

NVCC COLLEGE-WIDE COURSE CONTENT SUMMARY
HRI 106-107 - PRINCIPLES OF CULINARY ARTS I - II (3 CR.) (3 CR.)

Course Description

Introduces the fundamental principles of food preparation and basic culinary procedures. Stresses the use of culinary procedures combined with food science principles, proper sanitation, standards of quality for food items that are made, and proper use and care of kitchen equipment in classroom and laboratory sessions. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose

The course is designed to provide the student with the fundamental principles of food preparation, standard culinary procedures, professional foodservice standards, and use and care of foodservice equipment.

Course Prerequisites/Co-requisites

None

Course Objectives - Culinary Arts I

Upon completion of the course, the student will be able to:

1. List major events in the development of modern food service, including the effects of recent food and equipment technology.
2. Identify the major stations in a classical kitchen.
3. List the factors that influence the organization of modern kitchens.
4. Describe the major standards of work in a professional manner.
5. Differentiate between clean and sanitary.
6. Identify the major disease-producing microorganisms that pose problems in foodservice operations.
7. Identify causes of foodborne illness and methods used to prevent them.
8. List safe work habits to prevent cuts, burns and fires in the work place.
9. List safe work habits to prevent injuries from machines and equipment in the work place.
10. List safe work habits to prevent falls and strains and injuries from lifting in the work place.
11. Identify major pieces of kitchen equipment and their use and care.
12. Identify the most commonly used hand tools and their use and care.
13. Describe the various types of metals used in knives and their advantages and disadvantages.
14. Describe the use and care of various types of knives.
15. Name the most important components of foods and describe what happens to them when they are cooked.
16. Describe the ways in which heat is transferred to food in order to cook it.
17. List the factors that affect cooking times.
18. Explain the differences between moist-heat cooking methods, dry-heat cooking methods, and dry-heat methods using fat.
19. Explain the basic principles for using seasonings and flavorings to create good-tasting food.
20. Explain the importance of using judgment when cooking.
21. Describe the structure and functions of standardized recipes.
22. Measure ingredients and portions.
23. Calculate raw food costs.
24. Convert recipes to higher or lower yields.
25. Explain the importance of mise en place.
26. Describe the concept and steps of mise en place.

27. Explain the difference in preparation requirements for set meal service and extended meal service.
28. Use and sharpen a knife correctly.
29. Control texture, flavor, color, and nutritional changes when cooking vegetables.
30. Prepare vegetables cooked to their proper doneness.
31. Perform preparation for fresh vegetables.
32. Describe quality standards for frozen, canned, and dried vegetables.
33. Describe how to store fresh and processed vegetables.
34. Cook vegetables by various cooking methods, i.e. boiling, sautéing, pan-frying, braising, and deep-frying.
35. List basic knife cuts and shapes.
36. Prepare a brown beef, chicken or fish stock.
37. Cool and store stocks correctly.
38. Explain the preparation of meat, chicken, and fish glazes.
39. Explain the preparation of the five leading sauces.
40. Explain the preparation of small sauces.
41. Prepare white, blond and brown roux and use them to thicken liquids.
42. Thicken liquids with cornstarch and other starches.
43. Describe the major categories of soups.
44. Prepare vegetable soups.
45. Prepare cream soups.
46. Prepare puree soups.
47. Describe the composition and structure of meat and tell how it relates to meat selection and cooking methods.
48. Explain the federal meat inspection and grading system.
49. Identify the primal cuts of beef and list the major fabricated cuts.
50. Select appropriate cooking methods for the major fabricated cuts based on the meat's tenderness and other characteristics.
51. Determine doneness in cooked meats.
52. Prepare meat dishes using a variety of cooking methods.
53. Identify domestic poultry items with reference to its kind, class and style.
54. Store poultry items properly.
55. Determine doneness in cooked poultry.
56. Prepare poultry dishes using a variety of cooking methods.
57. List most popular sandwich fillings.
58. Explain how to set up a sandwich station.
59. Explain how to prepare major types of sandwiches.

