

Food Service/Culinary Arts

6/2011

Levels: Grades 11-12

Units of Credit: 1.00

CIP Code: 20.0401

Core Code: 34-01-00-00-170

Prerequisite: Food and Nutrition I & II

Skill Test: # 345

COURSE DESCRIPTION

Students will be trained for career opportunities in the food service/culinary arts industry. Students will have the opportunity to learn and practice safety and sanitation procedures, and use and maintain commercial food service equipment. They will perform quantity food preparation as it relates to catering, bakery, restaurant, hospitality, and fast food business operations.

CORE STANDARDS, OBJECTIVES, AND INDICATORS

STANDARD 1

Students will discuss career options and employment skills required in the food service industry.

Objective 1: Identify various career opportunities and educational requirements.

- a. Identify and investigate a culinary/food service career. (utahfutures.org recommended)

Objective 2: Identify and discuss trends in the food service industry.

- a. Explain the history and development of trends.
- b. Identify current trends and their influence (industry, government regulations, cycles, media, and current events).

Objective 3: Identify various food production areas such as fast food, catering, institutional food, family dining, and fine dining.

STANDARD 2

Students will discuss the importance of human relations and customer service.

Objective 1: Explore appropriate employment skills.

- a. Identify communication skills used with co-workers and customers (verbal/non-verbal: sexual harassment, race/gender bias, appropriate language, dress).
- b. Identify and discuss appropriate work ethics (honesty/integrity, dependability, respect). Identify and model employee success skills (punctuality, work independently, anticipate needs, time management, appropriate dress and language). (Majority of problems between staff caused by poor communication.)
- c. Identify the necessary group skills needed for employment. (team work, cooperation, problem-solving ability, interpersonal communication skill)
- d. Identify the necessary individual skills needed for employment. (initiative, honesty, positive attitude, loyalty, dependability, human relations, communication, and math)

Objective 2: Discuss the job title and duties of food service employees.

- a. Identify front of the house job and duties of the host/hostess. (responsibility to the customer, greet and seat customers, take reservations, supervise service to customers, handle customer complaints.)
- b. Identify front of the house job and duties of the server. (handles customer needs, knowledge of menu items, checks tables, checks on food/drinks/water, corrects problems, presents the check, knowledge of appropriate table settings, table service – appropriate personal hygiene and sanitation, serves from the right, removes plates from the left, quickly cleans up spills, uses a tray properly, side work – filling table supplies)

- c. Identify front of the house job and duties of the server bus person. (clears and resets table covers and assists the server, table setting: arrangements for informal, formal and buffet settings)
- d. Identify front of the house job and duties of the cashier. (responsible for cash drawer, counts back change, procedure to follow if there is a discrepancy)
- e. Identify front of the house job and duties of the server manager. (controls overall food production, handles complaints, resolves problems, monitors customer service)
- f. Identify back of the house jobs and duties (cook, baker, chef, bus person, dish washer, manager)
- g. Identify the purpose of the Kitchen Brigade System.

STANDARD 3

Students will discuss the importance of sanitation and safety.

Objective 1: Identify standards of personal grooming and hygiene.

- a. Establish and follow procedures to prevent human contamination (food handler permit requirements).
- b. Identify business standards for personal hygiene.
 - 1. Wash hands with soap and water- minimum 20 sec.
 - 2. Wash hands after using the restroom, sneezing, coughing, or touching face or hair
 - 3. Wash hands before and after handling raw meat, poultry and eggs
 - 4. Wear gloves over any cuts or open sores on hands
 - 5. Change dirty aprons – bacteria could be on it that can contaminate food.
 - 6. Tasting food – use clean spoon and use only once

Objective 2: Identify proper sanitation techniques used with tools, equipment, and surfaces.

- a. Discuss the order used when washing and sanitizing dishes (3-compartment sink dishwashing order: rinse and scrape, wash, rinse, sanitize and air dry. Wash pots and pans last place upside down to air dry.

Objective 3: Identify the factors contributing to food-borne contamination, illness, and prevention strategies.

