CULINARY ARTS ADVANCED (UC)

INDUSTRY SECTOR: Hospitality, Tourism and Recreation Sector

PATHWAY: Food Service and Hospitality

CALPADS TITLE: Advanced Food Service and Hospitality (Capstone)

CALPADS CODE: 8021

HOURS:

Total	Classroom	Laboratory/CC/CVE
180	180	0

JOB TITLE	O*NET CODE	JOB TITLE	O*NET CODE
Food Service Managers	11-9051.00	Food Preparation Workers	35-2021.00
Cooks, Restaurant	35-2014.00	Chefs and Head Cooks	35-1011.00

COURSE DESCRIPTION:

This advanced Food, Science, Dietetics, and Nutrition pathway course provides the understanding of the biological, chemical, and physical characteristics of food. It is an applied laboratory-based course that focuses on advanced skills and terminology used in food management and preparation. The focus of the course is on advanced food safety, food sanitation, the chemical composition of food, reactions of food and food microbiology as related to food preparation and techniques, along with facilities, storage, and equipment. Students will research, collect data, analyze information, report findings, and evaluate products and performance.

A-G APPROVAL: G

ARTICULATION: None

DUAL ENROLLMENT: None

PREREQUISITES:

Prerequisite
Culinary Arts
Chemistry and or biology (Recommended)
Algebra 1

METHODS OF INSTRUCTION

- Direct instruction
- Group and individual applied projects
- Multimedia
- Demonstration
- Field trips
- Guest speakers

STUDENT EVALUATION:

- Student projects
- Written work
- Exams
- Observation record of student performance
- Completion of assignment

INDUSTRY CERTIFICATION:

- Food Handlers Certificate (ServSafe)

RECOMMENDED TEXTS:

- Foundations of Restaurant Management & Culinary Arts: Level 2 1st Edition by National Restaurant Association

PROGRAM OF STUDY

Grade	Fall	Spring	Year	Course Type	Course Name
9, 10, 11, 12				Introductory	Baking and Pastry
10, 11, 12				Concentrator	Culinary Arts
10, 11, 12				Capstone	Culinary Arts Advanced (UC)

I.	INTRODUCTION AND ORIENTATION	CR	Lab/ CC	Standards
	• Demonstrate an awareness of course objectives and competencies • Demonstrate an understanding of course requirements and student expectations • Demonstrate an awareness of the industry standards • Examine the history of modern gastronomy • Identify the organization of the modern kitchen • Demonstrate the use of the scientific method of inquiry, experimentation, analysis, and documentation of lab reports	2	0	**Academic:** A-SSE: 1 **CTE Anchor:** Communications: 2.4 **CTE Pathway:** B1.1, B1.2, B1.3, B1.4
II.	**SANITATION AND SAFETY**	**CR**	**Lab/ CC**	**Standards**
	• Identify food-borne diseases • Demonstrate proper personal hygiene • Demonstrate the proper handling, preparation, and storage of food products, meats, poultry, and fish • Implement Hazard Analysis and Critical Control Points (HAACP) food-safety system • Demonstrate standard safety procedures • Identify the different types of knives • Demonstrate the proper use of each knife and proper hand coordination • Apply proper technique in vegetable preparation • Demonstrate the ability to perform brunoise, julienne, and dicing cuts • Understand the prevention of accidents i.e. cuts, burns, fires, and falls	8	0	**Academic:** LS: 11-12.3, 11-12.4 **CTE Anchor:** Health and Safety: 6.2, 6.3, 6.5 **CTE Pathway:** B2.1, B2.2, B2.3, B2.4, B3.1, B3.2, B3.3, B3.4, B3.5, B3.6
III.	**PORTION CONTROL AND MEASUREMENTS**	**CR**	**Lab/ CC**	**Standards**
	• Apply metric and standard weights and measurements • Understand the difference between dry and liquid measurements • Practice recipe measurements and conversions • Demonstrate an understanding of food portioning and scaling of ingredients • Calculate food costs and yield percentages, cost per portion, and profit margins • Prepare recipe-costing forms and market order forms	13	0	**Academic:** LS: 11-12.4 **CTE Anchor:** Problem Solving and Critical Thinking: 5.4 **CTE Pathway:** B6.3, B6.4, B6.5, B11.2
III.	**THE MENU**	**CR**	**Lab/ CC**	**Standards**
	• Demonstrate menu planning using nutrition principles • Design three and four-course meals • Demonstrate menu forms and functions • Purchase food items for recipes • Employ computer arts and graphics in preparing menus • Prepare oral presentations	15	0	**Academic:** LS: 11-12.2 **CTE Anchor:** Communications: 2.5 **CTE Pathway:** B6.5, B6.3, B6.4, B6.6, B10.1, B10.2, B10.3, B11.5
IV.	**BASIC TO ADVANCED PRINCIPLES OF FOOD PRODUCTION**	**CR**	**Lab/ CC**	**Standards**
	• Describe the effects of heat on foods and principles of heat transfer (coagulants and pigments) • Understand equipment and technology standards and functions • Describe the effects of different cooking methods on nutrition • Distinguish the effects of different cooking methods on nutritive value, texture, color, aroma, and flavor	15	0	**Academic:** LS: 11-12.3 **CTE Anchor:** Communications: 2.4 **CTE Pathway:**

	• Define cooking terminology			B6.4, B6.3, B6.1
V.	**THE ART OF SEASONING AND FLAVORING**	**CR**	**Lab/ CC**	**Standards**
	• Define and analyze flavoring and seasoning • Understand when to season and when to flavor • List common seasonings and flavorings • Practice the use of herbs and spices • Demonstrate the proper use of fresh herbs	15	0	**Academic:** LS: 11-12.1 **CTE Anchor:** Communications: 2.2 Demonstration and Application: 11.1 **CTE Pathway:** B6.3, B6.1, B6.4
VI.	**STOCKS, SAUCES, AND SOUPS**	**CR**	**Lab/ CC**	**Standards**
	• Understand the classification of sauces • Understand the use of derivatives • Demonstrate reduction and glazes • Perform de-glazing • Understand the theory of emulsification, types of emulsions, emulsifying agents • Prepare mother sauces, small sauces, and roux • Demonstrate the use of thickening agents • Define the different classification of soups	15	0	**Academic:** LS: 11-12.3 **CTE Anchor:** Communications: 2.1 **CTE Pathway:** B6.4, B6.5, B6.6, B6.7, B6.1, B6.2, B6.3
VII.	**STARCHES, VEGETABLES, AND FRUITS**	**CR**	**Lab/ CC**	**Standards**
	• Understand browning (enzymatic and non-enzymatic), and prevention of browning • Regulate quality changes during cooking • Understand pigments and color changes • Demonstrate the effects of heat on vegetables • Research different heat-transfer methods to cook fruits and vegetables • Classify and identify starches • Demonstrate scientific methods of cooking starches (potatoes, rice, cereals)	15	0	**Academic:** SEP: 4, 8 **CTE Anchor:** Communications: 2.1 **CTE Pathway:** B6.1, B6.2, B6.3, B6.7, B6.4, B6.6, B6.5
VIII.	**UNDERSTANDING POULTRY, BEEF, AND FISH**	**CR**	**Lab/ CC**	**Standards**
	• Describe classification and market forms • Describe poultry fabrication and understand anatomy • Understand meat labels • Define the basic cuts of meat • Describe the composition, structure and basic quality factors • Understand the effects of heat on muscle fiber, collagen, and fat • Describe the biological classification of fish • Understand the structure and composition • Demonstrate food preparation using flambé and stir-fry methods • Prepare food by sautéing, braising, baking, frying, broiling, and grilling	15	0	**Academic:** RSIT: 11-12.2 **CTE Anchor:** Demonstration and Application: 11.1, 11.2 **CTE Pathway:** B6.4, B6.5, B6.6, B6.7, B6.3, B6.2, B6.1
IX.	**GARDE MANGER**	**CR**	**Lab/ CC**	**Standards**
	• Demonstrate the use of scientific methods of cold-food preparation and preservation • Prepare emulsion dressings • Demonstrate the art of preparing canapés, hors-d'oeuvres, and garnishes • Understand the fundamentals of advanced decorative techniques and presentation	15	0	**Academic:** CC: 3 **CTE Anchor:** Technical Knowledge and Skills: 10.1 **CTE Pathway:**

