

Florida Department of Education
Curriculum Framework

Program Title: Culinary Arts
Program Type: Career Preparatory
Career Cluster: Hospitality & Tourism

Secondary – Career Preparatory

Program Number	8800500
CIP Number	0420040210
Grade Level	9-12
Standard Length	4 credits
Teacher Certification	Refer to the Program Structure section.
CTSO	FCCLA, Skills USA
SOC Codes (all applicable)	35-2021 – Food Preparation Workers 35-3021 – Combined Food Preparation and Serving Workers, Including Fast Food 35-2014 – Cooks, Restaurant 11-9051 – Food Service Managers
CTE Program Resources	http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml

Purpose

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Hospitality & Tourism career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Hospitality & Tourism career cluster.

Additional Information relevant to this Career and Technical Education (CTE) program is provided at the end of this document.

Program Structure

This program is a planned sequence of instruction consisting of four credits. The fourth course in the program is comprised of three (3) tracks and is intended to provide flexibility for students in the last year of the Culinary Arts program.

Track 1 is comprised of Standards 20 - 27 and is a one credit course focused on Culinary and Hospitality Management Skills.

Track 2 is comprised of Standards 28 - 38 and is a one credit course focused on Advanced Baking Techniques.

Track 3 is comprised of Standards 39 - 45 and is a one credit course focused on Gastronomy and Garde Manger Skills. To complete the program, students must complete either Track 1 or Track 2 or Track 3.

To teach the course(s) listed below, instructors must hold at least one of the teacher certifications indicated for that course.

The following table illustrates the secondary program structure:

Course Number	Course Title	Teacher Certification	Length	SOC Code	Level	Graduation Requirement
8800510	Culinary Arts 1	FAM CON SCI CULINARY 7 G	1 credit	35-2021	2	
8800520	Culinary Arts 2		1 credit	35-3021	2	PA
8800530	Culinary Arts 3		1 credit	35-2014	3	PA
8800540 OR 8800550 OR 8800560	Culinary Arts 4 (Track 1) OR Culinary Arts 4 (Track 2) OR Culinary Arts 4 (Track 3)		1 credit	11-9051	3	

See program structure section above for optional tracks for Culinary Arts 4.

(Graduation Requirement Abbreviations- EQ= Equally Rigorous Science, PA= Practical Arts, EC= Economics)

Regulated Programs

This program is regulated by the Florida Department of Business & Professional Regulation, Division of Hotels and Restaurants.

It is strongly recommended that teachers obtain employee food handler training certification, as well as food safety manager training/certification.

More information available at the Florida Department of Business & Professional Regulation

<http://www.myfloridalicense.com/DBPR/hotels-restaurants/food-lodging/>).

Information on Department of Health rules that affect culinary programs is available at

<https://www.flrules.org/gateway/chapterhome.asp?chapter=64E-11>.

Common Career Technical Core – Career Ready Practices

Career Ready Practices describe the career-ready skills that educators should seek to develop in their students. These practices are not exclusive to a Career Pathway, program of study, discipline or level of education. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

1. Act as a responsible and contributing citizen and employee.
2. Apply appropriate academic and technical skills.
3. Attend to personal health and financial well-being.
4. Communicate clearly, effectively and with reason.
5. Consider the environmental, social and economic impacts of decisions.
6. Demonstrate creativity and innovation.
7. Employ valid and reliable research strategies.
8. Utilize critical thinking to make sense of problems and persevere in solving them.
9. Model integrity, ethical leadership and effective management.
10. Plan education and career path aligned to personal goals.
11. Use technology to enhance productivity.
12. Work productively in teams while using cultural/global competence.

Standards

After successfully completing this program, the student will be able to perform the following:

Culinary Arts 1

- 01.0 Recognize and identify career and employment opportunities.
- 02.0 Demonstrate and incorporate workplace safety procedures.
- 03.0 Demonstrate workplace communication skills.
- 04.0 Use and care for commercial tools and equipment.
- 05.0 Demonstrate basic kitchen essentials.
- 06.0 Identify soups, stocks and sauces.
- 07.0 Understand principles of food science in cooking and baking techniques.

Culinary Arts 2

- 08.0 Exhibit the ability to follow state mandated guidelines for food safety and service.
- 09.0 Identify and explain front-of-the-house and back-of-the-house duties.
- 10.0 Apply principles of food science in cooking techniques.
- 11.0 Present food and beverage items to meet creativity aspects as well as quality standards.
- 12.0 Describe and apply the basic principles of nutrition.
- 13.0 Identify and summarize the various cuisines of the world.

Culinary Arts 3

- 14.0 Research college and career advancement opportunities in professional cooking and baking.
- 15.0 Follow food identification, selection, purchasing, receiving, storing and inventory guidelines.
- 16.0 Practice professional cooking and baking techniques.
- 17.0 Apply scientific principles in cooking and baking.
- 18.0 Identify and exhibit management skills.
- 19.0 Comply with laws and regulations specific to the food service and hospitality industry.

