

STRANDS AND STANDARDS

CULINARY 2



Course Description

This course will train students for career opportunities in the food service/culinary arts industry. Safety and sanitation procedures will be implemented and practiced, as well as knowledge of use and care of commercial food service equipment. Quantity food preparation will be explored as it relates to catering, bakery, restaurant, hospitality, and quick service business operations. Student leadership and competitive events (FCCLA) may be integrated into this course.

Intended Grade Level	9-12
Units of Credit	1.0
Core Code	34.01.00.00.172
Concurrent Enrollment Core Code	
Prerequisite	Foods and Nutrition; Culinary 1
Skill Certification Test Number	345
Test Weight	1.0
License Area of Concentration	CTE &/or Secondary Education 6-12
Required Endorsement(s)	
Endorsement 1	Family Consumer Sciences
Endorsement 2	Food Services/Culinary Arts
Endorsement 3	

STRAND 1

Differentiate knives and food service equipment function, proper use and care. (Suggested 6 days)

Standard 1

Identify types of knives, understand their proper use and care, and demonstrate proper knife safety.

- Types of knives, including chef, boning, paring, serrated
- Correct holding technique, sharpening, wash and storage

Standard 2

Identify common small ware food preparation equipment, and how it is to be safely used and cleaned. (i.e. knives, mandolin, piping tools, Parisian scoop, scales)

Standard 3

Identify common food preparation and service equipment and how it is to be safely used and cleaned (e.g., convection oven, conventional oven, commercial dishwasher/sanitizer, ice machine, stand mixer, deep fat fryer, proofer, steam table, hotel pans, sheet pans, chafing dishes).

Standard 4

Identify and demonstrate different knife cuts, including:

- Batonnet— $1/4 \times 1/4 \times 2-3$ inch
- Julienne— $1/8 \times 1/8 \times 1-2$ inch, fine julienne- $1/16 \times 1/16 \times 1-2$ inch
- Brunoise— $1/8 \times 1/8 \times 1/8$ inch
- Dice, small— $1/4 \times 1/4 \times 1/4$ inch; medium— $1/2 \times 1/2 \times 1/2$ inch; large— $3/4 \times 3/4 \times 3/4$ inch
- Chiffonade—stack leaves, roll and slice into thin shreds
- Diagonal—cut on a 45 degree angle
- Rondelle—also called coin cut
- Mince - to cut or chop into very small pieces.
- Chop - to cut into uniform size when shape is not important.

Standard 5

Identify the process of mise en place.

- Mise en place (to put in place): organizing equipment and preparing ingredients (measuring, doing knife cuts) before you begin cooking.

STRAND 2

Connect workplace safety, food safety, and sanitation as applied to food production. (Suggested 5 days)

Standard 1

Apply established safety rules and guidelines in a work environment.

- Identify prevention, protocol and treatment for cuts.

- Prevention
 - Use sharp knives, dull knives are more dangerous
 - Hold knife correctly, using the claw hand position on guide hand.
 - Use a stabilized cutting board.
 - Hold onto the knife handle while cleaning, do not soak.
- Protocol
 - Clean and sanitize the affected area and equipment as soon as possible.
- Treatment
 - Minor cuts clean wound, apply bandage and wear glove.
 - Sever cuts apply pressure and seek medical attention.
- Identify prevention, protocol and treatment for fires, chemical and heat related incidents.
 - Prevention
 - Avoid flammable materials or clothing on or near the range.
 - Turn handles away from the front of the range.
 - Lift lids on hot foods away from you.
 - Use hot pads or oven mitts for handling hot baking pans.
 - Keep equipment clean.
 - Keep chemicals away from food.
 - Protocol
 - To extinguish a fire use the correct fire extinguisher. (A, B, C, or K)
 - To extinguish a grease fire, cover/smother the pan, pour baking soda/salt. Avoid water, flour or sugar on grease fires.
 - Follow manufactures directions for all chemical use and storage, do not mix chemicals.
 - Chemical incident see Safety Data Sheet (SDS) for medical treatment and fire suppression.
 - Treatment
 - First Degree Burn and Second Degree Burn: immerse burn in cool water or use cool compress for 10-15 minutes.
 - Third Degree Burn: seek medical treatment
 - For Chemical Burn: seek medical treatment or call poison control.
- Identify prevention, protocol and treatment for break, strains and sprains.
 - Prevention
 - Keep floors clean and dry.
 - Post caution signs for wet floors.
 - Store heavy items on lower shelves.
 - Use ladders or step stools appropriately.
 - Lift heavy items appropriately.
 - Wear non-slip shoes.
 - Treatment
 - Seek medical attention.

