Appendix A

COOK

O*NET/SOC CODE: 35-201.00 RAIS CODE: 0663

This schedule is attached to and a part of these Standards for the above identified occupation.

1. **TERM OF APPRENTICESHIP**

   The term of the occupation shall be the satisfactory completion of the work processes as listed in these Standards and shall be a minimum period of 4,000 hours (2 years) and a maximum period of 6,000 hours (3 years) supplemented by the required hours of related instruction.

2. **RATIO OF APPRENTICES TO JOURNEYWORKERS**

   Ratio of Journeyworkers to Apprentices are to be established on a local program basis and as indicated in Section VII should be consistent with proper supervision, training, safety, and continuity of employment.

   However as a guideline, it is suggested that the following ratio be considered for use where appropriate. One apprentice may be employed for the first Journeyworker, and one apprentice may be employed for each two additional Journeyworkers employed at the work site.

   See the attached lists for the Qualifications for a Supervising Chef and Qualifications for a Sponsoring House.

3. **APPRENTICE WAGE SCHEDULE**

   Apprentices shall be paid a progressively increasing schedule of wages based on a percentage of the current journeyworker wage rate,

2 year Term Example:

   1st 6 months + 0 hours = 60%  
   2nd 6 months + 1000 hours = 70%  
   3rd 6 months + 2000 hours = 80%  
   4th 6 months + 3000 hours = 90%  
   5th 6 months + 4000 hours = 100%

3 Year Term Example:

   1st 6 months + 0 hours = 50%  
   2nd 6 months + 1000 hours = 55%  
   3rd 6 months + 2000 hours = 60%  
   4th 6 months + 3000 hours = 70%  
   5th 6 months+ 4000 hours = 80%  
   6th 6 months+ 5000 hours = 90%  
   7th 6 months+ 6000 hours = 100%

4. **SCHEDULE OF WORK EXPERIENCE**

   (See attached Occupation Schedule)

   The Apprenticeship Committee may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.
5. **SCHEDULE OF WORK EXPERIENCE** (See attached Course Outline)

### SCHEDULE OF WORK EXPERIENCE

#### Work Stations

<table>
<thead>
<tr>
<th>Cook program</th>
<th>4000 hr. program</th>
<th>6000 hr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Steward</td>
<td>240</td>
<td>320</td>
</tr>
<tr>
<td>II. Breakfast Cook</td>
<td>200</td>
<td>480</td>
</tr>
<tr>
<td>III. Vegetable Cook</td>
<td>480</td>
<td>960</td>
</tr>
<tr>
<td>IV. Butcher</td>
<td>120</td>
<td>160</td>
</tr>
<tr>
<td>V. Broiler Cook</td>
<td>600</td>
<td>800</td>
</tr>
<tr>
<td>VI. Soup and Sauce Cook</td>
<td>600</td>
<td>640</td>
</tr>
<tr>
<td>VII. Pantry Cook and Garde Manger</td>
<td>600</td>
<td>960</td>
</tr>
<tr>
<td>VIII. Sauté Cook</td>
<td>600</td>
<td>960</td>
</tr>
<tr>
<td>IX. Baker and Pastry Cook</td>
<td>200</td>
<td>320</td>
</tr>
<tr>
<td>X. Banquet Cook &amp; Supervision</td>
<td>360</td>
<td>400</td>
</tr>
</tbody>
</table>

**Total Hours**

<table>
<thead>
<tr>
<th>4000 Hours</th>
<th>6000 Hour</th>
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<td>4000</td>
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### WORK PROCESSES

I. **Steward - 240 or 320 hours**

Responsible for the overall cleanliness and maintenance of the kitchen and its supporting facilities plus equipment, tools, and supplies.

A. **Sanitation and Hygiene**

1. Maintain cleanliness of kitchen
   a. Provide clean wiping cloths
   b. Recognize unclean work areas
   c. Identify and select appropriate cleaning and sterilizing agents

2. Waste management
   a. Control disposal of food waste and garbage
   b. Control storage of perishable goods

3. Identify and exterminate insects and vermin
   a. Prepare kitchen areas for bug spraying

4. **Safety**

   a. Store toxic chemicals properly
   b. Recognize and correct unsafe fire hazards
   c. Recognize and correct unsafe safety hazards
   d. Use hand fire extinguisher
   e. Use and insist on safe lifting and carrying procedures
   f. Apply survival first aid
   g. Ensure adequate ventilation and lighting in work areas and washrooms

5. Maintain standard of personal hygiene

B. **Tools and Equipment**

1. Identify, select, use, care for and store the following equipment and tools:
   a. Broom
b. Mop

c. Mop pail with wringer

d. Carts, mobile, assorted sizes

e. Dishwasher, commercial model

f. Sink, utility, 3 compartment

g. Freezer, walk-in

h. Refrigerators, reach-in

i. Refrigerators, walk-in

j. Trash cans

k. Holding bins for garbage

l. Freezer, reach-in

m. Storage cabinets

n. Table, utility

o. Skirting for buffet tables

p. Clipboard

q. Tables, folding

r. Linens

s. Ventilation system

t. Lavatories

C. Product Identification and Knowledge

1. Identify all basic food products and where they are stored

2. Identify various cleaning chemicals and agents

3. Identify different sizes of canned goods

4. Identify various forms and containers as fresh produce comes in

5. Identify the forms as frozen food comes in

6. Recognize quality standards in fresh vegetables, fish, and seafood, dairy products and meats

7. Identify canned heat

D. Production

1. Storeroom

   a. Receive goods

   b. Store goods

   c. Inventory goods

   d. Prepare daily food order

   e. Distribute goods

   f. Clean storage and receiving areas

2. General kitchen cleaning

   a. Clean refrigerators and freezers

   b. Prepare work areas

   c. Clean work areas

   d. Polish stainless steel

   e. Clean floors

   f. Clean walls

   g. Clean restrooms

   h. Clean filters

   i. Clean hood system

   j. Clean ovens

   k. Filter fat in deep fryer

   l. Clean deep fryer
3. Warewashing
   a. Prepare pots and pans for cleaning
   b. Wash pots and pans
   c. Sanitize pots and pans
   d. Dry pots and pans
   e. Store pots and pans
   f. Set up/turn on dish machine
   g. Prepare dishwashing area
   h. Prepare dishware for washing
   i. Wash dishware
   j. Clean dishwashing area
   k. Break down/clean/dish machine
   l. Store dishes
   m. Prepare utensils for washing
   n. Wash utensils
   o. Store utensils
   p. Prepare silverware for washing
   q. Wash silverware
   r. Store silverware

4. Waste disposal
   a. Clean garbage cans
   b. Collect garbage
   c. Maintain garbage area

5. Buffet set-up
   a. Set up buffet tables
   b. Cover and drape buffet tables
   c. Clean chafing dishes
   d. Assemble chafing dishes
   e. Light chafing dishes
   f. Deliver food to buffet
   g. Set up food on buffet