Culinary Arts 4 (Track 1)

Culinary and Hospitality Management

- 20.0 Analyze history and trends in the culinary and hospitality industry.
- 21.0 Demonstrate management skills.
- 22.0 Identify the elements of successful customer service and the role management plays.
- 23.0 Compare and contrast the different types of operations in the culinary and hospitality industry.
- 24.0 Demonstrate the skills necessary for planning and catering an event.
- 25.0 Utilize cost control.
- 26.0 Utilize human resource management guidelines.
- 27.0 Explore trends in marketing.
- 28.0 Describe the requirements to be a successful entrepreneur and small business owner in the hospitality industry.

Culinary Arts 4 (Track 2)**Advanced Baking Techniques**

- 29.0 Describe the history and culture of baking.
- 30.0 Identify careers in Baking and Pastry Arts.
- 31.0 Demonstrate an understanding of common Baking and Pastry Arts vocabulary.
- 32.0 Identify tools and equipment used in Baking and Pastry Arts.
- 33.0 Demonstrate baking mathematics knowledge and skills.
- 34.0 Show proficiency in imperial measurements and metric units.
- 35.0 Prepare nutritious food for individuals with special dietary needs.
- 36.0 Demonstrate standard preparation skills for baked goods.
- 37.0 Explain the connections and interdependency of food and science.
- 38.0 Demonstrate advanced preparation skills for baking and pastry products.
- 39.0 Apply the knowledge and skills necessary to successfully cater an event.
- 40.0 Demonstrate creativity in presenting baked products.

Culinary Arts 4 (Track 3)**Gastronomy and Garde Manger**

- 41.0 Exhibit the ability to follow state mandated guidelines for food service.
- 42.0 Utilize industry technology to enhance methodology and efficiency of preparation.
- 43.0 Examine the interconnections and interdependency of ecological, social, and economic systems.
- 44.0 Demonstrate advanced preparation skills for various proteins.
- 45.0 Demonstrate buffet food preparation skills.
- 46.0 Apply the knowledge and skills necessary to successfully cater an event.
- 47.0 Develop and implement a capstone project.

Florida Department of Education
Student Performance Standards

Course Title: Culinary Arts 1
Course Number: 8800510
Course Credit: 1

Course Description:

This course covers the history of the food service industry and careers in that industry. Also covered are safety in the workplace; employability skills; leadership/teamwork skills; care and use of commercial culinary equipment; basic food science; basic nutrition; and following recipes in food preparation labs.

CTE Standards and Benchmarks	
01.0	Recognize and identify career and employment opportunities. The student will be able to:
01.01	Discuss history and trends of the food service industry.
01.02	Identify occupations in the food service and hospitality industry and their impact on the economy.
01.03	Identify levels of training required for food service and hospitality occupations.
01.04	Identify professional organizations related to hospitality/food service.
01.05	Explain the importance of a portfolio and resume'.
01.06	Identify procedures and documents required when applying for employment.
02.0	Demonstrate and incorporate workplace safety procedures. The student will be able to:
02.01	Follow standard procedures for physical, chemical and biological hazard control.
02.02	Identify and utilize first-aid procedures for accidents and injuries common to the food service industry.
02.03	Follow the standards for infectious disease control.
02.04	Identify and apply sanitary procedures in maintaining the facility including proper waste disposal methods and recycling.
02.05	Maintain a SDS (Safety Data Sheet) for each product.
02.06	Explain the Federal Hazardous Communication Regulation Law as recorded in (29 CFR-1910.1200) – OSHA Law.
02.07	Demonstrate and utilize safety procedures related to prevention of slips, falls, burns, and fire; proper lifting and chemical use.

CTE Standards and Benchmarks	
02.08	Demonstrate and utilize proper personal hygiene and personal health precautions (hand washing; use of gloves; grooming; proper hair restraints, closed-toe shoes, aprons, uniforms).
02.09	Demonstrate proper food handling techniques (thermometer use; thawing methods; internal cooking temperatures) utilizing current industry safety and sanitation procedures for the agency having jurisdiction.
02.10	Identify the HACCP (Hazard Analysis Critical Control Point) procedure during all food handling processes.
02.11	Identify State of Florida Food Handler Training Certificate requirements.
03.0	Demonstrate workplace communication skills. The student will be able to:
03.01	Identify and exhibit employability skills (punctuality, dependability, appropriate appearance).
03.02	Identify and exhibit work ethics and integrity (employee theft and consequences).
03.03	Maintain positive personal relationships including acceptance of constructive criticism.
03.04	Develop and demonstrate personal and professional etiquette.
03.05	Demonstrate the ability to function as a team member in a diverse environment.
04.0	Use and care for commercial tools and equipment. The student will be able to:
04.01	Identify commercial tools and equipment.
04.02	Demonstrate mastery of standard weights and measures used in the food service industry.
04.03	Use and maintain commercial tools.
05.0	Demonstrate basic kitchen essentials. The student will be able to:
05.01	Define mise en place and the relationship of organizational skills to productivity in the workplace.
05.02	Identify, explain and illustrate basic knife cuts and skills.
05.03	Demonstrate an understanding of the purpose of standardized recipes.
05.04	Use, follow, prepare and plate standardized recipes creatively.
06.0	Identify soups, stocks and sauces. The student will be able to:
06.01	Identify the four essential components of stock.
06.02	Identify the types of stock.

