietitians, food scientists and food journalists play in the front and back house food service operation?

Why is record-keeping important for food service operations?

Why is it important to understand and apply perpetual and physical inventory control?

Unit Goal: Recognize industry standards for the kitchen brigade and front house restaurant positions and apply professional standards to production and formal labs.

Duration of Unit: 7 weeks and on going

Guiding/Topical/Questions	Content/Themes/Skills	Resources and Materials	Suggested Strategies	Suggested Assessments
<p>What is the timeline of the modern-day restaurant?</p>	<p>Describe the history of the restaurant and how it evolved into its present form</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with Internet access and soft ware; visual presenters; digital and video camera; television with DVD unit</p> <p>Portfolio office supplies</p> <p>Articulation agreements with Johnson & Wales University; Culinary Institute of America and Brookdale Community College</p> <p>Class text: <i>On Cooking</i></p> <p>Culinary library of <i>5 Star Café</i> Recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations with student Note-taking</p> <p>Unit outline</p> <p>Research project on professionalism to reinforce literacy</p> <p>Portfolio development to include: resume; documentation of work through pictorial and formal lab documentation</p> <p>Practical application of professionalism and skill proficiency in daily operation of the student run restaurant, the <i>5 Star Café</i>; catered events and community service activities</p> <p>Guest presenters from professional organizations and colleges</p> <p>Skill competitions through club and classroom</p> <p>Peer teaching through group culinary assignments</p>	<p>Daily/weekly grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research paper</p> <p>Midterm examination</p> <p>Final examination</p>
<p>How have professional chef organizations evolved?</p>	<p>Role model, a proactive member of the nationally sanctioned Skills USA Club which promotes career exploration, community service and leadership activities</p>	<p>Affiliation with professional organizations: National Restaurant Association; Chef's Association and Skills USA Club</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p> <p>Class text: <i>On Cooking</i></p>	<p>Chef instructor lectures, demonstrations with student note-taking</p> <p>Unit outline</p> <p>Research project on professionalism to reinforce literacy</p> <p>Portfolio development to include: resume; documentation of work through pictorial and formal lab documentation</p> <p>Practical application of professionalism and skill proficiency in daily operation of the student run restaurant, the <i>5 Star Café</i>; catered events and community service activities</p> <p>Guest presenters from professional organizations and colleges</p> <p>Skill competitions through club and classroom</p> <p>Peer teaching through group culinary assignments</p>	<p>Daily/weekly grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research paper</p> <p>Midterm examination</p> <p>Final examination</p>

<p>What education, training, skills, and abilities are necessary to become a food-service worker?</p>	<p>Demonstrate professionalism through dress, attitude, attentiveness, and participation in the student run restaurant during formal production labs and catered events</p>	<p>Affiliation with professional organizations: National Restaurant Association; Chef's Association and Skills USA Club</p> <p>Culinary library of <i>5 Star Café</i> Recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations with student note-taking</p> <p>Unit outline</p> <p>Research project on professionalism to reinforce literacy</p> <p>Portfolio development to include: resume; documentation of work through pictorial and formal lab documentation</p> <p>Practical application of professionalism and skill proficiency in daily operation of the student run restaurant, the <i>5 Star Café</i>; catered events and community service activities</p> <p>Guest presenters from professional organizations and colleges</p> <p>Skill competitions through club and classroom</p> <p>Peer teaching through group culinary assignments</p>	<p>Daily/weekly grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research paper</p> <p>Midterm examination</p> <p>Final examination</p>
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Differentiation

Students with individual learning styles can be assisted through adjustments in assessment items and time restraints, one-to-one teacher support, extended testing time, and use of visual and auditory teaching methods. This wide variety of assessments, strategies, and hands-on evaluations complement the individual learning experience. Skill performance tasks can be broken down into smaller tasks (when safety appropriate).

Technology

Students complete internet research projects and literacy assignments. Digital cameras are used to document student work and pictures of equipment, small wares and food displays for teaching samples and consistent products. Overhead LCD projector is used to present teacher materials and student work.

College and Workplace Readiness

The skills in this unit can be applied to any work environment in the hospitality and food service job cluster as the demonstrated skills are mirrored to and in compliance with all national, state and local mandates/ guidelines. All labs are completed in a licensed commercial food service operation with NSF approved small wares, knives and equipment. The setting provides for job shadowing and sampling in an authentic setting. This curriculum is articulated with several colleges and universities providing four year program of study Culinary Arts Academy students a smooth transition from high school to post secondary education and career.

Unit 03 - Culinary Arts I/Culinary Math

Advanced Food Preparation

Enduring Understandings: Identifying terminology and characteristic of cooking principles is necessary to develop advanced culinary practices and skill proficiencies.

Essential Questions:

What nutrition and menu planning role do starches, grains and pastas, play in standardized recipe preparation?