II. Breakfast Cook - 200 or 480 hours
Responsible for the set up, cooking, and serving of the breakfast meal.

A. Sanitation and Hygiene
   1. Keep a neat and clean work station
   2. Keep a neat and clean personal appearance
   3. Keep hair covered at all time
   4. Maintain a clean apron’
   5. Maintain a clean side towel
   6. Keep a supply of side towels, properly stored, and make sure they are routed correctly for cleaning
   7. Prevent spread of disease from salmonella, especially as it pertains to eggs and their shells

B. Tools and Equipment
   1. Prepare, clean, and season griddle
   2. Prepare, clean, and season waffle iron
   3. Maintain properly seasoned egg pan
4. Use sauté pan properly for eggs and omelets
5. Understand and use varieties of spatulas
6. Utilize the bain marie for keeping breakfast items hot and of a quality for service
7. Use utility knife for the proper cleaning and cutting of fruits and vegetables

C. Product Identification and Knowledge
1. Recognize different sizes of eggs
2. Recognize different types of eggs
   a. Duck
   b. Brown
   c. Double yolk
3. Recognize the various types of canned and fresh or frozen juices for breakfast
4. Identify and select fresh vegetables and fruits used for the breakfast meal
5. Identify the different kinds of teas for hot tea
6. Describe the varieties of coffees
7. Identify the different types of breakfast meats, proper storage

D. Production
1. Prepare fried eggs
   a. Over easy
   b. Over medium
   c. Over hard
   d. Sunny-side up
   e. Basted
   f. Scrambled
2. Prepare poached eggs
   a. Set up poaching water
   b. Set up system for poaching eggs in quantity
   c. Cook poached eggs
3. Prepare boiled eggs
   a. 3-minute eggs
   b. 5 minute eggs
   c. Hard-cooked eggs
4. Prepare complex egg dishes
   a. Assemble Eggs Benedict
   b. Create one variation on Eggs Benedict
   c. Make Omelets
      1. Prepare ten different fillings for omelet
      2. Rolled omelet
      3. Folded omelet
      4. French omelet
      5. Soufflé omelet
5. Prepare breakfast meats
   a. Cook bacon
   b. Cook patty sausage
   c. Cook link sausage
   d. Cook ham steak
   e. Prepare corned beef or roast beef hash from scratch
   f. Cook corned beef or roast beef hash

6. Prepare and cook breakfast batters
   a. Make 2 quarts waffle batter
      1. Cook waffles
   b. Make 2 quarts pancake batter
      1. Cook pancakes
   c. Make 1 pint French toast batter
      1. Cook French toast
   d. Make 2 quarts crepe batter
      1. Cook crepes

7. Prepare breakfast potatoes
   a. Prepare potatoes for hash browned potatoes
   b. Cook hash browned potatoes
   c. Prepare potatoes for home fried potatoes
   d. Cool home fried potatoes

8. Prepare cereals and breads
   a. Cook oatmeal
   b. Cook a second hot cereal
   c. Toast all types of breads including English muffins

9. Prepare breakfast beverages
   a. Brew regular and decaffeinated
   b. Brew hot tea
   c. Make hot chocolate
   d. Reconstitute frozen juices
   e. Dispense canned juices
   f. Squeeze fresh orange and grapefruit juices

10. Prepare fruits for breakfast
    a. Section grapefruit
    b. Section cantaloupe
    c. Stew prunes
    d. Dispense canned fruits
    e. Clean and section a variety of fruits, then arrange on platter for breakfast buffet

11. Prepare all of the items necessary for a full breakfast buffet

E. Garnishment and Display
    1. Identify and implement six different breakfast plate garnishes
    2. Set up table and design layout for breakfast buffet including center pieces
F. Nutrition
1. Be aware of fats and oils used in cooking breakfasts
   a. Amounts and kinds used (or available)
   b. Health impact
2. Care and storage of breakfast fruits and juices
3. Create a breakfast plate that is lower in calorie and fat content than traditional breakfast

III. Vegetable Cook - 480 or 960 hours
Responsible for fabricating, cooking, and serving all fruits, vegetables, cereals, grains, beans, tubers, and farinaceous product.

A. Sanitation and Hygiene
1. Clean up after performing a task
2. Keep counter where working wiped clean and free of food refuse
3. Keep food off floor and/or cleaned up
4. Maintain clean hands and fingernails
5. Maintain hair neatly on head and face
6. Wear minimal amounts of jewelry
7. Maintain clean and polished shoes
8. Wear proper hat at all times
9. Wear proper uniform
10. Maintain a clean apron and wear at all times
11. Properly cover and label all foods to be stored
12. Keep knives and hand tools clean at all times
13. Dispose of dirty side towels properly
14. Maintain a clean side towel at all times
15. Wash all vegetables, dried beans, and rice for the removal of unwanted chemicals

B. Tools and Equipment
1. Identify and use a variety of small hand utensils
   a. Peilers
   b. Channel knife
   c. Melon baller
   d. Tomato corer
   e. Zigzag cutter
   f. Brushes
2. Use all types of knives
   a. Paring
   b. French
   c. Utility
   d. Grapefruit
   e. Slicer
3. Sharpen knives
   a. Use stone
   b. Use steel
4. Identify and select all sizes of pots for cooking varying amounts of vegetables
   a. Saucepans - 1 quart, 2 quart, 4 ½ quart, 7 quart
   b. Saucepots - 8 ½ quart, 26 quart, 5 gallon
   c. Stockpot - 3 gallon, 6 gallon, 10 gallon, 15 gallon
   d. Covers - 10", 12", 14"

5. Identify and select pans for cooking vegetables
   a. Hotel pans - perforated, solid
      1. 2 inch hotel pan
      2. 4 inch hotel pan
      3. ½ hotel pan
      4. ¼ hotel
   b. Sheet pan
   c. ½ sheet pan
   d. Fry pans
      1. 12 inch
      2. 14 inch
   e. Sauté pan
      1. Slope-sided (Sauté use)
      2. Straight-sided (Sautoir)
   f. Cast iron skillet
   g. Rondeau
   h. Wok

6. Identify and select heavy duty equipment
   a. Truncheon
   b. Steam kettle
   c. Use commercial steamer for cooking vegetables
   d. Stove top
      1. French top
      2. Open burners
      3. Griddle
   e. Ovens
      1. Convection
      2. Conventional
      3. Convection-steam
      4. Microwave
   f. French fryer
   g. Vertical chopping machine
   h. Mixers
      1. 2 quart
      2. 30 quart
   i. Buffalo chopper
   j. Electric slicer
   k. Food processor
7. Identify and select various other hand tools
   a. Spatulas
   b. Forks
   c. Spoons
      1. Slotted
      2. Pierced
      3. Solid
      4. Measuring
   d. Ladles - 2, 4, 6, 8 oz.
   e. Strainers
      1. Spider
      2. China cap
      3. Colander - 11 quart, 16 quart
   f. Mandolin
   g. Spatzie press
   h. Whips
      1. French
      2. Piano wire
   i. Funnels
   j. Scales
   k. Liquid measures
   l. Dry measures
   m. Can opener
   n. Mixing bowls