CTE Standards and Benchmarks	
06.03	Define characteristics of the grand/mother/leading sauces.
06.04	Identify and describe the two classifications of soups.
06.05	Demonstrate the methods of preparation of soups, stocks and sauce.
06.06	Identify the differences between a permanent and temporary emulsion.
06.07	Identify and explain the principles of thickening agents used in food preparation.
06.08	Distinguish between and demonstrate the physical properties of thickening agents.
07.0	Understand principles of food science in cooking and baking techniques. The student will be able to:
07.01	Identify food products that are a result of fermentation.
07.02	Identify and explain the various leavening agents used in baking.
07.03	Explain the leavening process in baking.
07.04	Demonstrate and analyze the different functions of sugar and fats in baked goods.

**Florida Department of Education
Student Performance Standards-**

Course Title: Culinary Arts 2
Course Number: 8800520
Course Credit: 1

Course Description:

In this course students will learn state mandated guidelines for food service; how to attain food handler training certification; and perform front-of-the-house and back-of-the-house duties. Students will prepare quality food products and present them creatively; demonstrate safe, sanitary work procedures; understand food science principles related to cooking and baking; and utilize nutrition concepts when planning meals/menus.

CTE Standards and Benchmarks	
08.0	Exhibit the ability to follow state mandated guidelines for food safety and service. The student will be able to:
08.01	Demonstrate and utilize proper techniques for lifting, receiving, and storing food supplies.
08.02	Demonstrate and utilize proper techniques for transporting, cooking and holding food (proper ways to cool/reheat food; holding temperatures).
08.03	Demonstrate and utilize proper cleaning, sanitizing, and disinfecting techniques (cleaning vs. sanitizing; storing cleaning supplies; proper procedures for cleaning equipment).
08.04	Demonstrate and utilize proper pest control procedures.
08.05	Classify all causes of foodborne illnesses (e.g., biological, physical and chemical).
08.06	Describe symptoms of foodborne illness and how it can be prevented.
08.07	Describe cross contamination and incorporate strategies to prevent this from occurring.
08.08	Research top allergens and how to control allergy cross-contamination.
09.0	Identify and explain front-of-the house and back-of-the-house duties. The student will be able to:
09.01	Identify, demonstrate, and utilize fundamentals of customer service and addressing difficult customers and handle customer complaints.
09.02	Identify and explain techniques of front-of-the-house and back-of-the-house responsibilities including but not limited to dining room setup, greeting, order-taking, serving, clearing, check presentation, bussing, and cashiering.
09.03	Identify and describe types of meal services.
09.04	Describe the types of work stations in the commercial kitchen.

CTE Standards and Benchmarks	
09.05	Perform duties to meet the needs of the customer (greeting guests, escorting to tables and presenting menus, handling guests with special needs, transporting and serving meals, loading and carrying trays, etc.).
09.06	Receive, store and issue supplies.
09.07	Practice environmentally sound procedures.
09.08	Demonstrate and follow operational procedures between the front-of-the-house and back-of-the-house.
09.09	Demonstrate efficient time and motion techniques.
09.10	Coordinate responsibilities with those of other workstations.
10.0	Apply principles of food science in cooking techniques. The student will be able to:
10.01	Explain common cooking methods (roasting, baking, broiling, sautéing, frying, deep-frying, braising and steaming).
10.02	Explain how taste and aroma combine to give foods their flavors.
10.03	List physical, psychological, cultural and environmental influences on food likes and dislikes.
10.04	Compare and analyze reasons for evaluating food products subjectively and objectively.
10.05	Identify herbs, spices, oils and vinegars and their appropriate use in preparing food products that exhibit and enhance creativity, taste and appearance.
10.06	Explain the role of the five senses in cooking, presenting and eating food.
10.07	Describe how the five basic tastes (salty, sweet, sour, bitter and savory/Umami) can affect the appeal of food.
10.08	Demonstrate and analyze the difference between moist, dry and combination cooking methods.
10.09	Apply basic principles of the chemistry of protein to cooking eggs, dairy and meat products.
10.10	Apply basic principles of the chemistry of food preparation to fruits and vegetables.
10.11	Demonstrate protein fabrication.
11.0	Present food and beverage items to meet creativity aspects as well as quality standards. The student will be able to:
11.01	Explain how color, texture, temperature, and balance affect the visual appeal of plated food.
11.02	Demonstrate platter presentation principles, effective platter layout, and techniques for enhancing food presentation.
11.03	Recognize standards of quality as well as prepare and creatively present: bake station items; pantry station items; fry station items; cold station items; hot station items; beverage items.

