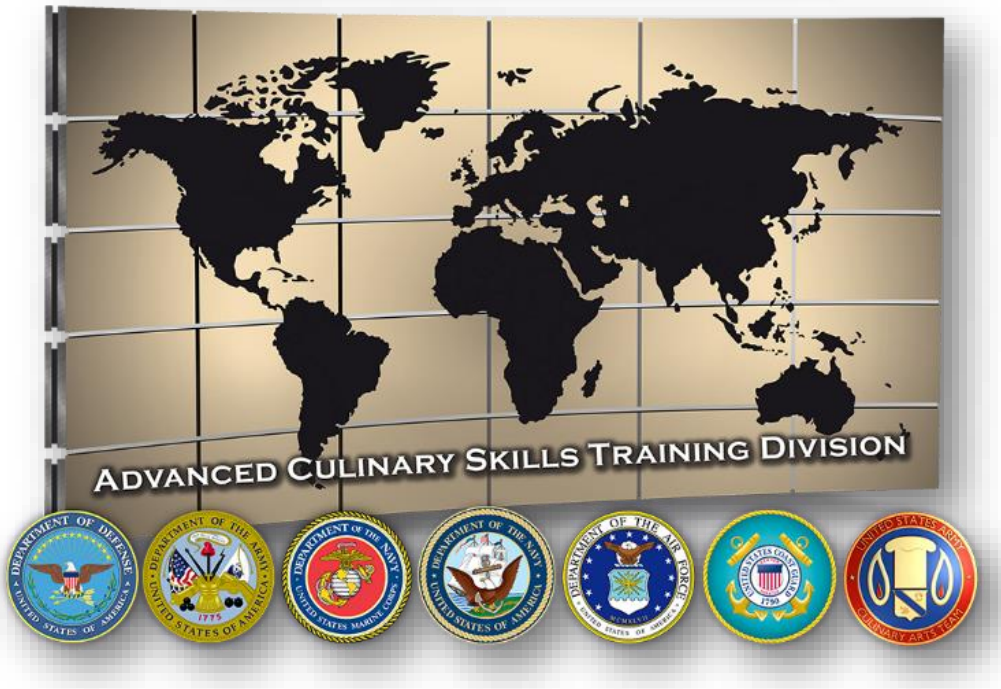
JCCoE

Joint Culinary Center of Excellence

Home of the Food Service Professional



DO NOT WRITE IN THIS PUBLICATION

Information for Students

Joint Culinary Center of Excellence,
Advanced Culinary Skills Training Division
1630 Byrd Ave, Bldg. 4200, Rm. 263
Fort Lee, VA 23801-1730

Office Phone: 804-734-3274
Email: usarmy.lee.tradoc.list.jccoe-advanced-culinary@mail.mil

Advanced Culinary Training Division Staff:

OIC:
Chief Warrant Officer 4 (CW4) Eveline Rosado-Haliday

NCOIC:
Sergeant First Class (SFC) Bryan M. Koritzer

Lead Instructor:
Sergeant First Class (SFC) Adam S. Berry

Instructors:
Senior Master Sergeant (SMSgt) Randy L. Gill
Senior Chief Petty Officer (SCPO) Ian A. Brown
Sergeant First Class (SFC) Sean F. Bamrick
Sergeant First Class (SFC) Adam S. Berry
Sergeant First Class (SFC) Christopher R. Gibson
Gunnery Sergeant (GySgt) Christopher T. Hamilton
Sergeant First Class (SFC) Ryan A. Nielsen
Mr. Guy C. Winks

Facebook: facebook.com/army.culinary
ACF Website: www.acfchef.org

The Professional Chef: ISBN: 978-0-470-42135-2
Culinary Fundamentals: ISBN: 0-13-118011-8
Baking Fundamentals: ISBN: 0-13-118351-6
Apprenticeship Training Program: ISBN: 978-0-8269-4196-1
Service Etiquette by Oretha Swartz ISBN: 0-87021-620-1

Assessment Guide

1. What does "mise en place" mean?

2. What is the function of a sorbet?

3. What are the classical grand sauces?
    1.
    2.
    3.
    4.
    5.
4. What primal cut of beef does the tenderloin fall under?

5. What is the ratio of oil to vinegar when preparing vinaigrette?

6. Define canapé and hors d' oeuvre?

7. What are the categories of potatoes?
    1.
    2.
    3.
8. What is the simmering time for brown veal stock?

9. Name the categories of fish?
    1.
    2.
    3.
10. What should be inspected when purchasing fresh fish to ensure quality?
    1.
    2.
    3.
    4.
11. What is it called when a fillet is rolled and stuffed with a filling?

12. What is the ratio of a roux?

13. What is the cut when fish is cut horizontally across the body?

14. The classic *supreme* cut is what section of the chicken?

15. What is the theory behind adding cold water to stocks?

16. How many sides on the classical cut *tourné* potato?

17. What is the easiest type of service for large numbers of people and no assigned seating?

18. What is the best way to store fresh whole fish?

19. Name examples of crustaceans.
    1.
    2.
    3.
20. In formal dining, beverages are severed from what side?

21. What are the dimensions of the classical cut *brunoise*?

22. What method of slicing vegetables or herbs produces fine, thin ribbon like strips?

23. Define the following cooking terms
    Reduction:

    Coulis:

    Sweat:
24. What are the moist heat cooking methods?

25. What are the dry heat cooking methods?

26. What are the ingredients found in a mirepoix?

27. What is the maximum number of forks placed at a formal setting?

28. What does the acronym ACF mean?

29. What are the functions of egg whites and yolks?

30. What does *cover* refer to when setting a table?

Table of Contents

The Evolution of Cuisine

Like any art, great cookery requires taste and creativity, an appreciation of beauty and mastery of technique. Like the sciences, successful cookery demands knowledge and an understanding of basic principles. Like any successful leader, chefs must exercise sound judgment and be committed to achieving excellence in their endeavors. This course will describe food, cooking equipment, explain culinary principles, cooking techniques, and provide recipes using these principles and techniques. We cannot provide taste, creativity, commitment and judgment for these; a chef must rely on themselves.

History of Modern Food Service

Apicius / 4th century first

Cookbook Boulanger / Restaurant

Beauvillers / Grand Taverne de Londres

Guilds / French Revolution

Marie-Antoine Carème / **Grande Cuisine**

Georges Auguste Escoffier / Refining Grande Cuisine to **Classic Cuisine**

Classic Kitchen Brigade

Fernand Point / **Nouvelle Cuisine**

Chez Panisse/**New American Cuisine**

Fusion Cuisine

Avant-Garde Cuisine or Modernist Cuisine

The Professional Chef

Chefs must be able to identify, purchase, utilize and prepare a wide variety of foods. They should be able to train and supervise a safe, skilled and efficient staff. To do all this successfully, chefs must possess a body of knowledge, understand and apply certain scientific and business principles. Culinary training should at a minimum, provide the student with a basic knowledge of sanitation, nutrition, variety of foods, styles, and the methods used to prepare foods. This course will emphasize culinary principles not recipes. Focus is on the general procedures, fundamental principles and skills. Education does not stop at the end of the book, hopefully within the next few weeks the quest for knowledge will ignite.

The art and science of cookery formed from a noble profession with a rich history and long traditions. With knowledge, skill, taste, judgment, dedication and pride, the student chef can become a part of a wonderful profession.

Knowledge- culinary training from schools, books, life and observing more then you speak

Skill- practical hands on experience will produce consistent, efficient, quality, organize, motivation

Taste- all senses are involved in eating, creating, preparing and presenting food

Judgment- comes with experience, often accompanied by failure, do not be afraid to fail, learn from mistakes as well from successes, only then will true judgment develop

Dedication- becoming a chef is hard work. A chef should never falter and always serve food with safety, sanitation and quality first and foremost.

Pride- It is important that the job be completed, but one should have a sense of pride in their work. Pride should extend to personal appearance and behavior in and around the kitchen. Learn the whys behind the reason to prepare food and know that the chef attire has certain utilitarian aspects. The checkered pants were designed to disguise stains. The double-breasted white jacket can be re-buttoned to hide dirt and the double layering is to protect from scalds and burns. The neckerchief wore around the neck was to absorb perspiration. The apron protects the uniform and insulates the body. Shoes are polished and pants are pressed. The crowning element of our chef uniform is the hat, with a history dating back to the sixth century and story of earning of the height. The uniform should be worn with the same pride you place in food presentation.

Food Safety and Sanitation

The U.S. Public Health Service identifies more than forty diseases that can be transmitted through food. Many can cause serious illness and even death. Therefore, providing consumers with safe food is the food handler's most important responsibility. Unfortunately, the food handler is the primary cause of food-related illness. Understanding what causes food-borne illness and what can be done to prevent them will help you to better protect the consumer.

Sanitation -is referred to the creation and maintenance of conditions that will prevent food-borne illness. Preparing and serving safe foods in a clean kitchen is important but it does not stop there, the food must have high quality as well through proper handling from the dock to the dining room table.

Contamination- is the presence of harmful organisms of substances (biological, chemical or physical). Contamination occurs either direct or by cross-contamination.

Direct- is the contamination of raw foods (plants or animal), in their natural settings or habitats.

Cross contamination- is the movement of chemicals or microorganisms to food products, they cannot move on their own. Food handlers can cause this movement during processing, preparing, cooking, or even serving.

Foodborne Illness
Pathogens
Bacteria
FATTOM
Flow of food
HACCP

As Chefs we must…..

Practice good personal hygiene
Form clean work habits
Prevent cross contamination during storage, handling, preparation, service
Control time and temperature; know more than just the danger zone 41 degrees-135 degrees F
Receive, store and prepare food at the correct temperatures and time frames
- Hot food hot/cold foods cold
- Reheated foods 165 degrees or higher and then maintained at 135 degrees or higher
- Cold foods in refrigeration of 41 degrees or less, frozen at 0 degrees F

Thaw food safely- preferred method is refrigeration of 41*f or less, or under running water of 70*F or cooler
Cool food safely- two stage cooling method
- First stage- cools to 70 degrees F within 2 hours
- Second stage- 70 degrees F to 41 degrees F in an additional 4 hours, for a total of 6 hours

HACCP system-
Pest control
Kitchen Safety (work safely, first aid, fire safety, dress for safety)

Equipment Identification

A sure mark of the true professional is the ability to select the right tool for the job. Knowing how to maintain, clean, and use as wide array of tools, large and small, is the foundation of work done by a chef. Having the proper tools and equipment for a particular task may mean the difference between a job well done and one done carelessly, incorrectly or even dangerously. A wide variety of specialized tools are available but before using any new equipment read the owner's manual or have someone experienced with the item instruct on the proper procedures for use and cleaning. Remember safety, sanitation and customer service are the foundation of our profession.

Standards for Tools and Equipment
NSF International (NSF), previously known as the National Sanitation Foundation, promulgates consensus standards for the design, construction and installation of kitchen tools, cookware and equipment. Although NSF is voluntary, most manufacturers submit their designs for certification to show that they are suitable for use in professional food service operations.

Selecting Tools and Equipment

Hand tools-are designed to aid in cutting, shaping, moving or combining items. They have few if any moving parts. Spoons, whisks, zester, peeler, spatula, tongs and knives are among the common hand tools.

Measuring and portioning devices- Recipe ingredients ***MUST BE*** measured precisely. Measurements may be based on weight (grams, ounces and pounds) or volume (teaspoons, cups, gallons). Therefore, it is necessary to have available several measuring devices, including liquid and dry measuring cups and a variety of scales. Thermometers and timers are also measuring devices.

Scales-are necessary to determine weight of an ingredient or a portion of food. They must be properly used and maintained to provide an accurate reading. Never pick up a scale by its platform for this can damage the balancing mechanism.

Volume measuring- measuring spoons (1/4 tsp -1T units), dry measuring cups (1/4-1 cup units)

Liquid measuring- cup to gallon units -has a lip/ pour spout above top measurement to prevent spills

Ladles- useful in portioning liquids (ounces to milliliters stamped on the handle)

Portion scoops- are useful for portioning salads, vegetables, batters, sorbets, truffles. A number stamped on the scoop indicates the number level scoopfuls per quart. The higher the number means the smaller the scoop's capacity.

Cookware- should be selected for its size, shape, ability to conduct heat evenly and overall quality of its construction. Cookware that fails to distribute heat evenly may cause hot spots that burn foods. Because different metals conduct heat at different rates, and thicker layers of metal conduct heat more evenly that thinner ones, the most important consideration when choosing cookware are the types and thickness, known as the gauge of the material used. Cookware includes sauté pans, stockpots, roasting pans, hotel pans and specialty molds.

Some Common Items in the Kitchen

Pots, Pans, Hotel Pans (4 inch, 2 inch, half, one-third, and perforated

pans) Strainers and Sieves, chinois, cheesecloth, sifters

Molds usually made of tinned steel, smooth or patterned, round, oval or rectangular

Processing Equipment- both electric and nonelectrical mechanical devices used to chop, puree, slice, grind, or mix foods. ***ALWAYS*** follow safety rules for all equipment and report any malfunctions immediately. Slicers, mandolin, food chopper (buffalo chopper), food processor, blender, immersion blender, vita prep mixers and juicers are processing equipment.

Safety Equipment-fire extinguishers, first-aid kits, protective gear

Cleaning supplies- ***NEVER*** stored with or near foods

Compartment Sink- garbage disposal, wash, rinse, and sanitize (based off chemicals)

The Cooking Process

Education of a chef involves continually tasting food in as many states as possible. A raw onion will taste different from a warm caramelized onion or even a hot onion ring. Cooking is defined as the transfer of energy from a heat source to a food. This energy alters the molecular structure, changing texture, flavor, aroma and appearance of the food. Cooking destroys undesirable microorganisms and makes food easier to ingest and digest. To cook foods successfully, you first must understand heat is transferred by conduction, convection, and radiation.

Conduction- simply movement of heat from one item to another through direct contact

Convection- transfer of heat through a fluid, may be a liquid or a gas

Natural- occurs because warm liquids and gases to rise while cooler ones fall

Mechanical- relies on fans or stirring heat more quickly and evenly

Radiation- is transferred by waves of heat or light striking the food, no contact of heat source and the food

Infrared- electric or ceramic element of radiant heat waves that cooks the food. Toasters and broilers

Microwave- relies on radiation generated by a special oven to penetrate of food

Induction- uses electromagnetic current to heat magnetic cookware. It heats the food not the cook top.

Cooking techniques involve a thorough knowledge of cooking methods and how to develop flavors in food. The cooking method chosen depends on the type of food being cooked and the flavors the chef is developing in the dish. Flavorings are added to change the natural flavor of a food. Seasonings are added to intensify the flavor of the food. Successfully developing flavors is the key to creating successful dishes that guests will enjoy and want to order again and again.

Cooking Methods

Foods are composed of proteins, carbohydrates (starches and sugars), water and fats, plus small amounts of minerals and vitamins. Changes in the shape, texture, color and flavor of foods may occur when heat is applied to each of these nutrients. Understanding these changes and learning to control them, you will be able to prepare foods with the characteristics desired. Foods can be cooked in air, fat, water or steam; these are known as cooking *media*. The effects of heat on food are protein coagulates, starch gelatinizes, sugar caramelizes, water evaporates, and fat melt. There are two cooking methods dry-heat and moist-heat.

Dry-Heat Cooking Methods- any cooking method that uses hot air, hot metal, a flame, or hot fat to conduct heat and brown food. The foods cooked using these methods are usually rich in flavor caused from browning. They are broiling, grilling, roasting, baking, sautéing, pan-frying and deep frying.

Moist-Heat Cooking Methods- any cooking method that uses liquid or steam as a cooking medium. Poaching, steaming, simmering, blanching and boiling.

Combination Cooking Methods- braising, stewing, poêléing, sous vide

Changes in Color and Texture

It is important to understand how heat changes the color and texture of food.

Maillard Reaction-

Caramelization-

Reduction-

Coagulation-

Gelatinization-

Color Changes- Different color on interior vs. exterior -grilling
Transparent/opaque -sautéing, poaching
Bright to dull colors -blanching/boiling

Texture Changes- Soft- often thought of as under cooked or too moist
Firm-often thought of as tough or dry

Flavor Changes- Deepen or concentrate flavors by reducing
Intensify, adjust or modify by adding seasoning
Diminish or even remove flavors by blanching

Nutrient Changes- Nutrient values can be altered by the way food is prepared, cooked and stored
Heat can destroy vitamins but can also increase values- cooked tomatoes contain more lycopene than uncooked tomatoes, heated cinnamon has more antioxidant power than raw cinnamon.

The Perception of Food

Food is presented in many forms, colors, textures, and flavors. Sensory perception is the ability of the senses to gather information and evaluate the environment. Signals are sent to the brain regarding the presentation, aroma, taste, and texture of food.

Aromas- The human nose can detect thousands of aromas. The flavor of food is sensed by the nose because the nose has more sensory cells that the tongue. The nose can differentiate between foods that are quite in taste. A description such as vanilla-flavored coffee describes the overall aroma of the item rather than its taste. The tongue can taste the sweetness and bitterness of the coffee, but it is the nose that senses the vanilla and the roasted aroma of the coffee beans.

Taste and Texture- The taste and texture of food are determining factors in the appeal of a given dish. Even if the food looks and smells appealing, an unappetizing taste or texture can cause a guest to reject the item.

The types of flavor the tongue or *palette*

Sweet- is the most pleasurable and often sought-after taste, although ironically, the fewer sweet-tasting foods we consume, the more enhanced our ability to recognize sweet-tasting foods we consume, the more enhanced our ability to recognize sweet. Sweetness comes from the naturally occurring sugars it contains (like sucrose and fructose) or sweeteners added to the food, the sweetness can sometimes be enhanced by adding a small amount of a sour, bitter or salty taste.

Sour- is considered the opposite of sweet, a sour taste is found in acidic foods and, can vary greatly in intensity. Food that have dominate sour taste, like red currants or sour cream; will also contain a secondary or slight sweetness. Often sour taste can be improved by adding a little sweetness or negated by adding a large amount of a sweet ingredient.

Salty- is the notable exception of oysters and other shellfish and seaweed, the presence of salty taste in food is the result of the cook's decision to add the mineral sodium chloride, known as salt, or to use a previously salted ingredient such as salt cured fish or soy sauce. Salt helps finish a dish, heightening or enhancing its other flavors. Dishes that lack salt often taste flat. Like sweet, the less a consumer consumed on a regular basis the more will be detected in foods.

Bitter- is a flavored ingredient unbalanced by something sour or salty and is generally disliked. Bitterness often balances sweetness and can cut in the richness of a dish.

Umami- is a newly added taste, akin to the savory taste long recognized in Japanese cuisine (meaning delicious) refers to a food's savory characteristic of richness, fullness, meatiness or meaty taste of a dish. Taste buds sense umami in the presence of several substances, including the naturally occurring amino acid glutamate and its commercially produced counterpart of monosodium glutamate (MSG). Cheese, meats, rich stocks, soy sauce, fatty fish, mushrooms, tomatoes, and wine are all high in glutamate and produce the taste sensation of umami.

Factors that Affect Flavor Development

Temperature- foods at warm temperatures offer the strongest tastes. Heating food releases flavor compounds, which intensifies one's perceptions of odors. Foods seem to lose their sour or sweet taste both the colder and hotter they become. Saltiness is perceived differently at colder temperatures. It is important to taste and season food at the temperatures it will be served.

Texture or Consistency-the consistency or texture affects appearance and flavor of food. Two foods with the same amount of taste and smell compounds that differ in texture will differ in perceived intensity and onset time; the thicker item will take longer to reach its peak intensity and will have a less intense flavor. Sweetened heavy cream made in two exact batches, whipping one will take on volume and a milder flavor. Some descriptive words for texture include firm (dense or hard), soft (yielding), dry, crisp, light, airy (frothy or foamy), thick, watery, warming and cooling.

Presence of Contrasting Tastes- sweet and sour are considered opposites, and often the addition of one to a food dominated by the other will enhance the overall flavor. Adding sugar to vinaigrette reduces the sourness or adding a squeeze of lemon juice to a broiled lobster reduces the shellfish sweetness.

Presences of Fats-many of the chemical compounds that create tastes and aromas are dissolved in the fats naturally occurring in foods or fat is added to foods during cooking. As these compounds are slowly released by evaporation or saliva, they provide a sustained taste sensation. If there is too little fat, the flavor compounds may not be released efficiently, resulting in a dish with little sustained flavor. Too much fat can coat the tongue and interfere with the ability of taste receptors to perceive flavor compounds.

Color- affects how the consumer will perceive the flavor before it is even tasted. When food is appropriately colored it will cause the perception of taste and flavor to increase. Common color association with foods are *opaque* (light), *translucent* (some light passes through), and *transparent* (clear).

Aroma- is responsible for eighty percent of flavor. Anyone with a cold or allergies knows that it is difficult to taste food. Smell is often perceived as perfume, fragrance, pungent, or earthy that describes the sensations that tickle or trick our gustatory senses like carbonated beverages or false perception of heat from chili pepper.

Sound- is important to the experience of taste. Crispy food should have a crunch upon biting and hot food should sizzle. We often describe food sounds as having snap, sizzle, pop, crackle or crunch.

Note-*It is said that the most sensitive temperature for taste is 72 degree-105 degree F, as flavors are more pronounced between those temperatures. Age, health, smoking and drinking can all compromise the perception of taste.*

Flavor is to food, what hue is to color. Flavor is the adjective and food is the noun. Each ingredient has its own character, which is altered by every ingredient it encounters. A secret ingredient is one that mysteriously improves the flavor of a dish without overpowering the main ingredient. There are primary flavors (obvious) and secondary flavors (secret or an ingredient that does not act well alone, like herbs are usually added in combinations). Whether the function is primary or secondary flavors combine in three ways. They marry (combine to form one taste, vanilla with lobster), they oppose (opposite flavors can highlight), or they juxtapose (cut or balance each other, like sweet and sour). Knowing how to combine or not combine flavors and aromas, to achieve a simple and pure result, will make a more confident chef.

Describing Foods Using Flavor Profiles

A flavor profile describes its flavor from the moment the consumer gets the first whiff of its aroma until they swallow that last morsel. It is a convenient way to articulate and evaluate a dish's sensory characteristics as well as identify contrasting or complementing items that could be served with it. A profile consists of one or more of the following elements:

Top Notes-the sharp, first flavor or aroma that come from citrus, herbs, spices and many condiments. They have instant impact and dissipate quickly.

Middle Notes- the second wave of flavor and aroma. More subtle and linger longer than top notes. Usually come from dairy products, poultry, some vegetables, fish and some meats.

Low Notes-the most dominate, lingering flavors. These flavors consist of the basic tastes (especially sweatiness, sourness, saltiness and umami) and come from foods such as anchovies, beans, chocolates, and garlic. They can be created by smoking or caramelizing the sugars in the food during grilling, broiling and other dry-heat cooking methods.

Aftertaste -the final flavor that remains in the mouth after swallowing, the lingering bitterness of coffee or chocolate or the pungency of black pepper or strong mustard.

Roundness- the unity of various flavors achieved through the judicious use of butter, cream, coconut milk, reduced stocks, salt, sugar and these ingredients cause the other flavorings to linger without necessarily adding their own dominant taste or flavor.

Depth of flavor- whether the dish has a broad range of flavor notes, flavor profiles often refers to the seasoning widely used to season many dishes in each cuisine. The overall flavor profile can range from simple to complex, depending on how many individual flavors, aromas, and textures.

Choosing the appropriate ingredients to use in a dish is a way to develop flavor. The goal is to select, prepare, and present foods that appeal to all senses. Food should be fresh as possible, best and appropriate quality, fully flavored, attractive in shape and size, and have the best possible texture. Think about the essence of the moment (the season, weather, the weight of a meal desired) and the essence of the ingredient (seasonal, functions of its age, like a banana increases sweetness as it changes color and functions, and the volume or strength of the flavor of the ingredient).

Plating and Presentation

It is time to put down the kitchen equipment and get ready to present the food. It is important the creativity and skill that went into cooking is not lost in a sloppy presentation. Food preparation is a science, presentation is an art. Good presentation results from careful attention to the colors, shapes textures, and arrangement of the foods. Great presentation takes experience. Presentation is the art of telling guests about the food by the way it is arranged on the plate or platter. Good presentations will make the guest want to eat the food, even before the first bite is taken. A variety of words can describe the effect of each element in a presentation: simple, elegant, balanced, integrated, unified, organic, or even synergistic. Food should always be ***properly cooked neatly plated and served at the appropriate temperature***.

The Primary Objectives of Food Presentation

Serve foods at the best possible temperature, for safety and flavor

Give foods an attractive and appropriate appearance

Make it easy for the guest to identify and eat the food

Highlight all aspects of color, aroma, temperature, and shape

The Elements on the Plate

Main Item, side or accompaniments, sauce, garnish

Presentation Development Checklist (S.C.H.I.F.T)

Shape- different shapes bring variety, interest, and appeal

Color- of the components must be natural colors to that specific item, potatoes should not be green

Height- brings eye appeal and dimension

Items - or components should balance and complement each other. Plates should have the following items or components, main, side, sauce, crunch and garnish

Flavor- balancing through contrast of flavors, creating a unique experience. Contrasting flavors are sour and sweet, warm/hot and cold/frozen, soft/tender and crisp, lean and rich/fatty, cool and spicy

Texture- the components on a dish should vary in texture. A contrast in texture helps develop a better pallet feel. Achieving a balance of texture on a plate can be simple as adding a crisp garnish such as the fried julienned vegetables

Presentation Guidelines

Balance- the concept of balance incorporates many factors in food presentation. The presentation must be balanced through the selection of food by choosing complementary flavors, colors, food items, etc. Also, food should be prepared using different but complementary cooking methods and arranging it on appropriate china in an appetizing presentation

Selection of Food- complex and simple types of food should be balanced

Colors- is always important in food, but especially so in presentation. Color reinforces freshness, quality, and proper cooking methods

Variety- use variety in color without giving a "circus" effect. Earth tones with vibrant color are often successful. Usually foods that taste good together will naturally harmonize in color

Cooking Methods- avoid repetition by using different and compatible methods

Shapes- avoid combining the same shapes on one plate. Avoid too many whole or stuffed items or too many loose mixtures on the same plate

Textures-utilize purées, custards, fried, toasted items, to provide different textures; however, avoid combining too many similar textures on the same plate. The basic textures to work with are smooth, coarse, solid and soft

Flavorings or Seasonings- avoid using the same seasonings to provide flavor. Do not put lemon or vanilla in everything if they will be served on the same plate. The flavors should be complementary like rich with lean, spicy with bland, smoky (salt) with sweet, sweet with sour (acid), sweet with spicy

Using the Right Plate-show case the food on plain plate, a colorful plate takes away from the food. The garnishes and components should never be on the rim of the plate. Always place hot foods on a hot plate and cold foods on a cold plate

Flow and Sequencing-

Flow is the sense of movement on a plate.

Sequencing- sliced items should be arranged in the order in which they are cut from the large piece.

Since majority of the people are right-handed, meat should always go on the right side of the plate.

Serviceability- the diner should not have to move around components to get to other items

a b

Lines-Strong and Weak

Strong lines are natural in line and shape (A is the strongest line), a strong line is slightly curved indicates a general direction of movement. (B, C, and D)

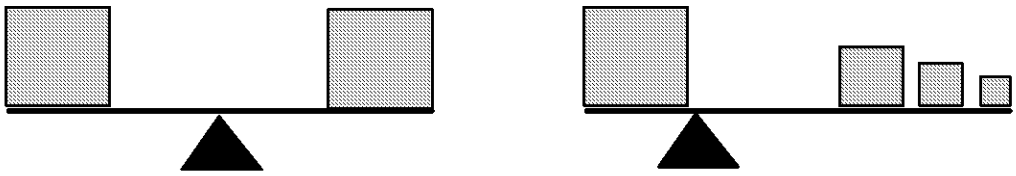
A weak line is not consistent in line or direction, has too many curves and no definition. (E and F)

A B C D E F

Garnishes-should always be edible and be used in odd numbers. A garnish should always be functional. For example, capers, caviar, finely chopped parsley. Un-functional garnishes get in the way and increases food waste. Slice of lemon, a sprig of rosemary are not functional because the diner will not eat the item. Garnishes can add color, texture, taste and interest to a dish, should not distract from the focus. Garnish should make sense flavor wise, it should flow with the other components

Unity-layout should work as a cohesive unit. Everything should be close together to retain their temperature and unity. Components that are scarred on the place cause the eye to be bounce from item to item. Avoid by bringing all the components close together and reduce the focus point

Balance in Presentation- if the balance, unity, and focal point are correct a sense of movement will be natural. The layout is symmetric if the sense of flow is stifled by "locking" the eye in the middle of the plate or platter; the layout is asymmetric when there is a stronger sense of movement.



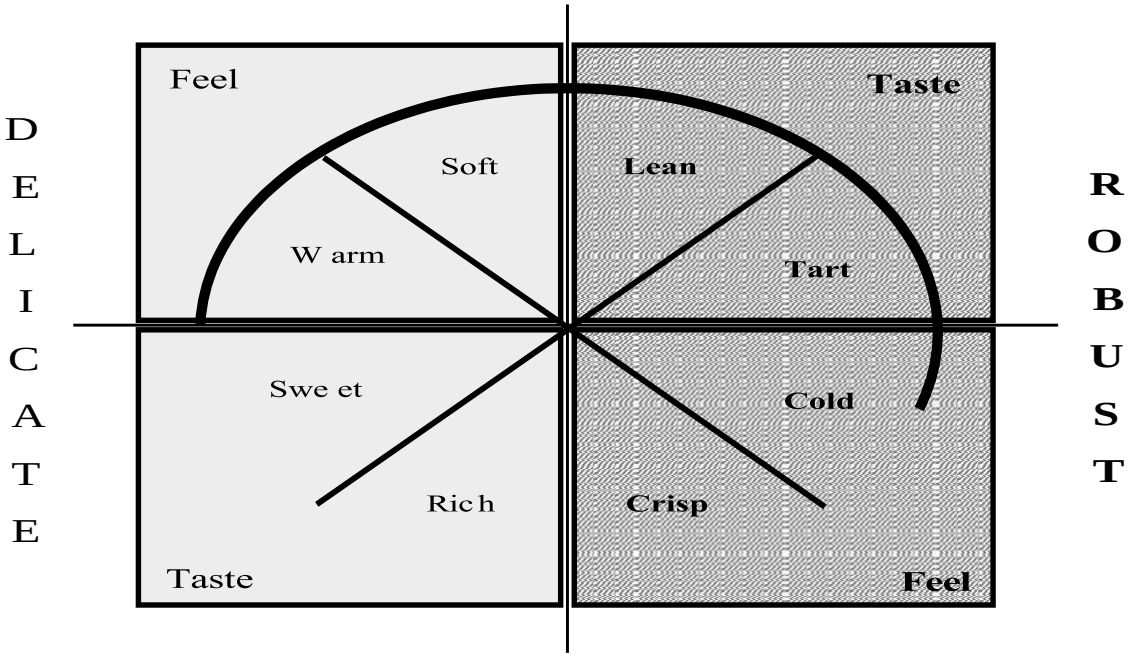
Symmetric Balance

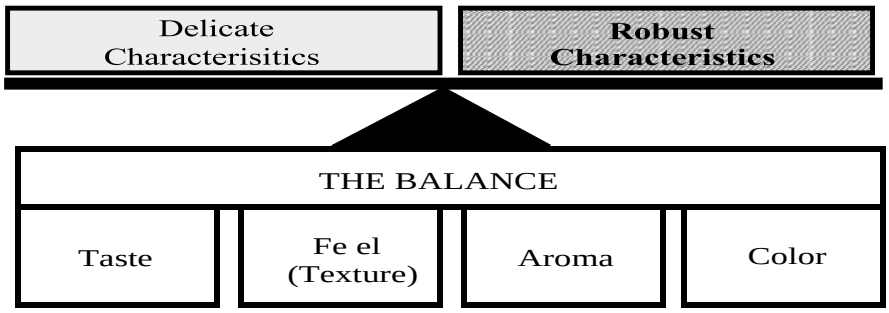
Asymmetric Balance

Modern Plating-Trends and Composition

When designing a plate, the chef must consider the composition, exploring the possibilities of contrasting and complementing flavor, texture, color and style. It is important to consider, the customer base, specific event or menu need, and the environment for preparation and service. Look at classic plating with a contemporary eye and perhaps introduce ingredients that are not typical and give them new life. When planning an item for a menu, consider the final presentation of the item. Certain restrictions may immediately become apparent; the lack of equipment (not enough of a particular mold,) might force you to change the shape or look of a certain item. Timing can also be a restrictive element for preparation or service

