PROGRAM CONCENTRATION: CAREER PATHWAY: COURSE TITLE: Culinary Arts Culinary Arts Introduction to Culinary Arts

Introduction to Culinary Arts is a course designed to introduce students to fundamental food preparation terms, concepts, and methods in Culinary Arts where laboratory practice will parallel class work. Fundamental techniques, skills, and terminology are covered and mastered with an emphasis on basic kitchen and dining room safety, sanitation, equipment maintenance and operation procedures. Course also provides an overview of the professionalism in the culinary industry and career opportunities leading into a career pathway to Culinary Arts.

CA-ICA-1. Students will examine and identify the history and philosophy of the food service industry.

- a. Name and define professional organizations and career technical service organizations and the importance and benefits of membership, such as the ACF, AAC, FCCLA, and Skills USA.
- b. Explore career opportunities and pathways in the foodservice industry and identify specific jobs and positions such as Chef, Dietician, Food Stylist, Food Demonstrators, Research and Development Workers, Food Service Workers, Nutritionist, Food Service Manager, and Health Inspector.
- c. Identify key historical persons and summarize their contributions to the evolution and development of modern day foodservice to include but not limited to Careme, Escoffier and De Medici.
- d. Identify and describe various foodservice restaurant styles such as fast food, casual, family dining, institutional, and formal dining.
- e. Identify and explain formal dining etiquette from both service and customer perspectives and be able to demonstrate both.
- f. Define cuisine and compare/contrast the differences between American Regional, French, Italian, and Asian cuisine. Identify elements and characteristics of each type of cuisine.

ACADEMIC STANDARDS:

ELA10RL5. The student examines and acquires new vocabulary and uses it correctly in reading and writing.

CA-ICA-2. Students will demonstrate and practice correct sanitation as it relates to healthy living and the modern commercial kitchen

- a. Identify and demonstrate personal hygiene and hand washing procedures as defined in ServSafe textbook.
- b. Identify the biological, physical, and chemical contaminants and prevention measures.
- c. Practice proper contaminant prevention measures as it relates to food preparation the commercial kitchen.

- d. Discuss and practice cleanliness of kitchen equipment and facilities.
- e. Identify and examine pot and pan washing with four-compartment sinks and the use of sanitizers and cleaning chemicals for manual and automatic dishwashing.
- f. Demonstrate the proper use and cleaning of an automatic dishwasher.
- g. Discuss pest control and management of infestations, Health Department inspections, and facility requirements of commercial foodservice establishments.
- h. Identify and demonstrate proper receiving and storage principles such as FIFO, rotating inventory, and receiving temperatures.
- i. Identify the factors that affect the growth of food borne pathogens (i.e. FATTOM) and explain how time and temperature guidelines can reduce growth of microorganisms.
- j. List and demonstrate food handling, preparation, and storage techniques that prevent cross-contamination between raw and ready-to-eat foods and between animal and seafood, including sources of other potentially hazardous food products.
- k. Discuss the concept of HACCP and the flow of food in a variety of foodservice establishments.

Example task: Students perform hand washing steps by first wetting hands and applying soap and scrubbing hands, between fingers, forearms, and underneath fingernails for at least 20 seconds. Then, rinse hands and forearms completely and dry using a single use towel. Lastly, turn off the water by using the towel as a barrier between your hand and the faucet, then using the same towel, open the door with the towel using the towel as a barrier between your hand and the door handle, if applicable, and finally throw towel in garbage.

ACADEMIC STANDARDS:

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

NFCS-8.2. Demonstrate food safety and sanitation procedures.

CA-ICA-3. Students will name and describe various fixed equipment and small wares associated with the commercial kitchen.

- a. List and describe the tools used for commercial food preparation, cooking, and serving and demonstrate proper use.
- b. Identify and distinguish between a standard and convection oven, stoves, ranges, steamers, fryers, refrigerators, freezers, slicers, food processors, coffee and tea brewing equipment, and food storage equipment. Demonstrate proper use and cleaning of each.
- c. Identify and distinguish between the various mixers and small wares, demonstrating proper use and cleaning.

ACADEMIC STANDARDS:

ELAALRL5. The student understands and acquires new vocabulary and uses it correctly in reading and writing.

NFCS-8.3. Demonstrate selecting, using, and maintaining food production equipment.

CA-ICA-4. Students will analyze and examine fundamental safety skills and practices related to the commercial kitchen.