CTE Standards and Benchmarks	
11.04	Distinguish between the characteristics of acids and bases.
12.0	Describe and apply the basic principles of nutrition. The student will be able to:
12.01	List the essential nutrients and their functions.
12.02	Interpret food labels.
12.03	Identify different dietary needs.
12.04	List categories of lipids (fats and oils) in food preparation.
12.05	Examine the functions of lipids (fats and oils) in food preparation.
12.06	Analyze the nutritional impact of lipids (fats and oils) in the diet.
12.07	Apply the current USDA guidelines to analyze diets to include special needs.
13.0	Identify and summarize the various cuisines of the world. The student will be able to:
13.01	Identify and distinguish ingredients of the five regions of the United States.
13.02	Identify flavor profiles from different cuisines of the world.
13.03	Compare and contrast the relationship of history and culture in regional cooking.
13.04	Prepare and creatively present menus that reflect different cultures.
13.05	Examine competitive events and opportunities related to the culinary students (e.g., FCCLA, SkillsUSA).

**Florida Department of Education
Student Performance Standards**

Course Title: Culinary Arts 3
Course Number: 8800530
Course Credit: 1

Course Description:

In this course the student will research career opportunities in professional cooking/baking; follow guidelines on food selection, purchasing, and storage; and use communication skills. Students will prepare and present a variety of advanced food products; create centerpieces; and research laws specific to the hospitality industry. Also covered are management skills; how to develop a business plan; and utilization of technology in the workplace. Students will be knowledgeable about food safety manager training/certification training programs that are acceptable in Florida.

CTE Standards and Benchmarks	
14.0	Research college and career advancement opportunities in professional cooking and baking. The student will be able to:
14.01	Describe the elements of a job search as it relates to advancement opportunities.
14.02	Discuss and identify program pathway options in year 4.
14.03	Develop a personal career plan.
14.04	Demonstrate an understanding of entrepreneurship and the economic impact of food and hospitality enterprises on the industry.
14.05	Explain the benefits of membership in professional associations, including student organizations.
14.06	Explore competitions and scholarship opportunities available to the culinary student.
15.0	Follow food identification, selection, purchasing, receiving, storing, and inventory guidelines. The student will be able to:
15.01	Demonstrate ordering, receiving, monitoring, storage and inventory of par stock.
15.02	Identify and select basic food items according to quality standards.
15.03	Select basic food items according to standard qualities.
15.04	Practice portion control and utilize costing procedures.
15.05	Monitor inventory and par stock.
16.0	Practice professional cooking and baking techniques. The student will be able to:

CTE Standards and Benchmarks	
16.01	Recognize standards of quality as well as prepare and creatively present: professional bake station items; professional pantry station items; professional fry station items; and professional hot station items.
16.02	Prepare and creatively present: appetizers; salads; vegetables; fruits; pasta/rice/cereals; soups/stocks/sauces/gravies; meats; poultry; fish/shellfish; breakfast foods; sandwiches; hors d'oeuvres; garnishes; edible centerpieces.
17.0	Apply scientific principles in cooking and baking. The student will be able to:
17.01	Identify the physical and chemical changes in foods that result from the application of heat or cold.
17.02	Identify the effect of various levels of moisture on food.
17.03	Develop artistic talents in the creation of centerpieces from a variety of mediums (cooked sugar, chocolate, marzipan).
17.04	Prepare and creatively present: salads, soups/stocks/sauces, yeast breads, pies and pastries, cakes and icing, specialty desserts, breakfast foods, quick breads, sandwiches, garnishes, edible centerpieces.
18.0	Identify and exhibit management skills. The student will be able to:
18.01	Identify characteristics of an effective manager.
18.02	Examine management skills.
18.03	Demonstrate effective communication skills.
18.04	Use positive reinforcement techniques to increase productivity.
19.0	Comply with laws and regulations specific to the food service and hospitality industry. The student will be able to:
19.01	Identify food service and hospitality laws and regulations to include OSHA and the Americans with Disabilities Act (ADA).
19.02	Demonstrate knowledge of food safety manager training/certification programs that are accredited in Florida.

**Florida Department of Education
Student Performance Standards**

Course Title: Culinary Arts 4 (Track 1-Culinary and Hospitality Management)
Course Number: 8800540
Course Credit: 1

Course Description:

This course provides opportunities for students to apply their acquired knowledge and skills in culinary related scenarios. Track 1 is comprised of Standards 20 - 27 and is a one credit course focused on Culinary and Hospitality Management. This is a culminating course to develop advanced culinary techniques and skills. Students will learn using modern technology and culinary trends. To complete the program, students must complete either Track 1 or Track 2 or Track 3. Students may complete more than one track in this course.

