

Course: Advanced Culinary Arts
PEIMS Code: N1302265
Abbreviation: ADCULART
Grade Level(s): 10-12
Number of Credits: 1-2

Course description:

Advanced Culinary Arts will extend content and enhance skills introduced in culinary arts by infusing high-level, industry-driven content to prepare students for success in higher education, certifications, and/or immediate employment. This mid-level course will increase students' depth of knowledge and experience in specific areas including baking, protein selection, advanced nutrition, and sustainability. *Advanced Culinary Arts* students will trace the origin of food recipe and preparation. They will be able to apply the USDA regulatory method of grading food as they select items for production. Students will differentiate between front and back of the house roles and how these areas work together to create a successful operation. Students will prepare for national certifications that will provide them an advantage for scholarships, college admittance, and employment.

Essential knowledge and skills:

(1) The student researches, analyzes, and designs a path to achieve career goals. The student examines jobs available in the foodservice industry and accesses career opportunities. The student is expected to:

- (A) demonstrate major duties and qualifications for all staff and managerial positions to facilitate selection of career choices in the foodservice industry
- (B) model proper interview techniques
- (C) critique personal and short term goals
- (D) create an online portfolio

(2) The student will evaluate nontraditional foodservice careers including, but not limited to, food photographer, food stylist, corporate research and development chef, food writer, and independent consultant. The student is expected to:

- (A) identify salary, skill level, and upward mobility aspects of specific careers
- (B) research, write, and present job descriptions to peers



(3) The student evaluates global cuisines including the culture, history, and indigenous ingredients to create international recipes. The student is expected to:

- (A) replicate advanced moist and dry cooking techniques from the seven continents
- (B) synthesize indigenous ingredients from global cuisine to create fusion dishes

(4) The student will distinguish sustainability in the restaurant industry and its effect on the planet and profitability. The student is expected to:

- (A) examine methods for water conservation and assess profitability when applied across sectors in the restaurant industry
- (B) defend practices for energy conservation and assess its profitability when applied across sectors in the restaurant industry
- (C) identify waste management options to promote sustainability
- (D) evaluate current sustainable food practices
- (E) redesign an existing restaurant concept using sustainable resources, calculate current and revised profit and loss, and determine change in profitability

(5) The student will demonstrate comprehensive meat and protein (beef, veal, pork lamb and poultry) product knowledge and be able to discriminate based on established quality standards and profitability. The student is expected to:

- (A) categorize grading and classifications
- (B) explain factors contributing to tenderness and flavor
- (C) summarize elements of USDA inspection and grading
- (D) explain how retail cuts come to market
- (E) demonstrate familiarity with the NAMP guide and its importance in purchasing
- (F) create a specification sheet for ordering meat products
- (G) develop model profitable purchasing guidelines

(6) The student will demonstrate comprehensive fish and shellfish product knowledge and be able to discriminate based on established quality standards and profitability. The student is expected to:

- (A) categorize classifications of fish and shellfish

- (B) explain factors contributing to freshness and flavor
 - (C) explain how retail seafood comes to market
 - (D) demonstrate the ability to fabricate round, flat, and fin fish
 - (E) demonstrate competency in respect to receiving guidelines, product classifications, and their importance in purchasing seafood
 - (F) create a specification sheet for ordering fish and shellfish products
- (7) The student will demonstrate comprehensive produce product knowledge and be able to discriminate based on established quality standards and profitability. The student is expected to:
- (A) compare classifications and types of commonly available produce and identify factors contributing to cost and quality
 - (B) identify elements of government grading
 - (C) explain how to examine selected produce for quality
 - (D) demonstrate familiarity with packaging guidelines
 - (E) develop a system for ordering, receiving, and storing produce
- (8) The student understands advanced baking, confection, and fondants principles. The student is expected to:
- (A) differentiate how various types of bread crusts are created through fermentation, proofing, baking temperatures, and humidity
 - (B) prepare soft, hard, and artisanal breads through proper baking techniques
 - (C) compare different types of dough and pastry crusts
 - (D) model the mixing methods and factors that influence tenderness and flakiness of dough and pastry crust
 - (E) correctly utilize professional food preparation equipment and operation including commercial-grade mixers and food processors
 - (F) differentiate between the types of advanced confections and components of each by taste and texture
 - (G) model methods of preparation in each type of confection



(H) demonstrate chocolate as a major ingredient in dessert/food production

(I) compose original standardized recipes

(9) The student will use a scientific approach to validate how advanced nutrition concepts affect marketing, menu engineering, and profitability. The student is expected to:

(A) demonstrate a working knowledge of the human digestive system

(B) analyze why carbohydrates, vitamins, fiber, gluten, minerals, proteins, water, and fats play a major role in a healthy diet

(C) explain the role of carbohydrates, vitamins, fiber, gluten, minerals, proteins, water, and fats in digestion and metabolism

(D) compare and contrast vitamin supplements with vitamins occurring naturally in foods

(E) research and develop menus for populations with special dietary needs

(10) The student will analyze the components of cost controls in a foodservice operation and develop a plan to manage those costs. The student is expected to:

(A) differentiate between the major costs in foodservice: food, beverage, and labor

(B) design a cost management system across sectors of the foodservice industry

(C) validate the effect of controlling costs on profitability, return on investment, and success of a foodservice business

(D) differentiate the concept of fixed costs, variable costs, and controllable costs, and create scenarios that can increase profitability in these areas

(11) The student will determine how successful marketing impacts a foodservice operation. The student is expected to:

(A) explain marketing, product, service, presentation, and communication mixes

(B) generate a marketing plan for multiple foodservice operations

(C) evaluate the marketing plans based on differentiating demographics

(D) examine market analysis and predict impact in current economy

(E) identify marketing communication formats across multiple platforms

(F) design the menu as a marketing tool

Description of specific student needs this course is designed to meet:

In many districts, the culinary arts programs are expanding beyond expectations and allowing for a comprehensive high school culinary program spanning four years. *Advanced Culinary Arts* will provide students a solid foundation, articulate with partner colleges and give them a competitive advantage over those who did not take the class, and bridge the substantial gaps between what employers need and what students can master in earlier courses. The *Advanced Culinary Arts* class follows the “advanced” courses format found in many of the sixteen career clusters.

Major resources and materials:

Professional Cooking by Wayne Gisslen or similar resource

Foundations of Restaurant Management & Culinary Arts: Level 2, National Restaurant Association or similar resource

Required activities and sample optional activities to be used:

The student will work in a commercial kitchen and bakery to complete labs in global cuisines, assorted baking, dairy, produce, and meat categories. Projects for various menu types, marketing, and sustainability, along with a digital portfolio are important components of the course.

Methods for evaluating student outcomes:

Research projects, practical exams, presentations, exams, and participation level

Teacher qualifications:

Appropriate Texas Teacher Certification for Culinary Arts. Three years of industry experience is preferred.

Additional information: