

SAN DIEGO COMMUNITY COLLEGE DISTRICT
CONTINUING EDUCATION
COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER

FDNT 681

COURSE TITLE

CULINARY ARTS AND SCIENCES I

TYPE COURSE

NON-FEE

VOCATIONAL

CATALOG COURSE DESCRIPTION

This course provides an overview of the culinary arts industry and the basic knowledge and skills required for entry-level positions in the culinary arts profession. Topics will include: culinary terminology, industry history, food safety and sanitation, tools, equipment, knife skills, and food service operations. Students will also learn the preparation of stocks, sauces and soups, bakeshop products, breakfast cookery, and American regional cuisine. (FT)

LECTURE/LABORATORY HOURS

450

ADVISORIES

NONE

RECOMMENDED SKILL LEVEL

Eighth grade reading level; ability to communicate effectively in the English language, knowledge of general math; basic computation skills and basic computer skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES

1. Social Responsibility
SDCE students demonstrate interpersonal skills by learning and working cooperatively in a diverse environment.
2. Effective Communication
SDCE students demonstrate effective communication skills.

INSTITUTIONAL STUDENT LEARNING OUTCOMES (CONTINUED)

3. Critical Thinking
SDCE students critically process information, make decisions, and solve problems independently or cooperatively.
4. Personal and Professional Development
SDCE students pursue short term and life-long learning goals, mastering necessary skills and using resource management and self-advocacy skills to cope with changing situations in their lives.

COURSE GOALS

1. Students will gain an understanding and overview of the culinary arts industry, history and terminology.
2. Students will learn basic safety and sanitation principles.
3. Students will learn basic culinary production skills.
4. Students will gain preparation knowledge of a variety of food products.
5. Students learn standards of professionalism in the culinary industry.

COURSE OBJECTIVES

1. Explain the history of the culinary arts industry, and evaluate current culinary practices.
2. Describe and demonstrate the basic safety and sanitation practices in the culinary industry.
3. Identify and demonstrate the proper use of culinary tools and equipment.
4. Demonstrate knowledge and preparation techniques of a variety of food products.
5. Describe and demonstrate standards of professionalism in the culinary industry.

SECTION II

COURSE CONTENT AND SCOPE

1. Culinary Industry
 - 1.1. Historical perspective
 - 1.1.1. Restaurant history and perspective
 - 1.1.2. Origins of classical and modern cuisine
 - 1.1.2.1. Careme and grande cuisine
 - 1.1.2.2. Escoffier and classical cuisine
 - 1.1.2.3. Pointe and nouvelle cuisine
 - 1.1.3. Influences on current food service operations
 - 1.1.3.1. Standards of professionalism
 - 1.1.3.1.1. Communication
 - 1.1.3.1.2. Ethics
 - 1.1.3.1.3. Conduct
2. Food Service Operations
 - 2.1. Escoffier's classic kitchen brigade (organization)
 - 2.1.1. Terminology
 - 2.1.2. Modern kitchen brigades
 - 2.1.3. Professional culinarians

COURSE CONTENT AND SCOPE (CONTINUED)

- 2.1.4. Modern kitchens theory and design
- 2.2. Purchasing and product identification
 - 2.2.1. Product specification sheets
- 2.3. Workplace preparation skills
 - 2.3.1. Professional image
 - 2.3.2. Effective communication skills
 - 2.3.3. Workplace standards
- 3. Culinary Terminology
 - 3.1. Industrial
 - 3.2. Preparation
 - 3.3. Cooking
 - 3.4. Baking
 - 3.5. Measurement
 - 3.6. Equipment
- 4. Culinary Tools and Equipment
 - 4.1. Quantity food equipment
 - 4.2. Standards for tools and equipment
 - 4.3. Selecting equipment
 - 4.4. Maintenance and sanitation
 - 4.5. Cooking equipment
 - 4.6. Processing equipment
 - 4.7. Storage and holding equipment
 - 4.8. Pots, pans, and containers
 - 4.9. Measuring devices
 - 4.10. Small equipment
- 5. Food Borne Pathogens
 - 5.1. Terminology relating to food borne illness
 - 5.2. Food protection, illness and responsibility
 - 5.3. Causes of food borne illness
 - 5.4. Bacteria growth requirements
 - 5.5. Micro-organisms in food service operations
 - 5.6. Spread of disease
 - 5.7. Causes of food borne illness
 - 5.8. Symptoms, onset, source and foods involved in the most common food borne illness
 - 5.9. Methods to control and prevent food borne illness
 - 5.10. Food protection and personal hygiene
- 6. Kitchen Control Measures and Systems
 - 6.1. Hazard analysis Critical Control Plan (HACCP)
 - 6.1.1. Critical control points
 - 6.2. Safety Management:
 - 6.2.1. Bacterial growth curves
 - 6.2.2. Bacterial lag times
 - 6.2.3. Temperature danger zones
 - 6.3. Kitchen Reports
 - 6.3.1. Temperature logs and labels
 - 6.3.2. Waste logs