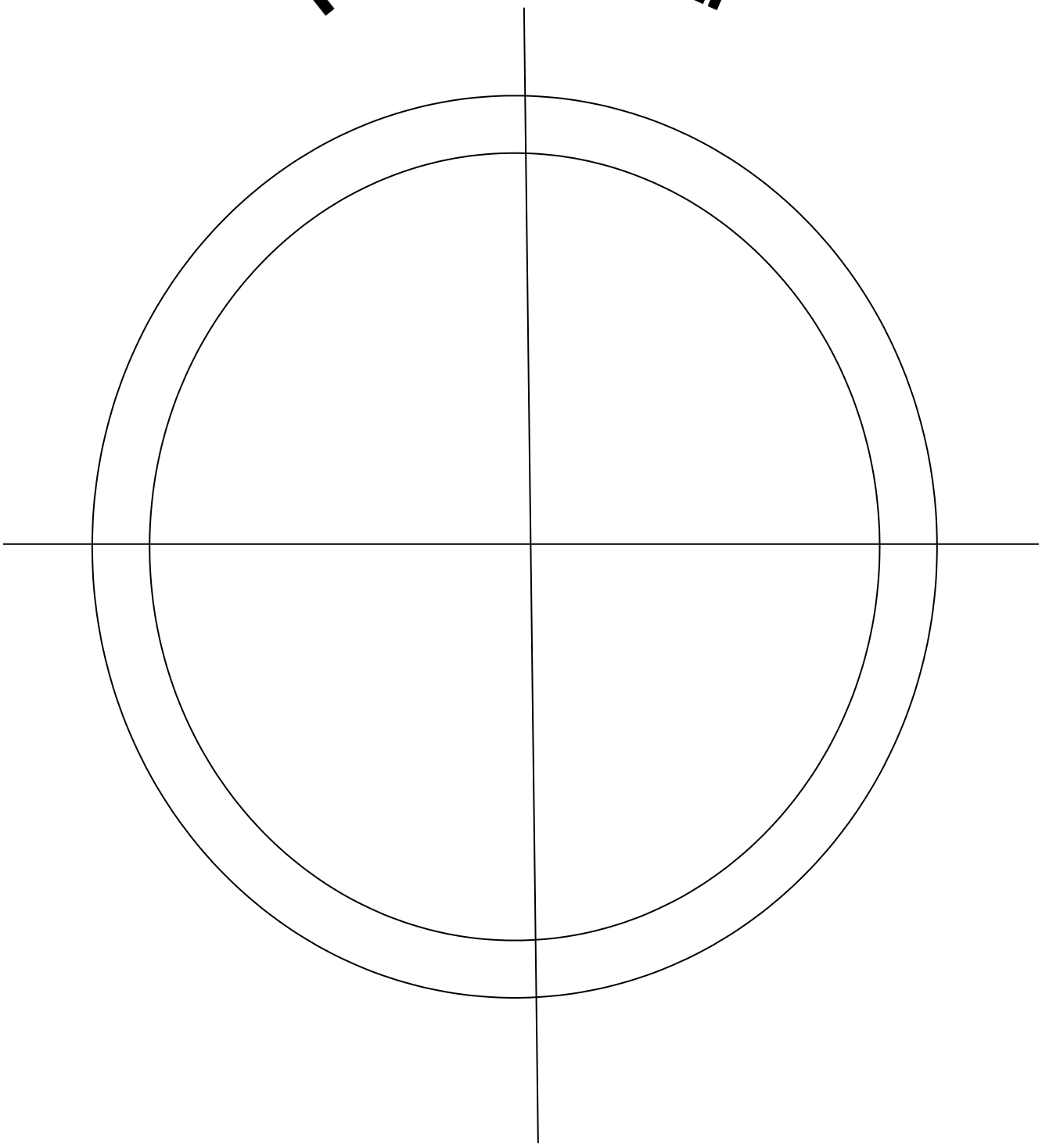
The Contrast Wheel-is a visual guide to understand the basic contrasting flavors, temperatures, and textures that can be utilized in the creation of a plated course. Think about incorporating contrasting characteristics into a menu by using different components, but never add components just to have another contrasting element, the number of components should make sense for the course





The contrast wheel is divided between delicate and robust tastes and mouth feels. Combining contrasting elements on one plate will keep the palate interested and excited. Keep the idea of the contrast wheel in mind when adding new item to a current menu or designing a new menu. A balanced menu should contain warm and cold, sweet and tart, and rich and lean items.

Plate Up Diagram



Menu Planning

The first step of planning a menu is to determine the theme of the event. A theme sets the tone of the event. It defines the menu, decorations, linens and dinnerware. Once the theme is identified, the menu can start to be worked. Menu items should be consistent with the theme. It is important to consider visual appeal and avoid repetition. Therefore:

Offer dishes featuring different principal ingredients-

If there are two starches make one a pasta and a potato

Offer foods cooked by different methods-

A hot braised protein and one roasted protein served cold

Offer foods with different colors-

Fettuccine Alfredo and poached fish served in béarnaise sauce are same color

Offer foods with different textures-

If two soups are served, make one clear and the other a cream

Offer seasonally appropriate foods-

A rich lamb stew may not go over well for a chafing dish at a summer luncheon

Offer foods appropriate to the time of year-

Tomato, basil and mozzarella salad in summer when items are fresh, not readily available in the winter

Truth-in-Menu Guidelines- The federal government enacted the truth-in-menu guidelines, which require accuracy in statements made on menus. The guidelines are designed to protect the guests from fraudulent food and beverage claims. Failure to comply with truth-in-menu guidelines can result in legal claims being made against a foodservice operation for misleading or endangering guests.

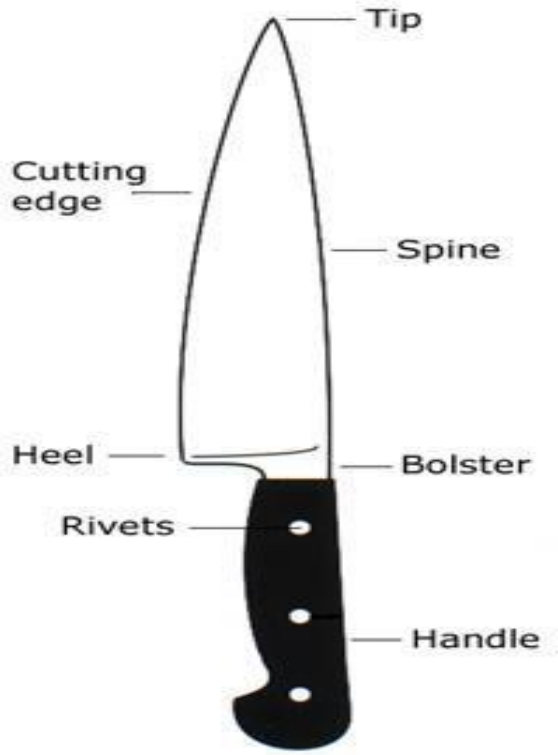
Common misrepresentations:

Portion size of an item- advertising a 12 oz. steak but serving a 10 oz.
Quality or grade of an item- USDA Prime and serving USDA select
Preservation method- fresh fish and serving previously frozen
Preparation method- house made, but it was a prepackaged item
Type of product served- uses extra virgin olive oil- using vegetable oil
Certified foods- claiming organic and it is not
Point of Origin- Florida oranges- that were bought in Virginia
Nutrition Information- listing as low-fat when it does not meet the required criteria
Product brand- serving a different brand than the one listed

Basic Knife Skills

Every professional must become skilled in the use of certain tools. The professional chef is no exception. One of the most important tools the student chef must master is the knife. Good knife skills are critical to a chef because the knife is the most common tool used in the kitchen.

Parts of a Knife



Parts of the Knife

Knife sharpening

- Steel
- Stone/Oil
- Cutting Board
- Knife

Stone method

- Place stone on a towel to prevent slipping
- Hold knife at a 20 degree angle
- Always move in the same direction.

Steel method

- Hold the steel away from the body
- Steel in one hand, knife in the other
- Start with the knife nearly vertical
- Blade resting on the inner side of the steel (heel)
- Move the knife down the steel (heel to tip)
- Repeat on the outside of the steel

Classical Cut Vegetables

A knife is used to shape an item and reduce its size. Uniformity of size and shape ensures even cooking and enhances the appearance of the finished product. Items are shaped by slicing, chopping, dicing, mincing, and other special cutting.

Slicing Cuts- involves passing the blade of the knife slowly through the item to make long, thin pieces.

Rondelle-	disk-shaped slices
Oblique-	small pieces with two angle cut sides
Chiffonade-	fine slice of leafy vegetables or herbs

Stick Cuts- are used for a wide variety of food preparations for a uniform appearance and ensure even cooking

Brunoise-	1/8 x 1/8 x 1/8 inch cubed
Fine Brunoise-	1/16 x 1/16 x 1/16 inch cubed
Batonnet-	1/4 x 1/4 x 2 inches stick-shaped cut (french-fry)
Fine Julienne-	1/16 x 1/16 x 2 inches, stick-shaped cut (toothpick)
Julienne-	1/8 x 1/8 x 2 inches, stick-shaped cut (matchstick)
Large Dice-	3/4 x 3/4 x 3/4 inch cubed
Medium Dice-	1/2 x 1/2 x 1/2 inch cubed
Small Dice-	1/4 x 1/4 x 1/4 inch cubed

<u>Using stick cuts to make dice cuts</u>

Batonnet to make **Small Dice**- 1/4 x 1/4 x 1/4 inch cubed

Julienne to make **Brunoise**- 1/8 x 1/8 x 1/8 inch cubed

Fine Julienne to make **Fine Brunoise**- 1/16 x 1/16 x 1/16 inch cubed

Chop-	to cut into pieces where uniformity of size and shape is not important
Mince-	tiny cut with no specific dimensions except quite small, to promote quick flavor infusion
Paysanne-	3/4 x 1/8 a thin flat square
Tourné-	cutting technique that result in a seven equal sided football/barrel shape

Classical Cuts Practical

Prepare five of the following

Large dice

Medium dice

Small dice

Brunoise

Batonnet

Julienne

Oblique

Rondelles

Paysanne

Two tourné potatoes

Concassé and brunoise cut one tomato

Zest and segment one orange

Chiffonade basil

Meat Fabrication

"Cooking is one of the simplest and most gratifying of the arts, but to cook well one must love and respect food."

Craig Claiborne, American Food Critic
1920-2000

Poultry Fabrication

Poultry is the collective term for domesticated birds bred for eating. It is generally the least expensive and most versatile of all main dish foods. It can be cooked by almost any method, and its mild flavor goes well with a wide variety of sauces**.**

Six major categories/kinds of poultry: chicken, turkey, duck, goose, guinea, pigeon

Class of chicken-

Game hen	5-6 wks old	2lbs or less
Broiler	13 weeks	1 ½ -2 lbs
Fryer	13 wks	2 ½ -3 lbs
Roaster	3-5 months	3 ½ -5 lbs
Capon	under 8 months	5- 8 lbs.
Hen	over 10 months	2 ½ -8 lbs

Grades- USDA grades available (A*, B, C)

* For sale in commercial foodservice establishments and retail outlets

Choosing Quality Products

Poultry should have plump breasts and meaty thighs
The skin should be intact with no tears or punctures
Poultry should be purchased from reputable purveyors and kept chilled to below 32*F
Hold chicken in drip pans when it stored in the refrigerator.

FABRICATION

1. With the breast side down, use a stiff boning knife to split the bird along both sides of the backbone from the neck to the tail.
2. Open the bird to reveal the keel bone. Cut through the keel bone and wishbone lengthwise from the neck to the tail. If necessary, hit the spine of the blade with the heel of the hand.
3. Cut through the flesh and skin behind the keel bone to separate the bird into halves.
4. Cut through the skin between the breast and thigh. Pull the thigh away from the breast to expose the joint.
5. Cut the joint to separate the breast from the thigh.
6. Cut along one side of the breastbone, following the curve of the ribs, to separate the flesh from the bone.
7. Separate the wing from the rib cage by cutting the joint. Keep the wing attached to the breast.
8. Cut the breast meat free from the carcass.
9. Make a cut on the back of the joint between the drumette and the paddle bones.
10. Break the joint and pull back the flesh and skin to expose the drumette bone. Trim the end of the drumette to the cartilage.

Preparing Chicken Supreme with Frenched Bone

Remove the breast meat and wing from the rib cage carefully. Using the tip of the boning knife, slice down between the breast meat and rib cage. Guide the knife carefully down the natural curvature of the rib cage until the breast and wing are completely separated from the rib cage. Be careful not to damage the tenderloin. Cut through the joint separating the wing and breast from the main body

Separate the tenderloin from the breast. Clean the tenderloin by carefully cutting out the tendon

Trim excess skin away from the breast, making sure to keep enough skin intact to cover the chicken breast

Use the tip of the boning knife to make a cut that circles' around the second joint of the wing bone. Make sure to cut through the web skin as well. Bend the wing bone at the second joint to snap it. Continue to cut through the joint until the wing tip and wing flap are removed, leaving the drumette attached to the breast

NOTE: Fabrication must be checked by class leader then instructor prior to wrapping and labeling

Once you have the "GO" from both class leader and instructor you need to wrap the following-

Two Supremes with tenderloins on top and label and the other two Supremes with tenderloins wrapped as a separate unit totaling in four Supremes in two separate packages.

You will need two labels just like the below examples

CHICKEN SUPREME STATION #	CHICKEN SUPREME STATION #

The entire class will place their wrapped Supremes on one sheet pan in sequence order (station 1, 2, 3…..) and once the class leader and then instructor has verified, they will be placed in the freezer for later use.

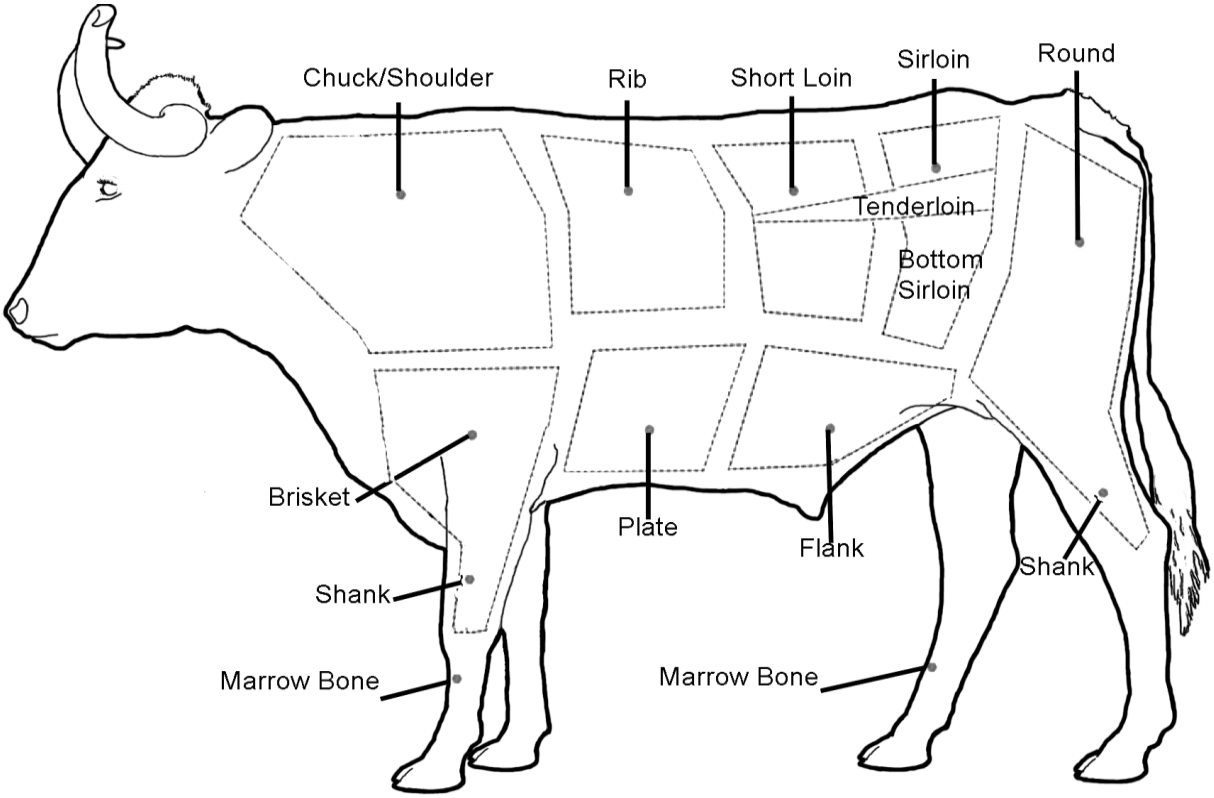
Cooking Poultry

Regardless of the cooking method used, poultry should be cooked to an internal temperature of 165* F, except in the case of duck. Duck are commonly served medium-rare.