- a. Discuss general concepts of food-borne illness.
 - 1. Food-borne illness – results from eating contaminated foods containing poisonous toxins.
 - 2. General conditions for Bacterial growth – food, moisture and warmth
 - 3. Food does not always have an off odor or flavor
 - 4. Food will often look and smell normal
- b. Identify botulism, e-coli, hepatitis, salmonella, staphylococci, and listeriosis
 - 1. Botulism – associated with improperly canned low acid foods
 - 2. E-coli – usually found in undercooked ground beef, unpasteurized milk, fruit juices, fresh fruit, and vegetables
 - 3. Hepatitis A – toxin from fecal bacteria transferred by human contact usually through improper hand washing
 - 4. Salmonella – often found in fresh poultry and raw eggs
 - 5. Staphylococcus – spread through human mucous contact to food source
 - 6. Listeriosis – usually found in ice cream, frozen yogurt, unpasteurized milk & cheese, raw vegetables, poultry, meat, seafood
- c. Discuss prevention strategies.
 - 1. Large majority of food-borne illness can be prevented by proper hand washing
 - 2. When in doubt throw it out. Do not taste or use. Don't use bulging cans.
 - 3. Frequently clean and sanitize work surfaces, i.e. cutting boards, counters
 - 4. Wash cutting boards, dishes, tools, etc, with hot soapy water after preparing each food item and before you go on to the next food
 - 5. Store raw meat, poultry, etc. covered in the refrigerator so they will not touch/contaminate or drip into other foods.
 - 6. Never place cooked food on a plate which has previously held raw meat, poultry or seafood without first washing the plate with hot soapy water
 - 7. Bacteria is destroyed at 180 degrees – dishwasher water temperature
- d. Discuss the importance of cooking to proper temperatures.
- e. Identify and define the Danger Zone: 41-135 degrees (no longer than 4 hours total)

- f. Internal food temps - be sure to use a clean thermometer
 - 1. Seafood, pork, beef, veal, lamb – 145 degrees
 - 2. Ground meats (pork, beef, veal, lamb) – 155 degrees
 - 3. All Poultry (whole or ground) – 165 degrees
 - 4. Reheat temp – 165 degrees (for a minimum of 15 seconds)
- g. Discuss the importance of cooling and reheating foods to the correct temperature zones in the correct amount of time using proper equipment.
 - 1. Keep hot foods hot and cold foods cold
 - 2. Thoroughly cool hot foods and reheat leftovers thoroughly
 - 3. Bring sauces, soups etc. to a boil when reheating; heat other leftovers to 165 degrees (for a minimum of 15 seconds)
 - 4. Food borne illnesses are related to improper cooling of foods
 - 5. Divide large amounts of leftovers in small, shallow, covered containers for quick cooling
 - 6. Store foods in the fridge and freezer so that the cool air can circulate to keep food safe
- h. Discuss how to correctly thaw foods.
 - 1. Refrigerator is the safest way to thaw; never defrost at room temperature on the counter
 - 2. Thaw in the refrigerator, under cold running water, or in the microwave
 - 3. If thawing food under cold water or in the microwave cook immediately
- i. Explain the duties of HACCP (Hazard Analysis Critical Control Point).
 - 1. Used to control sanitary conditions through a system of critical control points
- j. Discuss methods of purchasing, receiving, and storage (FIFO).
 - 1. FIFO (first-in first-out) rule – means the food that has been in the holding area the longest will be used first.
 - 2. Refrigerator, freezer, and dry storage
 - 3. Food storage and cleaning supply storage
- k. Discuss that the number one cause of food borne illness is poor personal hygiene.

Objective 4: Apply basic safety and first-aid procedures.

- a. Identify treatments for various emergencies. (fires, earthquakes, burns, cuts, falls, lifting injuries)
- b. Identify and practice basic first-aid procedures.
 - 1. Shock symptoms (pale or bluish skin color, shallow breathing, and clammy skin)
 - 2. Heimlich (abdominal thrust) is for choking
 - 3. Abdominal thrust on unconscious victims (kneel astride the victim's thighs; first-aid for choking)
 - 4. Do not interfere if the victim is coughing forcefully with a partial airway obstruction
 - 5. First degree burn (soak in cool water)
 - 6. Second degree burn (soak in cool water)
 - 7. Third degree burn (cover loosely with a dry, sterile cloth)

Objective 5: Demonstrate appropriate food handler safety and sanitation procedures.

STANDARD 4

Identify and practice the basic concepts of food production.

Objective 1: Utilize proper measuring techniques.