What are the classic categories of stocks, soups, and mother sauces and how are they used to compliment basic proteins of poultry, seafood and meat in a menu and food production?

What are the scientific and mathematical implications on all cooking applications to produce a saleable product through standardized recipe preparation?

What are the ways to be able to convert recipes and approximate yields?

What are the implications of matching small wares, measuring devices, and equipment for all cooking tasks and standardized recipe preparation?

What are the various measuring and weighing devices?

How are the various weighing and measuring devices used?

Unit Goal: Students will identify the roles that nutrition, cost, texture, color and taste play in menu planning and apply professional skill application to standardized recipes.

Duration of Unit: 8 weeks and on going

Guiding/Topical Questions	Content/Themes/Skills	Resources and Materials	Suggested Strategies	Suggested Assessments
<p>How does the food pyramid affect menu planning?</p>	<p>Create menus and recipes that meet the dietary guidelines to promote good health:</p> <ul style="list-style-type: none"> - identify categories of nutrients and explain their importance in a balanced diet - understand the effects that storage and preparation techniques have on various foods' nutritional value - the use of ingredient substitutes and alternatives 	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies</p> <p>Class text: <i>On Cooking</i></p> <p>Affiliation with professional organizations: National Restaurant Association, Chef's Association and Skills USA Club</p>	<p>Chef instructor lectures and demonstrations with student note taking for portfolio of work for college articulation</p> <p>Unit outline</p> <p>Stock and soup lab resume</p> <p>Do Now Math problems and activities for costing recipes and yield adjustments</p> <p>Identification and understanding of science concepts relating to microbiology, nutrition and heat applications</p> <p>Recipe development labs</p> <p>Research action project: Standardized recipe and nutrition (to reinforce literacy and use of technology)</p> <p>Portfolio development to include: formal lab documentation of soups and stocks; research project</p> <p>Practical application of standardized recipe preparation and service in the <i>5 Star Café</i>; catered events and community service activities</p> <p>Classroom and Skills USA based skill competitions and practices</p>	<p>Daily/weekly grading of skill proficiency as per rubric and teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research action project</p> <p>Unit test/quizzes</p>