COURSE CONTENT AND SCOPE (CONTINUED)

- 6.3.3. Par stock logs
- 6.3.4. Accident reports
- 6.3.5. Material data sheets (MDS)
- 7. Understanding the Flow of Food
 - 7.1. Health and safety codes
 - 7.2. Receiving
 - 7.2.1. Inspection
 - 7.2.1.1. Approved sources
 - 7.2.1.2. Examples of food inspection
 - 7.2.1.3. Evaluation of food products by color, texture, odor and temperature
 - 7.2.1.4. Receiving logs.
 - 7.3. Storage
 - 7.3.1. FIFO system
 - 7.3.2. Non-refrigerated food items
 - 7.3.3. Refrigerated food items
 - 7.3.4. Chemicals, pesticides and non-food items
 - 7.4. Preparation
 - 7.4.1. Basic preparation and practices
 - 7.4.2. Thawing practices
 - 7.4.3. Small batch preparation
 - 7.4.4. Cross contamination
 - 7.5. Cooking
 - 7.5.1. Temperature effects
 - 7.5.2. Internal cooking temperatures
 - 7.6. Serving
 - 7.6.1. Holding temperatures
 - 7.6.2. Food and utensil contamination prevention
 - 7.7. Cooling, reheating and labeling
 - 7.7.1. Cooling and heat transfer
 - 7.7.2. Reheating temperatures
 - 7.7.3. Labeling requirements
- 8. Safe and Sanitary Facilities
 - 8.1. Safe and unsafe work environments
 - 8.2. Inspection check list
 - 8.3. Sanitation tools and equipment
 - 8.4. Scheduled maintenance procedures
 - 8.5. First aid techniques
 - 8.6. Pest control
 - 8.7. Emergency evacuation procedure
 - 8.8. Fire extinguishers
- 9. Knife Skills
 - 9.1. Knife safety
 - 9.1.1. Proper sanitation
 - 9.1.2. Proper storage
 - 9.1.3. Correct hand positions

COURSE CONTENT AND SCOPE (CONTINUED)

- 9.1.4. Honing and sharpening
- 9.2. Knife cuts
 - 9.2.1. Classic knife cuts
 - 9.2.1.1. Brunoise
 - 9.2.1.2. Dice
 - 9.2.1.3. Julienne
 - 9.2.1.4. Tourne
 - 9.2.1.5. Oblique
 - 9.2.1.6. Mince
 - 9.2.1.7. Chiffonade
 - 9.2.1.8. Batonnet
- 10. American Regional Cuisine
 - 10.1. Ingredients of the regions
 - 10.1.1. Product identification
 - 10.1.2. History
 - 10.2. Regions
 - 10.2.1. New England
 - 10.2.2. Mid Atlantic
 - 10.2.3. Floridian
 - 10.2.4. Deep South
 - 10.2.5. Cajun and Creole
 - 10.2.6. Central Plains
 - 10.2.7. Pacific Northwest
 - 10.2.8. Southwest and Tex Mex
 - 10.2.9. California
 - 10.2.10. Hawaii
- 11. Stocks, Sauces, and Soups
 - 11.1. Stock reductions and glazes
 - 11.1.1. Types of stocks and uses
 - 11.1.1.1. Preparation and ingredients
 - 11.1.2. Thickening agents
 - 11.1.2.1. Types and uses
 - 11.1.2.2. Preparation and application
 - 11.2. Sauces
 - 11.2.1. Sauce families
 - 11.2.1.1. Leading and mother sauces
 - 11.2.1.1.1. Béchamel
 - 11.2.1.1.2. Veloute
 - 11.2.1.1.3. Espagnole
 - 11.2.1.1.4. Tomato
 - 11.2.1.1.5. Hollandaise
 - 11.2.1.2. Small and compound sauces
 - 11.2.1.3. Production of sauces
 - 11.2.1.3.1. Finishing sauces
 - 11.2.1.4. Coulis, beurre's, relish, and contemporary sauces

COURSE CONTENT AND SCOPE (CONTINUED)