Determining Doneness

Chicken is always cooked well-done and should still be moist and juicy. The four methods that chefs use to determine the doneness are temperature, touch, joints and juices (TTJJ). Temperature 165*F, Touch- firm and sold, Joints- soft and tender, Juices- clear with no signs of blood.

Beef Tenderloin



Inspection- government inspection of all meats is mandatory. Inspections are required at various times, on the farm, at the slaughterhouse (ante mortem), and again after butchering (postmortem). Inspectors ensure that animals are free of disease, farms are operated in accordance to standards, and meat is wholesome and fit for human consumption.

Grading- Quality grading, unlike inspection is voluntary. The USDA has developed standards used to assign grades to meats and train graders. Since it is voluntary the meat packer absorbs the costs instead of the taxpayers. Prime is usually reserved for commercial foodservice and butcher shops. Choice and select are most often available, grades lower then select are generally used for processed meat.

The USDA Grades of Beef

Prime, Choice, Select

The other grades are Standard, Commercial, Utility, Cutter, and Canner

Receiving/Storage- Meats are perishable; they should be received at 41 degrees F, sealed packing and no discoloration. Check the temperature of the delivery truck, store in refrigeration at or below 41 degrees F. Keep different types of meat separate and store on trays to avoid cross contamination.

Parts/Common Cooking Methods

Loin- sirloin, tenderloin, flank steak, strip loin, short loin

Common cooking methods are grilling, roasting, broiling and sautéing

Sections of the tenderloin- chateaubriand, filet mignon, tournedos

Economical cuts of beef (steamship, shank, ground beef and rounds).

Fabricating Beef Tenderloin

1. With a rigid boning knife, carefully remove the chain muscle from the side of the tenderloin and reserve.
2. Trim and pull the thick fat covering away from the tenderloin.
3. Insert the tip of the boning knife just beneath the silver skin at the tail end of the tenderloin. Draw the blade slightly upward along the length of the tenderloin, just beneath the silver skin, toward the head of the tenderloin.
4. Starting at the largest end, cut off the uneven tip of the tenderloin. Cut the tip across the grain into tenderloin tips.
5. Make a cut across the grain just after the large portion ends to remove the chateaubriand.
6. Cut the center of the tenderloin across the grain to desired thickness to produce filet mignons.
7. Cut the smallest third of the tenderloin across the grain to produce tournedos ½-3/4 inch thick and approximately 2 ½ inches in diameter.

You will need four labels just like the below examples:

FILET MIGNON
THREE COURSE
STATION #
PRACTICE

FILET MIGNON
THREE COURSE
STATION #
TEST

Beef Tenderloin
HORS Ds
STATION #
PRACTICE

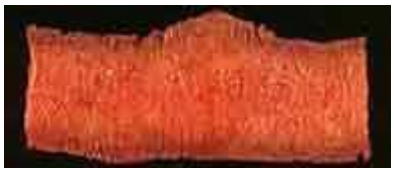
Beef Tenderloin
HORS Ds
STATION #
TEST

The entire class will place their **PRACTICE** beef on one sheet pan in sequence order (station 1, 2, 3…..) and once the class leader and then instructor has verified, they will be placed in the freezer for later use.
You will repeat the above steps for **TEST** beef and practice/test for hors d oeuvre beef.

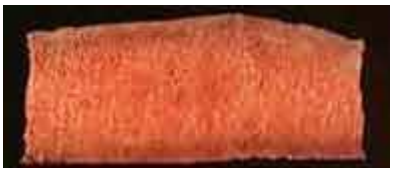
Determining Degrees of Doneness-

VERY RARE
Approx. 130°F, 55°C

RARE
Approx. 140°F, 63°C



MEDIUM RARE
Approx. 145°F, 63°C

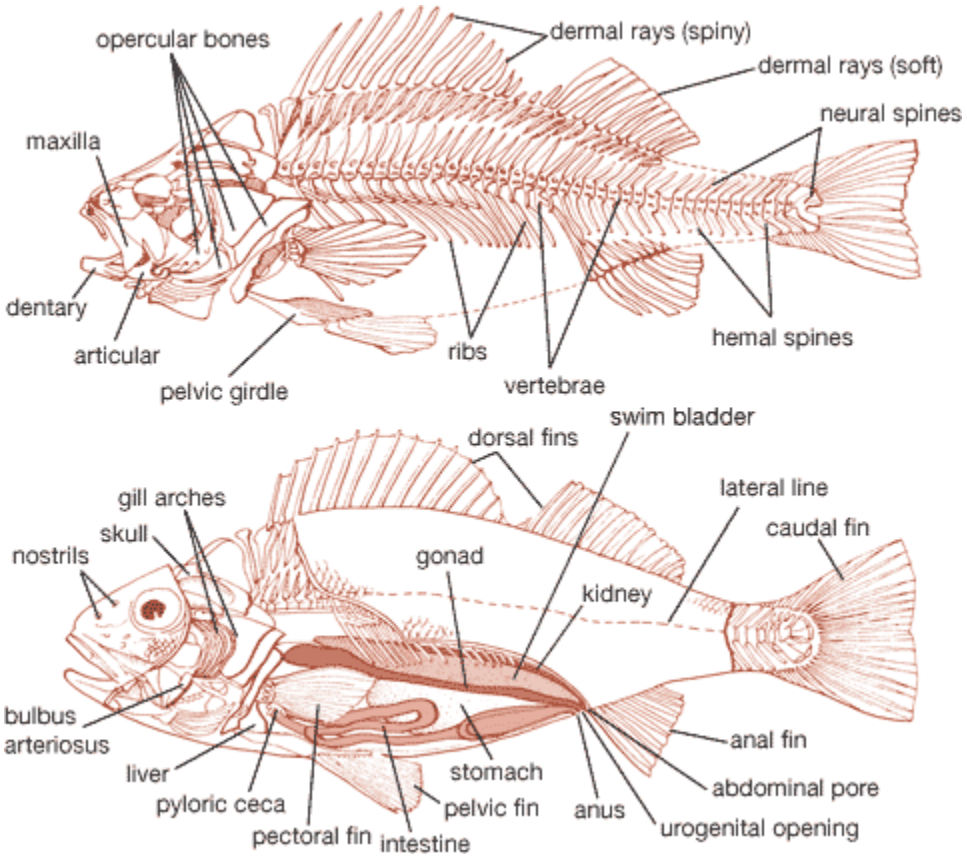


MEDIUM
Approx. 160°F, 71°C

WELL DONE
Approx. 170°F, 77°C

VERY WELL DONE
Approx. 180°F, 82°C

Fish Identification and Fabrication



Market forms-whole, drawn, headed and gutted (H&G), dressed, steak and fillet

What to look for when purchasing-

Clear eyes
Fresh smell
Skin and flesh should spring back when gently pushed
Gills should be bright red- maroon color

Proper Storage-

Drawn and H&G are stored on ice
Fillets and steaks on ice but not directly touching

Activity Types of Fish: The flavor, color and texture of fish are determined by the water they live. It is also influenced by how active it is. The higher the activity level, the darker the flesh and the more pronounced its flavor.

Low-Activity Fish have lean flesh that is delicate in flavor and texture. They are typically prepared by gentle moist-heat cooking methods. Some have enough texture to up to baking or frying

Medium-Activity Fish have moderately fatty or oily flesh. The flesh is not pure white and tends not to be as flaky as low activity fish. These fish are suitable for all cooking techniques

High-Activity Fish are described as fatty or oily. They have dark flesh, pronounced flavors, and textures that tend toward meatiness. Dry heating techniques are particularly suitable

Types of Fish-

Flat- (lean or low activity) – is any thin, wide fish with both eyes located on one side of the head and the backbone that runs from head to tail through the lateral line of the body. They swim along bottom of ocean and have top darker (pigmented) side and bottom lighter (non-pigmented) side

Sole, Flounder, Halibut
Culinary uses are commonly baked, poached, sautéed, steamed

Round- is any fish with a cylindrical body, an eye located on each side of the head, and a backbone that runs from head to tail in the center of the body. Most commonly found in freshwater lakes and streams as well as in saltwater.

Lean (low activity) - cod, Pollock
Culinary uses are commonly shallow poached, baked, and smoked

Moderately fatty (medium-activity) - grouper, bass, snapper
Culinary uses are commonly poached, grilled, sautéed, baked, steamed

Fatty (high activity) -salmon, trout, tuna, amberjack
Culinary uses are commonly smoked, baked, broil

Cartilaginous (Nonbony fish)- is any fish that has a skeleton composed of cartilage instead of bones. Cartilaginous fish often have a smooth, tough outer skin without scales. Swordfish, Shark, Skate, Eel culinary common uses are baked, poached, broiled

Considerations for Purchasing:

Smell-

Appearance-

Touch-

Determining Doneness- takes practice because it involves sight and touch more than temperature. A fish that is done will have a caramelized skin, firm and dense interior edges, and a moist, opaque center. It should register 145* F on the instant read thermometer when inserted into the thickest part of the fish. Undercooked fish will be translucent, and the juices will be clear and watery. Overcooked fish is dry and falls apart easily.

Fish Fabrication Techniques

Round Fish- Salmon

1. Use a boning knife to make a cut about ½ inches behind the gills and down to, but not through, the backbone.
2. Make a second cut along the backbone from just behind the head all the way to the tail. Do not cut through the backbone.
3. Starting at the tail, carefully slice toward the head to cut the flesh away from the backbone.
4. Carefully lift the filet and cut away any rib bones that are still attached to the fillet. Trim any belly fat from the fillet.
5. Run fingers gently along the surface of the fillet to raise the ends of any pin bones that may remain. Use needle-nose pliers to remove the pin bones.
6. Turn the fish over and repeat the entire process on the other side.

You will need two labels just like the below examples:

SALMON FOR HORS Ds
STATION #
PRACTICE

SALMON FOR THREE COURSE
STATION #
PRACTICE

SALMON FOR HORS Ds
STATION #
TEST

SALMON FOR THREE COURSE
STATION #
TEST

The entire class will place their **PRACTICE** salmon on one sheet pan in sequence order (station 1, 2, 3…..) and once the class leader and then instructor has verified, they will be placed in the freezer for later use.
You will repeat the above steps for **TEST** salmon as well

Flat Fish- Dover Sole
Mise en place - plastic wrap, boning knife, cutting board, waste pan, usable product pan, ice pan, sanitation bucket, towels, gloves, needle nose pliers

Lay the fish flat on the cutting board head facing away from you tail towards you. Make and even slice down the length of the back bone from head to tail, Make a small slit near the tail as to expose the meat, using pliers gently grab a small amount of skin a pull towards head exposing the whole fillet , using extreme caution with the knife parallel to the left fillet from head to tail slice gently following the natural contour away from back bone repeat on the right side of fish, turn the fish over, and repeat steps you will end with 4 fillets you will then scrape any remaining meat with a spoon set aside for later use.

Preparing Stocks

"Stocks are the foundation of cooking, without it, nothing can be done. If one's stock is good, what remains of work is easy…"

Auguste Escoffier
Le Guide Culinaire

Preparing Stocks

Stock- a flavor liquid, a good stock is the key to a great soup, sauce, or braised dish. The French appropriately call a stock fond ("foundation"), as stocks are the foundation for many classic and modern dishes.

Types of Stocks
- Brown
- White
- Fumet
- Vegetable

Standard Ratios for 1 gallon

- 8lbs of bones
- 5 to 6 quarts of cold water
- 1 lb of mirepoix
- 1 Aromatic (Sachet d'Epices or Bouquet Garni)

Cooking Times

Vegetable	45 minutes to 1 hour
Fish/shellfish	35-45minutes
Poultry	3-4 hours
Veal	6-8 hours
Beef	8-10 hours

The Stock Making Techniques

- Select and prepare ingredients for stock
- Combine the main ingredients to liquid
- Continue to simmer till good flavor and color
- Add flavoring at appropriate point
- Strain stock carefully

How to Evaluate the Stock's Quality

Color- includes its color and its clarity
- White stocks are nearly colorless when they are heated
- Simple stocks have the color of the main ingredients you chose
- Brown stocks are a deep brown color as a result of browning the main ingredients
- The addition of tomato gives the stock a reddish cast

Clarity- stocks are relatively clear; some are nearly translucent or may have a slightly cloudy appearance
- Stocks made from meat, poultry, game bones, or shells should be extremely clear
- Stocks made from fish bones or vegetables are typically semi translucent, especially if the bones or vegetables are smothered before adding the liquid.

Flavor and Aroma- a stock should smell fresh, appealing, and flavorful, both when it is cold and when it is brought to a boil. The flavor of stock should be savory and satisfying. This flavor is often known by the Japanese term *umami.* Flavor should reflect the main ingredient.

Body- a well-made stock will have a rich texture to it because of its base ingredients. Vegetable stocks have a thin body. Hot stock has noticeable texture when you put it in your mouth that clings very slightly to the palate. When the stock is cold, it becomes gelatinous.

Culinary Terms Associated with Stocks

Aromatics- an ingredient such as herbs or spices added to food to enhance its natural flavors

Browning- roasting or searing the bones for a stock gives them a darker color

Blanching- blanching bones inhibits from browning and results in finished stock with neutral color and flavor

Smothering- quick-cooking stocks that benefit from ingredients cooked in fat before liquid is added

Depouillage- is a French culinary term for skimming

Remouillages- rewetting French, a stock made from using bones that have already been used once

Glace - made by simmering stock to cook away majority of moisture very rich, flavorful jelly-like

Court Bouillon- quick broth, simmering mirepoix, aromatics, an acid (vinegar wine) water for 20 minutes

Fond- the bones and vegetables, drippings that accumulate in the pan

De glazing- to use a liquid, to dissolve food particles left in a pan after roasting or sautéing

Onion Brule- is made by peeling an onion, halving it crosswise, and charring cut edges

Onion Pique- "pricked onion" whole, peeled onion, bay leaf attached using whole clove as a tack

Mirepoix- combination of two parts onion, one-part carrot, and one-part celery

White Mirepoix- mirepoix that include parsnips instead of carrots

Matignon- onions, carrots, celery, leek, ham, mushrooms (optional), edible mirepoix for it is uniformly cut and left in dish

Sachet d' epic- (bag of spices) parsley stems, cracked peppercorn, thyme, bay leaf

Bouquet garni- (small bundle of herbs) thyme, parsley stems, bay leaf, leek leaves and celery stalk

Herbs- leaf or stems of non-woody plants, dry herbs are stronger than fresh herbs.

Spices- are aromatics produced primarily from the bark and seeds of plants.

Pincé (pincage)- refers to an item, usually a tomato product, caramelized by sautéing. (Example, sautéing of mirepoix for brown stock)

Procedure for Preparing Brown Stocks

1. Roast bones in a roasting pan until evenly brown. Transfer the roasted bones to a stockpot and cover with cold water. Reserve the rendered fat in the roasting pan.
2. Begin heating the contents of the stockpot. Then, sauté the mirepoix in the reserved rendered fat until it is well caramelized. Stir the mirepoix continuously to avoid burning.
3. Pour off excess fat and reserve for later use.

4. If desired, add a small amount of tomato sauce or paste to the mirepoix and cook until the tomato product caramelizes.
5. Deglaze the roasting pan.

6. Once the water in the stockpot has reached a simmer, skim the impurities from the surface and then add the contents of the roasting pan to the stockpot.
7. Return the contents of the stockpot to a simmer and continue cooking and skimming impurities from the surface until done. Do not let the stock boil.