<p>Why are stocks known as the <i>fonds de cuisine</i> or “foundations of cooking”?</p>	<p>Demonstrate a lab resume of all mother sauces</p> <p>Recognize and classify sauces</p> <p>Demonstrate the use of thickening agents properly</p> <p>Prepare a variety of classic and modern sauces</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies</p> <p>Class text: <i>On Cooking</i></p> <p>Affiliation with professional organizations: National Restaurant Association, Chef’s Association and Skills USA Club</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures and demonstrations with student note taking for portfolio of work for college articulation</p> <p>Unit outline</p> <p>Stock and soup lab resume</p> <p>Do now Math problems and activities for costing recipes and yield adjustments</p> <p>Identification and understanding of science concepts relating to microbiology, nutrition and heat applications</p> <p>Recipe development labs</p> <p>Research action project: Standardized recipe and nutrition (to reinforce literacy and use of technology)</p> <p>Portfolio development to include: formal lab documentation of soups and stocks; research project</p> <p>Practical application of standardized recipe preparation and service in the <i>5 Star Café</i>; catered events and community service activities</p> <p>Classroom and Skills USA based skill competitions and practices</p>	<p>Daily/weekly grading of skill proficiency as per rubric and teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research action project</p> <p>Unit test/quizzes</p> <p>Homework assignments</p>
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<p>What are the nutritional and monetary benefits of preparing soups?</p>	<p>Demonstrate a lab resume of stocks and soups: - prepare a variety of clear and thick soups - garnish and serve soups appropriately</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies</p> <p>Class text: <i>On Cooking</i></p> <p>Affiliation with professional organizations: National Restaurant Association, Chef's Association and Skills USA Club</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures and demonstrations with student note taking for portfolio of work for college articulation</p> <p>Unit outline</p> <p>Stock and soup lab resume</p> <p>Do now Math problems and activities for costing recipes and yield adjustments</p> <p>Identification and understanding of science concepts relating to microbiology, nutrition and heat applications</p> <p>Recipe development labs</p> <p>Research action project: Standardized recipe and nutrition (to reinforce literacy and use of technology)</p> <p>Portfolio development to include: formal lab documentation of soups and stocks; research project</p> <p>Practical application of standardized recipe preparation and service in the <i>5 Star Café</i>; catered events and community service activities</p> <p>Classroom and Skills USA based skill competitions and practices</p>	<p>Daily/weekly grading of skill proficiency as per rubric and teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research action project</p> <p>Unit test/quizzes</p> <p>Homework assignments</p>
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<p>What are the nutritional and monetary benefits of grains?</p>	<p>Justify the cost factors involved in planning a nutritionally balanced menu using grains, starches, and proteins.</p> <p>Develop and implement standardized recipes for grains, starches, and pastas.</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies</p> <p>Class text: <i>On Cooking</i></p>	<p>Chef instructor lectures and demonstrations with student note taking for portfolio of work for college articulation</p> <p>Unit outline</p> <p>Stock and soup lab resume</p> <p>Do now Math problems and activities for costing recipes and yield adjustments</p> <p>Identification and understanding of science concepts relating to microbiology, nutrition and heat applications</p> <p>Recipe development labs</p> <p>Research action project: Standardized recipe and nutrition (to reinforce literacy and use of technology)</p> <p>Portfolio development to include: formal lab documentation of soups and stocks; research project</p> <p>Practical application of standardized recipe preparation and service in the <i>5 Star Café</i>; catered events and community service activities</p> <p>Classroom and Skills USA based skill competitions and practices</p>	<p>Daily/weekly grading of skill proficiency as per rubric and teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research action project</p> <p>Unit test/quizzes</p> <p>Homework assignments</p>
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<p>What are the effects of heat applications to each of the five nutrient groups?</p>	<p>Determine the effects of evaporation, carmelization, gelatinization, coagulation, and rendering on foods</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies</p> <p>Class text: <i>On Cooking</i></p> <p>Affiliation with professional organizations: National Restaurant Association, Chef's Association and Skills USA Club</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures and demonstrations with student note taking for portfolio of work for college articulation</p> <p>Unit outline</p> <p>Stock and soup lab resume</p> <p>Do now Math problems and activities for costing recipes and yield adjustments</p> <p>Identification and understanding of science concepts relating to microbiology, nutrition and heat applications</p> <p>Recipe development labs</p> <p>Research action project: Standardized recipe and nutrition (to reinforce literacy and use of technology)</p> <p>Portfolio development to include: formal lab documentation of soups and stocks; research project</p> <p>Practical application of standardized recipe preparation and service in the <i>5 Star Café</i>; catered events and community service activities</p> <p>Classroom and Skills USA based skill competitions and practices</p>	<p>Daily/weekly grading of skill proficiency as per rubric and teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research action project</p> <p>Unit test/quizzes</p> <p>Homework assignments</p>
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<p>Why is the concept of mise en place so important in food preparation?</p>	<p>Show an understanding of the concept of “everything in its place”</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies</p> <p>Class text: <i>On Cooking</i></p> <p>Affiliation with professional organizations: National Restaurant Association, Chef’s Association and Skills USA Club</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures and demonstrations with student note taking for portfolio of work for college articulation</p> <p>Unit outline</p> <p>Stock and soup lab resume</p> <p>Do Now math problems and activities for costing recipes and yield adjustments</p> <p>Identification and understanding of science concepts relating to microbiology, nutrition and heat applications</p> <p>Recipe development labs</p> <p>Research action project: Standardized recipe and nutrition (to reinforce literacy and use of technology)</p> <p>Portfolio development to include: formal lab documentation of soups and stocks; research project</p> <p>Practical application of standardized recipe preparation and service in the <i>5 Star Café</i>; catered events and community service activities</p> <p>Classroom and Skills USA based skill competitions and practices</p>	<p>Daily/weekly grading of skill proficiency as per rubric and teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research action project</p> <p>Unit test/quizzes</p> <p>Homework assignments</p>
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<p>What are the benefits of preparing all foods according to standardized recipe procedures?</p>	<p>Demonstrate consistent professional skills in the preparation and service of standardized recipes considering industry standards and the audience</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies</p> <p>Class text: <i>On Cooking</i></p> <p>Affiliation with professional organizations: National Restaurant Association, Chef's Association and Skills USA Club</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures and demonstrations with student note taking for portfolio of work for college articulation</p> <p>Unit outline</p> <p>Stock and soup lab resume</p> <p>Do Now math problems and activities for costing recipes and yield adjustments</p> <p>Identification and understanding of science concepts relating to microbiology, nutrition and heat applications</p> <p>Recipe development labs</p> <p>Research action project: Standardized recipe and nutrition (to reinforce literacy and use of technology)</p> <p>Portfolio development to include: formal lab documentation of soups and stocks; research project</p> <p>Practical application of standardized recipe preparation and service in the <i>5 Star Café</i>; catered events and community service activities</p> <p>Classroom and Skills USA based skill competitions and practices</p>	<p>Daily/weekly grading of skill proficiency as per rubric and teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Research action project</p> <p>Unit test/quizzes</p> <p>Homework assignments</p>
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Differentiation

Students with individual learning styles can be assisted through adjustments in assessment items and time restraints, one-to-one teacher support, extended testing time, and use of visual and auditory teaching methods. This wide variety of assessments, strategies, and hands-on evaluations complement the individual learning experience. Skill performance tasks can be broken down into smaller tasks (when safety appropriate)

Technology

Students have use of a Culinary Academy computer lab and lap top lab to complete internet research projects and literacy assignments. Digital cameras are used to document student work and pictures of equipment, small wares and food displays for teaching samples and consistent products. Overhead LCD projector is used to present teacher materials and student work.

