

ADVANCED CULINARY ARTS

Advanced Culinary Arts prepares students for occupations and higher education programs of study related to the entire spectrum of careers in the food industry, including (but not limited to) food production and services; food science, dietetics, and nutrition; and baking and pastry arts. Major topics for this advanced course include: basic baking theory and skills, introduction to breads, introduction to pastry arts, nutrition, nutrition accommodations and adaptations, cost control and purchasing, and current marketing and trends. Instruction and intensive laboratory experiences include commercial applications of principles of nutrition, aesthetic, and sanitary selection; purchasing, storage, preparation, and service of food and food products; using and maintaining related tools and equipment; baking and pastry arts skills; managing operations in food service, food science, or hospitality establishments; providing for the dietary needs of persons with special requirements; and related research, development, and testing. Intensive laboratory experiences with commercial applications are a required component of this course of study. Student laboratory experiences may be either school-based or "on-the-job" or a combination of the two. *Advanced Culinary Arts* builds upon skills and techniques learned in *Culinary Arts and Hospitality Management*, which must be successfully completed before enrolling in this advanced course. Work-based experiences in the food industry are strongly encouraged. A standards-based plan guides the students' laboratory and work-based experiences. Students are monitored in these experiences by the *Advanced Culinary Arts* teacher. Articulation with postsecondary programs is encouraged.

- DOE Code: 5436
- Recommended Grade Level: Grade 12
- Recommended Prerequisites: Culinary Arts and Hospitality Management
- Credits: 1-3 credits per semester, maximum of 6 credits
- Counts as a Directed Elective or Elective for the General, Core 40, Core 40 with Academic Honors and Core 40 with Technical Honors diplomas
- This course is aligned with the following Post-Secondary courses for Dual Credit:
 - Ivy Tech
 - HOSP 104 Nutrition
 - HOSP 105 Introduction to Baking
 - Vincennes University
 - REST 100 Intro to Hosp Management
 - REST 155 Quantity Food Purchasing

Dual Credit

This course provides the opportunity for dual credit for students who meet postsecondary requirements for earning dual credit and successfully complete the dual credit requirements of this course.

Application of Content and Multiple Hour Offerings

Intensive laboratory applications are a component of this course and may be either school based or work based or a combination of the two. Work-based learning experiences should be in a closely related industry setting. Instructors shall have a standards-based training plan for students participating in work-based learning experiences. When a course is offered for multiple hours per semester, the amount of laboratory application or work-based learning needs to be increased proportionally.

Career and Technical Student Organizations (CTSOs)

Career and Technical Student Organizations are considered a powerful instructional tool when integrated into Career and Technical Education programs. They enhance the knowledge and skills students learn in a course by allowing a student to participate in a unique program of career and leadership development. Students should be encouraged to participate in FCCLA (Family, Career and Community Leaders of America), the CTSO for this area.

Suggested FCCLA Project Based Assessments

- Applied Math for Culinary Management
- Culinary Arts
- Culinary Chicken Fabrication
- Culinary Food Art
- Culinary Knife Skills
- Career Investigation
- Entrepreneurship
- Illustrated Talk
- Job Interview
- Nutrition and Wellness
- Food Innovations
- Hospitality, Tourism and Recreation
- Sports Nutrition

Content Standards

Domain – Basic Baking Theory and Skills

Core Standard 1 Students will connect baking theory and skills to develop proper techniques in baking. (IvT HOSP 105, # 1-7)

Standards	
ACA-1.1	Define baking terms
ACA-1.2	Identify equipment and utensils used in baking and discuss proper use and care
ACA-1.3	Demonstrate proper selection of equipment and utensils for specific application
ACA-1.4	Identify ingredients used in baking
ACA-1.5	Demonstrate proper scaling and measurement techniques utilizing standard and metric units.
ACA-1.6	Apply basic math skills to recipe conversions
ACA-1.7	Describe properties and list function of various ingredients

Domain – Introduction to Breads

Core Standard 2 Students will apply concepts of baking techniques to prepare high quality breads. (IvT HOSP 105, #8, 9, 12, 17)

