Regional Occupational Program

Culinary Arts & Management 1 A-G 2026-2027

COURSE DESCRIPTION

Culinary Arts and Management prepares students for gainful employment and/or entry into post-secondary education in the food service industry. Students will develop marketable skills by demonstrating the principles of safety and sanitation, food preparation skills, and teamwork to manage an environment conducive to quality food production and service operations. Laboratory facilities and experiences, which simulate commercial food production and service operations are integrated into instruction. The Culinary Arts and Management course provides students with a comprehensive curriculum designed to develop these career specific qualities while strengthening their skills in the core subjects of math, science, and English. The Common Core standards will be infused throughout this course, to improve critical and creative thinking skills, such as problem solving, information literacy, and quantitative reasoning. Study and practice in the culinary arts will expand student awareness of history, art, science, and language. It is the goal of this program that all students leave this course with strong training that is aligned to post-secondary training expectations. Coursework includes laboratory sessions, academic preparation, and hands-on experience.

Course Information:

Course Length:	1 Year
Prerequisite:	Algebra 1, Business Math, or Biology
Course Level:	Concentrator
UC:	Yes G - Elective
Articulated:	No
Industry Cert.:	Food Handlers Card
Industry Sector:	Hospitality, Tourism and Recreation
Pathway:	Food Service and Hospitality
CALPADS:	8020

O*Net SOC Codes:

11-9051	Food Service Managers
35-2014	Cooks, Restaurant
35-2021	Food Preparation Workers

Legend:

CTE - PS	CTE Pathway Standards
CRP	Career Ready Practices
CTE - AS	CTE Anchor Standards
CCSS	Common Core State Standards
ISTE	International Society for Technology in Education

Includes updates from the 25/26 Hospitality Tourism and Recreation Advisory
Advisory Minutes

Culinary Arts & Management 1

Course Orientation

a. Discuss objectives for this course, including competencies, teacher expectations, classroom policies, and procedures.
b. Identify and discuss the acquisition of transferable skills (communication, collaboration, creativity, and critical thinking) and their importance to being college and career ready and for future personal and professional success.
c. Review objectives, competencies, and course syllabus.
d. Discuss student and teacher expectations, including behavior, class rules, appropriate dress, pre-course knowledge, and grading policies, including enrollment and attendance requirements and procedures, and classroom/school safety and disaster procedures.
e. Discuss next steps in course sequence related to the career pathway, the need for reinforcement of basic skills, transferrable skills, and postsecondary and career options.
f. Discuss the Big Six: Career Ready Essentials and the Standards for Career Ready Practice as they relate to this course, all aspects of the industry sector, and being college and career ready.

Big Six: Career Ready Essentials

1. Effective Communication	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. Demonstrate effective verbal communication and conflict resolution skills. **b. Use the writing process to develop written communication with the appropriate tone, organization, and format for the identified audience.** c. Explain the effect of interpersonal skills on one's ability to communicate effectively and develop relationships. d. Describe the impact of ineffective communication on business relationships. e. Analyze the impact of vocabulary, body language, and tone on verbal communication. f. Demonstrate active listening skills. g. Accurately interpret industry-specific written communication. h. Model responsible and effective use of various communication technologies. i. Identify valid and reliable digital reference and resource materials. j. Gather information from multiple digital sources to compare and contrast, synthesize, and summarize. k. Identify and use appropriate communication and collaboration technologies. l. Utilize technology to problem solve, accomplish tasks, and to produce or publish products.		1 2 11	2 3 4 5 7 8 9 10 11	**LS** 9-10 11-12.6 **SLS** 11-12.2 9-10 11-12.1 11-12.1d **WS** 11-12.7 11-12.6	1b,c 2c 3b,c 5c 6b,c,d