- 11.3. Soups
 - 11.3.1. Types of Soups
 - 11.3.1.1. Clear
 - 11.3.1.1.1. Broth base
 - 11.3.1.1.2. Consommé
 - 11.3.1.2. Thick soups
 - 11.3.1.2.1. Cream soups
 - 11.3.1.2.2. Purred soups
 - 11.3.1.3. Chowders
 - 11.3.1.4. Chilled soups
 - 11.3.2. Thickening agents
 - 11.3.2.1. Types and uses
- 12. Culinary Techniques
 - 12.1. Heat transfer (thermodynamics)
 - 12.2. Cooking principles
 - 12.2.1. Cooking methods
 - 12.2.1.1. Poach, simmer, and boil
 - 12.2.1.2. Steaming
 - 12.2.1.3. Braise
 - 12.2.1.4. Roast and bake
 - 12.2.1.5. Broil
 - 12.2.1.6. Grill and griddle
 - 12.2.1.7. Saute
 - 12.2.1.8. Pan fry and deep fry
 - 12.2.1.9. Microwave cooking
 - 12.2.2. Seasonings and flavoring
 - 12.2.2.1. Product identification
 - 12.2.2.2. Rules and practices
 - 12.2.2.3. Herbs and spices
 - 12.2.3. Mise en place (everything put in place)
 - 12.2.3.1. Planning and organizing
 - 12.2.3.2. Preparation lists
 - 12.2.3.3. Preparation cooking
 - 12.2.3.4. Holding and reheating
 - 12.2.4. Kitchen staples
 - 12.2.4.1. Dairy
- 13. Breakfast Cookery
 - 13.1. Eggs
 - 13.1.1. Composition and identification
 - 13.1.1.1. Grading
 - 13.1.1.2. Storage
 - 13.1.1.3. Substitutes
 - 13.1.2. Cooking methods and styles
 - 13.1.2.1. Dry heat cooking methods
 - 13.1.2.1.1. Baking
 - 13.1.2.1.2. Sautéing
 - 13.1.2.1.3. Omelets

COURSE CONTENT AND SCOPE (CONTINUED)

- 13.1.2.1.4. Frittatas
- 13.1.2.1.5. Pan frying
- 13.1.2.2. Moist heat cooking methods
 - 13.1.2.2.1. Simmering
 - 13.1.2.2.2. Poaching
- 13.1.2.3. Recipes
- 13.2. Breakfast breads, cereals, and meats
- 14. Baking
 - 14.1. Introduction to baking
 - 14.1.1. The baking process
 - 14.1.1.1. Terminology
 - 14.1.1.2. Ingredients
 - 14.1.1.3. Techniques
 - 14.1.1.4. Tools and equipment
 - 14.1.1.5. Formulas, measurement, and development
 - 14.1.1.6. Baker's percentage
- 15. Bread Product Types
 - 15.1. Yeast products
 - 15.1.1. Production stages of yeast breads
 - 15.1.1.1. Regular yeast
 - 15.1.1.2. Straight and modified methods
 - 15.1.1.3. Sponge methods
 - 15.1.2. Standard techniques in yeast dough production
 - 15.2. Enriched products
 - 15.2.1. Production stages of enriched breads
 - 15.2.1.1. Dough make-ups
 - 15.2.1.1.1. Brioche
 - 15.2.1.1.2. Challah
 - 15.3. Laminated dough products
 - 15.3.1. Production stages of laminated doughs
 - 15.3.1.1. Types of laminated doughs
 - 15.3.1.1.1. Croissant
 - 15.3.1.1.2. Danish
 - 15.3.1.1.3. Puff Pastry
- 16. Cakes, Cookies, Pies, and Pastries
 - 16.1. Cakes
 - 16.1.1. Types
 - 16.1.2. Mixing methods
 - 16.1.3. Formulas
 - 16.1.4. Icings
 - 16.1.5. Decorating
 - 16.1.6. Baking and cooling
 - 16.1.7. Assembly
 - 16.2. Cookies
 - 16.2.1. Identification and characteristics
 - 16.2.2. Mixing methods
 - 16.2.3. Recipes

COURSE CONTENT AND SCOPE (CONTINUED)

