

Culinary Arts III

Primary Career Cluster:	Hospitality & Tourism
Course Contact:	CTEStandards@tn.gov
Course Code(s):	C16H08
Prerequisite(s):	<i>Culinary Arts I</i> (C16H06) and/or <i>Culinary Arts II</i> (C16H07)
Credit:	1
Grade Level:	11-12
Focus Elective - Graduation Requirements:	This course satisfies one of three credits required for an elective focus when taken in conjunction with other Hospitality & Tourism courses.
POS Concentrator:	This course satisfies one out of two required courses to meet the Perkins V concentrator definition, when taken in sequence in an approved program of study.
Programs of Study and Sequence:	This is the third course in the <i>Culinary Arts</i> program of study.
Aligned Student Organization(s):	Family, Career and Community Leaders of America (FCCLA): http://www.tennesseefccla.org/ SkillsUSA: http://tnskillsusa.com/
Promoted Tennessee Student Industry Credentials:	Credentials are aligned with postsecondary and employment opportunities and with the competencies and skills that students acquire through their selected program of study. For a listing of promoted student industry credentials, visit https://www.tn.gov/education/career-and-technical-education/student-industry-certification.html .
Teacher Endorsement(s):	(050 and 060), (050 and 453), (051 and 060), (051 and 453), (154 and 155), (450 and 060), (450 and 453), 562, 563, 564, 566, 730
Required Teacher Certifications/Training:	ServSafe Food Manager, National Registry of Food Safety Professionals, Certified Culinary Educator (CCE) Certification, or Certified Secondary Culinary Educator (CSCE) Certification
Teacher Resources:	https://www.tn.gov/education/career-and-technical-education/career-clusters/cte-cluster-hospitality-tourism.html Best for All Central: https://bestforall.tnedu.gov/

Course-at-a-Glance

CTE courses provide students with an opportunity to develop specific academic, technical, and 21st century skills necessary to be successful in career and in life. In pursuit of ensuring every student in Tennessee achieves this level of success, we begin with rigorous course standards which feed into intentionally designed programs of study.

Students engage in industry relevant content through general education integration and experiences such as career & technical student organizations (CTSO) and work-based learning (WBL). Through these experiences, students are immersed with industry standard content and technology, solve industry-based problems, meaningfully interact with industry professionals and use/produce industry specific, informational texts.

Using a Career and Technical Student Organization (CTSO) in Your Classroom

CTSOs are a great resource to put classroom learning into real-life experiences for your students through classroom, regional, state, and national competitions, and leadership opportunities. Below are CTSO connections for this course, note this is not an exhaustive list.

- Participate in the CTSO Fall Leadership Conference, DECA and FCCLA Fall Leadership Camps, FCCLA District STAR Events, SkillsUSA State Leadership and Skills Conference, and the DECA Emerging Leader Summit to engage with peers, demonstrate logical thought processes, and develop industry specific skills that involve teamwork and project management
- Participate in FCCLA and SkillsUSA career competitive events that highlight career development, including career investigation, interviewing, job skills demonstrations, career pathways showcase, and employment application process (ADA)
- Participate in DECA competitive events such as Food Marketing, Quick Serve Restaurant Management Series, Restaurant and Food Service Management, and Virtual Business Challenge – Restaurant
- Participate in FCCLA and SkillsUSA competitive events such as Applied Math for Culinary Management, Baking and Pastry, Culinary Arts, Food Innovations, Nutrition and Wellness, and Commercial Baking.

For more ideas and information, visit Tennessee DECA at <https://www.decatn.org/>, Tennessee FCCLA at <https://www.tennesseefccla.org/>, and Tennessee SkillsUSA at [skillsusatn.org](https://www.skillsusatn.org/).

Using Work-based Learning (WBL) in Your Classroom

Sustained and coordinated activities that relate to the course content are the key to successful work-based learning. Possible activities for this course include the following. This is not an exhaustive list.

- **Standards 1.1-1.2** | Workplace tours and job shadowing of local restaurants or other commercial kitchen facilities to facilitate students' understanding of safety and sanitation in the foodservice industry and provide students with hands-on experience.
- **Standard 2.1-2.2** | On-the-job training as part of recommended 30 hours in commercial kitchen laboratory to develop students' mastery of presetting a dining area.
- **Standards 4.1-4.3** | Technical mentoring through online interactions with foodservice industry professionals to develop students' mastery of bakeshop basics.
- **Standards 5.1-5.8** | On-the-job training in food preparation, including dairy and eggs, meats and poultry, cookies, and pies and tarts, as part of recommended 30 hours in commercial kitchen laboratory and/or compensated internship connected to curriculum at a local restaurant or other foodservice provider.