2. Collaboration, Creativity, and Critical Thinking	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. Demonstrate critical thinking skills for a variety of purposes and in different settings. **b. Collaborate to reach consensus on an identical objective through the sharing of knowledge, tasks, and learning.** c. Discuss the importance of the critical thinking process to real-world applications.		2 4 5 7	2 3 4 5	**LS** 9-10 11- 12.6	1c 3c,d 4a-d 5c,d

d. Evaluate the impact of creative thinking on problem solving and innovation in real-world applications. e. Compile work that demonstrates the process used to (elaborate, refine, analyze) evaluate original ideas and maximize creative efforts. f. Apply divergent and convergent thinking to the development of an original idea or solution. g. Examine real-world limits to adopting ideas. h. Demonstrate creative thinking (preparation, insight, evaluation, elaboration, and communication) to create a new idea or concept. i. Assume shared responsibility for collaborative work, and value the individual contributions made by each team member. j. Evaluate evidence, arguments, claims, and beliefs to identify connections. k. Identify bias, prejudice, propaganda, self-deception, distortion, and misinformation. l. Produce intellectual, informational, or material products that serve an authentic purpose. m. Work effectively and respectfully with those from diverse backgrounds or cultures. n. Demonstrate respect, trust, commitment, and the ability to compromise in collaborative projects.		9 10 11	7 8 9 11	**SLS** 9-10 11-12.1 11-12.1d 11-12.2 **WS** 11-12.7 11-12.6	6c 7b,c,d
3. Leaders and Teams: Roles and Responsibilities	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Determine the individual and team members' roles and responsibilities. **b. Demonstrate leadership skills and qualities (i.e., reliability, negotiation skills, initiative, positive reinforcement, recognition of others' efforts, problem-solving skills, conflict resolution, and delegation).** c. Explain the importance of technical, social, and communication skills to team success. d. Compare and contrast leadership styles and their effectiveness in various situations. e. Organize and delegate responsibilities in a team setting to encourage ideas, perspectives, and contributions from all team members. f. Develop a strong sense of team identity by brainstorming solutions, volunteering, assisting others, practicing respect and courtesy, and taking initiative. g. Examine situations in which a follower becomes the leader. h. Describe twenty-first-century skills required across all occupations. i. Identify and discuss the characteristics of a successful team (i.e., leadership, cooperation, and effective decision-making). j. Leverage social and cultural differences to increase innovation and quality of work.		7 8 9	3 7 8 9 11	**SLS** 11-12.2 9-10 11-12.1 11-12.1d **WS** 11-12.6	7a,c
4. Legal, Ethical, and Environmental Considerations	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Demonstrate industry specific ethical and legal practices. **b. Identify eco-friendly industry specific practices and resources.** c. Identify local, state, and federal regulatory agencies, entities, laws, and regulations.		5 7 8	3 5 7	**WS** 11-12.6 11-12.7	2a,b 3a,b 5c

d. Identify discrimination based on race, nationality, religion, gender, age, disability, or sexual orientation. e. Summarize the ethical and legal implications of workplace discrimination and harassment. f. Explain the concept of corporate citizenship. g. Examine an employer's role in protecting the health and welfare of employees, the community, and the environment. h. Analyze current environmental laws and regulations and their impact on industry. i. Compare and contrast both society's and industry's impact on the environment.		12	8 9 11	**SLS** 9-10 11-12.1 11-12.1d 11-12.2	6c
5. Personal Growth and Career Planning	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Demonstrate continued personal development and growth. **b. Develop and manage a personal growth and career plan.** c. Explain the relationship between sound financial habits and financial security. d. Create and manage a personal financial plan. e. Demonstrate initiative in achieving personal and professional goals. f. Apply time management strategies to meet deadlines. g. Demonstrate a growth mindset through flexibility and a positive attitude. h. Select and demonstrate appropriate job-search and retention techniques. i. Demonstrate strategies to prepare for employment. j. Demonstrate interpersonal skills appropriate for the workplace. k. Elaborate on the importance of perseverance to personal and professional success. l. Discover personal career interests, aptitudes, and skills.		1 2 3 4 6	2 3 4 7 8 11	**LS** 9-10 11-12.6 **SLS** 9-10 11-12.1 11-12.1d 11-12.2 **WS** 11-12.6	1a 3a,c 4d 6a,d 7b
6. Workplace Safety and Personal Wellness	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Demonstrate proper industry specific safe work practices to prevent injury or illness. **b. Assess the potential impact of goal setting on personal and professional success.** c. Describe the role of security and emergency procedures in workplace safety. d. Describe the effect of preventative measures on emergencies in the workplace. e. Identify and describe the causes, prevention, and treatment of common accidents. f. Identify local, state, and federal agencies that regulate workplace safety. g. Explain the role of the California Occupational Safety and Health Administration (Cal-OSHA) and the Environmental Protection Agency (EPA). h. Discuss the basics of system operations. i. Demonstrate the proper use of personal protective equipment (PPE). j. Explain the purpose of and accurately interpret a Safety Data Sheet (SDS). k. Identify hazardous materials and chemicals. l. Demonstrate proper procedures to respond to work-related accidents and injuries. m. Describe how ergonomics, housekeeping, and maintenance are related to accidents and injuries.		2 5 6 8 12	2 5 6 7 8 10 11	**LS** 9-10 11-12.6 **WS** 11-12.7 11-12.6 **SLS** 9-10 11-12.1 11-12.1d	1a,d 2a,d 5b