- 16.2.4. Baking and cooling
- 16.3. Pies and Pastries
 - 16.3.1. Pies
 - 16.3.1.1. Doughs
 - 16.3.1.2. Crusts
 - 16.3.1.3. Fillings
 - 16.3.1.4. Assembly
 - 16.3.1.5. Baking and cooling
 - 16.3.2. Pastries
 - 16.3.2.1. Puff pastries
 - 16.3.2.2. Éclairs
 - 16.3.2.3. Meringues
 - 16.3.2.4. Fruit desserts
- 17. Custards and Frozen Desserts
 - 17.1. Custards
 - 17.1.1. Types of custards
 - 17.1.1.1. Stirred custards
 - 17.1.1.1.1. Crème anglaise
 - 17.1.1.1.2. Sabayon
 - 17.1.1.2. Baked custards
 - 17.1.1.2.1. Crème brulee
 - 17.1.1.2.2. Bread pudding
 - 17.1.1.2.3. Cheesecake
 - 17.1.1.2.4. Flan
 - 17.2. Frozen Desserts
 - 17.2.1. Types of frozen desserts
 - 17.2.1.1. Ice cream
 - 17.2.1.2. Sherbet
 - 17.2.1.3. Sorbet
 - 17.2.1.4. Gelato
 - 17.2.1.5. Granita
 - 17.2.1.6. Still frozen desserts
 - 17.2.2. Thickeners for frozen desserts
- 18. Chocolate and Sugar Confections
 - 18.1. Chocolate
 - 18.1.1. History of cacao and production
 - 18.1.2. Types of chocolate
 - 18.1.2.1. White chocolate
 - 18.1.2.2. Milk chocolate
 - 18.1.2.3. Dark chocolate
 - 18.1.3. Types of chocolate confections
 - 18.1.3.1. Truffles
 - 18.1.3.2. Ganache
 - 18.1.3.3. Soft Centers
 - 18.2. Sugar
 - 18.2.1. History of sugar and production
 - 18.2.2. Types of sugar

COURSE CONTENT AND SCOPE (CONTINUED)

- 18.2.2.1. Crystalized sugar
- 18.2.2.2. Inverted sugars
- 18.2.3. Types of sugar confections
 - 18.2.3.1. Crystalized
 - 18.2.3.2. Non-crystalized
 - 18.2.3.3. Aerated

APPROPRIATE READINGS

Reading assignments may include but are not limited to the following:

1. *American Regional Cuisine*, The Art Institute, Wiley Publishing, current edition
2. *Baking and Pastry: Mastering the Art and Craft*, The Culinary Institute of America, Wiley Publishing, current edition
3. *Frozen Desserts*, The Culinary Institute of America, Wiley Publishing, current edition
4. *Chocolate and Confections: Formula, Theory, and Technique for the Artisan Confectioner*, The Culinary Institute of America, Wiley Publishing, current edition

Information obtained on the Internet.

1. County of San Diego Food Handlers Guide
(http://www.sandiegocounty.gov/content/dam/sdc/deh/fhd/food/fhp/fhbooklet_en_fp.pdf)

WRITING ASSIGNMENTS

Writing assignments may include but are not limited to the following:

1. Create a lab binder, complete with menus, recipe cards, production plans, plate diagrams, and shopping lists.
2. Written presentation on three herbs and spices, including their origin, history, and culinary use.
3. Written assignment on the baking process.

OUTSIDE ASSIGNMENTS

Outside assignments may include but are not limited to the following:

1. Practicable application of proper personal hygiene standards.
2. Practicable application of safe food handling techniques.
3. Independent research on developments and new trends in the culinary field.

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING

Critical thinking assignments may include but are not limited to the following:

APPROPRIATE ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING (CONTINUED)

1. Comparison of professional versus personal food handling techniques.
2. Developing a Hazard Analysis Critical Control Plan (HACCP).
3. Prepare a critique of the modern kitchen hierarchy versus the classic kitchen brigade.
4. Analyze and describe a variety of baked products, prepared in an institution food kitchen.

EVALUATION

Evaluation methods may include but are not limited to:

1. Attendance.
2. Class participation.
3. Lab Projects and demonstrations.
4. Quizzes and exams.
5. Project papers.
6. Term projects.

METHOD OF INSTRUCTION

Instruction will include lecture, laboratory, demonstrations, and student-centered approach that utilizes a variety of strategies that may include research projects, group discussions, peer instructions, audiovisual presentations, computer assisted instruction, textbooks, speakers, and field trips.

This course, or sections of this course, may be offered through distance education.

TEXTS AND SUPPLIES

Texts:

On Cooking, Techniques From Expert Chefs, Sarah R. Labensky, Alan M Hause, Prentice Hall Publishing, New Jersey, current edition

On Cooking, Techniques From Expert Chefs, Study Guide, Sarah R. Labensky, Alan M Hause, Prentice Hall Publishing, New Jersey, current edition

PREPARED BY: Megan Leppert/Lee Blackmore/Donna Namdar DATE April 13, 2015

REVISED BY: Megan Leppert DATE: May 6, 2020

Instructors must meet all requirements stated in Policy 3100 (Student Rights, Responsibilities and Administrative Due Process), and the Attendance Policy set forth in the Continuing Education Catalog.

REFERENCES:

San Diego Community College District Policy 3100