- a. Liquid, dry, and weight/scale
- b. Serving sizes: ladles and scoops
- c. Standardized recipes (Ingredients listed in order they go into the recipe)

Objective 2: Demonstrate proper mise en place and clean up.

Objective 3: Apply knowledge of equivalents and substitutions.

- a. Identify the equivalents used in food preparation. (3 t. = 1 T., 16 T = 1 c.; 2c. = 1 pt.; 4 qt.= 1 gal.; 16 c. = 1 gal.; 60 min. = 1 hr.; 4 c. = 1 qt. 2 pt.=1 qt.; 8 fl. oz.=1 c.; 1 qt.=32oz.; 2 c. butter = 1 lb.; 2 c. sugar = 1 lb.; 4 c. flour = 1 lb.)
- b. Identify substitutions in food preparation. (buttermilk/sour milk, square of chocolate, whole egg)

Objective 4: Apply knowledge of cost calculation.

- a. Figuring the cost per serving is the most accurate way to cost food
- b. Total cost divided by the number of portions = cost per serving
- c. Portion control – servings from various size pans, common serving sizes
- d. Determine how to increase and decrease the recipe yields.
- e. Price computation, costing calculation, portion-size cost analysis
- f. Food costs and profit margins

Objective 5: Identify and demonstrate appropriate use and cleaning of food service equipment.

- a. Identify equipment and how it is to be used and cleaned. (Grill, convection oven, slicer, range top, commercial oven, commercial dishwasher, ice machine, commercial mixer, deep fat fryer, knives, proofing oven, steam table)
- b. Identify required safety procedures for food service equipment.
- c. Identify types of knives, use/care and demonstrate proper knife safety.
 - a. Types of Knives (French/chef, boning, utility, paring, serrated)
 - b. Hold, sharpen, wash and store
 - c. Carry a loaded tray(on one shoulder)
 - d. Bend from knees

Objective 6: Apply the basics of menu/meal planning.

- a. Analyze nutritional needs of individuals.
 - a. MyPlate
 - b. Dietary guidelines
 - c. Nutritional considerations
- b. Identify meal planning aesthetics (color, shape, size, flavor, texture, temperature).
 - a. Meal planning begins with the entree
- c. Plan, calculate and present a quantity menu item.

Objective 7: Demonstrate quality presentation using the principles and elements of design.

- a. Identify table setting techniques.
- b. Identify the purpose and techniques of garnishing.
- c. Complete a plate and tray presentation. (salad, entrée, desert)

STANDARD 5

Students will discuss and participate in bakery food production.

Objective 1: Identify the function of each ingredient used in bakery products.

- a. Flour (All purpose, bread, gluten)
- b. Sugar
- c. Fats
- d. Leavening
- e. Salt
- f. Eggs
- g. Liquids
- h. Flavorings

Objective 2: Identify the types, mixing, and storage methods of various bakery products including cookies, quick breads, yeast breads, pastries, cakes, icings, frosting, and fillings.

- a. Cookies
 1. Identify the types of cookies: Soft dough -bar, drop, Stiff dough -rolled, molded, refrigerator, Batter – sheet (e.g. brownies).
 2. Discuss that cookies use the same creaming method cake batters and quick breads.
 3. Discuss the proper storage of cookies. (air tight container, freeze, length of time)
- b. Quick Breads
 1. Identify the types of quick breads: pour batter - (1 part flour to 1 part liquid), drop batter (2 parts flour to 1 part liquid), soft dough –(3 parts flour to 1 part liquid) ,
 2. Identify the proper mixing methods of quick breads. (biscuit method, muffin methods)
 3. Discuss the proper storage of quick breads. (airtight, can be frozen for up to 3 months)
- c. Yeast Breads
 1. Identify the types of yeast breads: lean dough (very little or no sugar or fat), rich dough (addition of shortening, butter, sugars, eggs, milk or cream)
 2. Define and use the baking terminology: fermentation, scalding, kneading, dividing dough, rounding dough, panning dough, proofing, resting, gluten.
- d. Pastries
 1. Identify the three different types of pastries. (pies, tarts, cream puffs)
 2. Identify the equipment used for making pastries.(Scales, mixer, mixer attachments, pastry blender, rolling pin, pastry wheel, convection oven, tart pans, pie pans, pastry tools, pie divider.)
 3. Identify the types of pie dough. (flaky, crumb, puff pastry)
 4. Identify different pie fillings. (cooked, cream, custard, soft , chiffon, mousses, fruit, gelatin.)
 5. Discuss the method used to mix pastry dough. (cut fat into dry until crumbly and then add liquid until combined. Do not over mix).
 6. Discuss and apply proper storage methods of pies. (Fruit pies can be held at room temperature 1-2 days, frozen before baking for 2 months. Cream pies need to be refrigerated and used with 1-2 days. Do not freeze.)
- e. Cakes
 1. Identify the different types of cakes. (shortened and foam cakes (angel food, sponge and chiffon)
 2. Discuss the different mixing methods and know the terminology used when making cakes. (Creaming, Blending, Sponge/Foam, Angel Food, Chiffon)
 3. Identify and practice the proper storage of cakes. (Wrapped in air-tight containers and stored in refrigerator until needed. Can be frozen for up to 1 month.)
- f. Icings, Frostings, & Fillings
 1. Identify the different types of frosting. (buttercream, foam/boiled, fondant, fudge, ganache, glaze, royal icing)
 2. Identify the three main functions of icings. (creates a protective coating for baked goods, contributes to flavor and richness, and improves appearance.
 3. Identify the different types of fillings. (Fruit and cream fillings)
 4. Storage – Refrigerate until use