8. Strain the stock with a chinois or cheesecloth-lined china cap.
9. Quickly cool the strained stock in an ice bath or with a cooling paddle and refrigerate or freeze.
10. Label and date the stock and refrigerate or freeze until needed.

PREPARING CLASSICAL SAUCES

Sauces are considered one of the greatest tests of a chef's skill. The successful pairing of a sauce with food demonstrates technical expertise, an understanding of food, and the ability to evaluate flavor, texture, and color

Culinary Fundamentals

The Classical Sauces

Classical Sauces are the foundation for the entire classic repertoire of sauces based upon French culinary standards. The classical sauces are defined as a sauce that can be prepared in advance in a significant amount, then finished or flavored so that it is custom fit to a particular dish. Sauce should complement food; it should never disguise it.

Purpose of Sauces

Completes or enhances the flavor, moistness or texture of a dish

The Classical Sauces

Béchamel
Velouté
Espagnole
Tomato
Hollandaise

Brown Sauces- espagnole, demi-glace, jus lies, pan sauces

Evaluate sauces

Espagnole: has a full, rich flavor. Has a deep brown color without any dark specks or debris
Demi-glace: is translucent and highly glossy with a noticeable body
Jus lie: A greater degree of clarity, lighter texture and color

Finishing a sauce

Reductions
Garnishes
Wines
Finishing with butter

White Sauces- Velouté, Béchamel

Evaluate sauces

Velouté- This translates from French as “velvety, soft, and smooth to the palate.”
Béchamel

Finishing a sauce

Flavored with a reduction or essence
Garnishes
Often finished with cream

Tomato Sauces- Tomato

Hollandaise Sauce- emulsion

Butter sauces-

Contemporary Sauces-

Salsas, relishes, pesto
Chutney and Coulis
Nage’s-
Flavored oils and Foams

Culinary Terms Associated with Sauces

Appareil- A prepared mixture of ingredients used alone or in another preparation.

Beurre Blanc-A classic emulsified sauce made with a reduction of white wine and shallots, thickened with whole butter and possibly finished with fresh herbs or other seasonings.

Reduction- The product that results when a liquid is reduced.

Roux- An appareil containing equal parts of flour and fat (usually butter), used to thicken liquids. Roux is cooked to varying degrees (white, blond, brown, or dark), depending on its intended use. The darker the roux, the less thickening power it has but the fuller the taste.

Clarified butter- Butter from which the milk solids and water have been removed, leaving pure butterfat. Has a higher smoke point that whole butter but less butter flavor.

Slurry- A starch, such as arrowroot, cornstarch, or potato starch, dispersed in cold liquid to prevent it from forming lumps when added to hot liquid as a thickener.

Derivatives-Variations of the classical sauces.

Aromatics- Ingredients such as herbs, spices, vegetables, citrus fruits, wines, and vinegars used to enhance the flavor and fragrance of food.

Beurre manié – 'kneaded butter', a mixture of equal parts by weight of whole butter and flour, used to thicken gravies and sauces.

Liaison- A mixture of egg yolks and cream used to thicken an enrich sauces. Also, loosely applied to any appareil used as a thickener.

Temper- To heat gently and gradually. May refer to the process of incorporating thot liquid into a liaison to gradually raise its temperature. May also refer to the proper method of r melting chocolate.

Nappe- To coat with sauce. Also, thickened. Also, the consistency of a sauce that will coat the back of a spoon.

Coagulation- The curdling or clumping of proteins, usually due to the application of heat or acid

Emulsification- A mixture of two or more liquids, one of which is a fat or oil and the other of which is water based, so that tiny globules of one are suspended in the other. This may involve the use of stabilizers such as egg or mustard. Emulsions may be temporary, permanent, or semi-permanent.

Derivatives for Velouté-

Bercy- adding shallots, white wine and fish stock to fish velouté.

Aurora- adding tomato paste& finishing with butter to chicken velouté.

Supreme-adding cream and mushrooms to velouté.

Allemande-adding lemon juice and a liaison (egg yolks and cream)

Derivatives for Béchamel-

Cream Sauce- adding cream and lemon juice

Cheese Sauce- adding cheese (American/Cheddar)

Mornay- adding gruyere and parmesan

Derivatives for Espagnole-

Chasseur (hunter sauce) - adding mushrooms, shallots and white wine

Bourguignonne French sauce with a base of red wine with onions or shallots, a bouquet garni

Derivatives for Tomato-

Creole-adding green peppers, bay leaf and hot sauce

Milanese-adding mushrooms, butter and ham

Derivatives for Hollandaise-

Maltaise- adding blood orange juice

Béarnaise- adding shallots, tarragon and chervil

Preparing Soups

In his 1903 culinary treatise *Le Guide Culinaire*, Auguste Escoffier recognized many more categories of soups then we do today, he defined clear soups as which are always clear consommés with a slight garnish in keeping with the nature of the consommé. Purees are made from starchy vegetables and are thickened with rice, potatoes or soft breadcrumbs. Cullises use poultry, game or fish for a base and are thickened with rice, lentils, Espagnole sauce or bread soaked in boiling salted water. Bisques which are shellfish cooked with a mirepoix as a base and are thickened with rice. Cream soups which use béchamel as a base and finish with heavy cream. Vegetable soups are usually paysanne or peasant type and do not demand very great precision in the apportionment of the vegetables of which they are composed, but they need great care and attention. Foreign soups have a foreign origin whose use although it may not be general is yet sufficiently common.

Culinary Fundamentals

Preparing Soups

The variety of ingredients, seasonings and garnishes that can be used for soups is virtually endless, provided one understands the basic procedures for making different kinds of soup. Great soups can be made from the finest and most expensive ingredients or from leftovers from the previous evening's dinner.

Categories of Soups

Clear Soups- stock based with a thin watery consistency

Broth- produced from well-made stocks
Consommé- made from high quality broths that have been further clarified to remove impurities and surface fat.

Thick Soups- having a thick texture or consistency

Puree- Thickest soup; main ingredient is primary thickening agent; hearty and rustic
Cream- thickened by added starch as the flour in a roux

Specialty- many soups do not fall into traditional categories of thick or clear, they considered specialty soups and usually fall into three categories: bisques, chowders, or cold soups

Garnishes for Soups

Appropriate flavor/texture/color

Large enough to dip or small enough to fit on spoon

Show case knife skills

Portion size/temperature/serving vessels

Hot, hot, hot! (Unless a cold soup), hot serving vessel, but not so hot as to continue to cook

Under-liner plate and doily

Edible vessels are nice, bread bowls, cucumber cups, etc.

Appropriate for number of courses- 24oz average for total meal; don't fill your guest up too soon! Food doesn't taste as good when you are stuffed.

Terminology:

Raft- A mixture of ingredients used to clarify consommé. Refers to the fact that the ingredients rise to the surface and form a floating mass.
Clearmeat-A mixture of ground meat, egg whites, mirepoix, tomato puree, herbs and spices used to clarify broth or consommé.
Clarify- The process of removing solid impurities from a liquid such as butter or stock.

Starch Cookery

Today chefs are rediscovering traditional and ethnic dishes that rely on grains seldom used in typical American food service. Pasta, made from a variety of grains in numerous shapes and flavors and accompanied by countless sauces and garnishes, now regularly appears on menus alongside the ubiquitous potato prepared for many classical and modern dishes.

Starch Cookery

Potatoes, Grains and Pasta are known as starches, some are vegetables others are grasses. Starches are for the most part a staple food, which defines a cuisine and gives it substance. All are high in starchy carbohydrates, low in fat and commonly used as a part of a well-balanced diet. The types of starches: Potatoes, Grains, Pasta.

Potatoes- are succulent, non-woody annual plants; the tuber is the consumed part of the plant. They are hardy and easily grown, making them inexpensive and widely available. Each Americans eat about fifty pounds of potatoes annually. One of the most important considerations when selecting a potato is how it will be prepared and the type of potato best suited to produce that product. Potatoes are organized into three categories based on starch and moisture.

Three Categories of Potatoes-

Low moisture/ high starch – Idaho or russet
Medium (moderate) moisture/medium starch – Yukon Gold, Yellow Finn, Red
High moisture/ low starch – "New Potatoes", or potatoes that are naturally sweet.

Grains-are grasses that bear edible seeds. Both the fruit (seed or kernel) and the plant are called a grain. Grains are excellent sources of vitamins, minerals, proteins and fiber.

Examples: Corn, Rice, Wheat, Barley, Oats, Quinoa

Couscous: A staple of North African cuisine, coarsely ground semolina pasta.

Cooking couscous: Ratio: 2/3 C couscous to 1 C liquid

Risotto is traditionally made with special Italian varieties of medium-grained round rice such as Arborio. Just about anything can be added to a risotto, like vegetables, meats, herbs and cheese.

Cooking risotto: Ratio of 1 cup Arborio rice to 5 ½ cups liquid

Pasta-is made from unleavened dough of wheat flour mixed with a liquid. It is one of the most versatile and popular foods in most cuisines. There are different types of pastas such as Italian is usually made with semolina flour into ribbons, tubes, shapes and Asian is usually wheat, rice, bean starch, buckwheat flours.

Preparing Salads

According to the Spanish proverb, four persons are needed to make a good salad: A spendthrift for oil, a miser for vinegar, a counselor for salt, and a madman to stir it all up

Abraham Hayward
English Writer 1801-1884

Preparing Salads

Salads use greens as the base and built artistically arranging components on the plate. A salad is determined by the greens selected. A salad can be made up of one type of lettuce or a combination of lettuces from different groups. Greens are grouped according to their flavor and/or texture. It is important to properly clean the lettuce before use. To clean lettuce plunge in cold water, repeat as necessary with clean cold water. A salad spinner can be used to remove water, by removing water from the lettuce the dressing will cling evenly and the lettuce natural flavor will be exposed.

Types of Salads

Green- a mixture of leafy greens and other ingredients served with a dressing

Composed- a salad that is **attractively arranged** consists of a **base, body garnish and dressing**

Potato – potatoes must be completely cooked. Salad can use creamy dressing or vinaigrette

Pasta and Grain- Should be fully cooked. Grains and pasta will continue to absorb after cooking. Taste before service, flavor is lost the longer it sits.

Legume- Beans should be cooked till tender. If being chilled after cooking, beans should be overcooked to ensure a creamy texture. Acid in a salad will make the beans become tough.

Vegetable- is a salad that is primarily made of vegetables

Fruit- is a salad that is primarily made of fruits

Warm- known as a *salade tiede*-is made by tossing the salad ingredients in a warm dressing, working over medium-to-low heat.

Components of a Salad- base, body, garnish, dressing

Base- a layer of greens that line the plate on which the salad will be served, can cupped or shaped

Body- the main ingredient; it can be greens or added items like chicken or fruits and vegetables

Garnish-is added for color, texture and flavor. It should complement and balance the flavor

Dressing-should complement rather than mask the flavors in the salad, the type should be based on the delicacy of the greens, light dressings for the delicate greens and more robust dressings for the stronger flavored greens.

Types of Dressings

Vinaigrette- ratio is 3 parts oil to 1 part vinegar

Vinaigrettes are mainly used for salads, but also used as marinades for grilled or broiled foods; as a dressing for grains, vegetables, beans and pasta salads; as dips; as sauces served hot or cold entrees and appetizers; or brushed on sandwiches. The quality and flavor of the oil and vinegar selected add to the finished vinaigrette flavor. Oils that are strong in flavor are paired with milder vinegars (Vic versa). This creates a balance, making the milder flavor complimentary to the stronger one. Additional ingredients that are added to vinaigrettes therefore improving the flavors are seasonings (salt, pepper, herbs and spices) and emulsifiers (egg yolks, mustard, roasted garlic, fruit or vegetable purees or glace de viande "a thick meat glaze made by reducing meat juices").

Mayonnaise based dressings- ratio is 24 ounces oil to each 3 fl oz egg yolk

Mayonnaise Based Dressings are very versatile. Mayonnaise is a cold sauce made from combining egg yolks with oil to form a stable emulsion. Emulsion is a mixture of two liquids that will not blend. Mayonnaise and sauces made with mayonnaise can be used as a spread, dip or salad dressing. The egg yolk provides the liquid, which holds the oil droplets in suspension; air, as well as lecithin form the yolk, acts as an emulsifier. The oil selected should not have a strong flavor since mayonnaise can be used as a base for many sauces. Acids such as lemon juice, wine or cider vinegar can be used to prepare mayonnaise. The acid along with water provides additional moisture for the emulsification.

Plating and Presentation- arrange the components carefully, striving for a natural look. Colors and flavors add depth to your salad. Prepare each component perfectly to stand alone as well as enhances the complete salad. Arrange where natural textures and colors of the components are enhanced. Remember to show your skill set with the production of the salad by adding classical cuts and different cooking methods to showcase the components. Your salad will be critiqued on the following: appearance, portion size, texture, and flavor.

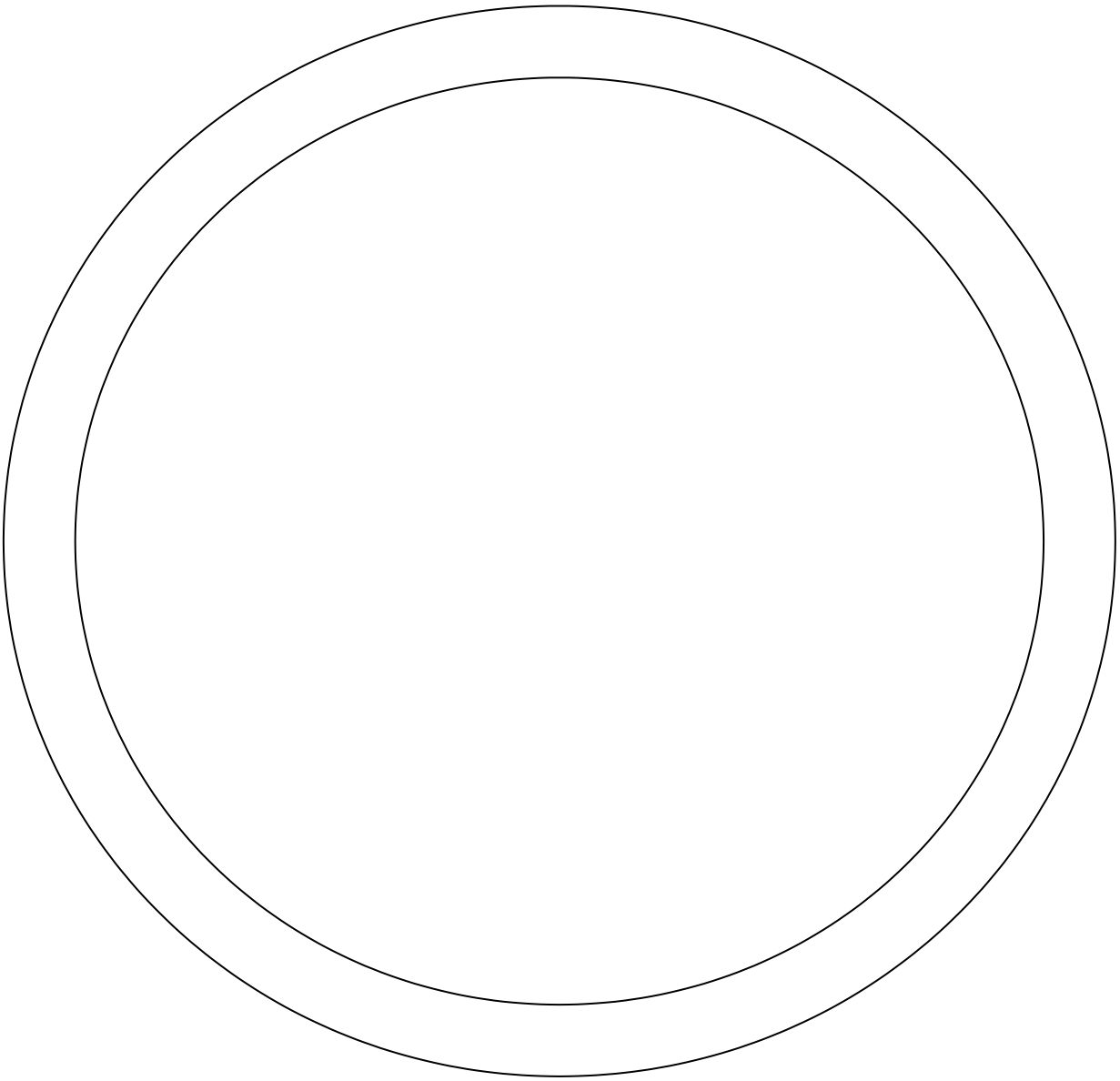
Preparing and Presenting
Dinner for Two

Pan Seared Chicken Supremes with Prosciutto, Spinach and Boursin
With a reduced Classic Supreme Sauce

Roasted Garlic Mashed Potatoes

Seasoned Haricot Verts and Matignon Vegetables

Dinner for Two Plate Design



Hors d’ oeuvres

It be said that a good hors d’ oeuvres artist is a man to be prized in any kitchen for, although his duties do not by any means rank first in importance, they nevertheless demand of the chef the possession of such qualities as are rarely found united in one person: reliable and experienced taste, originality, keen artistic sense, and professional knowledge.