College and Workplace Readiness

The skills in this unit can be applied to any work environment in the hospitality and food service job cluster as the demonstrated skills are mirrored to and in compliance with all National, State and Local mandates/ guidelines. All labs are completed in a licensed commercial food service operation with NSF approved small wares, knives and equipment. The setting provides for job shadowing and sampling in an authentic setting. This curriculum is articulated with several colleges and universities providing four year program of study Culinary Arts Academy students a smooth transition from high school to post secondary education and career.

Unit 04 - Culinary Arts I/Culinary Math

Career Exploration and Management Applied to Breakfast and Lunch Cooking

Enduring Understandings Career exploration and management activities applied to the kitchen brigade provide informed decisions for professional job opportunities and career planning.

Essential Questions:

What skills are needed to make an informed career decision in the food service job cluster?

What would be a logical course of action to explore culinary and management positions such as rounds man/short order line cook, or commercial baker considering their task analysis and job descriptions?

What are the different ways of gaining knowledge of business communications in a commercial food service operation?

Unit Goal: Students will analyze job descriptions for the kitchen brigade and front house dining room and apply learned skills to the operation of a licensed restaurant.

Duration of Unit: 7 weeks and on going

Guiding/Topical Questions	Content/Themes/Skills	Resources and Materials	Suggested Strategies	Suggested Assessments
How do organizational skills affect the sauté station in a successful restaurant's kitchen brigade?	Outline the organizational structure of a foodservice operation	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spread sheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

<p>What skills are necessary to be a commercial baker?</p>	<p>Explore and practice quantity commercial baking by preparing the baked goods for the community service Thanksgiving Bake Sale fund raiser</p> <p>Develop facility-based standards for preparing, handling, and storing baked goods</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spreadsheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
<p>What are careers in kitchen brigade?</p>	<p>Categorize the various careers available in foodservice/hospitality</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spreadsheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

<p>What qualities must a line cook possess?</p>	<p>Understand and demonstrate the attributes a student chef needs to become a professional chef</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spread sheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
<p>Why would a baker need higher level math abilities?</p>	<p>Complete the cost analysis for the annual Thanksgiving pie sale to illustrate the use of math skills in baking</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spread sheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

<p>What basic qualities should a restaurant manager develop?</p>	<p>Apply basic employability skills in the foodservice industry</p> <p>Demonstrate a positive work ethic</p> <p>Practice leadership skills in foodservice</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spread sheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
<p>Should a food service manager have a thorough understanding and moderate skill proficiency for food production jobs/tasks?</p>	<p>Complete a job rotation of all the stations in the restaurant</p> <p>Discuss the skills necessary for the foodservice industry and construct a rubric to determine the importance of each skill</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spread sheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

<p>What are some job descriptions for entry-level careers in foodservice?</p>	<p>Understand and discuss the organization of a classical kitchen brigade</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spread sheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
<p>What are the components of a resume?</p>	<p>Assemble the necessary information for a professional resume</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spread sheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the <i>5 Star Café</i></p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

<p>What are the components of a career portfolio?</p>	<p>Create a professional career portfolio</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: Computer lab with internet access; digital camera; television with DVD unit; visual presenter</p> <p>Calculators</p> <p>Portfolio office supplies to include flash drives</p> <p>Class text: <i>On Cooking</i></p> <p>Active participation in Skills USA club community service fund raiser</p>	<p>Chef instructor demonstrations, lecture and class discussion</p> <p>Unit outline and chapter study guides</p> <p>Bake sale cost analysis spread sheet development and standardized recipe adjustments to yield quantity commercial baked goods</p> <p>Portfolio development to include pictorial and lab documentation of back and front house career exploration practicum</p> <p>Formal lab experiences</p> <p>Practical application of skills identified through the job task analysis of front and back house positions in the student restaurant, the 5 Star Café</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
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Differentiation

Students with individual learning styles can be assisted through adjustments in assessment items and time restraints, one-to-one teacher support, extended testing time, and use of visual and auditory teaching methods. This wide variety of assessments, strategies, and hands-on evaluations complement the individual learning experience. Skill performance tasks can be broken down into smaller tasks (when safety appropriate).

Technology

Students have use of a Culinary Academy computer lab and lap top lab to complete internet research projects and literacy assignments. Digital cameras are used to document student work and pictures of equipment, small wares and food displays for teaching samples and consistent products. Overhead LCD projector is used to present teacher materials and student work.