8. Identify and select cutting boards

9. Identify and select various sizes of storage containers, lids

10. Identify need and request tool and equipment repairs

11. Clean and maintain all equipment related to the fry station

C. Product Identification and Knowledge
   1. Determine good quality in fresh fruits and vegetables
   2. Properly store fruits and vegetables
      a. Maintain proper temperature
      b. Rotate stock
      c. Keep storage area cleaned
      d. Keep all fruits and vegetables properly covered
   3. Identify all types of varieties of vegetables - recognizes various types of vegetables and determines whether they are roots, stems, seeds, leaves or fruits of a plant
   4. Identify various stages of ripeness for fruits and vegetables and explain how that will relate to cooking
   5. Identify the best times of the year for different fruits and vegetables
   6. Identify the regions or locations where fruits and vegetables come from
   7. Identify, select, and understand the use of all of the varieties of dried pasta products
8. Identify, select, and understand the use of all of the varieties of dried beans and legumes
9. Identify, select, and understand the use of all of the different types of potatoes and other tubers
10. Identify, select, and understand the use of all farinaceous products and cereals
11. Identify, select, and understand the use of all nuts
12. Identify, select, and understand the use of all mushrooms
13. Describe the conditions for progressing or retarding ripening of fruits and vegetables
14. Demonstrate a working knowledge in deep fat frying, including proper temperatures and frying shortenings

D. Production
1. Do pre-preparation of fruits, vegetables, farinaceous products, and tubers
   a. Peel and clean all fruits and vegetables both by hand and by machine
      1. Peel fruit, vegetables, and tubers
      2. Core fruit and vegetables
      3. Section fruit, vegetables, and tubers
      4. Zest or score citrus fruit
   b. Practice all of the standard cuts on fruits, vegetables, and tubers
      1. Emince
      2. Slice
      3. Chop
      4. Small dice
      5. Medium dice
      6. Large dice
      7. Brunoise
      8. Julienne
      9. French fry
     10. Batonet
     11. Pont neuf
     12. Paysanne
     13. Bias slice
   c. Puree fruits and vegetables
   d. Bread fruits and vegetables
   e. Batter fruits and vegetables
   f. Stuff fruits and vegetables
   g. Marinate and preserve fruits and vegetables
   h. Make pasta dough
   i. Make mix for dumplings
   j. Make gnocchi dough
2. Cook all fruits, vegetables, tubers, farinaceous products, cereals, grains and beans in the following manners:
   a. Blanching
   b. Shocking
   c. Boiling
   d. Par-boiling
e. Deep frying  
f. Pan frying  
g. Sautéing  
h. Steaming  
i. Baking  
j. Broiling  
k. Stew  
l. Braise  
m. Poach  

3. Make complex preparations with fruits, vegetables, tubers, cereals, grains, beans, and farinaceous products  
   a. Prepare potatoes in 15 different ways  
      Example:  
      1. Oven browned  
      2. Baked  
      3. Twice baked  
      4. French fried  
      5. Cottage fried  
      6. Home fried  
      7. Mashed  
      8. Boiled  
      9. Duchess  
     10. Dauphine  
     11. O’Brien  
     12. Delmonico  
     13. Scalloped  
     14. Au gratin  
     15. Parisienne  
   b. Prepare each vegetable in five different ways  
      Example: Zucchini  
      1. Provencale  
      2. Stuffed with carrot mousse  
      3. Sautéed with fresh herbs  
      4. Breaded  
      5. Mixed vegetable stir fry  
   c. Mix dough for pasta and fabricate one type of pasta from scratch  
   d. Prepare dried and fresh pasta in six different ways  
      Examples:  
      1. Spaghetti marinara  
      2. Macaroni and cheese  
      3. Noodles Romanoff  
      4. Fettuccine Alfredo  
      5. Stuffed manicotti  
      6. Gnocchi romano  
   e. Make various fruit preparations  
      Examples:  
      1. Applesauce  
      2. Stewed fruit  
   f. Prepare dried beans and legumes
Examples:
1. Baked beans
2. Split pea puree
3. Boiled lima beans
g. Prepare grains and cereals
   1. Prepare three rice dishes
      Examples:
      a. Rice pilaf
      b. Risotto
      c. Chinese fried rice
   2. Prepare barley
h. Utilize and prepare canned vegetables
i. Utilize and prepare frozen vegetables
j. Prepare dumplings
k. Prepare spatzle

E. Garnishment
   1. Cook to retain color for appearance
   2. Control portion size for plate balance
   3. Utilize varieties of cuts for appearance
      a. Turn mushroom caps
      b. Tournée vegetables
   4. Mix colors in fruits and vegetables for plate balance
   5. Combine vegetables and starches for eye appeal
   6. Utilize various toppings and garnishes
      a. Polonaise
   7. Utilize various sauces for effect of appearance
   8. Work with the varieties of shapes of vegetables, fruits, starches for composition and balance
   9. Develop a good sense for proportions to result in clean and appetizing display

F. Nutrition
   1. Cook vegetables in a manner for the retention of vitamins and minerals
   2. Utilize alternative flavoring methods - spicing, herbs, vegetable purees, stocks, natural juices to replace fats and sodium
   3. Minimize use of saturated fats in dishes
   4. Store cooked and raw vegetables using a method to retain vitamins and minerals
   5. Learn the nutritive values associated with fresh fruits and vegetables and how to maintain these nutrients during preparation and cooking
   6. Use salt judiciously
IV. Butcher - 120 or 160 hours
Responsible for the fabrication of meats, poultry, fish and seafood so that they are in a state where they can be used for final preparations in the other stations of the kitchen.

