

PROGRAM CONCENTRATION:
CAREER PATHWAY:
COURSE TITLE:

Culinary Arts
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Culinary Arts I

Culinary Arts I is designed to create a complete foundation and understanding of Culinary Arts leading to post secondary education or a foodservice career. Building from techniques and skills learned in Foundation of Culinary Arts, this fundamentals course begins to involve in-depth knowledge and hands on skill mastery of Culinary Arts.

CA-CAI-1. Students will examine and discuss introduction to the hospitality and food service industry and the role of the modern kitchen.

- a. Describe and define professionalism.
- b. Discuss and evaluate industry trends as they relate to career opportunities and the future of the industry.
- c. Identify industry professional organizations and student associations/programs, their purpose and benefits to careers and the industry (CTAE organizations, ACF, NRA, IFSEA).
- d. Trace the history and growth of the foodservice and hospitality industry and list historical chefs and entrepreneurs relating their major accomplishments to the food industry.
- e. Identify the positions of the classical and modern “kitchen brigade” and outline the organizational structure of various food service and hospitality organizations.
- f. List and describe the various cuisines and their relationships to history and cultural development cuisines.

ACADEMIC STANDARDS:

ELA10-RL5. The student understands and acquires new vocabulary and uses it correctly in reading and writing.

SSWG2. The student will explain the cultural aspects of geography.

CA-CAI-2. Students will demonstrate and practice food sanitation and safety with food preparation and service.

- a. Identify the characteristics of potentially hazardous foods, recognize risks associated with high risk populations, and list reasons why it is important to keep food safe through ServSafe Applications.
- b. Identify personal behaviors that can contaminate food and demonstrate good personal hygiene and health habits, including proper hand washing.
- c. Identify and categorize microorganisms related to food spoilage and food-borne illnesses; describe their requirements and methods for growth. List and identify the major reasons for and recognize signs of food spoilage and contamination.

- d. Identify and describe methods to prevent biological, chemical and physical contaminants and methods to prevent contamination of food and differentiate between foodborne intoxication, infections and toxin-mediated infections.
- e. Identify common allergens and major foodborne illnesses, their associated symptoms, and methods of prevention.
- f. Demonstrate proper receiving and storage of both raw and prepared foods, including identification of appropriate storage temperatures for perishable and semi-perishable foods.
- g. List and demonstrate food handling, preparation and storage techniques that prevent cross contamination between raw and ready-to-eat foods and between animal or fish, including sources of other potentially hazardous food products.
- h. Identify the factors that affect the growth of foodborne pathogens, FAT TOM, and explain how time and temperature guidelines can reduce growth of microorganisms.
- i. Examine current types and proper uses of cleaning materials and sanitizers and demonstrate procedures for cleaning and sanitizing utensils, equipment, and facilities.
- j. Demonstrate waste disposal and recycling methods and describe appropriate measures for insect, rodent, and pest control.
- k. Demonstrate maintenance of necessary records to document time and temperature control, employee health, equipment maintenance, and other food preparation and storage.
- l. Describe food security and identify differences between food safety and food security.
- m. Identify and reexamine basic safety practices such as lifting and carrying, including Basic First Aid.
- n. Identify the principles of HACCP and define the flow of food.
- o. Identify the history and purpose of O.S.H.A. and describe the O.S.H.A. requirements related to the food service industry.
- p. Follow state and local sanitation and safety codes.
- q. Demonstrate proper use, care, and cleaning of commercial foodservice equipment and facilities.

Sample task: Identify and explain the factors (FAT TOM) that effect foodborne pathogens. List and discuss each factor and identify examples (i.e. F = Foods which are potentially hazardous such as meats, poultry, dairy, and seafood). Include in your discussion steps to prevent contamination and identify the food safety procedures to prevent foodborne illnesses.

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.

NFCS-8.2.9. Use Occupational Safety and Health Administration's (OSHA) Right to Know Law and Material Safety Data Sheets (MSDS) and explain their requirements in

handling hazardous materials.

CA-CAI-3. Students will acquire basic knowledge of selecting, using, and maintaining professional kitchen equipment.