n. Demonstrate cyber ethics, cyber safety, and cybersecurity. o. Assess the potential impact of preventative physical and mental health measures on workplace safety.					
Culinary Arts & Management 1 Units of Instruction					
7. Introduction to the Food Service Industry	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Describe the industry by commercial and non-commercial segments. **b. Identify career options available in the food service and hospitality industry.** c. Evaluate current local, state, and national industry trends and how they impact the industry. d. Use the standards of professionalism as a model for acceptable classroom behavior. e. Identify the importance and benefits of membership in professional organizations. f. List the stations and positions in the kitchen brigade. g. Explore the evolution of the Food Service and Hospitality Industry and its impact on world history. h. Research the local restaurant history of our community and explain how it has evolved with the needs of its citizens. i. Compare and contrast a corporate, chain, franchise, and independent food service operations. j. Assess career possibilities based upon skills, talents, self-interests, and market needs. k. Assemble and present either a hard copy or digital career portfolio.	B1.3 B1.4 B12.2	1 2 3 5 10 11 12	1 2 3 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7 **SLS** 11-12.2	
8. Food Safety & Sanitation	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Maintain standards in personal grooming and hygiene as required by local, state, and federal health and safety codes. **b. Outline proper procedures for cleaning and sanitizing tools and equipment.** c. Describe the impacts of food borne hazards on food safety, environment, and human health. d. Identify factors that affect the growth of pathogens, using the acronym, FAT-TOM. e. Identify characteristics of Temperature Control Safety (TCS) food and list examples. f. Identify methods for preventing biological, chemical, and physical contamination. g. Identify government agencies that regulate the restaurant and foodservice industry. h. Understand where contamination can occur during the flow of food in a food service operation and identify ways to prevent it. i. Understand and apply the principles of the food safety management system, HACCP-Hazard Analysis Critical Control Point. j. Identify careers in food safety and sanitation.	B2.2 B2.3 B3.0 B3.1 B3.2 B3.3 B3.4	1 2 5 6 7 8 11 12	1 2 5 6 7 8 11	**LS** 9-10 11-12.6 **WS** 11-12.7 **RSTS** 9-10 11-12.4 **SLS** 9-10 11-12.1 11-12.1d	

9. Workplace Safety	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. Identify potential hazards that are created by poor safety procedures, unsafe practices, and human error. **b. Demonstrate the correct and safe use of knives.** c. Evaluate hazardous situations and determine how to control or eliminate hazards. d. Model the appropriate use of personal protective equipment (PPE). e. Explain appropriate procedures for responding to common kitchen emergencies including cuts, falls, fires, and burns. f. Demonstrate basic first aid procedures. g. Determine the legal responsibilities of a foodservice operation for providing a safe environment and ensuring safe practices. h. Examine the role of Occupational Safety and Health Administration (OSHA) regulations. i. Review the Fair Labor Standard Act and how it affects your current job options. j. Explain the Hazard Communication Standard (HCS) requirements for employers. k. Conduct a general safety audit for classroom kitchens and home kitchens. l. Complete an accident report based upon simulations. m. Evaluate the school emergency plan for different scenarios. n. Review classroom evacuation routes and understand personal responsibilities during an emergency situation. o. Explore the career of an Environmental Health and Safety Manager.	B2.0 B2.1 B2.4 B3.5	1 2 5 6 11 12	1 2 5 6 11	**LS** 9-10 11-12.6 **WS** 11-12.7 **RSTS** 9-10 11-12.4	