A. Sanitation
1. Clean up after performing a task
2. Keep counter where working wiped clean and free of food refuse
3. Keep food off floor and/or cleaned up
4. Maintain clean hands and fingernails at all times
5. Maintain hair neatly on head and face
6. Wear minimal amounts of jewelry
7. Maintain clean and polished shoes
8. Wear proper hat at all times
9. Wear proper uniform
10. Maintain a clean apron and wear at all times
11. Properly cover and label all foods to be store
12. Keep knives and hand tools clean at all times
13. Dispose of dirty side towels properly
14. Maintain a clean side towel at all times
15. Maintain sanitary area for butchery
   a. Understand the nature of blood
      Example:
      1. Volatility of mixing bloods from different animals
      2. Bacterial content in animal blood
   b. Wash and disinfect areas used for butchery
16. Clean machinery used for butchery

B. Tools and Equipment
1. Identify and select knives to be used in the butchery of meats, poultry, and seafood
   a. Scimitar
   b. Boning knife
      1. Stiff blade
      2. Flex blade
   c. Slicer
   d. Utility knife
   e. Meat cleaver
   f. Fish filleting knife
2. Identify and select tools for sharpening knives
   a. Steel
   b. Stones - Oil stone, water stone
   c. Honing oil
   d. Electric grinder
3. Sharpen and steel knives
4. Identify and select machinery used in the butchery of meats, seafood, fish and poultry
   a. Meat grinder
   b. Band saw
5. Identify and select tools used for butchery
   a. Meat mallet
C. Product Identification
   1. Identify and select the primary cuts of meat
   2. Identify and select the secondary cuts of meat
   3. Identify poultry
      a. Chicken
         1. Fryer
         2. Roasting hen
         3. Capon
         4. Broiler
      b. Duck
      c. Goose
      d. Quail
      e. Turkey
   4. Identify seafood
      a. Distinguish different sizes of shrimp
      b. Varieties of clams
      c. Oysters
      d. Mussels
      e. Lobster
      f. Crab
   5. Identify fish
      a. Flat
      b. Round
   6. Identify and select the portions that break down from the secondary cuts
      a. Steaks
         Examples:
         1. T-bone
         2. New York Strip
      b. Cutlets
      c. Poultry
         Examples:
         1. Wings
         2. Boneless breast
      d. Sausages
      e. Chops
      f. Shellfish
         1. Lobster tail
      g. Fish
         Examples:
         1. 6 oz. Fillet
         2. Fingers
         3. Steaks

D. Production
   1. Butcher - poultry, meat, fish, shellfish
      a. Prepare the area where butchering will occur
      b. Clean (remove skin, fat, gristle) from meat cuts
      c. Break down meats from primal cuts to secondary cuts
      d. Break down secondary cuts into portion sizes
         Example:
1. Cut strip loin into:
   a. 10 oz sirloin steaks
   b. 12 oz sirloin steaks
2. Cut filet of beef into:
   a. Chateaubriand
   b. 8 oz filet mignons
   c. 6 oz filet mignon
   d. 2 oz tournedos
3. Cut whole chicken into:
   a. Halves
   b. Quarters
   c. Pieces of eight
4. Cut veal loin into:
   a. Scaloppine
   b. Cutlet
e. Pound meat to tenderize
f. Debone poultry and fish
g. Fillet fish
   1. One round
   2. One flat
h. Cut fish into portions
   1. Steaks
   2. Fillets
   3. Fingers
i. Shell shrimp, crab, and lobster
j. Section lobster
k. Grind beef for hamburgers
l. Form hamburger patties
   1. Form hamburger steak
   2. Make Salisbury steak
m. Grind pork
n. Tie meat and poultry
   1. Truss chickens
   2. Tie string to form a net around meats to be roasted
o. Wrap and store meats

V. Broiler Cook - 600 or 800 hours
Responsible for the final preparation of meats, fish, seafood, and vegetables for broiling, grilling, or roasting and then garnishing and presenting for service.

A. Sanitation and Hygiene
1. Clean up after performing a task
2. Keep counter where working wiped clean and free of food refuse
3. Keep food off floor and/or cleaned up
4. Maintain clean hands and fingernails at all times
5. Maintain hair neatly on head and face
6. Wear minimal amounts of jewelry
7. Maintain clean and polished shoes
8. Wear proper hat at all times
9. Wear proper uniform
10. Maintain a clean apron and wear at all times
11. Properly cover and label all foods to be stored
12. Keep knives and hand tools clean at all times
13. Dispose of dirty side towels properly
14. Maintain a clean side towel at all times
15. Clean broiler, keep free of grit and grease
16. Maintain grill brush, brick

B. Tools and Equipment
1. Identify and select hand tools that are used in the broiling process
   a. Spatulas
      1. Slotted
      2. Solid
   b. Grill fork
   c. Grill brush
   d. Grill brick
2. Identify and select knives to be used for the final preparation of items for broiling
   a. French knife
   b. Boning knife
   c. Slicer
   d. Utility knife
   e. Paring knife
3. Identify and select tools used for carving roasts
   a. Meat slicer
   b. Ham slicer
   c. Carving fork
4. Identify and select containers for items to be broiled
   a. Metal broiler plates/platters
   b. Casseroles
   c. Skewers
5. Identify large equipment associated with the broiler
   a. Griddle
   b. Salamander
   c. Oven
   d. Toaster
6. Identify and select cutting boards

C. Product Identification and Knowledge
1. Identify and select the cuts of meat, poultry, shellfish and fish used for broiling
   a. Beef, veal, lamb, and pork
      Examples:
      1. Sirloin
      2. Top round
   b. Poultry and game
      Examples:
      1. Semi-boneless half
   c. Variety meats - kidney, liver
   d. Sausages
   e. Chops
   f. Paillarde
g. Fish
   Examples:
   1. Whole fish
   2. Filleted side
h. Shellfish

2. Identify and select marinades and seasoning mixes used for broiling
3. Identify and select oils and butters for basting mixes
   a. Recognize the smoking point for oils and fats
4. Identify and select sauces for broiled items
   a. Prepared sauces
   b. Sauces from scratch
5. Distinguish the different degree of doneness in meat, poultry and seafood
   a. Beef and lamb - Black and Blue, rare, medium rare, medium, medium well, well done
   b. Fish, shellfish, poultry, pork - under cooked, overcooked
   c. Duck breast - medium rare
6. Identify and select all of the materials for hot sandwiches
   a. Breads
   b. Meats
   c. Cheeses
   d. Spreads
   e. Sauces
7. Identify and select materials for making hors d’oeuvres
8. Understand the meat costs of various commercial cuts and how this affects the determination and portion size and weight of the finished product
9. Determine the cooking and shrink factor of various meat cuts from raw to finished, and how these factors relate to the preparation of large quantities of meat
10. Specify verbally how a particular cut of meat should be cooked and at what temperature in order to maximize flavor with minimum shrinkage. Demonstrate this knowledge by weighing in a raw meat cut, cooking it, determining the shrink factor, and the finished portion cost
11. Demonstrate a knowledge of proper roasting and holding temperatures and the internal temperatures of different states of doneness

D. Production
   1. Prepare compound butters
      a. Make mâître d’hôtel butter
   2. Prepare marinades
   3. Prepare seasoning mixes
      a. Wet basting mixes
      b. Dry spice and herb mixes
   4. Prepare hot hors d’oeuvres
      Example:
      a. Rumaki
      b. Brochettes
      c. Stuffed mushroom caps
5. Hot sandwiches
   a. Assemble sandwiches for the broiler, oven, or grill
   b. Broil sandwiches
      Example:
      1. Open-faced grilled cheese
   c. Grill sandwiches
      Examples:
      1. Reuben
      2. Grilled cheese
   d. Create a hot sandwich special