- a. Demonstrate proper procedures of cleaning and maintaining professional kitchen equipment.
- b. Demonstrate operation of professional kitchen equipment to include but not limited to ranges, mixers, microwave ovens, steamers, fat fryers, steam tables, ranges, broilers, and refrigeration- freezer.
- c. Demonstrate proper dish and pot and pan cleaning (machine procedures, manual procedures).
- d. Demonstrate how to properly store food supplies in reach-in and walk-in refrigerators and freezers.
- e. Use ladles, scales, scoops, and measuring cups and spoons to weigh, measure, and portion.
- f. Demonstrate proper use of food and beverage holding and serving equipment.

Sample Task: Identify and demonstrate the use of the three and/or four compartment sink. Identify each compartment of the sink as applicable (pre-wash, wash, rinse and sanitize). Fill compartments with appropriate levels of water at the required temperatures. Add proper amount of ware washing chemicals to appropriate sink. Demonstrate the proper cleaning and sanitizing of a pot. Demonstrate how to empty, clean, and sanitize each compartment and drain boards.

ACADEMIC STANDARDS:

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

CA-CAI-4. Students will acquire basic knowledge in business and culinary math skills.

- a. Identify and use weights and measures to demonstrate proper scaling and measurement techniques.
- b. Demonstrate, solve, and apply standard recipe conversions.
- c. Understand and examine basic accounting skills used in the evaluation of menu costing, pricing, and cost control.

ACADEMIC STANDARDS:

MC1-P1. Students will solve problems (using appropriate technology).

MC4P3. Students will communicate mathematically.

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

NFCS-8.5.3. Utilize weights and measures to demonstrate proper scaling and

measurement techniques.

CA-CAI-5. Students will identify and demonstrate the principles and processes of cooking in a professional kitchen.

- a. Identify and use herbs, spices, oils, and vinegars.
- b. Apply effective “mise en place” through practice.
- c. Demonstrate knife skills and proper cuts such as julienne, batonette, brunoise, paysanne, small, medium, and large dice; emphasize proper safety techniques.
- d. Describe and demonstrate several basic preparation techniques such as moist heat and dry heat cooking and apply the fundamentals of time and temperature in cooking and reheating a variety of foods.
- e. Discuss applicability of convenience, value-added, further processed, or par-cooked food items.

ACADEMIC STANDARDS:

SPS7. Students will relate transformations and flow of energy within a system.

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-CAI-6. Students will examine and practice cooking methods, techniques, and preparations such as dry heat and moist heat methods.

- a. Define and explain moist heating cooking methods, including blanching, boiling, steaming, and poaching; prepare a variety of food products using moist heat cooking methods.
- b. Define and explain dry cooking methods, including sauté, pan frying, deep-frying, baking, roasting, grilling, and broiling; prepare a variety of food products using dry heat cooking methods.
- c. Define and explain combination cooking, including braising and stewing; prepare a variety of food products using combination-cooking methods.
- d. Demonstrate a variety of other food preparation and cooking methods including convection, microwaving, and other emerging technologies.
- e. Define, explain, and prepare basic stocks and sauces.
- f. Define and explain basic soup types, including broth, consommé, and puree, clear, and cream soups; prepare various soups.
- g. Identify and prepare various breakfast foods to include breakfast meats, eggs, cereals, and batter products.

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. Demonstrate commercial preparation for all menu categories to produce a variety of food products.

CA-CAI-7. Students will identify and apply fundamentals of baking in the preparation and production of baked food products and will identify and use equipment normally found in the bakeshop.

- a. Define basic baking terms; identify equipment and utensils used in baking and describe their proper use and care.
- b. Identify ingredients used in baking, describe their properties, and list their functions.
- c. Produce yeast raised products, quick breads, pies, cookies, and basic cakes.

ACADEMIC STANDARDS:

SCSh2. Students will identify and investigate problems scientifically.

CA-CAI-8. Students will examine in detail the nutritional concepts that relate to a balanced and healthy diet, covering the six major classes of nutrients in developing a personalized healthy diet plan.

- a. Identify and develop a personalized healthy diet based upon My Pyramid and examine the impacts on cultural constraints, eating disorders and food allergies.
- b. Identify food groups, nutrient contributions of vitamins and minerals, nutrient variability within a group and daily recommended intake.
- c. Analyze and develop a daily and weekly personal menu that reflects the RDI values including the six major nutrients and calorific daily intakes.
- d. Identify and demonstrate appropriate serving sizes and portion control as related to dietary needs as compared to current industry trends.
- e. Examine current trends and issues in food and nutrition, fad diets and proper weight loss techniques. Discuss how they fit in healthy menu options.