10. Portion Control and Measurements	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. **Convert different units of measure using international cookbooks as the medium.** b. **Demonstrate correct technique for measuring and portioning ingredients by weight and by volume.** c. Identify the parts of a standardized recipe. d. Utilize and explain the importance of using a standardized recipe. e. Use math applications to vary the yield of a standardized recipe. f. Contrast the advantages and disadvantages of using the customary and metric measurement units. g. Describe factors that could impact conversions in a standardized recipe. h. Calculate AP (as purchased) and EP (Edible Portion) using a simulation, student enterprise, course project, or ProStart competition. i. Calculate the total cost and portion costs of a standardized recipe.	B6.3 B11.6	1 2 5 11	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	

11. Culinary Nutrition	CTE - PS	CRP	CTE - AS	CCSS	ISTE
a. Identify the six categories of nutrients and describe their general sources, functions, and deficiencies.	B10.0 B10.1	1 2	1 2	**LS** 9-10	

b. Use food preparation techniques that conserve nutrients and reduce harmful fats, sugar, and salt. c. Discuss the role of diet in causing and preventing various diseases, particularly chronic diseases. d. Interpret nutritional or ingredient information from food labels and nutrition information sheets. e. Understand the dimensions of issues facing professionals in the field of nutrition and exercise science, including ethical, cultural, and environmental components.	B10.2	5 6 11 12	5 6 11	11-12.6 **WS** 11-12.7 **RSTS** 9-10 11-12.4	
12. Kitchen Essentials (Focus on Equipment and Techniques)	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Identify the workstations used in various types of food service establishments. **b. Describe the specific tools and equipment that are essential to each workstation.** c. Evaluate the design, features, performance, cleaning requirements, and energy efficiency of various kitchen appliances. d. Make informed consumer decisions about cooking equipment selection based upon properties of thermal conductivity, heat capacity, absorbance, durability, and corrosion resistance. e. Outline proper procedures for cleaning and sanitizing tools and equipment. f. Apply effective *mise en place* during laboratory practice. g. Demonstrate correct care and use of knives. h. Describe and demonstrate basic pre-preparation techniques. i. Develop flavor through the effective and discretionary use of herbs, spices, condiments, and other seasonings. j. Evaluate the thermal properties of common cooking media, including air, steam, water, oil, microwaves, aluminum, stainless steel, and copper. k. Differentiate the three methods of heat transfer: conduction, convection, and radiation. l. Explain the effects and benefits of cooking food including the chemical and physical reactions that alter flavor, texture, and nutrient value. m. Compare, contrast, and demonstrate dry, moist, and combination cooking methods. n. Learn to evaluate food doneness by using sensory clues and a digital thermometer. o. Plate food in a visually appealing manner using the elements and principles of art. p. Critique food using the sensory mechanisms of taste, smell, sight, hearing, and senses of temperature, pain, kinesthetic, and common chemical.	B5.0 B5.1 B6.0 B6.1 B6.2 B6.3 B6.4 B6.5 B6.6	1 2 5 6 7 10 11	1 2 5 6 7 11	**LS** 9-10 11-12.6 **WS** 11-12.7 **RSTS** 9-10 11-12.4 **SLS** 9-10 11-12.1	
13. Menu Planning	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Identify and discuss the uses for the six general forms of menus. **b. Plan menus that incorporate principles of variety, balance, truthfulness, nutrition, and flexibility.** c. Discuss factors that influence the development of a menu.	B10.2 B10.3 B11.0	1 2 5 6	1 2 5 6	**LS** 9-10 11-12.6	