6. Prepare meats, poultry, seafood, and fish for broiling
   a. Season with dry herbs and spices
   b. Marinate in liquid seasoning mix

7. Broil meats, poultry, fish, and seafood

8. Prepare meats and poultry for roasting
   a. Season
   b. Stuff

9. Roast meat and poultry
   a. Baste meat while roasting

10. Carve roasted meats on buffet serving lines

11. Prepare hot appetizers
    Example:
    a. Coquille St. Jacques
    b. Oysters Rockefeller

12. Assemble and cook casseroles

13. Prepare sauces for broiled and roasted meats, fish and seafood
    Example:
    a. Barbecue
    b. Au jus

14. Assemble brochettes for broiling

E. Garnishment
   1. Produce a grilled garnish - skewered items
   2. Use color combinations well to make up for the bland brown of grilled items - accent with bright colors
   3. Utilize meat combinations that will accent with color and texture
   4. Utilize grill marks for a positive visual effect
   5. Prepare appropriate vegetable garnishes to go with items
      Examples:
      a. Stuffed cherry tomatoes
      b. Broiled onion for steak
      c. Sautéed mushrooms

F. Nutrition
   1. Utilize the marinating process to flavor meats for lower fat usage
   2. Develop the natural flavor of broiled meat with subtle use of fats, flavoring and spicing
   3. Substitute lower fat, lower cholesterol oils for saturated fats where possible
   4. Develop a healthful entree plate with broiled meat, poultry or fish
VI. Soup and Sauce Cook - 600 or 640 hours
Responsible for the production and presentation of hot soups and hot sauces

A. Sanitation and Hygiene
   1. Handle bones properly to prevent bacterial growth
   2. Cool soups, sauces, and stocks quickly to prevent bacterial growth
   3. Make a remouillage
   4. Reheat stocks, soups, and sauces in a conscientious manner to prevent souring, bacterial growth
   5. Hold soups and sauces in bain marie at correct temperature
   6. Discern the longevity of soups, stocks, and sauces and when they are no longer useable
   7. Refrigerate, and freeze soups and sauces properly
   8. Relate the dangers in mixing proteins

B. Tools and Equipment
   1. Identify and use the following equipment:
      a. Stock pot - all sizes
         1. Stock pot/spigot
      b. Dippers and skimmers
         1. Ladles - 2, 4, 6, 8 oz.
         2. Skimmer - 4”
         3. Spider
         4. Serving spoons
      c. Strainers
         1. 5 qt china cap
         2. Fine mesh china cap
         3. Cheesecloth
         4. Colander
      d. Containers and lids for storing soups, sauces, and stocks
      e. Bain marie containers
         1. Ceramic
         2. Stainless steel
      f. Saucepans
      g. Electric soup warmer
      h. Sauté pans
      i. Whips
      j. Locker pan for roasting bones
      k. Open burner stove top
      l. French top
      m. Containers for serving soup
         1. Bowls
         2. Cups
         3. Crock
         4. Deep dish plates

C. Product Identification and Knowledge
   1. Identify and select pre-made soup bases
      a. Dry
      b. Paste
      c. Liquid concentrations
2. Gain a working knowledge of the use of bases and flavorings for the preparation of various sauces and gravies
3. Demonstrate the use of bases in stock preparation
4. Describe the basic types of stocks
5. List ingredients and seasonings used in stock preparation
6. Identify and select stocks
   a. White stock
   b. Brown stock
   c. Fish stock
7. Demonstrate the preparation and uses of glazes prepared from stocks
8. Identify and select thickening agents
   a. Arrowroot
   b. Roux
      1. White roux
      2. Blond roux
      3. Brown roux
   c. Cornstarch
   d. Beurre manie
   e. Whitewash
   f. Breadcrumbs
   g. Liaison
9. Identify the seasoning forms
   a. Sachet bag
   b. Mirepoix
   c. Dry seasoning mixes
   d. Liquid flavorings
      Examples:
      1. Liquid smoke
      2. Worcestershire sauce
      3. Tabasco
      4. Lemon juice
   e. Herbs
      1. Fresh
      2. Dried
   f. Bouquet garn
10. Identify and select bones for stocks
11. Identify and select ingredients for soups
    a. Vegetables
       1. Fresh
       2. Frozen and canned
    b. Starches
    c. Beans
    d. Meats, fish, and seafood
12. Outline the major classifications and uses of sauces
    
    D. Production
       1. Roast bones
       2. Prepare stocks
          a. White
             1. Chicken
2. Beef  
3. Veal  
4. Turkey  
5. Ham  
b. Brown  
   1. Beef  
   2. Game  
   3. Lamb  
   4. Pork  
c. Fish  
d. Shellfish  
   1. Lobster  
   2. Shrimp  
e. Vegetable  
3. Prepare court bouillons  
4. Prepare thickeners  
a. Roux  
   1. Make two pounds of white roux  
   2. Make two pounds of blonde roux  
   3. Make two pounds of brown roux  
b. Beurre manie - make beurre manie and use as an thickener  
c. Thicken with corn starch  
d. Thicken with arrowroot  
e. Thicken with liaison  
f. Thicken naturally using the reduction technique  
5. Prepare soups  
a. Clear  
   1. Consommé  
      a. Make a raft  
      b. Make 1 gallon double consommé  
      c. Make 1 gallon of two different kinds of consommés  
         Examples:  
         1. Beef  
         2. Fish  
      d. Produce four different garnishes for consommé  
         Examples:  
         1. Celestine  
         2. Brunoise  
   3. Other clear soups  
      a. Make 2 gallons of vegetable soup  
      b. Make 2 gallons of chicken noodle soup  
b. Thick soups  
   1. Make two gallons of cream of mushroom soup  
   2. Make two gallons of cream of tomato soup  
   3. Make two gallons each of two other cream soups  
      Examples:  
      a. Cream of celery  
      b. Cream of asparagus  
      c. Cream of corn  
c. Puree soups
1. Make two gallons of puree of split pea soup
2. Make two gallons of navy bean soup
3. Make two gallons of one other puree soup
   Examples:
   a. Potage Crécy
   b. Potage Solferino
d. Bisques
   1. Make one gallon of either lobster or shrimp bisque
e. Chowders
   1. Make two gallons of New England Clam Chowder
   2. Make two gallons of Manhattan Clam Chowder
   3. Make two gallons of one other chowder
      Examples:
      a. Corn
      b. Potato
      c. Fisherman’s
f. Specialty and national soups
   1. Make two gallons of French Onion Soup Gratinée
   2. Make two gallons of Minestrone
   3. Make two gallons of one other national or specialty soup
      Examples:
      a. Borsch
      b. Avgolémono
6. Prepare Sauces
   a. Leading (Mother) sauces - make six quarts of the following
      1. Béchamel
         a. Small sauces - prepare two quarts each of two small sauces
         Examples:
         1. Cheese
         2. Soubise
         3. Mustard
         4. Nantua
      2. Veal velouté
         a. Secondary leading sauces - prepare four quarts of Allemande sauce
         1. Small sauces - prepare two quarts of two small sauces
            Examples:
            a. Poulette
            b. Curry
            c. Aurora
            d. Hungarian
      3. Chicken velouté
         a. Secondary leading sauces - prepare four quarts of supreme sauce
         1. Make two quarts of two small sauces
            Examples:
a. Mushroom
b. Ivory
c. Curry