- a. Discuss principals of basic First Aid treatments for a foodservice environment including basic cuts, lacerations, abrasions, punctures, CPR, food allergies, anaphylactic shock, Heimlich maneuver, and minor burns.
- b. Examine and practice correct Fire Safety procedures using correct classifications of fire extinguishers, hood suppression systems, and emergency evacuation routes.
- c. Practice and examine kitchen safety in the areas of falls, strains, sprains, and lifting using proper techniques.
- d. Identify gas safety issues for gas ranges and ovens, including shut off valves and pilot lights.
- e. Examine and identify a Material Safety Data Sheet and explain their importance when handling common foodservice chemicals.
- f. Identify and properly use and calibrate thermometers.

ACADEMIC STANDARDS:

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

NFCS-8.2. Demonstrate food safety and sanitation procedures.

CA-ICA-5. Students will discuss and practice culinary math skills through recipe conversion and measurements.

- a. Identify and master the use of different types of measuring tools including dry and liquid measuring cups, measuring spoons, and portioning tools.
- b. Demonstrate proper use of a spring and balance scales.
- c. Identify procedures used to calculate the cost of a standardized recipe and cost per portion and perform calculations.

ACADEMIC STANDARDS:

MC1P1. Students will solve problems using appropriate technology.

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SCSh4. Students will use tools and instruments for observing, measuring, and manipulating scientific equipment and materials.

NFCS-8.4. Demonstrate planning menu items based on standardized recipes to meet customer needs.

CA-ICA-6. Students will examine and perform all aspects of kitchen knife use and classic knife skills.

- a. Identify the different types of knives, their use, parts, and components.
- b. Identify and practice proper knife safety procedures and rules.
- c. Demonstrate correct knife sharpening.
- d. Define and demonstrate the concept of "mise en place" in setting up a work cutting station.
- e. Demonstrate proper knife safety, cleaning, and storage.
- f. Demonstrate proper knife techniques for cuts as julienne, batonnet, small, medium, and large dice.

ACADEMIC STANDARDS:

SCSh2. Students will use standard safety practices for all classroom laboratory and field investigations.

NFCS-8.5.1. Demonstrate skills in knife, tool, and equipment in handling.

CA-ICA-7. Students will perform basic food preparations of poultry, meat, dairy, fruits, and vegetables using proper commercial kitchen equipment and techniques to examine the fundamental methods, as applied in a commercial kitchen.

- a. Identify basic food cooking methods such as dry heat, moist heat, and combination cooking.
- b. Demonstrate basic dry heat cooking methods including sauté, griddle, pan-fry, deep fry, baking, roasting, and grilling.
- c. Demonstrate basic moist heat cooking methods including poaching, simmering, boiling, and steaming.
- d. Demonstrate basic combination cooking methods including stewing and braising.
- e. Compare and contrast a menu item using a microwave oven and conventional method.

Example task: Dry Heat Method – Sauté - Remove eggs from cooler, heat sauté pan and add a small amount of butter. Crack one egg and place in pan. Cook egg over medium heat until bottom of egg is set and caramelized, then flip and cook until top of egg is cooked to same doneness. Remove from pan and analyze.

ACADEMIC STANDARDS:

SC5. Students will understand that the rate at which a chemical reaction occurs can be affected by changing concentration, temperature, or pressure and the addition of a catalyst.

NFCS-8.5.2. Demonstrate a variety of cooking methods including roasting and baking broiling, smoking, grilling, sautéing, frying, deep frying, braising, stewing, poaching, steaming, working, convection, microwaving, and other emerging technologies.

CA-ICA-8. Students will examine and identify standardized recipes and their role in a commercial kitchen.

- a. Define standardized recipe, the components of the recipe, and explain the reasons for use in commercial kitchens.
- b. Identify recipe terminology including measurement abbreviations, instructions, and directions.
- c. Demonstrate the concept of recipe conversions by identifying and converting recipe formulas to increase or decrease yields.
- d. Demonstrate the concept of recipe "mise en place" by identifying and assembling ingredients and equipment for a specific recipe.
- e. Follow the written directions to prepare the recipe.

ACADEMIC STANDARDS:

MC4P1. Students will solve problems using appropriate technology.

MC4P4. Students will make connections among mathematical ideas and to other disciplines.

NFCS-9.3.5. Monitor recipe/formula proportions and modifications for food production.

CA-ICA-9. Students will examine an introduction to nutrition including the six major classes of nutrients, proteins, and carbohydrates: simple, complex, fats, vitamins, minerals and water.