d. Examine different menu formats, styles, and designs to discuss their marketing impact on the customer. e. Decode menus using strategies to find healthy choices, vegetarian options, and value. f. Determine factors that influence menu prices. g. Correctly use the factor method and mark-up-on-cost method of pricing.		11	11	**WS** 11-12.7 **RSTS** 9-10 11-12.4	
14. Stocks, Sauces, and Soups	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. **Demonstrate the preparation of a nutritious stock and determine the function of the four basic ingredients.** b. Observe the transformation of bone collagen to gelatin during the cooking process. c. Prepare reductions and glazes. d. Describe the classification of sauces and their derivatives. e. Demonstrate the art and science of making a roux. f. Identify and describe the variations of clear and pureed soups.	B6.3	1 2 5 10 11	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	
15. Vegetables and Fruits	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. **Demonstrate ways to control quality changes during cooking, including color changes, nutrient loss, and changes in texture.** b. Describe the advantages and disadvantages of both consumer choices of genetically modified fruits and vegetables and organic choices. c. Explain browning (enzymatic and non-enzymatic) and describe prevention methods. d. Research different heat-transfer methods to cook fruits and vegetables.	B6.3	1 2 5 11	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	
16. Starch Cookery	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Classify and identify the different starches. b. Research food origins of starches and their global importance as staple crops. c. Understand and demonstrate the scientific principles of cooking starches (potatoes, rice, and pasta).	B6.3	1 2 5 11	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	
17. Poultry	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. **Identify the different classifications and market forms of poultry.** b. Demonstrate poultry fabrication and describe the anatomical parts of poultry. c. Observe and analyze the effects of heat on poultry using dry and moist cooking techniques.	B6.3	1 2 5	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	
18. Meat	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Comprehend meat labels and determine the basic cuts of meats.	B6.3	1	1	**LS**	

b. Describe the composition, structure, and basic quality factors of meat. c. Explain the effects of heat on muscle fiber, collagen, and fat. d. Determine the conditions necessary to produce the desired Maillard reaction when browning meat. e. Practice taking the temperatures of meat to determine done-ness levels.		2 5 11	2 5 11	9-10 11-12.6 **WS** 11-12.7	
19. Fish and Seafood	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. Identify the biological classifications of fish. b. Describe the structure and composition of fish. c. Determine the best methods of preparing and cooking fish.	B6.3	1 2 5	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	
20. Garde Manger	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. **Understand the typical responsibilities/organization of a garde manger station.** b. **Demonstrate proficiency in the use of hand tools used in garde manger.** c. Identify and prepare salads, salad dressings, marinades, cold sauces, and condiments. d. Explain the conditions necessary for the formation of emulsions.	B6.3	1 2 5 11	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	
21. Baking Basics	**CTE - PS**	**CRP**	**CTE - AS**	**CCSS**	**ISTE**
a. **Review the proper techniques for scaling dry ingredients.** b. Describe the chemistry of baking and the role of different ingredients. c. Analyze the role of leavening agents and their chemical reactions and actions. d. Practice proper techniques for combining ingredients to develop batters and dough. e. Determine done ness in baked goods.	B7.0 B7.2	1 2 5 11	1 2 5 11	**LS** 9-10 11-12.6 **WS** 11-12.7	