4. Fish velouté
   a. Secondary leading sauces - prepare four quarts of white wine sauce
      1. Make two quarts of two small sauces
         Examples:
         a. Bercy (white)
         b. Herb
         c. Normandy

5. Espagnole
   a. Secondary leading sauces - prepare four quarts of demi-glace utilizing the traditional method
      1. Small sauces
         a. Make two quarts of Bordelaise sauce
         b. Make two quarts each of two other small sauces
            Examples:
            1. Robert
            2. Lyonnaise
            3. Madeira
            4. Chasseur
            5. Périgueux
            6. Bercy (brown)

6. Fond Lie
7. Tomato sauce
   a. Small sauces - Prepare two quarts of one small sauce
      Examples:
      1. Creole
      2. Portuguese

8. Hollandaise
   a. Small sauces - prepare one quart of one small sauce
      Examples:
      1. Maltaise
      2. Mousseline

9. Béarnaise
   a. Small sauces - prepare one quart of one small sauce
      Examples:
      1. Foyot
      2. Choron
   b. Prepare sweet and sour sauce/other cornstarch thickened sauces
c. Prepare jus
d. Prepare pan gravy
e. Prepare meat glacé from stocks meats
f. Prepare barbecue sauce
E. Garnishment
1. Garnish all soups - attention must be paid to the creation, production, and arrangement of a variety of garnishes that will effectively complete the soup course.
2. Create color in soups, stocks, and sauces - attention must be paid to the effective use of color to make soups and sauces more appealing and have the ability to “spark up” the accompanying parts of the serving.
   a. Use with discretion egg shade to brighten pale color of lighter colored soups, sauces, and stocks.
   b. Use with discretion brown shade (Kitchen Bouquet, Kitchen Quick) to enhance pale brown stocks, soups and sauces.
   c. Brown bones properly to effect color.
   d. Use lobster shells to create color in bisque.
3. Create texture in soups and sauces - paying attention to the way texture affects final appearance.
4. Garnish sauces
   a. Classical Examples:
      1. Zingara
      2. Chasseur
      3. Bordelaise
   b. Produce two sauce garnishes of own creation.

F. Nutrition
1. Remove fat from stocks, soups, sauces (degraisser)
   a. Quick with ice cube for stock
   b. Skimming
   c. Using paper on top
2. Promote soup as a meal on the menu.
4. Retain nutrients in the making of stock.
5. Produce low fat sauces
   a. Use low fat dairy products
   b. Use low/no cholesterol oils
   c. Use reductions in place of thickening agents
   d. Use thickening agents which are lower in fat.

VII. Pantry and Cold Foods - 600 or 960 hours
Responsible for all cold food production and presentation - including sandwiches, salads, cold appetizers and entrees, canapés, and showpieces

A. Sanitation and Hygiene
1. Clean up after performing a task.
2. Keep counter where working wiped clean and free of food refuse.
3. Keep food off floor and/or cleaned up.
4. Maintain clean hands and fingernails at all times.
5. Maintain hair neatly on head and face.
6. Wear minimal amounts of jewelry.
7. Maintain clean and polished shoes.
8. Wear proper hat at all times
9. Wear proper uniform
10. Maintain a clean apron and wear at all times
11. Properly cover and label all foods to be stored
12. Keep knives and hand tools clean at all times
13. Dispose of dirty side towels properly
14. Maintain a clean side towel at all times
15. Store cold sauces and dressings properly
16. Prepare cold bain marie
17. Wrap, label, date, store food properly
18. Rotate foodstuffs
19. Explain effect of air and temperature on quality and safety of foodstuffs
20. Handle products properly which use raw eggs such as mayonnaise, dressings

B. Tools and Equipment
1. Use variety of hand tools:
   a. Vegetable peeler
   b. Hand grater
   c. Aspic and canapé cutters
   d. Utility knife
   e. French knife
   f. Serrated knife
   g. Boning Knife
   h. Paring knife
   i. Corer
   j. Channel knife
2. Use a variety of machines:
   a. 2 quart mixer
   b. 30 quart mixer
   c. Meat grinder with attachments
   d. Food processor
   e. VCM (Vertical Cutter Mixer)
   f. Buffalo chopper
   g. Blender
   h. Use and care for electric slicer - break down, clean
3. Use molds for mousses, gelatin
4. Clean and store fancy platters, mirrors
5. Clean and store buffet stands
6. Demonstrate a working knowledge of refrigerators and freezers
   a. Walk-in
   b. Reach-in
   c. Ice cream box
C. Product Identification and Knowledge
   1. Identify, select, and explain use of the following:
      a. Fruits
         1. Fresh
         2. Exotics
         3. Canned
         4. Dried
         5. Frozen
      b. Leaf vegetables - aware of all varieties, uses
      c. Vegetables
      d. Beans and legumes
      e. Tubers
      f. Meats for meat salads
      g. Cold cuts
      h. Breads
      i. Sandwich spread - prepared and otherwise
      j. Cheese
         1. Bacteria ripened, from inside
            Example: Cheddar
         2. Bacteria ripened, from outside
            Example: Limburger
         3. Mold ripened, from inside
            Example: Roquefort
         4. Mold ripened, from outside
            Example: Camembert
         5. Unripened
            Example: Cream
      k. Olives/pickled vegetables
      l. Dairy products
      m. Pate spice, spice mixes and blends
      n. Gelatin and aspic
      o. Liquors to flavor mousse, dressings, sauces
      p. Seasonings - herbs
      q. Bottled dressings/dry mixes
      r. Sausages
      s. Pates, galantines, terrines
      t. Pastas and farinaceous products
      u. Cereals and grains
   2. Identify all basic components of salad
   3. Store and handle cold food and beverages

D. Production
   1. Cook whole meats, seafood to be served cold - roast beef, turkey
      breast, corned beef, chicken, ham, salmon, lobster, fish, shrimp, crab
   2. Slice meats and cheeses
   3. Set up cold lunch buffet
      a. Assemble meat platters
      b. Assemble bread trays
      c. Assemble cheese platters
      d. Garnish and arrange salads in serving bowl
e. Assemble garnish platters
f. Arrange all platters and salads attractively on buffet table