- a. Discuss and develop knowledge of the importance of My Pyramid and examine how My Pyramid can be misleading and complex due to cultural constraints, eating disorders, and food allergies.
- b. Examine the six major food groups, nutrient contributions of vitamins, minerals, and nutrient variability within a group and daily recommended intake
- c. Define a serving size, portion control, recommended serving size and balanced diet while maintaining a correct nutritional intake.
- d. Examine current trends and issues in food and nutrition, fad diets, proper weight loss techniques and how these fit into healthy menu options.

ACADEMIC STANDARDS:

NFCS-9.3.2. Appraise and interpret nutritional data.

CA-ICA-10. Students will identify various food products used in a commercial foodservice operation and list the proper handling and storage procedures for each.

- Identify proteins such as poultry, beef, pork, and seafood and demonstrate and examine the potential contaminants associated with and proper handling procedures
- b. Identify types of fruits and vegetables and proper handling techniques.
- c. Identify types of grains and milled products and proper handling techniques.
- d. Identify and distinguish between herbs, spices, seasonings, and their uses.

ACADEMIC STANDARDS:

ELA10RC3. The student acquires new vocabulary in each content area and uses it correctly.

NFCS-8.6.1. Apply principles of purchasing and receiving in food service operations.

SSEF1. The student will explain why limited productive resources and unlimited wants result in scarcity, opportunity costs and trade offs for individuals, businesses and governments

CA-ICA-11. Students will discuss and practice sound human relations and professionalism concepts for a career pathway in Culinary Arts employment.

- a. Identify a personalized resume and cover letter.
- b. Identify and demonstrate appropriate work ethics: attitude, appearance, attendance, teamwork, character, productivity, organizational skills, communication, and respect.
- c. Define professionalism and professional appearance as it has developed throughout the history of uniforms, presentation, and functionality.
- d. Identify the difference between personal and professional communication.
- e. Identify the five steps of the decision making process.

ACADEMIC STANDARDS:

ELA10W3. The student uses research and technology to support writing

ELA11LSV1. The student participates in student-to-teacher, student-to-student and group verbal interactions.

ELARL5. The student participates in student-to-teacher, student-to-student and group verbal interactions

NFCS-8.1. Analyze career paths within the food production and food services industries.

Reading Standard Comment

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal learning. Students encounter a variety of informational as well as fictional texts, and they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard focuses on the academic and personal skills students acquire as they read in all areas of learning.

MRC. Students will enhance reading in all curriculum areas by:

- a. Reading in all curriculum areas
 - Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
 - Read both informational and fictional texts in a variety of genres and modes of discourse.
 - Read technical texts related to various subject areas.
- b. Discussing books
 - Discuss messages and themes from books in all subject areas.
 - Respond to a variety of texts in multiple modes of discourse.
 - Relate messages and themes from one subject area to messages and themes in another area.
 - Evaluate the merit of texts in every subject discipline.
 - Examine author's purpose in writing.
 - Recognize the features of disciplinary texts.
- c. Building vocabulary knowledge
 - Demonstrate an understanding of contextual vocabulary in various subjects.
 - Use content vocabulary in writing and speaking.
 - Explore understanding of new words found in subject area texts.
- d. Establishing context
 - Explore life experiences related to subject area content.
 - Discuss in both writing and speaking how certain words are subject area related.

• Determine strategies for finding content and contextual meaning for unknown words.

CTAE Foundation Skills

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.

The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

- **CTAE-FS-1 Technical Skills:** Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.
- **CTAE-FS-2 Academic Foundations:** Learners achieve state academic standards at or above grade level.
- **CTAE-FS-3 Communications:** Learners use various communication skills in expressing and interpreting information.
- **CTAE-FS-4 Problem Solving and Critical Thinking:** Learners define and solve problems, and use problem-solving and improvement methods and tools.
- CTAE-FS-5 Information Technology Applications: Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.
- **CTAE-FS-6 Systems:** Learners understand a variety of organizational structures and functions.
- CTAE-FS-7 Safety, Health and Environment: Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.
- **CTAE-FS-8 Leadership and Teamwork:** Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.
- **CTAE-FS-9 Ethics and Legal Responsibilities:** Learners commit to work ethics, behavior, and legal responsibilities in the workplace.

- **CTAE-FS-10 Career Development:** Learners plan and manage academic-career plans and employment relations.
- **CTAE-FS-11 Entrepreneurship:** Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.