CTE Standards and Benchmarks	
20.0	Analyze history and trends in the culinary and hospitality industry. The student will be able to:
20.01	Discuss history and trends of the culinary and hospitality industry.
20.02	Identify management level careers in the culinary and hospitality industry.
20.03	Identify levels of training required for management careers in culinary and hospitality.
20.04	Construct an organizational chart for lodging or restaurant operations.
20.05	Investigate the impact of the hospitality industry on the global market.
20.06	Explore greening, recycling and sustainability trends in the hospitality industry.
21.0	Demonstrate management skills. The student will be able to:
21.01	Identify characteristics of an effective manager.
21.02	Examine management skills.
21.03	Demonstrate effective communication skills.
21.04	Use positive reinforcement techniques to increase productivity.
21.05	Demonstrate the ability to lead a team in a diverse environment.
22.0	Identify the elements of successful customer service and the role management plays. The student will be able to:

CTE Standards and Benchmarks	
22.01	Anticipate guest needs.
22.02	Evaluate and solve customer complaints.
22.03	Understand how management can empower their employees to handle customer needs.
22.04	Demonstrate problem solving skills.
23.0	Compare and contrast the different types of operations in the culinary and hospitality industry. The student will be able to:
23.01	Compare and contrast commercial and non-commercial segments in food service.
23.02	Explore the role and management pathway of a restaurant manager.
23.03	Explore the role and management pathway of a hotel manager.
23.04	Identify and differentiate the different types of lodging.
23.05	Identify and differentiate the different types of restaurants.
23.06	Examine the different segments in the travel and tourism industry.
24.0	Demonstrate the skills necessary for planning and catering an event. The student will be able to:
24.01	Define catering and describe the type of events that are usually catered.
24.02	Describe and illustrate how common themes are found across catering operations.
24.03	Differentiate between low cost and elaborate events.
24.04	Describe the regulatory restrictions for an approved kitchen and state mandated Food Safety Training requirements for a catering job.
24.05	Research the rule language in Florida Administrative Code related to catering.
24.06	Develop a menu for various events and determine food preparation steps based on the venue.
24.07	Plan and prepare a variety of hors d'oeuvres.
24.08	Demonstrate beverage preparation skills.
24.09	Plan and prepare dishes that lend themselves to various types of events.
24.10	Plan and organize an actual event using acquired skills.

CTE Standards and Benchmarks	
25.0	Utilize cost control. The student will be able to:
25.01	Develop an accounting and record-keeping system using selected software.
25.02	Develop a purchasing, receiving, storing, and inventory system.
25.03	Examine loss prevention factors such as safety, sanitation, food handling, ware handling, maintenance, insurance, and environmental effects.
25.04	Interpret profit and loss statements.
25.05	Identify the responsibility of each individual to be held accountable for profitability.
25.06	Identify elements of a successful organized food service operation in relation to time, energy, money, and space and customer service (role of management; importance of labor costs/food costs; use of computers).
26.0	Utilize human resource management guidelines. The student will be able to:
26.01	Understand and define the roles human resources plays in the food service and hospitality industry.
26.02	Explain the selection and employment process.
26.03	Recognize the importance and financial implications surrounding employee retention.
26.04	Identify and follow local and state rules, regulations, and laws relative to area of operation.
27.0	Explore trends in marketing. The students will be able to:
27.01	Identify major social networks (i.e., Facebook, Twitter) and the networks specific to the industry (yelp*, Foursquare, Urbanspoon, etc.) and explain how they can be applied to a marketing strategy.
27.02	Use technology to become aware of the academic and professional networking opportunities sites provide.
27.03	Identify and explain the four elements of the marketing mix.
27.04	Identify and describe social media marketing practices such as phishing and explain how these practices are used in the culinary/hospitality fields.
28.0	Describe the requirements to be a successful entrepreneur and small business owner in the hospitality industry. The student will be able to:
28.01	Describe the importance of entrepreneurship to the American Economy.
28.02	Distinguish between the advantages and disadvantages of business ownership.
28.03	Evaluate the risks involved in ownership of a business.

CTE Standards and Benchmarks	
28.04	Identify the business skills needed to operate a small business efficiently and effectively.
28.05	Research the start-up process for a small business (including regulatory issues, corporate structure, financing and insurance needs).
28.06	Create a business model for a food service or hospitality operation.

**Florida Department of Education
Student Performance Standards**

Course Title: Culinary Arts 4 (Track 2-Advanced Baking Techniques)
Course Number: 8800550
Course Credit: 1

Course Description:

This course provides opportunities for students to apply their acquired knowledge and skills in culinary related scenarios. This feature enables instruction in three key culinary disciplines. Track 2 is comprised of Standards 28 - 38 and is a one credit course focused on Advanced Baking Techniques. This is a culminating course to develop advanced culinary techniques and skills. Students will learn using modern technology and culinary trends. To complete the program, students must complete either Track 1 or Track 2 or Track 3. Students may complete more than one track in this course.

