# **Instructional Framework**

Culinary Arts 12.0500.00



Domain 1: Safety and Sanitation	
40-55% Instructional Time	
STANDARD 1.0 APPLY SANITATION PROCEDURES	
1.1 Define the concept of HACCP (Hazard Analysis Critical Control Point)	<ul> <li>3 Hazards -Biological, Chemical, Physical Hazards</li> <li>Define Hazard Analysis Critical Control Points (HACCP)         <ul> <li>7 parts of the HACCP Plan</li> </ul> </li> </ul>
1.2 Identify major reasons for and recognize signs of food spoilage and contamination	<ul> <li>Proper thawing methods</li> <li>First in First Out (FIFO)</li> </ul>
1.3 Identify the most common foodborne illnesses	<ul> <li>Salmonella</li> <li>E.Coli</li> <li>Shigella</li> <li>Norovirus</li> <li>Hepatitis A &amp; B</li> <li>Listeria</li> <li>Staphylococcus aureus</li> </ul>
1.4 Demonstrate good personal hygiene, proper dress code, and personal health practices	<ul> <li>Correct handwashing techniques</li> <li>Uniform</li> <li>Glove use standards</li> <li>Illness and the workplace (when to stay home, not touch food)</li> </ul>
1.5 Describe cross-contamination and use of acceptable procedures when preparing and storing foods that require time/temperature control for safety (TCS)	<ul> <li>Define cross contamination</li> <li>Examples of cross-contact:         <ul> <li>Common allergens</li> <li>Diet</li> </ul> </li> <li>Equipment use</li> <li>Difference between cleaning and sanitation</li> <li>Define Time/temperature control for safety (TCS)         <ul> <li>Cooling/chilling/and holding procedures</li> </ul> </li> </ul>
1.6 Delineate the requirements for proper receiving and storage of raw and prepared foods	<ul> <li>First in First Out (FIFO)</li> <li>Ready to Eat (RTE)</li> <li>Proper delivery inspections         <ul> <li>Packaging</li> <li>Temperatures</li> <li>Expiration dates</li> </ul> </li> <li>Storage Procedures</li> </ul>

	<ul> <li>Dry goods</li> <li>Refrigeration</li> <li>Freezer</li> </ul>
1.7 Identify proper waste disposal methods and recycling of materials	<ul> <li>Waste disposal methods for         <ul> <li>Fryer oil</li> <li>Food waste</li> <li>Paper goods</li> <li>MISC recycled materials</li> <li>Composting</li> </ul> </li> </ul>
1.8 Recognize, treat, and prevent signs of insect, rodent, and pest infiltration	<ul> <li>Recognition</li> <li>Prevention</li> <li>Treatment         <ul> <li>Licensed pest control</li> </ul> </li> </ul>
1.9 Identify regulatory agencies governing sanitation and safety in the food service operation	<ul> <li>USDA</li> <li>FDA</li> <li>OSHA</li> <li>Local County Health Inspections</li> </ul>
1.10 Define temperature danger zone for food safety and sanitation	<ul> <li>Temperature danger zone</li> <li>Danger Zone 41-135 F</li> </ul>
1.11 Identify minimum internal cooking temperature	<ul> <li>Identify minimum internal cooking temperature         <ul> <li>Poultry</li> <li>Beef (ground/non ground meat)</li> <li>Seafood</li> <li>Eggs (eggs on buffet/immediate service)</li> <li>Reheating</li> <li>Hot food holding</li> </ul> </li> </ul>
1.12 Define methods for the growth of microorganisms (FATTOM )	• Define FATTOM (Food, Acidity, Time, Temperature, Oxygen, Moisture)
1.13 Maintain appropriate temperature and placement of products in refrigeration equipment	<ul> <li>Cold food holding</li> <li>Shelving order of products</li> <li>Temperatures for refrigerators and freezers</li> </ul>
STANDARD 2.0 APPLY SAFETY PROCEDURES	
2.1 Identify current types of and the proper use and storage for cleaners and sanitizers	<ul> <li>Proper chemical storage</li> <li>Food safe cleaners and sanitizers</li> </ul>
2.2 Define and explain the purpose of Safety Data Sheets (SDS)	<ul> <li>Define Safety Data Sheet (SDS)</li> <li>Components of SDS sheets</li> </ul>

	Define Right to Know
2.3 Identify appropriate emergency procedures for common kitchen and dining room injuries	<ul> <li>Burns</li> <li>Cuts</li> <li>Fires</li> <li>Choking</li> <li>Bodily fluids</li> </ul>
2.4 Define types and appropriate uses for fire extinguishers found in the food service area	<ul> <li>Proper use of a fire extinguisher- Pull Aim Squeeze and Sweep (P.A.S.S)</li> <li>Fire Suppression System (commercial hood system - ex. Ansul, Piranha)</li> <li>Fire extinguishers:         <ul> <li>A wood/paper</li> <li>B grease/oil</li> <li>C electric</li> <li>K universal</li> </ul> </li> </ul>
2.5 Identify safety precautions for common workplace accidents and injuries, including OSHA regulations	<ul> <li>Facility Maintenance         <ul> <li>Floors</li> <li>Lighting</li> </ul> </li> <li>Employee         <ul> <li>Uniform</li> <li>Lifting procedures</li> </ul> </li> <li>Equipment         <ul> <li>Knives</li> <li>Unguarded machines</li> <li>Lockout/tag-out</li> </ul> </li> </ul>
2.6 Describe an emergency/evacuation plan for food service operations	Plan and implement an emergency evacuation plan

## Domain 2: Preparation Techniques and Cooking

#### 35-40% Instructional Time

STANDARD 7.0 INTERPRET FOOD PREPARATION TECHNIQUES	
7.1 Identify and demonstrate standardized knife cuts	Knife anatomy
	Proper holding technique
	<ul> <li>Claw grip</li> </ul>
	<ul> <li>Guiding hand</li> </ul>
	Demonstrate common knife cuts
	o Mince
	o Chop
	<ul> <li>Small/medium/large dice</li> </ul>

	<ul><li>Julienne</li><li>Chiffonade</li></ul>
7.2 Define, implement, and practice Mise en Place	Define Mise en Place
7.3 Identify common spices and herbs and guidelines for using them	<ul><li>Define the difference between spices and herbs</li><li>Dried vs Fresh</li></ul>
7.4 Identify oils and vinegars and their uses	<ul> <li>Sources of oils/vinegars</li> <li>Melting point, smoke point, and flash point</li> <li>Nutrition</li> </ul>
7.5 Identify various categories of dressings and salads	<ul> <li>Identify different types of dressings         <ul> <li>Emulsification</li> <li>Vinaigrette</li> <li>Mayonnaise</li> </ul> </li> <li>Identify different types of salads         <ul> <li>Tossed Salad</li> <li>Composed salad</li> <li>Bound salads</li> <li>Farinaceous Salad</li> </ul> </li> </ul>
7.6 Identify various marinades, brines, and rubs	Define the differences between a marinade, brine, and a rub and their intended purpose
7.7 Identify dry heat, moist heat, and combination cooking methods	<ul> <li>Define the difference between dry heat, moist heat, and combination cooking method and their expected outcomes</li> </ul>
STANDARD 8.0 PREPARE HOT FOODS	
8.1 Identify and prepare various meats, seafood, and poultry	<ul><li>USDA Grading and Inspection classifications</li><li>Fabrication</li></ul>
8.2 Identify and prepare various stock, soups, and sauces	<ul> <li>Identify the 5 mother sauces</li> <li>Identify the difference between stock and broth</li> <li>Mirepoix</li> <li>Identify ways to thicken sauces and soups</li> </ul>
8.3 Identify and prepare various fruits, vegetables, starches, and grains	<ul> <li>Identify different categories of fruits and vegetables</li> <li>Season availability effect on freshness, quality, and cost</li> <li>Difference between starches and grains</li> </ul>
8.4 Identify and prepare breakfast meats, eggs, grains, and batter products	Identify and prepare breakfast meats, eggs, grains, and batter products
8.5 Demonstrate traditional and contemporary food presentation techniques	<ul> <li>Explore a variety of plating techniques, such as color, shapes, texture, spacing, temperature, etc. (elements and principles of design)</li> </ul>

9.1 Identify tools and equipment used in garde manger preparation	Identify tools and equipment used in garde manger preparation
9.2 Demonstrate basic garnish techniques	<ul> <li>Basic garnish techniques, such as         <ul> <li>Peeling</li> <li>Zesting</li> <li>Curling</li> </ul> </li> <li>Functional vs. Non-Functional garnishing</li> </ul>
9.3 Demonstrate fundamental skills in preparing soups, salads, sauces, dressings, marinades, relishes, sandwiches, canapés, hors d'oeuvres, and cheese and sausages	<ul> <li>Prepare soups, salads, sauces, dressings, marinades, relishes, sandwiches, anapés, hors d'oeuvres, cheese, and sausages</li> </ul>
9.4 Identify food presentation techniques for banquet events	Service vs. Buffet presentation for banquets
STANDARD 10.0 PREPARE BAKERY AND PASTRY PRODUCTS	
10.1 Define common baking terms, methods, and techniques	<ul> <li>Baking Terms: scaling, confectionary, dust, sift, dough v batter</li> <li>Mixing Methods: beat, creaming, biscuit method,</li> <li>Baking Techniques: folding, whip, cut-in, bain marie</li> </ul>
10.2 Identify and describe functions of baking ingredients and leavening methods	<ul> <li>Basic Ingredients (flour, liquid, sweetener, binding agent, leavening, and flavor)</li> <li>Chemical vs Biological leavening agents</li> </ul>
10.3 Demonstrate techniques for preparing yeast breads	<ul> <li>Identify the steps in yeast bread production</li> <li>Prepare yeast breads</li> </ul>
10.4 Demonstrate techniques for preparing quick breads	Process and variations to prepare quick breads, such as muffin and biscuit methods
10.5 Demonstrate techniques for preparing pastry and baking goods	<ul> <li>Process and variations to prepare pastries and baked goods, such as pies, cookies, and cakes/cupcakes</li> </ul>
10.6 Identify types of finishing products and presentation techniques (e.g., icing, whipped cream, chocolate)	• Identify types of finishing techniques for baked products (e.g., icing, glaze, egg wash, garnish)

### Domain 3: Dining Operations

#### 10-15% Instructional Time

STANDARD 11.0 PERFORM DINING AND BEVERAGE CATERING OPERATIONS	
11.1 Demonstrate the general rules of table setting and dining room layout	Formal vs. Informal
11.2 Identify traditional and contemporary positions in food service	Front of the House (FOH) v. Back of the House (BOH)
11.3 Practice professionalism and techniques in support of good customer relations	Workplace and employability skills
11.4 Demonstrate cash handling procedures for processing guest checks, including point of	Cash handling

sale systems (POS)	
11.5 Practice sales techniques for service personnel, including menu knowledge, suggestive selling, and special requests	Practice front of the house sales techniques
11.6 Demonstrate fundamentals of acceptable dining etiquette	Proper serving and clearing of cover
11.7 Perform side work for opening and closing food service shifts	Perform side work relative to job duties for front of house and back of house positions
11.8 Identify various styles of service (e.g., buffet, fast casual, formal, and casual)	<ul> <li>Identify various styles of service (buffet, fast casual, formal, casual, and family)</li> </ul>

## Domain 4: Meal Planning

## 10-15% Instructional Time

STANDARD 3.0 APPLY BASIC NUTRITIONAL CONCEPTS	
3.1 Identify food groups in the current USDA nutritional guidelines	Refer to current USDA nutritional guidelines
3.2 Specify primary functions and sources for the six nutrients groups	Protein, carbohydrates, water, fat (lipid), vitamins, and minerals
3.3 Identify cooking and storage practices for maximum retention of nutrient groups	Healthy cooking techniques
3.4 Investigate common food allergies and appropriate substitutions	• Top eight allergens (peanuts, fish, dairy, wheat, soy, eggs, tree nuts, and shellfish)
3.5 Characterize common nutritional considerations (e.g., vegan/vegetarianism, restricted	Characterize common nutritional considerations (e.g.,
diets, and caloric intake)	vegan/vegetarianism, restricted diets, and caloric intake)
STANDARD 4.0 INTERPRET RECIPES	
4.1 Define common culinary recipe terminology	Define common culinary recipe terminology
4.2 Identify the four major components of a recipe	Title, yield, ingredients, method
4.3 Read, follow, and execute a recipe	Recipe formats: standardized, action, narrative
4.4 Use proper scaling and measurement techniques	Measuring equivalents
	Serving size
	Weight vs. volume
4.5 Identify and demonstrate mixing methods (e.g., stir, mix, cream, fold, and blend)	• Stir, mix, cream, fold, and blend
4.6 Identify menu styles (e.g., A la carte, Prix fixe, table d'hote, Du Jour)	A la carte, Prix fixe, table d'hote, Du Jour
4.7 Plan a menu	Identify the different components of a menu (appetizers, entrée, sides,
	desserts, etc)
	<ul> <li>Psychological, inventory, seasonal, cost analysis</li> </ul>

	Truth in menu principles
STANDARD 12.0 APPLY CULINARY MATHEMATICS	
12.1 Compare as purchased quantity to edible quantity	Compare as purchased quantity to edible quantity
12.2 Scale recipes based on RCF (recipe conversion factor) calculations	Scale recipes based on RCF (recipe conversion factor) calculations
12.3 Convert standard measurement amounts to metric	Convert standard measurement amounts to metric
12.4 Calculate food cost for a recipe	Calculate food cost for a recipe
12.5 Calculate unit cost of products for purchasing or for food cost analysis	Calculate unit cost of products for purchasing or for food cost analysis

## Domain 5: Small wares and Large Equipment

#### 5-10% Instructional Time

STANDARD 5.0 USE COMMERCIAL EQUIPMENT AND SMALLWARES	
5.1 Describe the proper use and maintenance for different knives	<ul><li>Honing vs sharpening</li><li>Proper cleaning</li></ul>
5.2 Demonstrate proper and safe use of small wares	Demonstrate proper and safe use of smallwares
5.3 Identify and demonstrate the selection of equipment and smallwares for specific applications	Differentiate between bakeware, cookware, and kitchenware
5.4 Describe procedures for the care and maintenance of commercial equipment and smallwares	Cleaning, storage, maintenance
STANDARD 6.0 USE LARGE COMMERCIAL GRADE EQUIPMENT	
6.1 Identify and operate different types of ovens, ranges, stoves, grills, and flattops	• Identify and operate different types of ovens (conventional v convection), ranges, stoves, grills, and flattops
6.2 Identify and use types of refrigerator and freezer equipment	Reach-in v. Walk-in Refrigerator
6.3 Demonstrate the selection of large commercial equipment for specific applications	<ul> <li>Demonstrate the selection of large commercial equipment for specific applications</li> <li>Identify the uses of         <ul> <li>Proofer</li> <li>Deep fat fryer</li> </ul> </li> </ul>
6.4 Identify procedures for the care and maintenance of large culinary and baking equipment	Cleaning, storage, maintenance