4. Prepare cold sauces and dressings
   a. Dips
      1. For chips and snacks
      2. For cut vegetables
      3. For cut fruit
   b. Spreads
      1. For canapés
      2. For sandwiches
         a. Egg salad
         b. Ham salad
         c. Chicken salad
         d. Tuna salad
         e. Crab salad
      3. Make mayonnaise
   c. Sauces - Make at least eight different cold sauces
      Examples:
      1. Tartar
      2. Cocktail
      3. Ravigote
      4. Verdi
      5. Louis
      6. Cumberland
      7. Mignonette
      8. Rémoulade
      9. Raifort
   d. Dressings - Make ten different dressings
      These six
      1. Thousand island
      2. Bleu cheese
      3. Vinaigrette
      4. Emulsified French
      5. Cooked dressing
      6. Fruit salad dressing
         Examples:
         a. Honey lemon dressing
         b. Yogurt
         c. Sour cream
         d. Poppy seed
      Plus four more, examples
      7. Ranch
      8. Green goddess
      9. Paris
      10. Caesar
      11. Russian
5. Prepare complex preparations
   a. Mousses
      1. From uncooked product to be cooked
      2. From cooked product not to be cooked
   b. Pate
   c. Galantines and Ballotines
   d. Terrines
   e. Make aspic and chaud froid
   f. Coat with aspic and chaud froid
   g. Pickle foods

6. Prepare salads
   a. Prepare greens for salads
   b. Prepare leafy salads
   c. Prepare vegetable salads
      1. Composed salads
      2. Mixed - potato, cole slaw
   d. Prepare meat salads
   e. Prepare seafood and fish salads
   f. Prepare bean and farinaceous salads
      1. Pasta
      2. Rice
      3. Macaroni
      4. Three bean
   g. Prepare fruit salads
   h. Prepare gelatin salads

7. Prepare cold sandwiches
   a. Sliced meat
   b. Sliced cheese
   c. Meat, seafood, and egg salad
   d. Combination
   e. Vegetable
   f. Sandwich special
   g. Finger
   h. Canapés
   i. Stock and maintain condiments for sandwiches
   j. Stock and maintain breads for sandwiches

8. Demonstrate the ability to set up, maintain and supply a cold station

9. Extract juice from fruits and vegetables

10. Prepare cold appetizers
    a. Seafood cocktails
    b. Fruit cocktails
    c. Shuck oysters
    d. Open clams

11. Prepare cold hors d’oeuvres
    a. Deviled eggs

12. Prepare cheese boards and trays

13. Prepare entree salad plates

14. Prepare cold entrées
15. Make cold soups
   a. 1 gallon vichyssoise
   b. 1 gallon gazpacho
   c. 1 gallon fruit soup
   d. 1 gallon of one other chilled soup

E. Garnishment
   1. Prepare buffet showpieces
      a. Prepare decorated pieces using aspic and chaud froid
      b. Produce fat sculptures
      c. Produce ice carving
      d. Produce decorated mirrors and platters
      e. Arrange a cornucopia
   2. Decorate buffet tables
   3. Garnish sandwich plates
      a. Traditional
      b. Create a signature garnish
   4. Garnish cold appetizers
   5. Garnish cold entrées
   6. Prepare a variety of appetizer garnishes and relishes such as: radish roses, carrot curls, scallions, vegetable sticks, stuffed and ripe olives, chopped, vegetables and pickle mixtures

F. Nutrition
   1. Use flavoring agents as alternative to fat and sodium
      a. Exotic vinegars
      b. Wines
      c. Herbs
      d. Liquors
      e. Spices
      f. Fruit juices
   2. Use low fat dairy products to reduce fat
      a. Yogurt
      b. Low fat cottage/ricotta cheese
   3. Create cold meals which are flavorful yet healthful

VIII. Sauté Cook - 600 or 960 hours
Responsible for the preparation, production, and serving of entrée items and hot appetizers which are sautéed, pan-fried, deep fried, braised, baked, or poached.

A. Sanitation and Hygiene
   1. Clean up after performing a task
   2. Keep counter where working wiped clean and free of food refuse
   3. Keep food off floor and/or cleaned up
   4. Maintain clean hands and fingernails at all times
   5. Maintain hair neatly on head and face
   6. Wear minimal amounts of jewelry
   7. Maintain clean and polished shoes
   8. Wear proper hat at all times
   9. Wear proper uniform
10. Maintain a clean apron and wear at all times
11. Properly cover and label all foods to be stored
12. Keep knives and hand tools clean at all times
13. Dispose of dirty side towels properly
14. Maintain a clean side towel at all times

B. Tools and Equipment
1. Identify and select sauté pans
2. Identify and select knives
3. Identify and select spatulas
4. Identify and select pots and pans
   a. Sauteuse
   b. Rondeaux
5. Identify electric Swiss brazier
6. Identify and select ovens and stove tops
   a. Open burners
   b. French top
7. Care for the deep-fat fryer and the grease quality content
8. Identify and select tools to go with deep fryer
   a. Fryer baskets
   b. Wire strainers
   c. Filter papers
   d. China cap
9. Identify fish poacher
10. Identify and select casseroles
11. Demonstrate proper cleaning care and maintenance of, griddles, skillets and sauté pans

C. Product Identification and Knowledge
1. Identify and select all of the ingredients necessary for entrée dishes:
   a. Fats and oils
   b. Meats
   c. Fish
   d. Seafood
   e. Cheese and dairy products
   f. Fruits and vegetables
   g. Seasoning liquids
   h. Breading ingredients
   i. Eggs
   j. Herbs and spices
   k. Sauces
2. Identify quality in pre-fabricated entrée items
3. Identify proper portion sizes in entrée items
4. Identify proper cooking temperatures with various types of foods to be deep fried
5. Identify various types of wild game and demonstrates a working knowledge of several dishes
D. Production
1. Clarify butter
2. Make meunière butter
3. Make beurre noisette
4. Make beurre noir
5. Make final preparation of fabricated meats and seafoods for entrée dishes
6. Stuff meat, fish, poultry, and seafood for entrée production
7. Coat meat, fish, poultry, and seafood for entrée production
8. Bread meat, fish, poultry, and seafood for entrée production
   a. Make egg wash
   b. Make breadcrumbs
   c. Make seasoned flour mix
9. Batter meat, fish, poultry, and seafood for entrée production
   a. Make tempura batter
   b. Make beer batter
   c. Make fritter batter
10. Pan-fry entrées
    a. Make pan fried fish
    b. Make pan fried chicken breast
11. Deep fry entrées - both from scratch and prefabricated
12. Poach entrées
    a. Poach fish
    b. Poach chicken
13. Braise entrées
    a. Make pot roast
14. Bake entrées
    Examples:
    a. Stuffed bell peppers
    b. Moussaka
15. Stew entrées
    a. Make meat stew
16. Sauté entrées
    Examples:
    a. Veal Scallopine
    b. Beef Stroganoff
17. Fricassee entrées
    Examples:
    a. Chicken Fricassee
    b. Veal Blanquette
18. Assemble casseroles for entrée
19. Prepare complex accompaniments for entrée items
    a. Prepare and poach dumplings
    b. Prepare and fry fritters
    c. Prepare and poach quenelles and dumplings
20. Prepare poaching liquor
E. Garnishment
   1. Garnish lunch and dinner entrée plates
   2. Garnish pans of hot food items for the buffet line
   3. Demonstrate importance of garnish at this station of the kitchen
   4. Demonstrate skills in combining colors, shapes, and textures to make a “perfect plate”