Auguste Escoffier
Le Guide Culinaire

Hors d'oeuvres

Hors d'oeuvres are very small portions of food served outside the meal to whet the appetite. They are passed elegantly by waiters or displayed as artwork. Preparing hors d'oeuvres uses skills from almost every workstation in the kitchen. Knowledge of food and how to pair different foods is a vital part of mastering hors d'oeuvres. **Hors d' oeuvre** means "outside the meal". They are served separately from meal; they can be hot or cold. It can be suitable to eat with fingers or may require use of plates or forks. Hors d'oeuvres are meant to pique the taste buds and perk up appetite. It should be small enough to eat in one or two bites. It should be attractive should have pleasing; natural colors should have precise cuts and follow the menu theme.

Types of hors d' oeuvres

Finger foods- are typical for outdoor occasions; neat self-contained

Crudités-Raw veggies or fruits served with dip.

Canapés- Defined as small open-faced sandwiches. Traditional canapés include base often cut into shapes a spread, a filling and a garnish

Raviers- French tradition that is usually served during luncheons with a selection of hot or cold items

Tapas-Spanish bars offer a selection of small dishes

Antipasto- Italian style of hors d' oeuvres that means before the pasta

Zakuski-boards of smoked fish, blini, caviar and vodkas are from the Russians

Mezzos-are a wide array of foods from the Mediterranean

Antojitos-are Latin cuisines to include tamales, empanadas and salsa

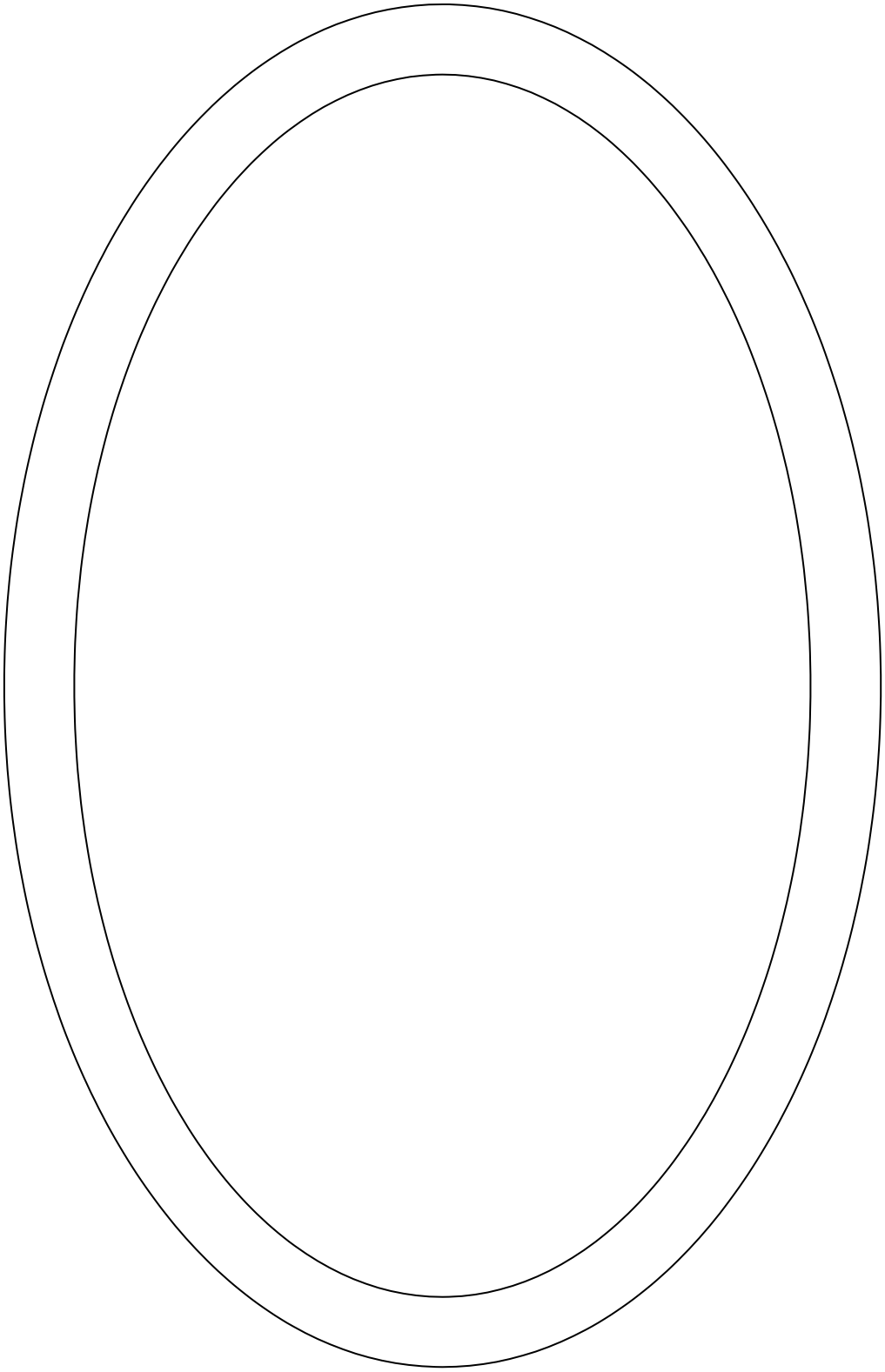
There are only two limitations on the type of food and the manner of preparation that can be used for hors d' oeuvres: the chef's imagination and the foods at their disposal.

Guidelines for preparing hors d' oeuvres

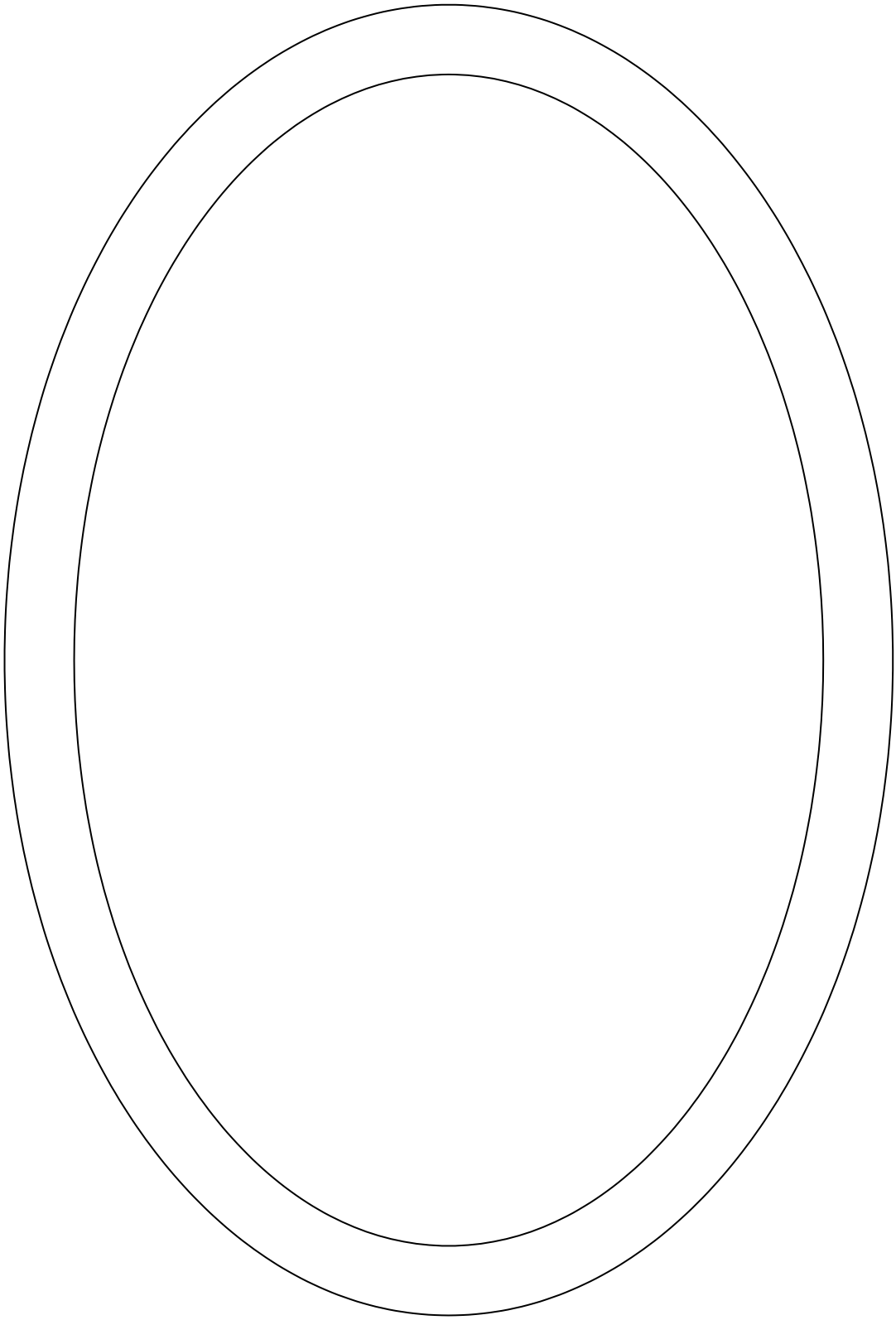
Small, one to two bites
Components- base, main, spread and garnish
Flavorful and well-seasoned, not overpowering
Visually attractive
Complement foods that follow, not duplicate their flavors

STUDENT ACTION PLAN

Platter One



Platter Two



Introduction to Wine

"A meal without wine is a boring event"

Julia Childs

Introduction to Wine

Red Wines- are classified by "body-type of light, medium and full bodied.

Light-bodied wine will have fewer tannins present and less presence on the palate. These wines tend to be less demanding partners with flavor-filled foods. An example of a light-bodied red wine would be one derived from the Gamay grape varietal, such as France's famed young red wine: *Beaujolais Nouveau.*

Medium-bodied red wine will contain more tannins than the above Beaujolais Nouveau but will not have near the pucker power of a high-powered California Cabernet Sauvignon or an Italian Super Tuscan. Typical examples of medium-bodied red wines include: *Merlot* or *Shiraz.*

Full-bodied red wines boast the highest tannin (and often alcohol) content. Prime examples of full-bodied reds are France's esteemed *Bordeaux* wines, California's key *Cabs* and Italy's sizzling *Super Tuscans*. In general, light-bodied wines tend to "feel" more like water in the mouth. In contrast, "full-bodied" wines feel heavier, more like milk, this effect is due in large part to the higher tannin (and again, alcohol) content.

Common Red Wine Flavor Descriptions- Plum, Cherry, Strawberry Blackberry, Raspberry, Currant, Gooseberry, Boysenberry, Raisin, Fig, Pepper (white/black), Clove, Cinnamon, Coffee, Cocoa, Mocha Tobacco, Leather Licorice, Toast, Smoke Violet

White Wines- are not always white at all, but yellow, golden or straw-like in color. Its color can be derived from an assortment of grape varietals. White wines are made from the grape juice and grape skin of green, gold or yellowish colored grapes or from just the juice (not the skin) of select red grapes (as in some Champagnes). White Wines are often consumed with lighter meals, think lunch, smaller dinners, and appetizers or as an *aperitif* themselves. They are more refreshing, lighter in both style and taste than the majority of their red wine counterparts, making them ideal for spring and summer occasions. The old guideline of "white wine with white meat" still holds true in many instances, but there are plenty of exceptions and palate preferences that dictate which. White wines have a different glass style altogether from red wines. They are best presented in narrower glasses, as the sharper taper at the top of the glass allows for better aroma concentration of more delicate white wines. Optimum white wine serving temperatures are between 45-50 °F. White Wine Varietals-"The Big Eight" when it comes to white wine varietals are: Chardonnay, Sauvignon Blanc (also called Fumé Blanc), Riesling, Gewurztraminer, Pinot Gris/Pinot Grigio, Semillon, Viognier, and Chenin Blanc.
Common White Wine Flavor Descriptions-Citrus, Apple, Pear, Grapefruit, Lemon, Lime, Pineapple, Melon, Butter, Honey, Floral, Herb, Earthy

How to Taste Wine- Learning how to taste wines is a straightforward adventure that will deepen your appreciation for both wines and winemakers. Look, smell, taste - starting with your basic senses but keep in mind that you can smell thousands of unique scents. Although your taste perception is limited to salty, sweet, sour and bitter. It is the combination of smell and taste that allows you to discern flavor.

Wine Tasting Steps
Look- check out color and clarity. Then take a good look at the wine. Tilt glass away and check out color of wine from rim edges to middle of glass (it's helpful to have a white background). What color is it? Look beyond red, white or blush. Red wine is the color maroon, purple, ruby, garnet, red, brick or even brownish. A white wine is it clear, pale yellow, straw-like, light green, golden, amber or brown in appearance. Move on to the wine's opacity. Is the wine watery or dark, translucent or opaque, dull or brilliant, cloudy or clear? Can you see sediment? Tilt the glass a bit, give it a little swirl - look again, is there sediment, bits of cork or any other floaters? An older red wine will be more translucent than younger red wines.

Smell- Our sense of smell is critical in properly analyzing a glass of wine. To get a good impression of the wine's aroma, gently swirl the glass (this helps vaporize some of the wine's alcohol and release more of its natural aromas) and then take a quick whiff to gain a first impression. Still Smelling- now stick your nose down into the glass and take a deep inhale through your nose. What are your second impressions? Can oak, berry, flowers, vanilla or citrus be smelled? A wine's aroma is an excellent indicator of its quality and unique characteristics. Gently swirl the wine and let the aromas mix and mingle, and sniff again.

Taste-Finally, take a taste. Start with a small sip and let it roll around your tongue. There are three stages of taste- the attack phase, the evolution phase and the finish.

The Attack Phase is the initial impression that the wine makes on the palate. The Attack is comprised of four pieces of the wine puzzle: **alcohol content**, **tannin levels**, **acidity** and **residual sugar**. These four puzzle pieces display initial sensations on the palate. Ideally these components will be well-balanced one piece will not be more prominent than the others. These four pieces do not display a specific flavor. They come together to offer impressions in intensity and complexity, soft or firm, light or heavy, crisp or creamy, sweet or dry, but not necessarily true flavors like fruit or spice.

The Evolution Phase is next, also called the mid-palate or middle range phase; this is the wine's actual taste on the palate. Analyze the flavor profile of the wine. If it's a red wine you may start noting fruit – berry, plum, prune or fig; perhaps some spice – pepper, clove, cinnamon, or maybe a woody flavor like oak, cedar, or a detectable smokiness. In the Evolution Phase of a white wine you may taste apple, pear, tropical or citrus fruits, or the taste may be more floral in nature or consist of honey, butter, herbs or a bit of earthiness.

The Finish is appropriately labeled as the final phase. The wine's finish is how long the flavor impression lasts after it is swallowed. This is where the wine culminates, where the aftertaste comes into play. Did it last several seconds? Was it light-bodied (like water) or full-bodied (like the consistency of milk)? Can you taste the remnant of the wine on the back of your mouth and throat? Do you want another sip or was the wine too bitter at the end? What was your last flavor impression – fruit, butter, oak? Does the taste persist or is it short-lived?

Serving Wine

In very general, red wines are served at cooler room temperatures and white wines are best served chilled. When wines are served too warm, they tend to taste unbalanced with an alcohol edge. When wines are served to cold the innate flavors and aromas are significantly suppressed.