Objective 3: Prepare and present quality bakery item(s).

STANDARD 6

Students will discuss and participate in restaurant food production.

Objective 1: Identify terminology and classifications of stocks, soups, and sauces.

- a. Identify various types of stocks (white, brown, fish, vegetable)
 - a. Mirepoix – mix of coarsely chopped vegetables used in stock to add flavor, nutrients, and color)
- b. Identify the five mother sauces (béchamel, veloute, espagnole, tomato, hollandaise).
 - a. Roux – equal parts flour and fat
- c. Prepare and present quality stocks, soups and sauces.

Objective 2: Identify high protein foods and appropriate safe cooking methods.

- a. Identify red meat terminology, cuts, and preparations. (wholesale cuts, meat thermometer, cooking methods: dry and moist heat, tenderizing methods)
- b. Identify poultry terminology, cuts, and preparations. (types and preparation, cooking methods)
- c. Identify seafood terminology, cuts, and preparations. (types and cuts, selection and preparation, cooking methods)
- d. Identify the three different types of vegetarians and foods associated with their diet. (lacto-vegetarian, lacto-ovo-vegetarian, vegan)
- e. Prepare and present quality protein foods.

Objective 3: Identify characteristics of fruits and vegetables and appropriate storage and cooking methods.

- a. Identify the proper receiving, storage, and handling of fruits and vegetables.
- b. Browning prevention
- c. Cooking techniques- Steaming and microwaving prevent nutrient loss
- d. Presentation
- e. Nutrient preservation
- f. Identify and demonstrate different knife cuts - Julienne, Brunoise, Small Dice, Medium Dice, Chiffonade, and Diagonal.
- g. Prepare and present a quality fruit/vegetable item.

Objective 4: Identify the characteristics of starch products, storage, and appropriate cooking methods for potatoes, grains, legumes, and pasta.

- a. Identify the characteristics and cooking methods used with potatoes
 1. Receiving, storage and handling
 2. Cooking techniques
 3. Presentation and nutrient preservation
- b. Identify the characteristics and cooking methods used with grains, pasta, and rice.
 1. Types/classifications grains, pasta and rice
 2. Dry yield to cooked equivalents
 - i. Pasta doubles in size when cooked, Rice triples
 3. Cooking methods
 - i. Pasta – uncovered in lots of water. Aldente – tender but still firm
 - ii. Rice – cook covered in a measured amount of water
 4. Prepare and present quality starch product(s).

Objective 5: Identify terminology, types and preparation methods of salads and dressings.

- a. Identify terminology, types and preparation methods of salads
 1. Identify the basic uses of salads: appetizer, accompaniment, main dish, dessert
 2. Discuss and identify the four basic parts to a salad. (Base, body, garnish and dressing)
 3. Identify the proper procedures for preparation and storage of salads.
 4. Prepare and present a quality salad product.
- b. Identify terminology, types and preparation methods of dressings
 1. Types – Vinaigrette (3 parts oil/1 part vinegar), Mayonnaise(based, cooked)
 2. Identify the proper preparation and storage of dressings. (Add just before serving or on the side)
 3. Prepare and present both types of salad dressings.