				B6.1, B6.2, B6.3, B6.5, B6.6, B6.4, B6.7
IX.	**BAKING**	**CR**	**Lab/ CC**	**Standards**
	• Understand the principles of bread making • Understand the chemistry of baking and the role different ingredients play in the production of baked goods • Analyze the role of leavening agents, chemical reactions and actions. • Define the elements of sugar, chemical bonds and effect of heat on structure (caramelization)	15	0	**Academic:** RLST: 11-12.3 **CTE Anchor:** Technical Knowledge and Skills: 10.1 **CTE Pathway:** B7.1, B7.2, B7.3, B7.4, B7.5, B7.6
X.	**DAIRY PRODUCTS AND EGGS**	**CR**	**Lab/ CC**	**Standards**
	• Describe the processing of milk, cream, cheese, and butter. • Understand the preservation techniques, pasteurization, homogenization, curing of cheese. • Describe the physical changes to dairy products and sensory analysis	15	0	**Academic:** SEP: 8 **CTE Anchor:** Technical Knowledge and Skills: 10.1 **CTE Pathway:** B6.7, B6.6, B6.4, B6.5, B6.3, B6.2, B6.1
XI.	**EMPLOYMENT LITERACY**	**CR**	**Lab/ CC**	**Standards**
	• Identify available positions in the industry through the use of the Internet • Complete an application form correctly • Prepare a written resume • Participate in a simulated employment interview • Prepare a portfolio	10	0	**Academic:** WS: 11-12.4, 11-12.7 WHSST: 11-12.2 **CTE Anchor:** Communications: 2.4, 2.5 Career Planning and Management: 3.1, 3.3, 3.4, 3.5, 3.6, 3.9 **CTE Pathway:** B4.2
XII.	**PERSONAL SKILLS RELATED TO EMPLOYMENT**	**CR**	**Lab/ CC**	**Standards**
	• Demonstrate promptness, attend class regularly, and follow absence notification procedures • Develop and maintain acceptable working relations • Demonstrate the ability to manage time wisely • Demonstrate a positive and cooperative attitude • Demonstrate values of honesty and integrity • Demonstrate respect for others • Dress in a professional manner according to industry standards • Demonstrate appropriate personal hygiene/grooming and dress • Demonstrate responsibility by exerting a high level of effort and working toward a goal	3	0	**Academic:** LS: 11-12.1 **CTE Anchor:** Responsibility and Flexibility: 7.2, 7.3, 7.7 Ethics and Legal Responsibilities: 8.2, 8.4 **CTE Pathway:** B8.4, B8.5, B9.5

XII.	INTERPERSONAL SKILLS AND GROUP DYNAMICS	CR	Lab/ CC	Standards
	• Demonstrate the ability to work as a member of a team • Identify proper procedures for handling harassment • Demonstrate leadership skills by working independently, making appropriate decisions, working well with others, and accepting constructive criticism • Demonstrate the ability to accept and work with individuals from various cultures	3	0	**Academic:** LS: 11-12.1 **CTE Anchor:** Leadership and Teamwork: 9.2, 9.3 **CTE Pathway:** B1.2
XII.	**THINKING AND PROBLEM SOLVING SKILLS**	**CR**	**Lab/ CC**	**Standards**
	• Utilize problem-solving techniques • Understand logical reasoning • Demonstrate creative thinking • Discuss decision making • Demonstrate the ability to interpret information correctly	3	0	**Academic:** LS: 11-12.1 **CTE Anchor:** Problem Solving and Critical Thinking: 5.2, 5.3 **CTE Pathway:** B1.4
XII.	**COMMUNICATION SKILLS**	**CR**	**Lab/ CC**	**Standards**
	• Demonstrate effective verbal and written skills • Read technical journals and write technical reports using appropriate terminology • Listen attentively, follow directions, and relay directions to others • Demonstrate ability to research and retrieve information	3	0	**Academic:** LS: 11-12.1, 11-12.2 **CTE Anchor:** Communications: 2.3, 2.4, 2.6 **CTE Pathway:** B8.1