Course Description

Culinary Arts III is an advanced course intended to further equip students with the skills and knowledge needed for various culinary careers. Students will gain experience in commercial food production and service operations, while preparing for further training at the postsecondary level. Upon completion of the course, students will be proficient in commercial kitchen safety and sanitation, dining room service, food preparation and presentation, bakeshop preparation skills and equipment, and advanced cooking principles. Students will create artifacts to include in their portfolios. **The course should also include a suggested 30 hours in a commercial kitchen laboratory.**

Course Standards

1. Food Safety & Sanitation

- 1.1 HACCP, FDA, & USDA: Analyze the concepts and principles of the **Hazard Analysis and Critical Control Points (HACCP)** from the **Food and Drug Administration (FDA)** and the **U.S. Department of Agriculture (USDA)** for meats and seafood.
- 1.2 Safety & Sanitation Procedures: Identify, practice, and critique **safety** and **sanitation procedures** related to handling, preparing, storing, and serving food. Review and demonstrate common laboratory safety procedures, including prevention and control procedures and personal hygiene expectations. Incorporate safety procedures and complete safety test with 100 percent accuracy.

2. Dining Room Service

- 2.1 Service Styles: Compare various **service styles** (e.g., buffet, American service, Russian service, and French service) used in modern-day dining rooms. Evaluate the appropriate style for a given audience, setting, or event.
- 2.2 Dining Area Presentation: Properly **preset a dining area** according to one of the commonly used **place settings** (i.e. American, a la carte, and banquet). Evaluate different **napkin folding** styles and techniques and then demonstrate one.

3. Food Preparation

For each of the following food types, prepare a "cheat sheet" to include as part of a food preparation index in the student portfolio. The index will address forms, preparation methods, classification and grading processes, receiving and storage practices, and a sample standardized recipe and photograph of the prepared dish. For each entry, draw on relevant culinary research and guidelines from regulatory agencies and organizations to support information included in the index.

- 3.1 Milk Composition: Synthesize research from the **National Dairy Council** to determine the **composition of milk**. Summarize the percentage of required **butterfat content** in various

milk products and high butterfat dairy products. Describe which product is best for different functions in the kitchen and outline guiding principles when cooking with milk.

- 3.2 Common Milk Products: Identify the three most common **milk products** (i.e. evaporated milk, sweetened condensed milk, and dried milk powder). Compare the different **concentrations** and **compositions** of each. Compile a collection of recipes that features the use of each product (independently or in combination).
- 3.3 Cultured Dairy Products: Research the history and use of **cultured dairy products** from early civilizations to the present. Outline the processes used in culturing, noting the types of bacteria that create each dairy product. Compare the taste, ingredients, and cost of different cultured dairy products.
- 3.4 Butter & Margarine: Compare the **chemical properties** of **butter** and **margarine**, citing evidence of molecular structure, nutritional facts, and nutritional claims. Justify why foodservice kitchens use clarified butter in place of butter substitutes. Demonstrate the multistep process for **clarifying butter**, noting temperature and time during each step.
- 3.5 Cheese-Making: Research the **cheese making process**, describing how various stages of the process impact the flavor, shape, and color of cheese. Compare the roles of coagulants, bacteria, curds, and whey in different cheese types (i.e. fresh, soft, medium, firm, hard, blue, processed, and stretched cheese). Make a cheese or **yogurt** product by following a multistep recipe.
- 3.6 Eggs: Summarize the anatomy of **eggs** and categorize the forms, grades, and sizes for purchasing eggs. Evaluate **storage procedures**, especially the temperature and time. Compile recipes that highlight the diverse role of eggs in commercial kitchens.
- 3.7 Poultry & Livestock: Identify major **species** and **breeds** of **livestock** and **poultry** used for **meat production**. Describe the **composition** of the meat (i.e. muscle, connective tissues, fat, and bones) and its impact on the quality analysis of the meat, including marbling. Summarize the effects of **aging** on the texture of meats and poultry.
- 3.8 USDA Inspection & Grading Procedures: Analyze the United States Department of Agriculture's (USDA) **meat inspection and grading procedures** and summarize how meats are graded, classified, and inspected. Examine how meat carcasses are cut into **primal** and **subprimal cuts** of meats, outlining the importance of **uniform portioning**.
- 3.9 Poultry Classification: Summarize the **classification of poultry** by bird type, size, and age in the foodservice industry. Explain how the size of poultry items affects the portion control, tenderness, and cost of dishes. Calculate the price of a whole bird compared to the cost of purchasing individual pieces by fabricating a whole chicken.