ACADEMIC STANDARDS:

MC4P1. Students will make connections among mathematical ideas and to other disciplines.

SCSh8. Students will understand important features of the process of scientific inquiry.

NFCS-9.3.2. Appraise and interpret nutritional data.

CA-CAI-9. Students will identify and apply front of the house techniques and methods of operation used in today's modern high pace, high volume restaurants.

- a. Describe the traditional service staff and list the duties and responsibilities of each.

- b. Identify and use proper techniques for greeting, seating, and presenting the menu to customers and dramatize ways of describing and recommending menu items to guests.
- c. Demonstrate an understanding of guest service and customer relations including handling of difficult situations and accommodations for the disabled.
- d. Demonstrate the general rules of table setting and service and identify the types of flatware, china, hollowware, and glassware and explain the specific uses of each.
- e. Identify the similarities and differences between American, French, English, Russian, and self-service styles of dining.

ACADEMIC STANDARDS:

ELA10-RL3. The student acquires new vocabulary in each content area and uses it correctly.

NFCS-8.7. Demonstrate the concept of internal and external customer service.

CA-CAI-10. Students will apply fundamentals of human relations and management skills in both personal and professional aspects and levels.

- a. Identify and exhibit appropriate oral and written communications on a personal and professional level.
- b. Identify the need for leadership and describe leadership qualities such as honesty and integrity, fairness, responsible behavior, ethical work habits, passion for goals, positive attitude, enthusiasm and empathy.
- c. Perform mock interviews; prepare resume, job applications, cover letters, and portfolios.
- d. Identify legal issues of employment including sexual harassment, discriminations, violence and unemployment.
- e. Analyze ways of handling stress in the workplace.

ACADEMIC STANDARDS:

ELA10-RL5. The student understands and acquires new vocabulary and uses it correctly in reading and writing.

ELA11LSVI. 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-5.6. Demonstrate facilities management functions.

CA-CAI-11. Students will identify and apply fundamentals for menu planning, purchasing, receiving, inventory, and storage.

- a. Identify basic menu planning principles, discuss the various types of restaurant menus and their importance to the overall operation of the facility, and define a la carte, table d'hote, California, du jour, and cycle menus.
- b. Identify and create menu item descriptions following established truth-in-menu guidelines and organize the information on a menu.
- c. Analyze various restaurant menus and identify standard menu layout and design concepts.
- d. Analyze recipes and apply the principles of nutrition to proper menu development.
- e. Identify menu requirements for various diets such as food allergy, vegetarian, low-sodium, and low caloric.
- f. Identify procedures for purchasing meat, poultry, seafood, dairy and staple items and describe proper techniques of receiving and storing fresh, frozen, refrigerated, and staple goods.
- g. Identify various types of fruits, vegetables, meats, poultry, seafood, dairy and starches and required product purchasing specifications.

ACADEMIC STANDARDS:

NFCS-8.6. Demonstrate implementation of food service management functions.

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-CAI-12. Students will identify and examine the role of Garde Manger and Pantry kitchen, demonstrating cold food skills and techniques used by the Garde Manger Chef.

- a. Identify the four main ingredients of sandwiches and identify different types of sandwiches; prepare cold/hot sandwiches.
- b. Identify the components of a salad, prepare all types of salads (i.e. composed, bound, tossed) and identify and prepare basic types of dressings (i.e. vinaigrette, emulsified).
- c. Define garnish; explain the differences between garnish, garniture and garni; list guidelines for use of hot and cold platter garnishes.
- d. Define responsibilities of pantry/garde manger workers, comparing duties of the pantry workers; explain the relationship and line set up to pantry/garde manger preparations.
- e. Discuss cold items to include soups, sauces, marinades, relishes and hors d'oeuvres.

ACADEMIC STANDARDS:

SCSh8. Students will understand important features of the process of scientific inquiry.

NFCS-8.5. Demonstrate commercial preparation for all menu categories to produce a variety of food products.

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.