Standard 2

Identify health and hygiene requirements for food handling.

- Identify proper hand washing.

- Wash hands with soap and warm water for a minimum of twenty seconds, and dry with single use paper towel.
- Water should be a minimum of 100 degrees.
- Wash hands before and after handling raw meat, poultry or eggs.
- Wash hands after using restroom, sneezing, coughing, changing diapers, etc.
- Identify appropriate clothing and hair restraints.
 - Appropriate clothing is clean and may include chef coat, apron, or other uniform.
 - Cover and tie back hair with appropriate hair restraints before working with food.
- When tasting foods, always use a clean spoon and use only once.
- Discuss appropriate use of gloves.
 - Single use gloves only.
 - Wash hands before putting on gloves.
 - Change gloves when they get dirty, torn, or changing task.
 - Wear gloves when handling ready-to-eat (RTE) foods.
 - Wear gloves and bandage for an open cut or wound.
- Any activity involving eating, drinking, smoking/vaping, or chewing gum needs to occur in a designated area away from food preparation areas.

Standard 3

Identify the steps in the flow of food, including purchasing, receiving, storage, preparation, cooking, holding (hot/cold), cooling, reheating, and serving.

- Explain the purpose of the Hazard Analysis Critical Control Point (HACCP) system (i.e., to ensure keeping food safe through a system of identifying and monitoring critical control points).
- Discuss methods of purchasing, receiving, and storage.
 - Purchase from an approved reputable vendor.
 - FIFO (first-in first-out) rule (i.e., the food that has been in the holding area the longest will be used first).
 - Store food and cleaning supplies separately.
- Refrigerator and freezer temperatures (refrigerator: 41°F or lower; freezer: 0°F or lower).

Standard 4

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

- Discuss general concepts of food-borne illness.
 - Food-borne illness results from eating foods contaminated with pathogens.
 - General conditions for bacterial growth include food, acidity, time, temperature, oxygen, moisture (FAT TOM).
 - Contaminated food does not always have an off odor or flavor, so it may look and smell normal.
- Three types of food contamination hazards.
 - Physical - hair, glass, metal shards, fingernails.
 - Chemical - cleaning supplies and pesticides.
 - Biological - harmful micro-organisms (pathogens)
- Identify the four types of pathogen contaminants
 - Bacteria - tiny single cell micro-organism including Salmonella and E-coli.
 - Viruses - simple organism responsible for majority of foodborne illness - Norovirus and Hepatitis A.

- Parasites - organism that must live in or on a host to survive ie. Giardia
- Fungi - spore producing organism including yeast and mold. Typically, visible on spoiled food.
- Food-borne illness symptoms that exclude a worker from handling food may include the following:
 - Sore throat with fever
 - Jaundice
 - Diarrhea
 - Vomiting
 - Open and infected sores
 - Food handlers need to be symptom-free for 24 hours before handling food.
- Discuss prevention strategies.
 - Controlling Time and Temperature
 - In cold storage, place ready-to-eat (RTE) foods on top and uncooked animal products toward the bottom according to cooking temperature.
 - All TCS (Time and Temperature Control for Safety) foods need to be covered and stored in the refrigerator with a label including a use-by date, store at 41°F or lower, if produced on site for no more than 7 days.
 - Food should not be in the Danger Zone (the temperature range of 41-135°F), for longer than 4 hours total from start of preparation.
 - Cooking to safe internal temperatures; be sure to use a clean and sanitized thermometer.
 - Seafood, pork, beef, veal, lamb—145°F (for a minimum of 15 seconds)
 - Ground meats (pork, beef, veal, lamb) and eggs—155°F (for a minimum of 15 seconds)
 - All Poultry (whole or ground)—165°F (for a minimum of 15 seconds)
 - Reheat temp—165°F (for a minimum of 15 seconds)
 - Cooling and reheating foods to the correct temperature for the correct amount of time using proper equipment.
 - Keep hot foods hot and cold foods cold.
 - Hold hot 135°F and above.
 - Cold 41°F or lower.
 - Food needs to be cooled below 70°F within two hours and below 41°F within four more hours.
 - Methods include ice water baths, ice paddles, blast chiller, and dividing large amounts of food in small, shallow, covered containers for quick cooling.
 - Store foods in the refrigerator and freezer so that the cool air can circulate to keep food safe. Don't cover shelves or overcrowd.
 - Bring sauces, soups etc. to a boil when reheating; heat other TCS leftovers to 165°F (for a minimum of 15 seconds).
 - Safely thaw foods, including in the refrigerator, under cold running water, in the microwave, or as part of the cooking process.
 - Never defrost at room temperature.
 - Cold running water should not exceed 70°F.
 - The product should not exceed 41°F internal temperature.
 - If thawing food in the microwave, cook immediately.

