

## 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: 2-3 credits per semester, 2 semesters maximum, 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.

### **Content Standards**

#### **Domain – Basic Baking Theory and Skills**

**Core Standard 1** 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
- 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** 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** 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**

- 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** 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 and religious dietary laws

**Domain – Cost Control and Purchasing**

**Core Standard 6** Evaluate methods for controlling costs and making purchasing decisions to ensure quality standards and profitability in the workplace. (*ProStart* 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** Apply concepts of marketing, menu design and sustainability practices to promote and ensure conservation efforts in the food service industry. (*ProStart* Foundations, Year 2, Chapters 7, 9)

**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, create, price and analyze various types of menus
- ACA-7.4 Investigate the importance of water and energy conservation, and waste management in the food service industry
- ACA-7.5 Examine the history and emerging trends of sustainability in the food service industry

**Common Core Literacy Standards for Technical Subjects**

**Reading Standards for Literacy in Technical Subjects 11-12**

The standards below begin at grade 11 and define what students should understand and be able to do by the end of grade 12. The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations – the former providing broad

standards, the latter providing additional specificity.

### **Key Ideas and Details**

- 11-12.RT.1 Cite specific textual evidence to support analysis of technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
- 11-12.RT.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- 11-12.RT.3 Follow precisely a complex multistep procedure when performing technical tasks; analyze the specific results based on explanations in the text.

### **Craft and Structure**

- 11-12.RT.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific context relevant to *grades 11-12 texts and topics*.
- 11-12.RT.5 Analyze how the text structures information or ideas into categories or hierarchies, demonstrating understanding of the information or ideas.
- 11-12.RT.6 Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.

### **Integration of Knowledge and Idea**

- 11-12.RT.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
- 11-12.RT.8 Evaluate the hypotheses, data, analysis, and conclusions in a technical subject, verifying the data when possible and corroborating or challenging conclusions with other sources of information.
- 11-12.RT.9 Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.

### **Range of Reading and Level of Text Complexity**

- 11-12.RT.10 By the end of grade 12, read and comprehend technical texts in the grades 11-CCR text complexity band independently and proficiently.

### **Writing Standards for Literacy in Technical Subjects 11-12**

The standards below begin at grade 11 and define what students should understand and be able to do by the end of grade 12. The CCR anchor standards and high school standards in literacy work in tandem to define college and career readiness expectations – the former providing broad standards, the latter providing additional specificity.

### **Text Types and Purposes**

- 11-12.WT.1 Write arguments focused on *discipline-specific content*.
- 11-12.WT.2 Write informative/explanatory texts, including technical processes.
- 11-12.WT.3 Students will not write narratives in technical subjects. *Note: Students' narrative skills continue to grow in these grades. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In technical, students must be able to write precise*

*enough descriptions of the step-by-step procedures they use in their technical work that others can replicate them and (possibly) reach the same results.*

#### **Production and Distribution of Writing**

- 11-12.WT.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 11-12.WT.5 Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.
- 11-12.WT.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

#### **Research to Build and Present Knowledge**

- 11-12.WT.7 Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.
- 11-12.WT.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation
- 11-12.WT.9 Draw evidence from informational texts to support analysis, reflection, and research.

#### **Range of Writing**

- 11-12.WT.10 Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

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