A-G Approved Key Assignments	
1.	Develop a career portfolio that includes a personal assessment of skills, talents, interests, education, volunteer and work experiences, honors and awards, work samples, career exploration and assessment, resume, letters of reference, unofficial transcript, club membership, job applications and personal reflection of the portfolio process. Presentation of portfolio will be both digital and hard copy. *Unit(s) 7*
2.	Using the World Health Organization's, 'Five Keys to Safer Food,' students will research one of the principles to food safety. Students will create a short safety video recording of the key to safer food to present to the high school population via our school video monitor. *Unit(s) 8*
3.	Select five chemicals used in the kitchen laboratory and read the material safety data sheets for the selected chemicals. Students will identify the equipment each chemical can be used to clean and what describe the safety precautions to follow. *Unit(s) 8*
4.	Conduct the following hand washing experiment (cdc.gov) Apply Glo Germ to their hands; check product coverage under a UV light then wash hands using different techniques within their group; members will recheck their hands after washing and record their observations for each hand washing technique and write a summary of how handwashing prevents the spread of disease-causing agents. *Unit(s) 8*
5.	Roleplay emergency situations to demonstrate the treatment for burns and cuts and for performing the Heimlich maneuver. *Unit(s) 9*
6.	Demonstrate proper use of knives following the SAFETY acronym. SAFETY: Securely hold your knife; anchor cutting boards; fingertips curled back; eyes on the knife; take your time yield to falling knives. *Unit(s) 9*
7.	Select a favorite family recipe and interview family members about the cultural and family customs associated with the recipe. Research the ingredients of the recipe using a history of food timeline. Following the guidelines for standardized recipes, students will submit a family recipe for the class cookbook. *Unit(s) 10*
8.	Conduct a product yield comparison using raw vegetables. The as purchased (AP) weight of the vegetable will first be recorded. The vegetable will then be cleaned and trimmed. The trim loss weight will next be recorded. Yield weight will be determined by subtracting the trim loss weight from the AP weight. To find the yield percentage, yield weight will be divided by the AP weight. Using this information, decide how much of each vegetable needs to be purchased in order to meet the desired yield of chosen recipe. Follow recipe to produce a simple salsa. *Unit(s) 10*
9.	Demonstrate how to use a balance, portion, and electronic scale to weigh various ingredients. Compare measuring accuracy when using the customary volume measures using various measuring techniques. Observe and record data. Evaluate measuring by weight as opposed to measuring by volume. Discuss why most commercial kitchens measure by weight. *Unit(s) 10*
10.	Use standardized recipes, convert the yield to match customer demand for catering events and for staff orders. Calculate food costs by determining unit prices for each ingredient and then finding the total. *Unit(s) 10*
11.	Use nationally adopted guidelines for nutrition to evaluate their diets for good health and nutrition. They will then use international nutrition guidelines to evaluate their diet over the same period of time. Class findings will be shared in a Power Point presentation. Students will be asked to make generalizations about the data presented from individual students. Dietary guidelines will be created for each class population and will be posted on the class website. U*nit(s) 11*
12.	Students will plan and prepare a nutritionally balanced vegetarian entrée using the cooking techniques that conserve nutrients. *Unit(s) 11*
13.	Create a brochure for the top 10 pieces of equipment that you consider to be important for stocking a graduating senior's first kitchen. You have a budget of $75.00. Defend your choices in the brochure and explain where purchases could be made. Brochures will be voted on by a committee of professionals and non-professionals. The winning brochure will be made available on our class web page. Unit(s) 12
14.	Develop menus that adhere to the required criteria of the ProStart competition. A separate menu will include nutrition information which is required by California law. Menu cost will include an appropriate profit margin. Student menus will be used for catering events, competition and or the student run café. *Unit(s) 13*

15.	After reading the folktale, “Stone Soup”, students will create a collaborative project that is also cross-curricular. The culinary arts class will team with a history class to produce a favorable soup created from shared resources. Culinary students will present a power point on the basics of making a healthy stock as the basis for a satisfying soup. History students in turn will give their presentations on soup and its historical significance for the time period and culture that they are currently studying. *Unit(s) 14*
16.	Clarify stock and remove impurities using the coagulation properties of egg whites. Unit(s)14
17.	Conduct an experiment to determine the best starch and method for thickening sauces. Each starch will be prepared with the following variables: added to hot liquid, added to cold liquid, prepared with and without fat, high and low heats, and short and long time periods, different mixing techniques will also be used. All results will be recorded in a report to determine the method that produced the best results. *Unit(s) 14*
18.	Working in teams, students will research one of fruit or vegetable that is in season to create an informational brochure about the nutritive qualities of the food and how to prepare it. The brochures will be available for public distribution at the Career Fair/Valor Day or STEM celebration. *Unit(s) 15*
19.	Research the fundamental global consequences of the Columbian Exchange related to starches (staple crops) that originated in either the Americas or Afro Eurasia. Students will map the food migration routes of these foods based upon their current growing locations. Students will prepare a report that details how the Columbian Exchange developed the ‘traditional’ international cuisines of today. *Units(s) 16*
20.	Demonstrate a variety of methods used to produce the desired Maillard reaction on meat taking into consideration temperature, dryness, pH, and protein content. Unit(s) 18
21.	Demonstrate techniques to form used to form permanent and temporary emulsions using a variety of ingredients. *Unit(s) 20*
22.	Determine the differences between the leavening agents of baking powder and baking soda by conducting experiments with water, vinegar, and the addition of heat. Observations will be recorded in a journal with a written summary regarding the role of carbon dioxide in baked goods. *Unit(s) 21*