- Preventing cross contamination and cross contact.
 - Cross-contact happens when one food containing allergens comes in contact with a surface or food, thereby posing a hazard for persons having that allergy.
 - The big 8 allergens include: tree nuts, eggs, milk, soy, wheat, peanuts, fish, and shell fish
 - Cross-contamination is the unintentional transfer of pathogens from people, surfaces or food to another food.
 - Food Storage: food is 6 inches off the ground, label stored food correctly, store ready-to-eat (RTE) food separately or above raw food.
 - Equipment Storage: Store service-ware and food containers upside down on a clean, sanitized surface, and store utensils with handles up.
 - Food Preparation: clean and sanitize work area and equipment, wash hands between task, never place cooked food on a plate which has previously held raw meat, poultry or seafood.
 - When serving foods: no bare hand contact with RTE food.
- Identify proper sanitation techniques used with tools, equipment, and surfaces.
 - Discuss three-compartment sink dishwashing and the order used when washing and sanitizing dishes (i.e., rinse and scrape, wash, rinse, sanitize and air dry).
 - Frequently clean and sanitize work surfaces (i.e., counters).
 - Clean and sanitize cutting boards, dishes, tools, etc., after preparing each food item, or every four hours of continuous use.
 - Never place cooked food on a plate which has previously held raw meat, poultry or seafood without first cleaning and sanitizing the plate.

STRAND 3

Students will explore the foodservice and hospitality industry; history, trends, and supply chains.
(Suggest-ed 4 days)

Standard 1

Identify various food service industry segments such as quick service, family dining, fine dining, catering, and institutional/non-commercial food service.

- Non-commercial: healthcare, education, military, charity, and corrections.
- Commercial: restaurants, caterers, lodging, travel, concessions, and retail.
- Identify various types of businesses including restaurants; quick service, full service and others.

Standard 2

Identify and discuss the history and influential chefs in the foodservice industry.

- Explain the history of food service.
- Identify the role of influential chefs.
 - Identify Marie-Antoine Careme
 - Implemented white chef coat and hats
 - Identify Auguste Escoffier
 - Organized kitchen management or brigade system
 - Identify Julia Child

- Revolutionized American home cooking through television

Standard 3

Identify current trends and their influence on the food service industry.

- Explore cultural influences on the food service industry such as, religion, health limitations, geographical, and age.

Standard 4

Differentiate the components of the food supply chain in regards to the food service industry.

- Agriculture
- Processing
- Distributor
- Retailer
- Consumer

STRAND 4

Students will compare and contrast various cooking techniques and how seasonings and flavorings create and enhance the natural flavors of food while practicing food presentation. (Suggested 5 days)

Standard 1

Review the various cooking techniques and how they affect food.

- Dry cooking applies heat directly as with flame or indirectly by surrounding food with heated air or fat. These techniques include: bake, grill, broil, roast, sauté/stir-fry, pan fry, deep fry.
- Moist cooking techniques apply heat to food by submerging it directly in hot liquid or steam. These cooking methods include: poach, simmer, boil, steam, and blanch.
- Combination (uses both dry and moist cooking methods): braise and stew.