CTE Standards and Benchmarks	
29.0	Describe the history and culture of baking. The student will be able to:
29.01	Trace inception and development of Baking and Pastry Arts industry.
29.02	Identify trends in the Baking and Pastry Arts industry.
29.03	Identify significant historical and cultural events and milestones in the Baking and Pastry Arts industry.
30.0	Identify careers in Baking and Pastry Arts. The student will be able to:
30.01	Explore internships and entrepreneurship opportunities in Baking and Pastry Arts.
30.02	Research and present information on a career in Baking and Pastry Arts to include roles, responsibilities, education and training pathways and requirements.
30.03	Summarize career progression in Baking and Pastry Arts industry.
31.0	Demonstrate an understanding of common Baking and Pastry Arts vocabulary. The students will be able to:
31.01	Define and recall common terms used in Baking and Pastry Arts.
31.02	Apply common abbreviations and equivalents used in baking.
31.03	Understand the difference and relationship of American and Classical cuisine.
32.0	Identify tools and equipment used in Baking and Pastry Arts. The student will be able to:

CTE Standards and Benchmarks	
32.01	Identify and demonstrate use and care of commonly used measuring utensils.
32.02	Identify and demonstrate use and care of commonly used tools and equipment.
32.03	Maintain maintenance logs.
32.04	Apply proper knife skills.
32.05	Recognize styles and various forms of Baking and Pastry Arts technology.
33.0	Demonstrate baking mathematics knowledge and skills. The student will be able to:
33.01	Show proficiency in using Bakers Percentage in standardized baking recipes.
34.0	Shows proficiency in imperial measurements and metric units. The student will be able to:
34.01	Understand the difference between recipes and formulas.
34.02	Proficient in converting recipes and formulas.
35.0	Prepare nutritious food for individuals with special dietary needs. The student will be able to:
35.01	Develop baking products for populations with special dietary needs and allergens.
35.02	Develop baking products with alternative sweeteners, flours and fat alternatives.
36.0	Demonstrate standard preparation skills for baked goods. The student will be able to:
36.01	Identify and select baking ingredients.
36.02	Store and handle baking products.
36.03	Prepare baked products using mixes.
36.04	Prepare sweet and savory pies.
36.05	Prepare and bake quick breads.
36.06	Prepare and bake yeast breads.
36.07	Prepare, bake and present assorted cakes.
36.08	Prepare syrups, sweet sauces, jams, jellies, preserves and gelatins.

CTE Standards and Benchmarks	
36.09	Prepare and apply butter creams and icings.
36.10	Prepare baked products that are “healthy” through the use of alternative ingredients.
36.11	Define gluten sensitivity and the resulting physical conditions.
36.12	Identify foods that contain gluten and foods that are gluten-free.
36.13	Identify and select basic ingredients used for gluten-free baking (including organic ingredients and non-gluten flours).
36.14	Prepare and present individual production plated desserts.
36.15	Prepare a variety of ice cream, sorbet and frozen desserts.
36.16	Prepare a variety of chocolates and candies.
37.0	Explain the connections and interdependency of food and science. The student will be able to:
37.01	Compare and contrast the reactions of different chemicals on foods.
37.02	Evaluate how the eventual flavor and texture of food ingredients is affected by the cooking method used.
37.03	Create a chart to do a food sensory analysis.
37.04	Define molecular gastronomy and research the origin of the term.
37.05	Distinguish between culinary definitions and culinary precisions.
37.06	Create, prepare, and present an original recipe using the concepts of molecular gastronomy.
37.07	Research top allergens, analyze their effect on persons with food allergies, and how to control allergy contamination in the kitchen.
38.0	Demonstrate advanced preparation skills for baking and pastry products. The student will be able to:
38.01	Identify and select advanced baking and dessert ingredients.
38.02	Store and handle advanced baking and dessert products.
38.03	Prepare advanced baked products (pies, breads, pastries, etc.)
38.04	Prepare, bake and present specialty cakes.
38.05	Demonstrate advanced decorating techniques using various frostings/icings.

CTE Standards and Benchmarks	
38.06	Prepare gluten-free products using appropriate blending and mixing techniques to achieve high-quality taste, texture, and appearance.
38.07	Demonstrate strategies used in communicating with customers who have allergies.
39.0	Apply the knowledge and skills necessary to successfully cater an event. The student will be able to:
39.01	Recognize an RFP (Request for Proposal) and how to send one out.
39.02	Develop a proposal fitting the consumer’s needs and desires to a budget, site selection, permits, transportation, parking, theme development, audio/visual needs, security, banquet planning (food or menu development), seating, rental equipment, emergency plans, health care and cleanup.
39.03	Use acquired knowledge to obtain Food Safety Manager Certificate that is valid in Florida.
39.04	Assess the impact on food preparation and organization for on premise vs. off-premise events.
39.05	Develop a menu and pricing, cost controls and consumer advisories applicable to a catering job.
39.06	Plan and prepare dishes used in different catering styles demonstrating ease in transportation and service.
39.07	Describe how to staff an event.
39.08	Illustrate various room set-ups for different catering functions, including proper tools, motion techniques, and staff needed.
39.09	Create a plan for floral arrangements, rental equipment requirements, what to do with leftovers, and target marketing for a catering job.
40.0	Demonstrate creativity in presenting baked products. The student will be able to:
40.01	Identify criteria for achieving an aesthetically pleasing plate.
40.02	Conduct sensory evaluations of plated presentations.
40.03	Practice various garnishing tools.
40.04	Create an edible centerpiece for presentation and assessment.