3.10 Mechanical & Chemical Tenderizers: Compare **mechanical and chemical tenderizers** used in **meat preparation**. Discuss how the cut of meat influences the type of tenderizer and cooking method used. Develop a corresponding data table for the proper cooking methods of each cut.

4. Bakeshop Basics

4.1 Hand Tools & Smallwares: Describe and demonstrate the use of **hand tools and smallwares** in the **bakeshop** area of the commercial kitchen. Identify the functions, cleaning procedures, storage, and examples of proper use of tools in commercial foodservice.

4.2 Mixing Methods: Compare **mixing methods** used in commercial kitchens. Demonstrate and practice these methods according to the ingredient and desired product. Mixing methods include,:

- a. Beat
- b. Blend
- c. Cream
- d. Cut in
- e. Fold
- f. Knead
- g. Whip

4.3 Baking Ingredients: Summarize characteristics of **baking ingredients** in commercial kitchens and describe the physical properties of each:

- a. Flour (high-gluten, bread flour, all-purpose, pastry, cake, whole wheat, self-rising, rye flour)
- b. Sweeteners (granulated sugar, powdered sugar, brown sugar, molasses, honey, and corn syrup)
- c. Shortening
- d. Leavening agents (chemical and yeast)
- e. Chocolate (powder, butter, and coating)

5. Bakeshop Preparation

5.1 Bread & Batter Types: Summarize the characteristics of **yeast breads, quick breads, and traditional batters**, noting the differences in leaveners, preparation/mixing methods, and baking methods. Outline of the scientific processes that occur in mixing, kneading, and proofing yeast breads.

5.2 Bread Products: Collect recipes that illustrate the **diversity of bread products** in commercial kitchens. Properly prepare one or more of the selected recipes.

5.3 Cookie Mixing Methods: Practice the two main **mixing methods** (one-stage and creaming) for **cookies**, notating the multiple steps involved. Analyze the **forming techniques** of

cookies (i.e. drop, rolled, spritz/pressed, sheet, icebox, and bar) and describe how each contributes to the cookie's overall appearance, flavor, and texture.

5.4 Cookie Recipes: Collect **cookie recipes** and then create an original recipe, focusing on ingredient proportions, flavor profile, and presentation.

5.5 Pies & Tarts: Identify the **qualities of pies and tarts**. Research different **piecrust** recipes and the **3-2-1 dough method**, paying close attention to the ingredients, temperature, and mixing methods, and rolling and forming steps. Evaluate various pie crusts using different preparation methods.

5.6 Pie Fillings: Summarize types and characteristics of **pie fillings** (i.e. fruit, liquid, cream, and chiffon fillings). Synthesize the chemical changes caused by certain thickening agents.

Examples of **thickeners** include:

- a. Cornstarch in fruit pies
- b. Arrowroot in fruit pies
- c. Eggs in liquid fillings

5.7 Fruit Tart Recipes: Modify a **fruit tart recipe** to create an original multistep fruit tart recipe that follows proper safety guidelines. Recommend how to select fruit for **garnishing**.

Support recommendations and explain the process of **oxidation** and the importance of **acidulation**.

5.8 In-House & Convenience Bakeshop Products: Evaluate **in-house made** and **convenience bakeshop** products for taste, price, and appearance. Compare the cost of the convenience product to in-house products.

The following artifacts will reside in the student's portfolio:

- Safety and Sanitation assignments
- Dining Room Service artifacts
- Collection of recipes
- Dairy and eggs artifacts
- Meat and poultry artifacts
- Bakeshop basic artifacts
- Pictures of skills

Standards Alignment Notes

*References to other standards include:

- P21: Partnership for 21st Century Skills [Framework for 21st Century Learning](#)
 - Note: While not all standards are specifically aligned, teachers will find the framework helpful for setting expectations for student behavior in their classroom and practicing specific career readiness skills.