Standard 2

Discuss the enhancement and creation of flavor when preparing food.

- Flavor can be defined as the sensory properties of food these are perceived with; taste, aroma, temperature, appearance (including color and arrangement), texture
 - There are four tastes that are universally agreed upon; sweet, sour, salty, bitter.
 - The taste umami, long recognized in Japan, and recently widely accepted by western cultures, is also called savory.
 - Seasoning enhances the flavor of food without changing the natural flavor. Seasonings are salt and monosodium glutamate (MSG).
 - Flavoring adds a new taste to food and/or alters its' natural flavors.
 - Herbs
 - The leaves, stems and flowers of aromatic plants.
 - Available fresh and dry. When using dry in the place of fresh, one third to one half the amount of fresh ask for should be used.
 - Fresh herbs are usually added at the end of cooking and dried are added at the beginning.

- Spices
 - bark, buds, fruit, roots, seeds or berries
 - Usually used in dry form, available whole or ground.
- Vinegars
 - Sour, acidic liquid that can be used to add flavor during cooking and/or as a condiment.
 - Vinegar is often named for the ingredient it is made from:
 - Wine vinegars are made from wine and contain no alcohol.
 - Cider=apples
 - Rice=rice
- Extracts are concentrated flavors that are used most often in baking.
- Ingredients commonly used to enhance flavor include onions, garlic, and lemon.

Standard 3

Elements of plating and food presentation.

- Avoid placing food on the rim or overfilling the plate, allowing for negative space.
- Avoid the use of non-edibles on the plate.
- Odd numbers are more pleasing than even numbers.
- Choose a variety of colors, texture, heights, size and shapes in meals.
- Consider food temperature.

STRAND 5

Students will utilize basic culinary math concepts. (Suggested 4 days)

Standard 1

Practice proper measuring techniques using appropriate tools.

- Volume and weight are the two standard methods of measuring food. Weight is the most accurate.
 - Volume measuring tools include teaspoons, tablespoons, cups, pints, quarts, gallons, and various sizes of ladles and scoops.
- Weight measuring tools include balance/baker scales, spring scale, and digital scale.

Standard 2

Identify measurement equivalents and apply by adjusting recipe yield.

- Identify measurement equivalents used in food preparation including, but not limited to:

• 3 t. = 1 T.	• 4 qt. = 1 gal.	• 1 lb. butter = 2 c.
• 16 T. = 1 c.	• 8 fl. oz. = 1 c.	• 16 oz. = 1 lb.
• 2 c. = 1 pt.	• 4 c. = 1 qt.	

Standard 3

Define a standardized recipe and identify components of a standardized recipe.

- Standardized recipe - A recipe that produces the same results and yield every time when the exact procedures are followed.

- Components of a recipe.
 - Title (name of the recipe)
 - Yield - how many servings the recipe will make.
 - List of ingredients and amounts, listed in order they appear in the recipe.
 - Step by step directions in order to be completed.
 - Equipment - container size and type.
 - Temperature and time
- Identify the importance/benefits of standardized recipes to a foodservice operation.
 - Customer Satisfaction
 - Consistent nutrient content
 - Food cost control

Standard 4

Correctly convert recipe yields.

- Formula for recipe conversion
 - Divide the new yield by the old yield to get the conversion factor:
 - $\text{New Yield} \div \text{Old Yield} = \text{Conversion factor}$
 - Multiply every recipe ingredient by the conversion factor to get the new quantity needed for the new yield:
 - $\text{Old ingredient quantity} \times \text{Conversion factor} = \text{New quantity}$

Standard 5

Calculate the difference between AP/EP to determine amounts needed for recipe production.

- Define as purchased (AP), edible portion (EP), and percent yield
 - As Purchased (AP) is the product before any trimming, cutting, or cooking.
 - Edible Portion (EP) is the product after it has to be trimmed or cut.
 - Percent Yield is the percentage of the remaining food after cutting, trimming, or cooking.
 - $\text{Edible Portion (EP)} \div \text{As Purchased (AP)} = \text{Percentage Yield}$
 - $\text{Edible Portion (EP)} \div \text{Percentage Yield} = \text{As Purchased (AP)}$
 - $\text{As Purchased (AP)} \times \text{Percentage Yield} = \text{Edible Portion (EP)}$

STRAND 6

Students will demonstrate the production of various stocks, soups and sauces. (Suggested 7 days)

Standard 1

Identify various types of stocks (i.e., white, brown, fish, vegetable).