**Florida Department of Education
Student Performance Standards**

Course Title: Culinary Arts 4 (Track 3-Gastronomy and Garde Manger Skills)
Course Number: 8800560
Course Credit: 1

Course Description:

This course provides opportunities for students to apply their acquired knowledge and skills in culinary related scenarios. This feature enables instruction in three key culinary disciplines. Track 3 is comprised of Standards 39 – 45 and is a one credit course focused on Gastronomy and Garde Manger Skills. This is a culminating course to develop advanced culinary techniques and skills. Students will learn using modern technology and culinary trends. To complete the program, students must complete either Track 1 or Track 2 or Track 3. Students may complete more than one track in this course.

CTE Standards and Benchmarks	
41.0	Exhibit the ability to follow state mandated guidelines for food service. The student will be able to:
41.01	Demonstrate proper personal hygiene (hand washing; use of gloves; grooming; proper hair restraints, closed-toe shoes, aprons, uniforms).
41.02	Demonstrate proper food handling techniques (thermometer use; thawing and freezing methods; internal cooking temperatures) utilizing HACCP industry safety and sanitation procedures.
41.03	Describe symptoms of food borne illness and how food borne illness can be prevented.
41.04	Use previous knowledge from acquiring the food safety manager certification that is accredited in Florida.
41.05	Identify and utilize first-aid procedures for accidents and injuries.
42.0	Utilize industry related technology to enhance methodology and efficiency of preparation. The student will be able to:
42.01	Create and present a selection of designs for development of a hospitality business using appropriate software applications.
42.02	Recognize the resources available to the public and private sector regarding the science behind menu development analyzing demographics for targeted advertising and the value of 'key word' identifiers for search engines.
42.03	Develop various restaurant menus using appropriate software applications.
42.04	Design advertisements for hospitality services for different media using a variety of software applications.
42.05	Use technology to operate a restaurant including inventory, costing, budgeting, and tracking number of guests and profit.
43.0	Examine the interconnections and interdependency of ecological, social, and economic systems. The student will be able to:

43.01	Explain sustainability as it relates to food production and consumption.
43.02	Develop and apply the knowledge, perspective, vision, skills, and habits necessary to make decisions and take actions to promote sustainability in the kitchen.
43.03	Explain how foods are cultivated by various natural processes.
43.04	Describe reasonable stewardship regarding best practices for Green programs including energy efficiency through energy-saving equipment, wastewater controls, product purchasing and recycling.
43.05	Explain how energy saving measures increase profitability of a food service establishment.
43.06	Describe reasonable stewardship regarding best practices for Sustainability programs including seafood sustainability (aquaculture, fishery management – recreational and commercial); product purchasing awareness; and used cooking oil (grease management, biodiesel initiatives).
43.07	Describe current trends related to sustainability (local, slow food movement, etc.).
43.08	Prepare seasonal, locally sourced farm to table foods.
43.09	Define the characteristics of the basic composition of a plated meal.
43.10	Explain and analyze the FDA Organic guidelines.
43.11	Differentiate and explain commercially processed food from organic, heirloom or artisanal products.
43.12	Describe the short term and long term benefits of clean eating on the body and society.
43.13	Demonstrate strategies used in communicating with customers who have allergies.
44.0	Demonstrate advanced preparation skills for various proteins. The student will be able to:
44.01	Research and report on the quality grading process for meats.
44.02	Identify and prepare cuts of meat that would be suitable for moist/dry/combo cooking techniques.
44.03	Describe the characteristics of organic meats.
44.04	Identify Game/Exotic meats.
44.05	Describe the process of aging meats.
44.06	Prepare steaks, chops, and roasts.
44.07	Prepare proteins using FDA Food Code: https://www.fda.gov/food/retail-food-protection/fda-food-code .
45.0	Demonstrate buffet food preparation skills. The student will be able to:

45.01	Prepare hot and cold beverages.
45.02	Prepare a variety of condiments, accompaniments, salad dressings, cold sauces and garnishes.
45.03	Prepare cold sandwiches.
45.04	Prepare sliced meats for a cold buffet.
45.05	Prepare bound salads.
45.06	Prepare cheese boards, canapés, and cold hors d’oeuvres
45.07	Plan, set up, and serve buffets.
45.08	Select, use and maintain buffet equipment and utensils.
45.09	Identify terrines, galantines, ballotine, charcuterie and forcemeats.
45.10	Demonstrate pickling, canning, curing and fermentation techniques.
46.0	Apply the knowledge and skills necessary to successfully cater an event. The student will be able to:
46.01	Recognize an RFP (Request for Proposal) and how to send one out.
46.02	Develop a proposal fitting the consumer’s needs and desires to a budget, site selection, permits, transportation, parking, theme development, audio/visual needs, security, banquet planning (food or menu development), seating, rental equipment, emergency plans, health care and cleanup.
46.03	Use acquired knowledge to obtain Food Safety Manager Certification that is valid in Florida.
46.04	Assess the impact on food preparation and organization for on premise vs. off-premise events.
46.05	Develop a menu and pricing, cost controls and consumer advisories applicable to a catering job.
46.06	Plan and prepare dishes used in different catering styles demonstrating ease in transportation and service.
46.07	Describe how to staff an event.
46.08	Illustrate various room set-ups for different catering functions, including proper tools, motion techniques, and staff needed.
46.09	Create a plan for floral arrangements, rental equipment requirements, what to do with leftovers, and target marketing for a catering job.
46.10	Plan, organize, and cater an actual event using acquired skills.
47.0	Develop and implement a capstone project. The student will be able to:

47.01	Create a menu (may be gourmet or thematic) using original recipes or references must be cited. Manual must be printed and presented professionally.
47.02	Plan for use of appropriate tableware, linens and decorations.
47.03	Develop purchase orders for all food items, supplies, tools and equipment including vendors and prices.
47.04	Create a timeline allowing sufficient time for preparation, service, clean up and include notated HACCP control points.
47.05	Prepare a cost analysis for the event – cost per person and per menu item.
47.06	Create a meal and present it to a panel.
47.07	Deliver a 5-10 minute oral presentation on this project utilizing at least one form of multi-media technology.
47.08	Photograph or videotape all skills being demonstrated.

Additional Information

Laboratory Activities

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools and equipment, as well as, experimental, quality, and safety procedures are an integral part of this career and technical program/course. Laboratory investigations benefit all students by developing an understanding of the complexity and ambiguity of empirical work, as well as the skills required to manage, operate, calibrate and troubleshoot equipment/tools used to make observations. Students understand measurement error; and have the skills to aggregate, interpret, and present the resulting data. Equipment and supplies should be provided to enhance hands-on experiences for students.

Florida Standards for English Language Development (ELD)

English language learners communicate for social and instructional purposes within the school setting. ELD.K12.ELL.SI.1

English Language Development (ELD) Standards Special Notes:

Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate for social and instructional purposes within the school setting. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills. To access an ELL supporting document which delineates performance definitions and descriptors, please click on the following link: <http://www.cpalms.org/uploads/docs/standards/eld/SI.pdf>.

For additional information on the development and implementation of the ELD standards, please contact the Bureau of Student Achievement through Language Acquisition at sala@fldoe.org.

Special Notes

The occupational standards and benchmarks outlined in this secondary program correlate to the standards and benchmarks of the postsecondary program with the same Classification of Instructional Programs (CIP) number.

In order to complete the program and sit for the industry certification test, National ProStart Certificate of Achievement, a student must complete Culinary Arts 1, Culinary Arts 2, and Culinary Arts 3.

Career and Technical Student Organization (CTSO)

Family, Career and Community Leaders of America (FCCLA) and SkillsUSA are the intercurricular career and technical student organizations providing leadership training and reinforcing specific career and technical skills. Career and Technical Student Organizations provide activities for students as an integral part of the instruction offered.

Cooperative Training – OJT

On-the-job training is appropriate but not required for this program. Whenever offered, the rules, guidelines, and requirements specified in the OJT framework apply.

Accommodations

Federal and state legislation requires the provision of accommodations for students with disabilities as identified on the secondary student's Individual Educational Plan (IEP) or 504 plan or postsecondary student's accommodations' plan to meet individual needs and ensure equal access. Accommodations change the way the student is instructed. Students with disabilities may need accommodations in such areas as instructional methods and materials, assignments and assessments, time demands and schedules, learning environment, assistive technology and special communication systems. Documentation of the accommodations requested and provided should be maintained in a confidential file.

In addition to accommodations, some secondary students with disabilities (students with an IEP served in Exceptional Student Education (ESE)) will need modifications to meet their needs. Modifications change the outcomes or what the student is expected to learn, e.g., modifying the curriculum of a secondary career and technical education course. Note: postsecondary curriculum and regulated secondary programs cannot be modified.

Some secondary students with disabilities (ESE) may need additional time (i.e., longer than the regular school year), to master the student performance standards associated with a regular course or a modified course. If needed, a student may enroll in the same career and technical course more than once. Documentation should be included in the IEP that clearly indicates that it is anticipated that the student may need an additional year to complete a Career and Technical Education (CTE) course. The student should work on different competencies and new applications of competencies each year toward completion of the CTE course. After achieving the competencies identified for the year, the student earns credit for the course. It is important to ensure that credits earned by students are reported accurately. The district's information system must be designed to accept multiple credits for the same course number for eligible students with disabilities.

Additional Resources

For additional information regarding articulation agreements, Bright Futures Scholarships, Fine Arts/Practical Arts Credit and Equivalent Mathematics and Equally Rigorous Science Courses please refer to:

<http://www.fldoe.org/academics/career-adult-edu/career-tech-edu/program-resources.stml>.