Course Objectives - Culinary Arts II

Upon completion of the course, the student will be able to:

1. Explain how the makeup of a menu depends on the type of meal and on the institution using it.
2. Explain the differences between static and cycle menus.
3. Explain the differences between a la carte and table d'hôte menus.
4. List the various courses that may appear in modern menus.
5. List and explain the importance of nutrients.
6. Critique menus in order to find if there is a proper balance
7. Explain how the cooking qualities of fish are affected by its lack of connective tissue.
8. Determine doneness in cooked fish.
9. List the basic market forms of fish.
10. List the characteristics of fresh fish.
11. Store fish and fish products correctly.
12. List and describe the most important mollusks used in commercial kitchens.
13. Describe the popular varieties of shellfish, including their characteristics, handling, and special

- cooking procedures.
14. Describe how to open clams and oysters, split lobsters, and peel and devein shrimp.
 15. Cook fish and shellfish by various cooking methods.
 16. Distinguish the major types of potatoes and the best cooking uses for each.
 17. Select potatoes of high quality and describe how to store them properly.
 18. Cook potatoes by deep-frying and other various cooking methods.
 19. Describe the major types of rice.
 20. Prepare rice by boiling and steaming and by the pilaf and risotto methods.
 21. Label the major kinds and shapes of commercial pasta and determine their quality.
 22. Prepare fresh pasta products.
 23. Describe different types of salads.
 24. Identify salad greens and other salad ingredients.
 25. Identify the major parts of a salad.
 26. List the guidelines for arranging salads.
 27. Describe an efficient system for producing salads in quantity.
 28. Produce green salads, vegetable salads, fruit salads, and gelatin salads.
 29. Identify salad dressing ingredients.
 30. Produce oil and vinegar dressings.
 31. Prepare fresh mayonnaise.
 32. Produce various mayonnaise-based dressings.
 33. Describe the composition of eggs and the major differences among grades.
 34. Prepare omelets and soufflés.
 35. Describe major milk, cream and butter products.
 36. Heat and cook with milk without curdling or scorching.
 37. Classify cheeses by the kind of ripening agent.
 38. Identify major types of cheeses.
 39. Store and serve cheese properly.
 40. Cook with cheese.
 41. Explain the importance of attractive food presentation.
 42. Describe the major guidelines to follow when arranging food on plates.
 43. Identify common terms from classical garniture that are still in general use today.
 44. Make simple vegetable garnishes.
 45. Explain the basic principles of platter presentation.
 46. List and explain typical recipes from Japan, China, Mexico, Italy and other European countries.
 47. Explain the importance of weighing baking ingredients.
 48. Use a baker's scale.
 49. Explain baker's percentages.
 50. List the factors that control the development of gluten in baked products.
 51. List the changes or steps in the baking process.
 52. List the major ingredients of baked goods and their functions and characteristics.
 53. Identify various types of yeast products.
 54. Explain the methods of yeast dough production, i.e. straight dough method and sponge method.
 55. List and explain the steps in yeast dough production.
 56. Make rolls into various shapes.
 57. Explain the various types of dough used in the making of quick breads.
 58. Explain gluten development in quick breads.
 59. List and explain the procedure in the biscuit method.
 60. List and explain the procedure in the muffin method.
 61. Identify basic cake mixing methods, i.e. creaming, two-stage, sponge, angel food and chiffon.
 62. Identify basic cookie mixing methods and various types of cookies.
 63. Explain the procedure for making pie dough.
 64. Identify the various types of fruit fillings used for pies.
 65. Identify other fillings, i.e. custard, cream pie, and chiffon.
 66. Explain stages of doneness in sugar cooking.

67. Identify basic custards, i.e. vanilla custard sauce, pastry cream, and baked custard.
68. Identify the following types of desserts: bavarians, chiffons, mousses, and soufflés.

Major Topics to be Included – Culinary Arts I

1. The Food Service Industry
2. Sanitation and Safety
3. Tools and Equipment
4. Basic Cooking Principles
5. The Recipe: Its Structure and Use
6. Preparation
7. Stocks and Sauces
8. Soups
9. Understanding Meats
10. Cooking Meats
11. Understanding Poultry
12. Cooking Poultry
13. Sandwiches and Hors d'oeuvres

Major Topics to be Included – Culinary Arts II

1. The Menu
2. Breakfast Preparation, Dairy Products, and Coffee and Tea
3. Food Presentation and Garnish
4. Understanding Fish and Shellfish
5. Cooking Fish and Shellfish
6. Potatoes and Other Starches
7. Salads and Salad Dressings
8. Recipes from International Cuisine
9. Bakeshop Production: Basic Principles and Ingredients
10. Quick Breads
11. Yeast Products
12. Assorted Baked and Pastry Products