- Mirepoix is a mix of coarsely chopped vegetables (onion, carrots, celery)
- To develop flavor, each needs to simmer for a minimum amount of time (do not boil).
 - White/poultry: 2-4 hours.
 - Brown/beef or veal: roast the bones for best color and flavor; 6-8 hours.
 - Fish: 20-45 minutes.
 - Vegetable: 30-60 minutes.

Standard 2

Compare soup types, including their ingredients and preparation methods.

- Clear/stock (broth, consommé, clear vegetable and noodle soups such as chicken noodle)
- Thick (creamed, pureed, bisque, chowder)
- Unusual/Regional (gazpacho, gumbo, borscht, and many more)

Standard 3

List potential thickeners for soups.

- Roux: Equal parts fat and flour heated into a paste.
- Slurry: Cornstarch and liquid
- Starchy foods: ex. Potatoes and pasta
- Beurre manie: Equal parts flour and butter kneaded to make a paste.

Standard 4

- Béchamel
 - Used in some cream soups; also in moussaka, lasagna, soufflé, croquettes, on a Croque Monsieur and with vegetable and pastas
 - Mornay/cheese sauce, crème sauce, and soubise
- Veloute
 - With fish or chicken, depending on the stock used; creamed soups
 - Allemande, supreme, poulette
- Espagnole
 - Serve with roasted beef or veal dishes
 - Bourguignonne, demi-glace, chasseur, and bordelaise
- Tomato
 - Serve with pasta, fish, vegetables, poultry, ground meats and sausages.
 - Marinara, creole sauce
- Hollandaise
 - Use with eggs, vegetables, light poultry, fish and beef dishes
 - Béarnaise, Dijon, Chantilly

STRAND 7

Students will explore salads, appetizers, and sandwiches. (Suggested 5 days)

Standard 1

Students will define and explore Garde mange

- Garde mange is cold dishes including salad, appetizers, hors d'oeuvres and canapes.

Standard 2

Students will recognize terminology and preparation methods of salads and dressings.

- Basic types/uses of salads:

- Appetizer: Small portion served prior to main dish.
- Accompaniment: Served with and compliments the main dish
- Main dish: This should have a variety of nutrients.
- Separate-course/intermezzo: A light salad served after the main course to refresh the palate.
- Salad greens
 - Choose your green based on season, salad structure, and flavor.
 - Select greens that are fresh and undamaged.
 - Ensure that greens have been thoroughly washed and dried.
 - Remove woody stems and cores.
- Salad dressings
 - Types:
 - Vinaigrette is made with oil and vinegar,
 - In a classically made vinaigrette the ratio will be 3 parts oil to 1 part vinegar.
 - An emulsified vinaigrette keeps the ingredients from separating.
 - Egg yolk and/or mustard are common emulsifiers.
 - A thick dressing is made by using mayonnaise and/or dairy products.
 - Match type of dressing with salad ingredients.
 - Dress greens just before serving.
 - Starchy salads, such as pasta, potato and rice, should be dressed and refrigerated to allow the flavors to blend and develop.

Standard 3

Identify and compose appetizers and hors d' oeuvres.

- Appetizers are served as the first course of a meal used to stimulate the appetite.
- Hors d'oeuvres are small bites served prior to a meal or at a separate event. Typically a finger food.
- Examples:
 - Brochettes: (Kabob) Food presented on a skewer
 - Filled Pastry Shells: Puff pastry or pastry shell with filling
 - Meatballs: Made from a variety of meat with a variety of sauces
 - Crudités: Raw vegetable tray
 - Canapes: Bread, toast or cracker topped with a savory spread and/or topping.
 - Bruschetta: Toasted bread topped with herbs, olive oil, and tomatoes.

Standard 4

Recognize the components and different types of sandwiches.