College and Workplace Readiness

The skills in this unit can be applied to any work environment in the hospitality and food service job cluster as the demonstrated skills are mirrored to and in compliance with all national, state and local mandates/ guidelines. All labs are completed in a licensed commercial food service operation with NSF approved small wares, knives and equipment. The setting provides for job shadowing and sampling in an authentic setting. This curriculum is articulated with several colleges and universities providing four year program of study Culinary Arts Academy students a smooth transition from high school to post secondary education and career.

Unit 05 - Culinary Arts I/Culinary Math

Nutritional Food Science

Enduring Understandings:

Basic concepts of nutritional food science are inherently the foundation for product development and menu delivery.

Essential Questions:

What are the agencies guidelines, organizations and cultural considerations that influence the commercial food service industry?

How do nutritional choices effect product development and menu delivery?

How do the five senses influence seasonings and flavorings in product/recipe development and adjustments?

Unit Goal: Students will identify and apply the basic concepts of nutritional food science to developing and preparing standardized recipes for customer service.

Duration of Unit: 7 weeks and on going

Guiding/Topical Questions	Content/Themes/Skills	Resources and Materials	Suggested Strategies	Suggested Assessments
Which entity has the strongest influence on the foodservice industry?	<p>Research the “psychology of food” and predict a future food trend</p> <p>Identify and practice the skills of flavor building and plate presentation</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies to include flash drives to save work</p> <p>Class text: <i>On Cooking and Food Science</i></p> <p>Skills USA Club</p> <p>National Restaurant Association</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations and student note-taking</p> <p>Unit outline</p> <p>Scientific lab experiments to include: acid and alkaline reactions; effects of inappropriate heat application and the effects of osmosis</p> <p>Recipe development formal and production labs</p> <p>Skills USA and classroom recipe development competitions</p> <p>Practical application of product development through scientific methods and skill proficiency in the daily operation of the student run restaurant, the <i>5 Star Café</i>, catered events and community service activities</p> <p>Peer teaching/learning through group activities and assignments</p> <p>Class discussion, evaluation and critique of developed recipes</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
What are the pros and cons of opening an ethnic facility?	Distinguish between the different ethnic cuisines and discuss the different ingredients used for each	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies to include flash drives to save work</p> <p>Class text: <i>On Cooking and Food Science</i></p> <p>Skills USA Club</p> <p>National Restaurant Association</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations and student note-taking</p> <p>Unit outline</p> <p>Scientific lab experiments to include: acid and alkaline reactions; effects of inappropriate heat application and the effects of osmosis</p> <p>Recipe development formal and production labs</p> <p>Skills USA and classroom recipe development competitions</p> <p>Practical application of product development through scientific methods and skill proficiency in the daily operation of the student run restaurant, the <i>5 Star Café</i>, catered events and community service activities</p> <p>Peer teaching/learning through group activities and assignments</p> <p>Class discussion, evaluation and critique of developed recipes</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

<p>How can you plan a menu with both nutritional and culinary objectives?</p>	<p>Understand and list basic menu planning principles</p> <p>Plan interesting menus that offer good nutrition and variety</p> <p>Use truth-in-menu guidelines to write a menu description</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies to include flash drives to save work</p> <p>Class text: <i>On Cooking and Food Science</i></p> <p>Skills USA Club</p> <p>National Restaurant Association</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations and student note-taking</p> <p>Unit outline</p> <p>Scientific lab experiments to include: acid and alkaline reactions; effects of inappropriate heat application and the effects of osmosis</p> <p>Recipe development formal and production labs</p> <p>Skills USA and classroom recipe development competitions</p> <p>Practical application of product development through scientific methods and skill proficiency in the daily operation of the student run restaurant, the <i>5 Star Café</i>, catered events and community service activities</p> <p>Peer teaching/learning through group activities and assignments</p> <p>Class discussion, evaluation and critique of developed recipes</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
<p>How much nutrition is lost with improperly handled foods?</p>	<p>Solve the problem of an entrée being either "nutritious" or "delicious" by developing a healthy recipe</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies to include flash drives to save work</p> <p>Class text: <i>On Cooking and Food Science</i></p> <p>Skills USA Club</p> <p>National Restaurant Association</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations and student note-taking</p> <p>Unit outline</p> <p>Scientific lab experiments to include: acid and alkaline reactions; effects of inappropriate heat application and the effects of osmosis</p> <p>Recipe development formal and production labs</p> <p>Skills USA and classroom recipe development competitions</p> <p>Practical application of product development through scientific methods and skill proficiency in the daily operation of the student run restaurant, the <i>5 Star Café</i>, catered events and community service activities</p> <p>Peer teaching/learning through group activities and assignments</p> <p>Class discussion, evaluation and critique of developed recipes</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