Standards Alignment

The curricula have been aligned with the CTE Model Curriculum Standards released in 2013. Each industry sector was updated to meet the increased rigor and relevancy requirements of the Common Core State Standards. The curriculum also includes the new Standards for Career Ready Practices.

Standards for Career Ready Practice

1. *Apply appropriate technical skills and academic knowledge.*
2. *Communicate clearly, effectively, and with reason.*
3. *Develop an education and career plan aligned with personal goals.*
4. *Apply technology to enhance productivity.*
5. *Utilize critical thinking to make sense of problems and persevere in solving them.*
6. *Practice personal health and understand financial literacy.*
7. *Act as a responsible citizen in the workplace and the community.*
8. *Model integrity, ethical leadership, and effective management.*
9. *Work productively in teams while integrating cultural and global competence.*
10. *Demonstrate creativity and innovation.*
11. *Employ valid and reliable research strategies.*
12. *Understand the environmental, social, and economic impacts of decisions.*

CTE Anchor Standards—Common Core English Language Arts Alignment

Anchor Standard 1: Academics

Analyze and apply appropriate academic standards required for successful industry sector pathway completion leading to postsecondary education and employment. Refer to the industry sector alignment matrix for identification of standards. Note: alignment listed within each sector.

Anchor Standard 2: Communications

Language Standard: Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the (career and college) readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression. LS 9-10, 11-12.6

Anchor Standard 3: Career Planning and Management

Speaking and Listening Standard: Integrate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, orally) in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data. SLS 11-12.2

Anchor Standard 4: Technology

Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments and information.

Anchor Standard 5: Problem Solving and Critical Thinking

Writing Standard: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem, narrow, or broaden the inquiry when appropriate, and synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation. WS 11-12.7

Anchor Standard 6: Health and Safety

Reading Standards for Science and Technical Subjects: Determine the meaning of symbols, keywords, and other domain-specific words and phrases as they are used in a specific scientific or technical context. RSTS 9-10, 11-12.4

Anchor Standard 7: Responsibility and Flexibility

Speaking and Listening Standard: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners, building on others' ideas and expressing their own clearly and persuasively. SLS 9-10, 11-12.1

Anchor Standard 8: Ethics and Legal Responsibilities

Speaking and Listening Standard: Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is required to deepen the investigation or complete the work. SLS 11-2.1d

Anchor Standard 9: Leadership and Teamwork

Speaking and Listening Standard: Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed. SLS 11-12.1b

Anchor Standard 10: Technical Knowledge and Skills

Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information. WS 11-12.6

Anchor Standard 11: Demonstration and Application

Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in the classroom, laboratory, and workplace settings, and the career technical student organization. Note: no alignment evident for this standard. WS 11-12.6

Hospitality, Tourism, and Recreation

B. Food Service and Hospitality Pathway

B1.3 Explain the relationship between industry trends and local, state, national, and international economic trends.

B1.4 Research the advantages and disadvantages of the working conditions of various careers in the food service and hospitality industry.

B2.0 Demonstrate the basics of safe work habits, security, and emergency procedures required in food service and hospitality establishments.

B2.1 Identify the causes, prevention, and treatment of common accidents and the reporting procedures involved.

B2.2 Practice the basic procedures for the safety of employees and guests, including the procedures for emergency situations.

B2.3 Understand the role of the California Occupational Safety and Health Administration, the Environmental Protection Agency, and other agencies in regulating practices in the food service and hospitality industry.

B2.4 Understand the source and purpose of information in the Material Safety Data Sheets (MSDS) and know the proper use of personal protective equipment (PPE).

B3.0 Interpret the basic principles of sanitation and safe food handling.