- Three components of a sandwich
 - Base: bread product or container for the sandwich. Traditional examples: loaf bread, rolls, and flat breads.
 - Spread: The three main purposes are to prevent bread from soaking up the filling, add moisture, and/or add flavor. Examples: Butter, mayonnaise, vegetable puree, mustards.
 - Filling: main component of the sandwich. Examples: meats, fish and shellfish, poultry, cheeses, eggs, vegetables, and fruits
- Types of sandwiches.
 - Closed: Filling is enclosed in the bread product, such as traditional sandwich, calzone, multi-decker, and wrap

- Open: Filling is placed on top of the bread product
- Sandwich preparation
 - Hot Sandwiches:
 - Hot Opened Faced Sandwich: Hot filling covered with a hot topping such as gravy or cheese.
 - Grilled Sandwich: Cooked on a griddle.
 - Panini: Cooked in a press
 - Fried Sandwich: ie. Monte Cristo
 - Pizza: Crust with a variety of toppings.
 - Cold Sandwiches:
 - Sub: ie. hero, hoagie, grinder, poor boy
 - Wrap: Can be made with a variety of flat breads or leafy greens, filled and rolled.
 - Canape

STRAND 8

Students will explore the career opportunities and employability skills needed in the foodservice and hospitality industry. (Suggested 6 days)

Standard 1

Differentiate between front (service) and back (production) of the house.

Standard 2

Identify service jobs and duties

- Host/hostess: greets and seats customers and takes reservations
- Server: meets customer needs
- Bus person: clears and resets table covers and assists the server
- Cashier: responsible for processing payment
- Dining room manager or maître d'hôtel: oversees all service of food and resolves problems
- Sales representative

Standard 3

- Executive chef
- Sous chef
- Station/line cooks
 - pastry, garde mange,
- Dishwasher

Standard 4

Identify management duties.

- Communication
- Time Management
- Resource management
 - Employee selection
 - Employee training
 - Orientation – learning about policies and procedures
 - Cross training – learning others jobs so you can cover for them

- On the job training – learning while you work
- Equity, inclusion, and diversity training—understand diversity, stereotypes and prejudice.
- Employee supervision and evaluation
 - Goal Setting
- Collaboration
- Motivation
- Critical Thinking/Problem Solving

Standard 5

Investigate employability skills.

- Positive Attitude
- Personal Appearance
- Communication skills (verbal and non-verbal)
- Ethical Behavior
- Collaboration
- Critical Thinking

Standard 6

Investigate the various steps necessary to gaining employment.

- Identify various ways to find employment
- Explore various tools used to apply for and obtain a job
 - Job Applications
 - Job Portfolio
 - Resume
 - Letter of request or cover letter
 - Job Interview
 - Thank you - follow-up

STRAND 9

Students will investigate the concepts of customer service and dining room management. (Suggested 3 days)

Standard 1

Discuss the importance of customer service

- Customer service is critical to an establishment's success.
 - Increases customer satisfaction, loyalty and employee moral
- Understand guest needs
 - age, families with children, first timers, special occasions, dietary needs, language barriers, dining alone

Standard 2

Explain the order of food and beverage service.

- Greet Customers

- Take the beverage order
- Sell the menu and take food order
- Serve the order
- Processing Payment

Standard 3

Categorize the main types of dining environments and service styles.

- Environment
 - Quick Service
 - Fast food. Limited menu, low prices and fast service
 - Fast Casual
 - An upscale quick service.
 - Casual Dining
 - Includes family style, neighborhood establishments, buffets and themed restaurants.
 - Fine dining
 - Expensive, great locations, fine food
- Service Styles
 - American Service: Plated in the kitchen
 - French Service: Tableside preparation, food is prepared in the kitchen and finished tableside. Requires skilled servers.
 - Russian Service: Food is prepared in kitchen and placed on platters. Servers serve food off the tray to the guest's plate.
 - English Service: is referred to as family style. Food is prepared in the kitchen and served in bowls or platters. Guest serve themselves from the bowls or platters.
 - Cafeteria/Counter Service: food selected and served at counter.
 - Buffet Service: food is displayed at a table where guests serve themselves.

Standard 4

Compare and contrast the various pieces of dining equipment and use.