<p>What are the five tastes distinguishable to the tongue and how does this effect "flavor building"?</p>	<p>List several words to describe how a food "looks", "smells", "feels", and "sounds" relate to familiar standardized recipes</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies to include flash drives to save work</p> <p>Class text: <i>On Cooking and Food Science</i></p> <p>Skills USA Club</p> <p>National Restaurant Association</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations and student note-taking</p> <p>Unit outline</p> <p>Scientific lab experiments to include: acid and alkaline reactions; effects of inappropriate heat application and the effects of osmosis</p> <p>Recipe development formal and production labs</p> <p>Skills USA and classroom recipe development competitions</p> <p>Practical application of product development through scientific methods and skill proficiency in the daily operation of the student run restaurant, the <i>5 Star Café</i>, catered events and community service activities</p> <p>Peer teaching/learning through group activities and assignments.</p> <p>Class discussion, evaluation and critique of developed recipes</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
<p>How do the other five senses affect the way we eat?</p>	<p>List several words to describe how a food "looks", "smells", "feels", and "sounds" relate to familiar standardized recipes</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies to include flash drives to save work</p> <p>Class text: <i>On Cooking and Food Science</i></p> <p>Skills USA Club</p> <p>National Restaurant Association</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations and student note-taking</p> <p>Unit outline</p> <p>Scientific lab experiments to include: acid and alkaline reactions; effects of inappropriate heat application and the effects of osmosis</p> <p>Recipe development formal and production labs</p> <p>Skills USA and classroom recipe development competitions</p> <p>Practical application of product development through scientific methods and skill proficiency in the daily operation of the student run restaurant, the <i>5 Star Café</i>, catered events and community service activities</p> <p>Peer teaching/learning through group activities and assignments</p> <p>Class discussion, evaluation and critique of developed recipes</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

<p>When are the senses necessary for "seasoning"?</p>	<p>Explore the difference between <i>seasoning</i> and <i>flavoring</i> a food</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumables</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies to include flash drives to save work</p> <p>Class text: <i>On Cooking and Food Science</i></p> <p>Skills USA Club</p> <p>National Restaurant Association</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations and student note-taking</p> <p>Unit outline</p> <p>Scientific lab experiments to include: acid and alkaline reactions; effects of inappropriate heat application and the effects of osmosis</p> <p>Recipe development formal and production labs</p> <p>Skills USA and classroom recipe development competitions</p> <p>Practical application of product development through scientific methods and skill proficiency in the daily operation of the student run restaurant, the <i>5 Star Café</i>, catered events and community service activities</p> <p>Peer teaching/learning through group activities and assignments</p> <p>Class discussion, evaluation and critique of developed recipes</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>
<p>Why are cost, nutritional, taste, texture, color and the audience considered in all menu and plate presentations?</p>	<p>Identify and practice the skills of flavor building and plate presentation</p> <p>List several words to describe how a food "looks", "smells", "feels", and "sounds" relate to familiar standardized recipes</p>	<p>Commercial kitchen (lab) and dining room to include: NSF equipment; small wares and consumable</p> <p>Technology: computer lab with internet access; visual presenter; digital camera; television with DVD unit</p> <p>Portfolio office supplies to include flash drives to save work</p> <p>Class text: <i>On Cooking and Food Science</i></p> <p>Skills USA Club</p> <p>National Restaurant Association</p> <p>Culinary library of <i>5 Star Café</i> recipes and cookbooks</p>	<p>Chef instructor lectures, demonstrations and student note-taking</p> <p>Unit outline</p> <p>Scientific lab experiments to include: acid and alkaline reactions; effects of inappropriate heat application and the effects of osmosis</p> <p>Recipe development formal and production labs</p> <p>Skills USA and classroom recipe development competitions</p> <p>Practical application of product development through scientific methods and skill proficiency in the daily operation of the student run restaurant, the <i>5 Star Café</i>, catered events and community service activities</p> <p>Peer teaching/learning through group activities and assignments</p> <p>Class discussion, evaluation and critique of developed recipes</p>	<p>Daily/ weekly rubric grading of professionalism through teacher observation</p> <p>Formal lab assessment</p> <p>Authentic portfolio assessment</p> <p>Product development research project</p> <p>Customer survey</p> <p>Peer evaluation and critique</p> <p>Unit written test and quizzes</p>

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Technology

Students have use of a Culinary Academy computer lab and lap top lab to complete internet research projects and literacy assignments. Digital cameras are used to document student work and pictures of equipment, small wares and food displays for teaching samples and consistent products. Overhead LCD projector is used to present teacher materials and student work.

College and Workplace Readiness

The skills in this unit can be applied to any work environment in the hospitality and food service job cluster as the demonstrated skills are mirrored to and in compliance with all national, state and local mandates/ guidelines. All labs are completed in a licensed commercial food service operation with NSF approved small wares, knives and equipment. The setting provides for job shadowing and sampling in an authentic setting. This curriculum is articulated with several colleges and universities providing four year program of study Culinary Arts Academy students a smooth transition from high school to post secondary education and career.