B3.1 Employ the standards of personal grooming and hygiene required by local, state, and federal health and safety codes.

B3.2 Understand basic local, state, and federal sanitation regulations as they pertain to food production and service.

B3.3 Explain the types of food contamination, the potential causes, including cross contamination, and methods of prevention.

B3.4 Practice safe and sanitary procedures in all food handling, including food receiving, storage, production, service, and cleanup.

B3.5 Understand the essential principles of Hazard Analysis Critical Control Points, including the use of flowcharts.

B5.0 Demonstrate an understanding of the basics of systems operations and the importance of maintaining facilities, equipment, tools, and supplies.

B5.1 Apply the procedures for cleaning and maintaining facilities and equipment and the importance of preventive maintenance and the use of nontoxic and less toxic materials.

B6.1 Use, maintain, and store the tools, utensils, equipment, and appliances safely and appropriately for preparing a variety of food items.

B6.2 Apply the principle of mise en place, including the placement and order of use of ingredients, equipment, tools, and supplies.

B6.3 Prepare food by using the correct terminology, food safety, techniques, and procedures specified in recipes and formulas.

B6.4 Plan and follow a food production schedule, including timing and prioritizing of tasks and activities.

B6.5 Evaluate the qualities and properties of food items and ingredients used in food preparation.

B6.6 Design plating techniques, including accurate portioning and aesthetic presentation skills.

B7.0 Illustrate and apply the basics of baking, pastry, and dessert preparation and safety and sanitation in professional and institutional kitchens.

B7.2 Apply the principle of mise en place, including the placement and order of use of the ingredients, equipment, tools, and supplies unique to baking and pastry production.

B10.0 Demonstrate and apply basic nutritional concepts in meal planning and food preparation.

B10.1 Apply basic nutritional principles and know how to use food preparation techniques that conserve nutrients.

B10.2 Interpret nutritional or ingredient information from food labels and fact sheets and analyze menu items to meet the dietary needs of individuals.

B10.3 Create nutritious, creative, and profitable menus in accord with availability and demand.

B11.0 Demonstrate an understanding of the basic processes of costing and cost analysis in food and beverage production and service.

B11.6 Calculate recipe costs and pricing per portion and compare the cost per cover to the theoretical cost.

B12.2 Identify the major market segments of the industry and understand how marketing principles and procedures can be applied to target audiences.

ISTE Standards for Students

1. Empowered Learner- Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.

a) Students articulate and set personal learning goals, develop strategies leveraging technology to achieve them, and reflect on the learning process itself to improve learning outcomes.

b) Students build networks and customize their learning environments in ways that support the learning process.

c) Students use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways

d) Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

2. Digital Citizen- Students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world, and they act and model in ways that are safe, legal, and ethical.

a) Students cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.

b) Students engage in positive, safe, legal, and ethical behavior when using technology, including social interactions online or when using networked devices.

c) Students demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

d) Students manage their personal data to maintain digital privacy and security and are aware of data-collection technology used to track their navigation online.

3.Knowledge Constructor- Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.

a) Students plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.

b) Students evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources.

c) Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.

d Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.

4. Innovative Designer- Students use a variety of technologies within a design process to identify and solve problems creating new, useful, or imaginative solutions.

a) Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems.

b) Students select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.

c) Students develop, test, and refine prototypes as part of a cyclical design process.

d) Students exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems.

5. Computational Thinker- Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

a) Students formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models, and algorithmic thinking in exploring and finding solutions.

b) Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.

c) Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

d) Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

6. Creative Communicator- Students communicate clearly and express themselves creatively for a variety of purposes using platforms, tools, styles, formats, and digital media appropriate for their goals.

a) Students choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.

b) Students create original works or responsibly repurpose or remix digital resources into new creations.

c) Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models, or simulations.

d) Students publish or present content that customizes the message and medium for their intended audiences.

7. Global Collaborator- Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.

a) Students use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.

b) Students use collaborative technologies to work with others, including peers, experts, or community members, to examine issues and problems from multiple viewpoints.

c) Students contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.

d) Students explore local and global issues and use collaborative technologies to work with others to investigate solutions.