- Dining and Service Equipment
 - Dining Equipment
 - Flatware
 - Glassware
 - Dinnerware
 - Service equipment—serving spoon, tongs, tureen, pitcher, platter
- Table setting
 - Center of table: center piece, salt and pepper, condiment holders
 - Napkin in the center of the place setting or to the left
 - Forks on the left, knives and spoons on the right
 - All knife blades turn in to plate
 - Flatware 1" from edge of table
 - Dessert forks and spoons at the top of the place setting
 - Bread plate on the left, butter knife on top of the bread plate, blade facing down toward the plate
 - Glassware above the knife

- Coffee cups to the right of the knives and spoons

STRAND 10

Students will explore and participate in bakery food production. (Suggested 10 days)

Standard 1

- Identify the functions and types of each ingredient used in bakery products.
- Flour
 - Flour provides structure.
 - Types
 - Bread, all purpose, pastry, whole wheat
 - Non-wheat (usually made to be gluten free). These come from other starchy plants, such as corn, barley, oats, potatoes, beans, and rice.
 - Sugar
 - Sugar provides flavor, color, food for yeast, tenderizer, and a stabilizer for egg whites.
 - Types
 - Syrups: honey, molasses, corn, maple
 - Sugars: brown, turbinado/raw, course/sanding, granulated, super fine/bakers/caster, confectioners/powdered
 - Fruit puree and juice
- Fats
 - Fats provide tenderness, flavor, moisture, browning, and flakiness.
 - Types
 - Shortening—made from vegetable oil that is hydrogenated.
 - Oil
 - Butter—it can be purchased salted or unsalted.
 - Margarine—made from hydrogenated vegetable oil with color, flavor and water added.
- Leavening
 - Leavening agents are what make baked goods rise and have a light tender texture and good volume.
 - Types:
 - Yeast
 - Chemical
 - Baking soda/sodium bicarbonate: needs an acid to make a chemical reaction that produces carbon dioxide.
 - Baking powder: made of baking soda, a dry acid such as cream of tartar, and a moisture absorber such as corn starch. When mixed with a liquid the ingredients combine to produce carbon dioxide.
 - Physical
 - Eggs—air is introduced by creaming or whisking and is trapped in the protein then it expands when it gets hot.
 - Steam—during baking water evaporates and expands.
 - Salt:
 - Adds flavor to food and brings out the flavor of the other ingredients.
- Eggs

- Functions
 - Structure—contributes to the structure.
 - Emulsification—blends ingredients.
 - Leavening
 - Flavor—when used in large amounts, such as in pate' choux and challah bread.
 - Color
- Packaging types
 - Shell eggs—sold in flats that hold 30 eggs. If stored properly at 41°F or below, they will last up to four weeks beyond the packing date.
 - Egg products—eggs that have been removed from the shell and pasteurized.
- Liquids
 - Functions
 - form the gluten structure
 - activate leavening agents
 - some give flavor, tenderize, add moisture, and help with browning
 - Types
 - Water
 - Milk and cream
 - Eggs
 - Syrups
 - Fruits and juices
 - Butter, oil, and margarine
- Flavorings
 - Effects taste and color of the final baked product.
 - Types
 - Extracts—liquid flavorings
 - Spices—bark, roots, flower buds, berries or seeds of aromatic plants.
 - Nuts
 - Chocolate
 - Comes from cacao beans harvested from the pod, roasted, chopped into nibs, crushed into a paste called chocolate liquor, and possibly sweetened and flavored (called bittersweet chocolate), or pressed to separate into liquid called cocoa butter and solids that are ground into cocoa powder.
 - Types
 - Unsweetened—a mixture of chocolate liquor and cocoa butter
 - Semisweet—a mixture of chocolate liquor, cocoa butter and sugar
 - Milk chocolate—chocolate liquor, cocoa butter, sugar and powdered, sweetened condensed or liquid milk.
 - White—sweetened cocoa butter
 - Cocoa powder—ground solids
 - Dutch-processed cocoa powder—treated with alkali to reduce acidity

Standard 2

Identify the types and mixing methods of various bakery products, including cookies and quick breads.

- Cookies
 - Types:
 - Crisp—very little moisture and a high ration of sugar. Spread more than other cookies.
 - Soft—low amount of fat and sugar, high ratio of liquid such as eggs, corn syrup, molasses or honey is often used.
 - Chewy—high ration of eggs, sugar and liquid, but a low amount of fat. Use pastry flour for an ideal chewy cookie, and develop the gluten during mixing.
 - Most cookies are made using the creaming method of mixing.
 - Shaping/baking methods
 - Drop—chocolate chip and oatmeal
 - Rolled—sugar and gingerbread
 - Molded and pressed—spritz, almond crescents and lace
 - Icebox/refrigerator—dough is made ahead of time and stored in the refrigerator, then sliced and baked as needed
 - Sheet or pan—brownies and lemon bars
 - Bar cookies—biscotti and fruit bars (like fig newtons)
 - Discuss the proper storage of cookies.
 - Cool completely before storing
 - Keep in an airtight package
 - Can be frozen for up to three months
- Quick breads
 - Identify the types of quick breads:
 - Pour batter (1 part flour to 1 part liquid)—crepes and pancakes
 - Drop batter (2 parts flour to 1 part liquid)—muffins
 - Soft dough—(3 parts flour to 1 part liquid)—biscuits and scones.
 - Stiff dough
 - Identify the proper mixing methods of quick breads.
 - Biscuit method—cut the fat into the dry ingredients, then add the liquids.
 - Blending/muffin method—combines liquids, including fat and eggs, in one container and dry ingredient in a separate container and then combine the two mixtures.
 - Creaming method—cream solid fat and sugar until light and fluffy, add eggs one at a time, then add dry and liquid ingredients.
 - Discuss the proper storage of quick breads.
 - Most are best when served fresh. When storing, put in airtight packaging. Use within a few days or freeze for up to three months.

Performance Skills

PERFORMANCE SKILL 1

Demonstrate competency with all the knife cuts listed in Strand 1 Standard 4.

PERFORMANCE SKILL 2

Students will complete a sanitation and food safety training equivalent to or higher than that of a food handler's permit or certificate.

PERFORMANCE SKILL 3 Students will explore flavor profiles using herbs and spices and produce a food item using those herbs and spices and an appropriate cooking method.

PERFORMANCE SKILL 4 Students will create a short presentation explaining one culinary math concept in Strand 5. (CTSO competitive event co-curricular opportunity)

PERFORMANCE SKILL 5 Students will make a mother sauces or a derivative to be incorporated with a complementary food item.

PERFORMANCE SKILL 6 Students will prepare and plate a salad, appetizer, or sandwich.

PERFORMANCE OBJECTIVE 7 Students will research a specific hospitality or food service career creating a presentation of their findings. A resume/cover letter specific to that career must be included. Teachers might use STAR Event Career Investigation as a resource.

PERFORMANCE SKILL 8 Plan, calculate cost, prepare and present a cookie or quick bread item for a minimum of 30 people.

FCCLA Integration into Culinary 2:

STAR Events: Career Investigation, Entrepreneurship, Environmental Ambassador, Illustrated Talk, Interpersonal Communications, Job Interview, Leadership, Life Event Planning, Nutrition & Wellness, Advocacy, Chapter Service Project Display, Chapter Service Project Portfolio, National Programs in Action, Applied Math for Culinary Management, Culinary Arts, Food Innovations, Hospitality, Tourism and Recreation, Sports Nutrition.

Skill Demonstration Events: Culinary Chicken, Culinary Food Art, Culinary Knife Skills, Consumer Math, Culinary Math, Hospitality, Tourism and Recreation, Nutrition, Science in FACS.

National Programs: Career Connection, Leadership Service in Action, Power of One, Student Body

Workplace Skills

Students will develop professional and interpersonal skills needed for success in industry. Determine the difference between hard skills and soft skills.

- Hard Skills: Hard skills are specific, teachable abilities that can be defined and measured
- Soft Skills: Personal attributes that enable someone to interact effectively and harmoniously with other people.

Identify soft skills needed in the workplace

- Professionalism
- Respect Legal requirements/expectations
- Good communication skills
- Resourcefulness & creativity
- Work Ethic