Unit 06 - Culinary Arts I/Culinary Math

Culinary Math

Enduring Understandings:

Understanding of mathematical fundamentals and functions in the hospitality and food industry.

Essential Questions:

What mathematical skills are necessary for the food service industry?

What is the importance of menu pricing and what are the factors that influence menu pricing?

Unit Goals:

Students will:

1. Perform basic math functions relating to the food service industry.
2. Methods for accurately weighing, measuring and portioning.
3. Procedures for costing and converting a standardized recipe.
4. Use computer programs to record information needed to run a food service operation.
5. Develop food production reports for the various stations in a commercial kitchen.
6. Take a physical inventory for the *5 Star Café* and record results on an inventory spreadsheet.

Recommended Duration: 3 weeks on going

Guiding/Topical Questions	Content/Themes/Skills	Resources and Materials	Suggested Strategies	Suggested Assessments
<p>What are the basic math functions relating to the food service industry?</p>	<p>Understand the basic mathematical functions used in a culinary setting</p> <p>Apply properties of numbers to real- life culinary situations</p> <p>Convert a decimal to a fraction and vice versa</p> <p>Apply ratios and proportions related to culinary</p>	<p>Class text: <i>Culinary Math</i></p> <p>Culinary Academy formatted standardized recipes</p> <p>Commercial foods kitchen staples</p> <p>Commercial tools and equipment including measuring devices</p> <p>Standardized recipes in CULA format with identified HACCP directions</p> <p>Samples/pictures of salable food products/ plate presentations</p> <p>Computer lab with internet access</p> <p>LCD projector</p>	<p>Conduct the vegetable yield lab</p> <p>Conduct the poultry yield lab</p> <p>Complete practice worksheets for basic math</p> <p>CIA math competency packet</p>	<p>Teacher observation of student skill proficiency and professionalism with a daily and weekly grading rubric</p> <p>Quiz/ test</p> <p>Career portfolio entries</p> <p>Practical and production labs with grading rubrics</p> <p>Teacher observation of demonstrated professionalism in communications and skill</p> <p>Formal lab sheets to be entered into career portfolio.</p> <p>Midterm and final examination</p>
<p>Why is it important to follow the methods for accurately weighing, measuring and portioning?</p>	<p>Understand what the weights and measuring devices used in the food service industry and how to properly use them</p> <p>Understand the elements of a standardized recipe and why it is important to use a standardized recipe</p> <p>Understand the methods for controlling portion size and apply it to restaurant production</p> <p>Estimate preparation amounts and number of different servings</p>	<p>Class text: <i>Culinary Math</i></p> <p>Culinary Academy formatted standardized recipes</p> <p>Commercial foods kitchen staples</p> <p>Commercial tools and equipment including measuring devices</p> <p>Standardized recipes in CULA format with identified HACCP directions</p> <p>Samples/pictures of salable food products/ plate presentations</p> <p>Computer lab with internet access</p> <p>LCD projector</p>	<p>Conduct Measuring Lab: Starches and sugars</p> <p>Conduct Measuring Lab: Vegetable cuts</p> <p>Research portion size through Food Pyramid and develop standardized recipes</p>	<p>Teacher observation of student skill proficiency and professionalism with a daily and weekly grading rubric</p> <p>Quiz/test</p> <p>Career portfolio entries</p> <p>Practical and production labs with grading rubrics</p> <p>Teacher observation of demonstrated professionalism in communications and skill</p> <p>Formal lab sheets to be entered into career portfolio</p> <p>Midterm and final examination</p>

<p>What are the procedures for costing and converting a standardized recipe?</p>	<p>Calculate menu prices and the factors involved</p> <p>Identify and utilize factors affecting menu prices</p> <p>Properly formulate a menu price</p> <p>Perform yield tests on different products used for a menu</p> <p>Determine cost per serving</p>	<p>Class text: <i>Culinary Math</i></p> <p>Culinary Academy formatted standardized recipes</p> <p>commercial foods kitchen staples</p> <p>Commercial tools and equipment including measuring devices</p> <p>Standardized recipes in CULA format with identified HACCP directions</p> <p>Samples/pictures of salable food products/ plate presentations</p> <p>Computer lab with internet access</p> <p>LCD projector</p>	<p>Calculate the food cost for the Five Star Cafe's static menu and determine if the current prices are profitable</p> <p>Develop standardized recipes for the static menu using the FRHSD Culinary Academy recipe format</p> <p>Lab: Lettuce yields</p>	<p>Teacher observation of student skill proficiency and professionalism with a daily and weekly grading rubric</p> <p>Quiz/ test</p> <p>Career portfolio entries</p> <p>Practical and production labs with grading rubrics</p> <p>Teacher observation of demonstrated professionalism in communications and skill</p> <p>Formal lab sheets to be entered into career portfolio</p> <p>Midterm and final examination</p>
<p>How can computer programs to record information needed to run a food service operation?</p>	<p>Record keeping in a food service establishment using excel and word programs</p> <p>Understand and utilize hardware and software programs are useful to monitor a food service operation</p> <p>Develop a formula for a spreadsheet to help with inventory and catered events</p>	<p>Class text: <i>Culinary Math</i></p> <p>Culinary Academy formatted standardized recipes</p> <p>Commercial foods kitchen staples</p> <p>Commercial tools and equipment including measuring devices</p> <p>Standardized recipes in CULA format with identified HACCP directions</p> <p>Samples/pictures of salable food products/ plate presentations</p> <p>Computer lab with internet access</p> <p>LCD projector</p>	<p>Develop food production reports the various stations in the commercial kitchen and bakeshop using excel</p> <p>Design a system of ordering for the Five Star Cafe</p> <p>Lab: Taking a Table order</p> <p>Lab: Reading an Invoice</p> <p>Lab: Service Skills</p>	<p>Teacher observation of student skill proficiency and professionalism with a daily and weekly grading rubric</p> <p>Quiz/ test</p> <p>Career portfolio entries</p> <p>Practical and production labs with grading rubrics</p> <p>Teacher observation of demonstrated professionalism in communications and skill</p> <p>Formal lab sheets to be entered into career portfolio</p> <p>Midterm and final examination</p>