Optimal Wine Serving Temperatures:
White Wines: 45-50 °F or 7-10 °C
Red Wines: 60-65 °F or 10-18 °C
Rosé Wines: 45-55 °F or 7-13 °C
Sparkling Wines: 42-52 °F or 6-11 °C
Fortified Wines: 55-68 °F or 13-20 °C

Midterm Review Notes

Foundation of Culinary

History/Chefs

Professional Chef

Knowledge, skill, taste, judgment, dedication, pride….what should you know as a professional

Safety/Sanitation

Foundation- KNOW THE RULES!!!! Danger zone, cooling/heating, storage, hygiene

Cooking Methods

Dry Heat Techniques
Moist Heat Techniques
Terminology and temperatures

Perception of Food

Taste, texture, effects of foods, flavor profiles

Plating and Design

Focal point
Sequencing
S.C.H.I.F.T.

Classical Cuts

Measurements/Terminology

Knife Sharpening

Parts/Types of a knife
Techniques for sharpening knives

Meat Fabrication

Terminology/Categories
Parts of the poultry, beef, fish
Cooking methods and temperatures

Stocks and Sauces

Types of Basic Roux, sauces and stocks
Ratios
Terminology/Techniques
Cooking times for stocks

Starches

Techniques
Categories of Starches

Soup and Salads

Types of soups
Types of salads
Techniques
Ratio

Dinner for two

Terminology/Techniques/ Methods

Hors d' oeuvres

Terminology/Components/Guidelines for preparing

Dessert

Ratio
Techniques
Terminology

Midterm Review Notes

Desserts

The pastry contrast table that follows is a visual guide to understanding the basic characteristics that the chef can use in the creation of a plated dessert. When conceptualizing desserts, think about incorporating several contrasting characteristics by using different components, but never add components just to have another contrast. The number of components should make sense for the dessert.

Contrast Table:

Seasonality	Flavor/aroma	Taste	Texture	Temperature	Presentation
FALL	Chocolate	Sweet	Crunchy	Frozen	Shape
SPRING	Vanilla	Salty	Crisp	Chilled	Volume
SUMMER	Fruit	Bitter	Brittle	Cool	Color
WINTER	Spice	Acidic	Chewy	Room Temp	Visual Texture
	Nut	Umami	Creamy	Warm	
			Liquid		
			Icy		
			Tender		
			Cakey		

The Functions of Baking Ingredients:

<u>Stabilizers</u>-any ingredient that helps to develop the solid structure, or "framework", of a finished product.

Arrowroot and Cornstarch-These are generally preferable for thickening sauces puddings and fillings where a translucent effect is desired. To dilute these thickeners before incorporating them with other ingredients, mix them with a small amount of cool water.

Gelatin- is used to produce light, delicate foams that are firmly set, such as Bavarian cram, mousse, and stabilized whipped cream.

Pectin- is a carbohydrate derived from the cell wall of certain fruits. It requires the correct balance of sugar and acid to gel.

<u>Liquefiers</u>- help to loosen or tenderize a dough or batter. Water, milk, and other liquids, fats and sugar act as liquefiers.

<u>Leaveners</u> (Biological, Chemical, Mechanical- to raise or to make lighter.

Biological Leaveners (fresh/compressed yeast, active dry yeast)- organic leaveners are based on yeast; are based on a living organism that feeds on sugars and produces alcohol and carbon dioxide, the gas that lightens a dough to give it the proper texture.

Chemical Leaveners- With baking soda and baking powder, an alkaline ingredient (usually sodium bicarbonate) interacts with an acid already present in baking powder, or in an ingredient such as buttermilk, sour cream, yogurt, or chocolate, to leaven the product. This process of expansion happens rapidly; hence, many items prepared with chemical leaveners are called "quick breads".

Mechanical Leaveners- Steam, which is produced when liquids in a batter or dough are heated. When air is incorporated into batter through either whipping or creaming an ingredient before it is incorporated into the final batter, heat causes the air pockets in the batter or dough to expand.

Cooking Sugar:

Sugar- may be cooked by one of two methods: **dry or wet**.
1. The **dry method** is used exclusively for caramelization.
2. The **wet method** is generally used when sugar must be cooked to a specific stage or temperature.

Basic rules: Use a heavy-gauge pot and candy thermometer
Add acid or invert sugar (corn syrup) to prevent sugar crystals from forming
Brush down sides with moist pastry brush
Heat or liquids before adding to caramel
Add liquids carefully, hot caramel will foam and splatter

Cooking Sugar to Stages:

234º F/112ºC	**Thread**
238º F/114ºC	**Soft ball**
248º F/120ºC	**Firm Ball**
260º F/127ºC	**Hard Ball**
275º F/135ºC	**Soft Crack**
310º F/154ºC	**Hard Crack**

Pastry Doughs and Batters (At a Glance):

Rubbed-dough method (cutting in)-
1. Sift the dry ingredients.
2. Cut the fat into the dry ingredients until the mixture resembles a coarse meal.
3. Add the cold liquid ingredients and mix just until a shaggy mass is formed.
4. Knead the dough very briefly, if necessary.
5. Shape and scale the dough as desired and bake as indicated for the particular item.

The Blending Mixing Method-
1. Sift together the dry ingredients.
2. Combine the liquid ingredients.
3. Add the liquid ingredients to the dry ingredients.
4. Mix until the batter is evenly moistened.
5. Add any additional garnish
6. Fill properly prepared pans and bake the item.
7. Remove the item from the pans, cool, and serve or properly store it.

The Creaming Method-

1. Bring Shortening or butter to room temperature.
2. Sift the flour, leaveners, and other dry ingredients as necessary.
3. Cream, the butter and sugar until the mixture is light and smooth and fully combined.
4. Add the eggs gradually and mix them in until the batter is smooth. Scrape the bowl in between each addition.
5. Add the sifted dry ingredients and liquid ingredients alternately, in portions. If not using liquid ingredients, add the dry ingredients all at once.
6. Scale out the batter into prepared pans and bake the item.
7. Remove the item from the pans, cool, and serve or properly store it.

The Foaming Method-

1. Sift the flour and other dry ingredients as necessary.
2. Heat the eggs and sugar over a hot water bath to approximately 110^{o}F, stirring to make sure that all the sugar is dissolved.
3. After removing the egg-sugar mixture from the heat, bet it until it reaches maximum volume. Turn the mixer to medium and beat the eggs for 15 minutes to stabilize the foam.
4. Fold in the sifted dry ingredients by hand.
5. Temper the flavorings, melted butter, and other optional ingredients.
6. Scale out the batter into prepared pans and bake it.
7. Remove the cake from the oven and let it cool briefly in the pan.

Pate a Choux-

1. Bring the liquid and fat to a boil, making sure that the fat is melted.
2. Add the flout all at once and cook the mixture.
3. Mix it until cool.
4. Add the eggs gradually and mix them in.
5. Pipe out the batter.
6. Bake the items.

Stirred Custards, Creams, and Pudding-

1. Carefully scale or measure all ingredients.
2. Heat the milk or milk/cream combination with half of the sugar to just below a boil.
3. Whisk together the eggs with the remainder of the sugar.
4. Temper the eggs with the hot milk, stirring constantly and return the tempered eggs to the pan.
5. Stirring constantly, cook the sauce over low heat just until it has reached the point of nappe.

Mousse-

1. Carefully scale or measure all ingredients.
2. Heat the egg yolks with some of the sugar, whisking until the mixture is thick and reaches the proper temperature.
3. Whip or whisk the egg whites with the remainder of the sugar.
4. Gently lighten the yolk mixture with some of the egg whites.
5. Carefully fold the remaining egg whites into the yolk mixture.

Making a Pie or Tart-

1. Carefully line the pie or tart pan with prepared dough, keeping the dough chilled before and after lining.
2. If necessary, par-bake crust.
3. Fill the pie with desired filling and finish as necessary.
4. Bake the finished item as necessary.

Basic Sauces

- All sauces should pair in flavor and texture with the different component of the dish.
- Some sauces will have to be served at room temperature or hot if butter has been used (a result of a deglazing, cold would taste fatty)

Vanilla Sauce- A stirred custard made with cream and/or milk, sugar, eggs and vanilla. May be served as a sauce or used in pastry preparations such as Bavarian cream and ice cream. Also known as **Crème Anglaise.**

Pastry Cream- "Crème Patissiere", a stirred custard made with eggs, flour or other starches, milk, sugar and flavorings, used to fill and garnish pastries or as the base for soufflés, creams, and mousses.

Sabayon- A custard of sweetened egg yolks flavored with Marsala or other wine or liqueur, beaten in a double boiler until frothy.

Ganache- A preparation of chocolate and heavy cream, and sometimes butter, sugar and other flavorings. It is used as a sauce, glaze, and filling or to make confections. Can range from soft to hard, depending on the ratio of chocolate to cream.

Coulis-A thick puree of vegetables or fruit; served hot or cold. Traditionally refers to the thickened juices of cooked meat, fish or shellfish puree or certain thick soups.

Liaison- A mixture of egg yolks and cream used to thicken and enrich sauces.

Reduction- Slow simmering of a liquid to concentrate solids and flavor by evaporating moisture, to get proper viscosity. (Also concentrates sweetening)

Example: Sweet wine or port reduction

Monte au beurre- "lifted with butter" Emulsion of a hot reduced liquid and butter; need to be served hot. (Makes it fluffier, same time richer, 20 to 25 % butter.) Whisking or swirling whole butter into the sauce until melted.

Example: Raspberry Monte au beurre

Tempering Chocolate- (seed and block method)-

1. **Seed method**, use chopped tempered chocolate, approx. 25% of the weight of the melted chocolate to be tempered should be added to the warm (110^{o}F) melted chocolate and gently stirred to melt and incorporate it. The whole mass is then brought to the appropriate working temperature.
2. **Block method** add a single block of tempered chocolate to warm melted chocolate and stir gently until the desired temperature is reached. After the chocolate is brought into temper, the seed, or block of chocolate is removed.

Table Service

Service Etiquette

As with any great change in social customs, there are fads that come and go, but proper etiquette will never go out of style

Service Etiquette
Oretha Swartz

Table Service

Basic Rules-There should be at least twenty-four inches of table space for each guest, this is called *cover.* The table should be balanced to include center pieces and candles.

Napkin Size- 14" – 16" square napkins are for informal events
18" – 22" square napkins are used for formal luncheons
24" square for a formal dinner and banquets

Napkin Placement -For formal settings napkins are placed on the left of the forks, one inch from the edge of the table, online with the plate and silverware. Open edges may be placed towards the plate and table edge, or towards the left.

Table China- Plates to include charger should be placed 1" from the edge of the table

Main course or Dinner plate- 10"
Luncheon plate- 9"
Flat dessert or salad plate- 8"
Soup plate- 9"- 10"

Silverware Placement- in the order in which it is going to be used, starting from outside and working in towards the plate. Silverware must be placed 1" from the edge of the table. Forks are placed to the left of the plate and no more than three (If more are needed, they should be brought in with the course). Knives and spoons are to the right of the plate, with the blade facing in. Spoons for tea and coffee are placed on the saucers, at the right of the handles, before service. Dessert silverware usually on the dessert plate

Table Decoration -The size of the centerpiece depends on the size and shape of the table, but it should not be so tall or large that guest cannot see over it.

Rules of Service -Serve food from left and remove from the right, beverage will be served from the right side. The charger is removed with the main course.

Coffee Service-Two servers work as a team, the first holding a small tray with a coffeepot, sugar and cream, and one cup. The second server follows with a large tray filled with cups and saucers. The first server asks each guest his preference for cream and sugar, then offers the cup on his tray.

Food Presentations for Buffets

The excitement and beauty of a well-designed buffet table depends on the arrangement of food on platters and serving dishes. One can sell any theme with creative menus, decorations, and artistic food presentations.

Food Presentation for Buffets

Personnel FOH Staff/BOH Staff

FOH Staff (5 people)

- 1 Captain- supervise the wait staff and dining room area
- 2 Front waiters- butler the fresh food
- 2 Back waiters - police buffet area and clear

BOH Staff (7 people)

- 1 Lead Chef- progressive cooking, check food temps
- 4 Sous chefs- maintain integrity of first to last plate
- 2 servers- replenish buffet items

Action Station/live station (1 person)

- Where food is prepared or carved to order in dining room
- Great eyes on buffet needs
- Allows dinners to ask questions about the buffet
- Work with captain and back waiters

Need to think about

- Easy access to both the staff and guest
- Variety of cooking techniques
- Variety of ingredients
- Seasonal food, color, texture, flavor
- Choose items that hold well (chafing dishes v splattered items)
- Progressive cooking

Safety concerns for buffets

- Proper temperatures No
- new food to old food
- Chafing dishes are not to heat food, just maintain heat
- Careful when changing chafing dishes
- Clean utensils/replace often
- Ample amount of plates for guest

Notes from Demo

CONSTRUCTING A WRITTEN "MISE EN PLACE PLAN"

RESEARCH TERMS/TECHNIQUES YOU ARE UNFAMILIAR WITH PRIOR TO CLASS

- Review what you must prepare – including **ALL** group work.
- List all the ingredients.
- Check if you need to order any additional ingredients.
- Determine cooking times and preparation procedures.
- Determine equipment and utensils you will need.
- Write the "mise en place plan" in sequential order.
- Reprioritize your mise en place plan every so often during the day.

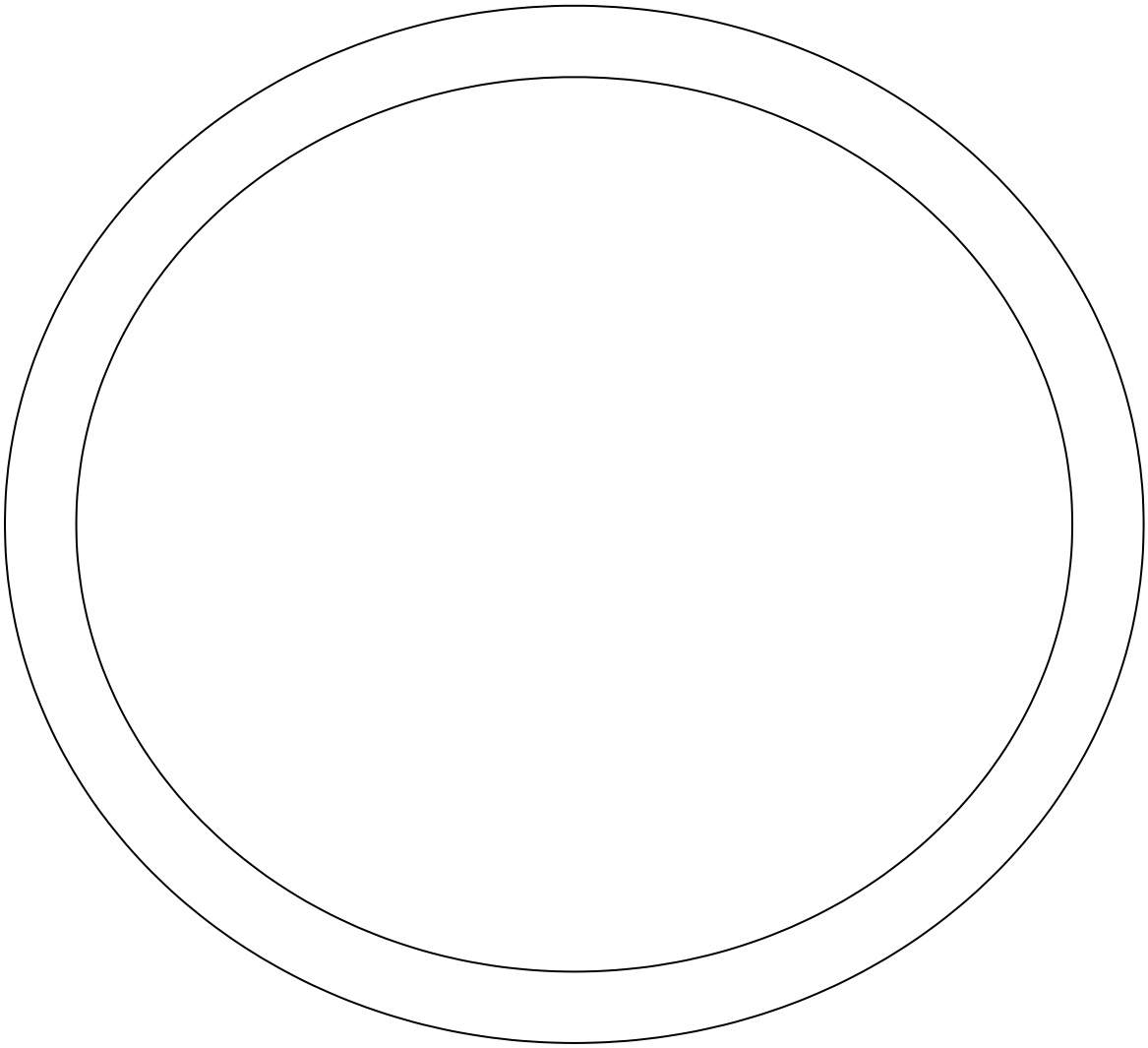
IMPORTANT POINTS FOR ORGANIZING YOUR GAME PLAN IN THE KITCHEN

- Pots and Pans, other equipment, communication
  - Select the proper pan and size for the job intended.
  - Have serving items for the finished product.
  - Utensils, spoons, ladles, spatulas, etc. and sanitizing bucket on the station.
  - Preheat ovens, deep-fryer, broiler, etc.
- Food
  - Gather the produce and dry goods, weigh and measure correctly to produce the recipe. Use up any product that is the oldest – First In, First Out (FIFO).
  - Keep perishable items refrigerated.
  - Prevent cross contamination with proper sanitation practice.
- Cooking
  - Pre-preparation
    Washing/peeling
    Slicing, dicing
    Trussing and seasoning
- Preparation
  - Start items with longest cooking times first.
  - Clean as you go.
- Finishing
  - Finish items as close to service time as possible.
- Set up line for service
  - Hot Food Hot Plates, Cold Food Cold Plates.