Standards	
ACA-2.1	Prepare crusty, soft and specialty yeast products; observe reactions
ACA-2.2	Prepare quick breads
ACA-2.3	Prepare laminated doughs such as puff pastry, croissant, and Danish pastry
ACA-2.4	Prepare a variety of fillings and toppings for baked goods

Domain – Introduction to Pastry Arts

Core Standard 3 Students will apply concepts of baking techniques to prepare high quality pastry products. (IvT HOSP 105, #10, 11, 13, 16, 17)

Standards	
ACA-3.1	Produce a variety of types of pies and tarts
ACA-3.2	Produce a variety of types of cookies
ACA-3.3	Prepare creams, custards, puddings, and related sauces
ACA-3.4	Prepare fritters, cobblers and crisps
ACA-3.5	Prepare a variety of fillings and toppings for pastries

Domain – Nutrition

Core Standard 4 Analyze nutrients and their functions to demonstrate preparation techniques for maximum retention of nutrients. (IvT HOSP 104, #4-8)

Standards	
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	ACA-4.1	List the food groups in the current USDA Food Guidelines, the recommended daily servings from each, and the major nutrients contributed by each group
	ACA-4.2	Describe the characteristics, functions, and best sources of the major nutrients
	ACA-4.3	List the primary functions and best sources of each of the major vitamins and minerals
	ACA-4.4	Describe processes of human digestion
	ACA-4.5	Calculate energy needs based upon basal metabolic rate and exercise expenditure
	ACA-4.6	Discuss and demonstrate cooking techniques and storage principles for maximum retention of nutrients
Domain – Nutrition Accommodations and Adaptations		
Core Standard 5 Students will evaluate guidelines and nutritional issues to adapt recipes and menus for specific dietary needs. (IvT HOSP 104, #9-11)		
	Standards	
	ACA-5.1	Discuss the current dietary guidelines and adapt recipes accordingly
	ACA-5.2	Evaluate diets in terms of the recommended dietary allowances
	ACA-5.3	Categorize foods into exchange groups and plan menus applying the exchange system
	ACA-5.4	Identify common food allergies and determine appropriate substitutions
	ACA-5.5	Discuss contemporary nutritional issues such as vegetarianism, heart healthy menus, gluten free menus and religious dietary laws
Domain – Cost Control and Purchasing		
Core Standard 6 Students will evaluate methods for controlling costs and making purchasing decisions to ensure quality standards and profitability in the workplace. (<i>ProStart</i> Foundations, Year 2, Chapters 3, 5)		
	Standards	
	ACA-6.1	Examine types of food costs, cost control tools, and operating budgets
	ACA-6.2	Determine, establish and monitor food production and costing
	ACA-6.3	Examine standards to promote quality in purchasing, receiving, producing, storing and service of food products
	ACA-6.4	Examine processes for managing purchasing and controlling inventory
Domain – Current Marketing Trends		
Core Standard 7 Students will apply concepts of marketing and menu design to attract and retain consumers. (<i>ProStart</i> Foundations, Year 2, Chapters 7)		
	Standards	
	ACA-7.1	Examine basic marketing research methods, concepts and plans
	ACA-7.2	Identify methods for creating a market identity, promoting sales and communications with the community
	ACA-7.3	Examine, organize and create various types of menus
	ACA-7.4	Analyze ways to test new menu items
	ACA-7.5	Compare basic pricing methods of menus
Domain – Sustainability in the Foodservice Industry		
Core Standard 8 Students will analyze sustainability practices to promote and ensure conservation efforts in the foodservice industry. (<i>ProStart</i> Foundations, Year 2, Chapter 9)		
	Standards	
	ACA-8.1	Investigate the importance of water and energy conservation, and waste management in the food service industry

	ACA-8.2	Examine the history and emerging trends of sustainability in the food service industry
	ACA-8.3	Identify the steps an operation should take to purchase and promote the use of sustainable food products
	ACA-8.4	Identify issues surrounding the global production of seafood, coffee, animals, and organic food