<p>How can food production reports be developed for the various stations in a commercial kitchen and why?</p>	<p>Create menus for the <i>5 Star Café</i> and developing standardized recipes</p>	<p>Class text: <i>Culinary Math</i></p> <p>Culinary Academy formatted standardized recipes</p> <p>Commercial foods kitchen staples</p> <p>Commercial tools and equipment including measuring devices</p> <p>Standardized recipes in CULA format with identified HACCP directions</p> <p>Samples/pictures of salable food products/ plate presentations</p> <p>Computer lab with internet access</p> <p>LCD projector</p>	<p>Research the formulas for meat fabrication and yields using text and Internet</p> <p>Provide records for a good accounting system</p> <p>Apply math functions that assist management in controlling money and materials</p> <p>Labs: Taking a table order</p> <p>Labs: Reading an invoice</p> <p>Labs: Service skills</p>	<p>Teacher observation of student skill proficiency and professionalism with a daily and weekly grading rubric</p> <p>Quiz/ test</p> <p>Career portfolio entries</p> <p>Practical and production labs with grading rubrics</p> <p>Teacher observation of demonstrated professionalism in communications and skill</p> <p>Formal lab sheets to be entered into career portfolio</p> <p>Midterm and final examination</p>
<p>Why is taking physical inventory for the <i>5 Star Café</i> and record results on an inventory spreadsheet important to the food service industry?</p>	<p>Develop an inventory system for the <i>5 Star Café</i></p> <p>Develop formulas for inventory and cost analysis</p> <p>Develop food production reports for the various stations in a commercial kitchen</p>	<p>Class text: <i>Culinary Math</i></p> <p>Culinary Academy formatted standardized recipes</p> <p>Commercial foods kitchen staples</p> <p>Commercial tools and equipment including measuring devices</p> <p>Standardized recipes in CULA format with identified HACCP directions</p> <p>Samples/pictures of salable food products/ plate presentations</p> <p>Computer lab with internet access</p> <p>LCD projector</p>	<p>Form groups to determine inventory and develop an inventory control log</p> <p>FIFO, why and what is the importance</p>	<p>Teacher observation of student skill proficiency and professionalism with a daily and weekly grading rubric</p> <p>Quiz/ test</p> <p>Career portfolio entries</p> <p>Practical and production labs with grading rubrics</p> <p>Teacher observation of demonstrated professionalism in communications and skill</p> <p>Formal lab sheets to be entered into career portfolio</p> <p>Midterm and final examination</p>

Differentiation

Students with individual learning styles can be assisted through adjustments in assessment items and time restraints, one-to-one teacher support, extended testing time, and use of visual and auditory teaching methods. This wide variety of assessments, strategies, and hands-on evaluations complement the individual learning experience. Skill performance tasks can be broken down into smaller tasks (when safety appropriate).

Technology

Students have use of a Culinary Academy computer lab with internet access and lap top lab to complete internet research projects and literacy assignments. Digital cameras are used to document student work and pictures of equipment, small wares and food displays for teaching samples and consistent products. Overhead LCD projector is used to present teacher materials and student work.

College and Workplace Readiness

The skills in this unit can be applied to any work environment in the hospitality and food service job cluster as the demonstrated skills are mirrored to and in compliance with all national, state and local mandates/ guidelines. All labs are completed in a licensed commercial food service operation with NSF approved small wares, knives and equipment. The setting provides for job shadowing and sampling in an authentic setting. This curriculum is articulated with several colleges and universities providing four year program of study Culinary Arts Academy students a smooth transition from high school to post secondary education and career.