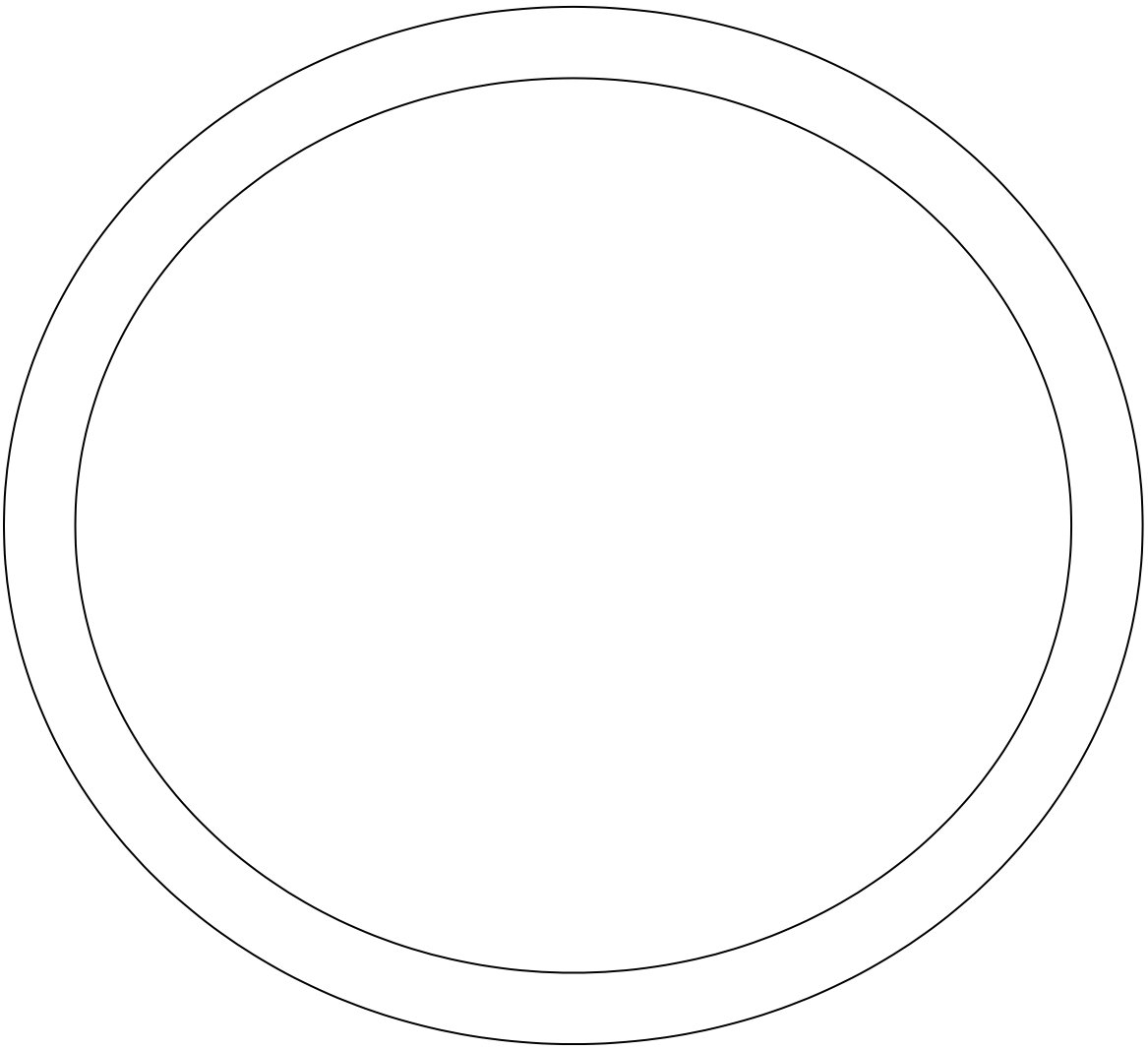
- Actual service (Plates or other serving dishes neat and clean, food hot)

Timeline

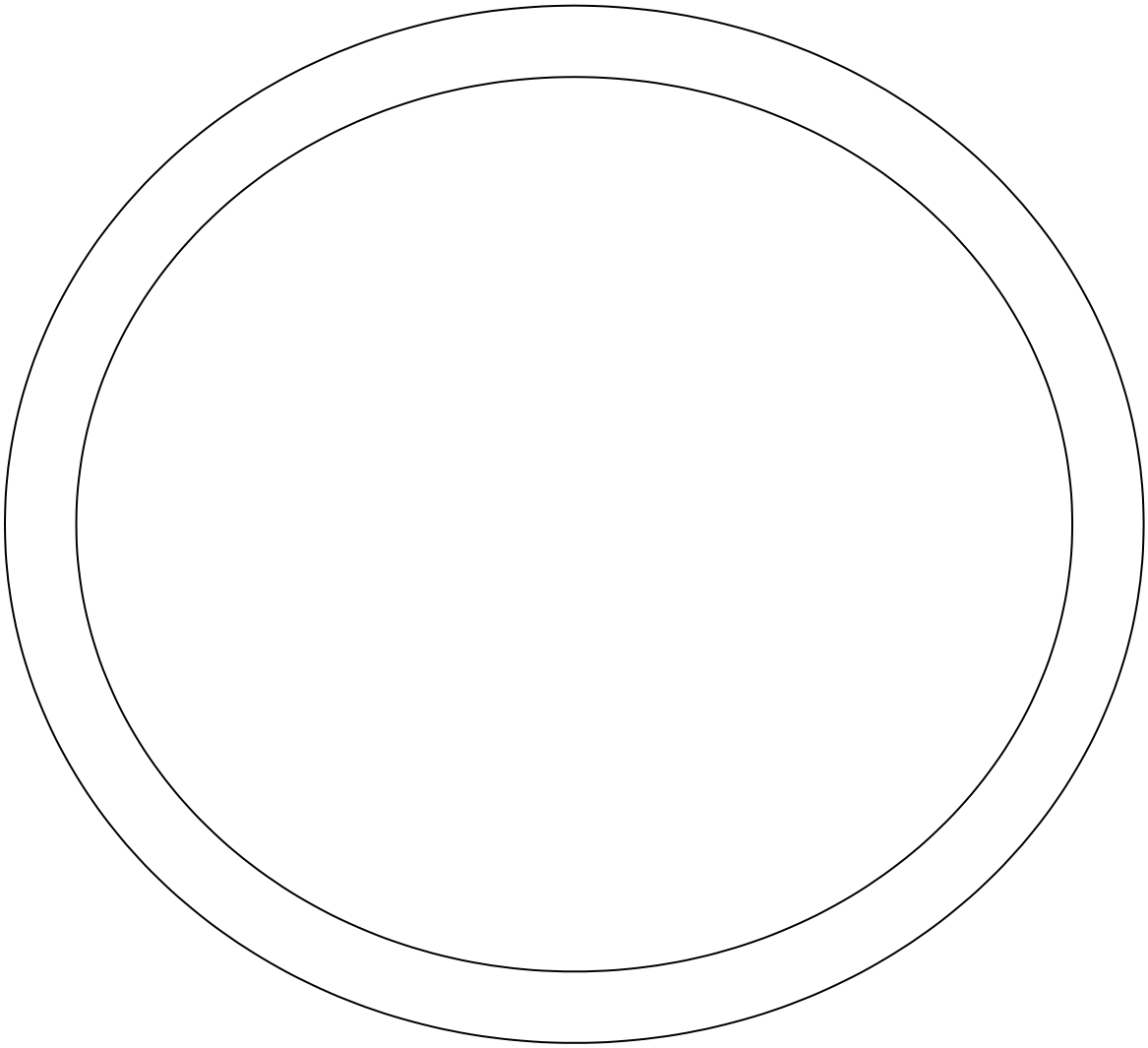
First Course Diagram



Second Course Diagram



Third Course Diagram



Final Exam Review

will include questions from entire course

Introduction to Wine and Paring with Food

***Types of Wines
*Terminology

Three Course

*Terminology
*Techniques
* Methods

Table Setting and Service

*Serving and Clearing procedures
*Table setting
*Brigade System
*Types of Service
*Coffee and tea service
*Terminology

Sanitation/Safety ALWAYS!!!!

WHAT SHOULD YOU KNOW AS THE CHEF?

*Temperature Danger Zone
*Food Contaminations/ cross contamination
*Food thawing procedures
*FOH/BOH
*Food cooling procedures

Exam Review Notes

End of Course Meal

Seven courses

Three hors d' oeuvres

Truffles (to go item for guest, will need to include packaging)

Two beverages (one with hors d' oeuvres and one with meal)

Menu brief **Week 2**

Menu discussions **Weeks 3-4**

Menu execution last week of course

Possible course selections

- Amuse Bouche
- Antipasto
- Appetizer
- Soup
- Salad
- Pasta
- Caviar
- Seafood
- Shellfish
- Fish
- Poultry
- Beef
- Game
- Entrée
- Dessert

1. Appetizer
2. Soup
3. Seafood
4. Salad
5. Game
6. Entrée
7. Dessert

Laboratory Clean Up, Inventory and Equipment

1. Workstations-
   - ⎦ Remove all equipment from workstations
   - ⎦ Clean and sanitize the workstations, top to bottom to include drawer and workstation legs
   - ⎦ Clean and sanitize the stovetops, ovens, and drip pans
   - ⎦ Sweep under the stations
   - ⎦ Mop and sanitize under and around the workstation floor
   - ⎦ Set up the workstation with clean and sanitized equipment according to the layout diagram
   - ⎦ Conduct inventory of equipment. Identify missing items, turn-in, list to the class leader

2. Ration Storage Shelves-
   - ⎦ Remove all rations from the shelves
   - ⎦ Pull the shelves away from the wall
   - ⎦ Wash, rinse, sanitize, and air dry the shelves
   - ⎦ Wash, rinse, and sanitize the walls
   - ⎦ Consolidate all ration items (sugar, flour, pasta, etc.)
   - ⎦ Wipe down all ration items
   - ⎦ Restock the shelves, FIFO
   - ⎦ Restock with at least two of each item

3. Refrigerators and Freezers-
   - ⎦ Remove all rations from the refrigerators and freezer
   - ⎦ Pull the refrigerators and freezers away from the wall
   - ⎦ Wash, rinse, and sanitize interior of the refrigerators; pay special attention to the door gaskets.
   - ⎦ Wash, rinse, and sanitize the exterior of the refrigerators.
   - ⎦ Wipe out the interior of the freezer with a dry paper towel; to include the door gaskets.
   - ⎦ Wash, rinse, and sanitize the exterior of the freezer
   - ⎦ Wash, rinse, and sanitize the walls.
   - ⎦ Restock the refrigerator and freezer, FIFO
   - ⎦ Replace sheet pans with clean ones
   - ⎦ Check dates on all items, FIFO method (Let instructors know before you throw out any item)
   - ⎦ Spray and rub down the refrigerator and freezer exterior with the stainless-steel cleaner

4. Sanitation area
   - ⎦ Clean and sanitize the mop and broom storage area
   - ⎦ Clean and sanitize all sinks
   - ⎦ Clean and sanitize grease trap (empty and scrape down sides of tank)
   - ⎦ Remove all equipment from the pot and pan racks
   - ⎦ Clean and sanitize the pot and pan racks
   - ⎦ Properly store and stack the equipment on the pot and pan racks
   - ⎦ Empty, clean and sanitize all trashcans. Reline them with new trash bags
   - ⎦ Conduct an inventory on the cleaning supplies. Turn supply list into the instructor

5. Instructors Workstation

- ⎦ Clean and sanitize instructor's workstation, shelves, and equipment
- ⎦ Clean and sanitize the stovetops, ovens, and drip pans
- ⎦ Change lining on equipment trays and utensil bucket
- ⎦ Clean mirrors with glass plus & back w/ stainless steel cleaner
- ⎦ Sweep under the station
- ⎦ Mop and sanitize under and around the workstation floor
- ⎦ Clean student seats and desktops
- ⎦ Clean and sanitize the trashcan. Reline it with a new trash bag

6. Produce Room
   - ⎦ Remove all rations from the refrigerators and freezers
   - ⎦ Pull the refrigerators and freezers away from the walls
   - ⎦ Wash, rinse, and sanitize the interior of the refrigerators; include door gaskets
   - ⎦ Wash, rinse, and sanitize the exterior of the refrigerator
   - ⎦ Sweep out the interior of the freezer with a dry paper towel; include door gaskets
   - ⎦ Wash, rinse, and sanitize the exterior of the freezer
   - ⎦ Wash, rinse, and sanitize the walls
   - ⎦ Check all item the refrigerator and freezer, FIFO
   - ⎦ Replace sheet pans with clean ones
   - ⎦ Spray and rub down the refrigerator and freezer exterior with the stainless-steel cleaner
   - ⎦ Clean, sanitize, and air-dry all stainless-steel tables
   - ⎦ Clean, sanitize, and organize the equipment/rations shelves
   - ⎦ Organize behind blue curtain (supplies and table skirts)
   - ⎦ Organize the ice carving cabinets
   - ⎦ Clean and sanitize the mop and broom storage area
   - ⎦ Clean and sanitize all sinks
   - ⎦ Sweep, mop, and sanitize the floor
   - ⎦ Empty, clean, and sanitize all trashcans. Reline them with new trash bags
   - ⎦ Conduct an inventory on the cleaning supplies. Turn supply list into class leader
7. Classroom and dining room
   - ⎦ Organize the storage closets in the dining room
   - ⎦ Re-arrange dining tables, student tables and chairs
   - ⎦ Sweep and mop the floor
   - ⎦ Vacuum the carpets
   - ⎦ Empty, clean, and sanitize all trashcans. Reline it with a new trash bag
8. Liquor Inventory
   - ⎦ Inventory liquor and organize the liquor. Inventory list should be given to an instructor.
   - ⎦ All open bottles should be consolidated and store in the instructor refrigerator
9. Specialty Equipment Inventory
   - ⎦ All specialty equipment such as terrine molds and tourné knives need to be inventoried and stored properly.

All areas will be inspected by the Class Leaders prior to the Instructors

CULINARY CODE

As a proud member of the American Culinary Federation, I pledge to share my professional knowledge and skill with all culinarians. I will place honor, fairness, cooperation and consideration first when dealing with my colleagues. I will keep all comments professional and respectful when dealing with my colleagues. I will protect all members from the use of unfair means, unnecessary risks and unethical behavior when used against them for another's personal gain. I will support the success, growth, and future of my colleagues and this great federation.

ACF MEMEBERS

“One can never know too much, the more one learns, the more one sees the need to learn more and that study as well as broadening the mind of the craftsman provides an easy way of perfecting yourself in the practice of your art.”

Auguste Escoffier