F. Nutrition
   1. Determine portion size as it relates to fat and caloric intake
   2. Create entrées with nutritional concepts in mind
   3. Use of unsaturated fats for preparations and cooking where possible
   4. Utilize cooking techniques - baking, poaching, braising which can lower fat content of meal
   5. Prepare and cook entrées to retain nutrients

IX. Baker and Pastry Cook - 200 or 320 hours
Responsible for the preparation, production, and presentation of baked goods including breads and sweet goods, and for the production and presentation of fancy pastries, desserts, and showpieces.

A. Sanitation and Hygiene
   1. Store flours to prevent vermin infection
   2. Handle cooked pastry product to prevent bacterial growth
   3. Store baked products and pastry goods
      a. Wrap, date, and seal goods
      b. Freeze and refrigerate goods
      c. Freeze dough’s properly
   4. Keep fine sieves, sifters dry and free of rust
   5. Clean mixers
   6. Clean wooden pastry board
   7. Clean baker’s table

B. Tools and Equipment
   1. Operate scales
   2. Demonstrate accuracy in scaling
   3. Use weights and measures accurately in baking
   4. Identify and select tools for measuring
      a. Liquid and dry measuring containers
      b. Scales - metric and imperial
   5. Identify and select hand tools used in baking and pastry
      a. Bench scraper and bowl scraper
      b. Wire whips
      c. Biscuit cutters
      d. Sifter
      e. Paring knife
      f. Bread knife
      g. Palette knife
      h. Rolling pin
      i. Mixing bowls
      j. Cutting boards
      k. Bench brush
6. Identify and select all types of pans used in baking and pastry
   a. Spring form
   b. Muffin tins
   c. Bread loaf pans
   d. Turk’s head
   e. Angel food tubes
   f. Sheet pans
   g. Round cake - 8”, 10”
   h. Pie pans
   i. Tart pans
   j. Barquette tins
   k. Flan rings

7. Describe an efficient layout a small bakeshop within an operating kitchen including the tools and equipment used, the extent and limitations of production

8. Identify and select pots and pans for pastry cooking
   a. Saucepots
   b. Double boiler

9. Identify and select glassware and china for serving desserts
   a. Parfaits
   b. Coupes
   c. Cake and pie plates
   d. Sundae dishes

10. Identify and select stationary equipment for baking and pastry
    a. Ovens
        1. Deck oven
        2. Convection oven
        3. Revolving tray oven
        4. Rack oven
    b. Burners
        1. Hotel range
        2. Confectioners stove
    c. Mixers
    d. Proof box
    e. Refrigeration
    f. Freezers

11. Demonstrate proper use and care of baking tools and equipment

C. Product Identification and Knowledge
   1. Expand or cut back a baking recipe
   2. Identify and select flours, meals, and starches
      a. Flours - rye, graham, whole wheat, cake, pastry, all purpose, bread
         1. Describe gluten and its functions
      b. Meals - cornmeal
      c. Starches - cornstarch, waxy maize, arrowroot, tapioca
   3. Identify and select sizes and grades of fresh eggs
   4. Identify and select prepared egg products - sugared yolks, sugared whites, whole eggs
5. Identify and select dairy products
   a. Milk products
      1. Whole, skim, 2%
      2. Cream - heavy, coffee, half and half
      3. Canned milks - evaporated, sweetened condensed
      4. Dry powdered milk
   b. Sour cream
   c. Yogurt
   d. Cheeses
   e. Ice Creams
   f. Sherbets
   g. Buttermilk

6. Identify and select fats, oils, and shortenings
   a. “Plastic” shortenings
   b. Emulsified shortenings
   c. Puff pastry shortenings
   d. Butter
   e. Margarine
   f. Oil
   g. Lard

7. Identify and select sweeteners
   a. Granulated sugar
   b. Powdered sugar
   c. Molasses
   d. Brown sugar
   e. Corn syrup
   f. Honey
   g. Maple syrup
   h. Reduced fruit juices

8. Identify and select leavening agents
   a. Yeast
   b. Baking soda
   c. Baking powder
   d. Ammonium bicarbonate
   e. Eggs

9. Identify and select salt, flavorings and spices
   a. Chocolate and cocoa
   b. Extracts and emulsions
   c. Baking spices - nutmeg, cinnamon, mace, cloves, ginger, caraway, poppy seed, anise, allspice, cardamom, and other
   d. Liquors
   e. Flavor concentrations

10. Identify and select prepared bakers fillings
    a. Fruit fillings
    b. Baker’s cheese
    c. Nut fillings
    d. Nougat paste
    e. Canned pastry cream and pudding

11. Identify and select nuts

12. Identify and select fruits for pastry and baked goods
13. Identify and select frozen pre-prepared baked goods and pastry products  
   a. Puff paste dough and Danish dough  
   b. Ready-proof rolls and breads  
   c. Pre-made cakes, pies, desserts  
   d. You bake-um pies

D. Production
1. Interpret where in the average kitchen that does not have a pastry chef one would plug in a knowledge of baking to enhance the food and to improve the quality and sales
2. Apply the basic principles of yeast bread to the production of various doughs
3. Apply the basic principles of baking and pastry and the basic knowledge of ingredients and procedure including the vocabulary and terminology to production
4. Prepare yeast dough and yeast dough products  
   a. Produce two loaves each of two different yeast breads  
      Examples:  
      1. French Bread  
      2. Whole wheat bread  
   b. Produce two dozen each of two different types of dinner rolls  
      Examples:  
      1. White rolls  
      2. Wheat rolls
5. Prepare sweet roll dough and sweet roll dough product  
   a. Make cinnamon rolls
6. Prepare rolled-in dough and rolled-in dough product  
   Either:  
   a. Form, fill, and bake Danish  
   Or:  
   b. Make croissants
7. Produce quick breads  
   a. Make soft dough and produce biscuits  
   b. Mix batters  
      1. Make corn bread and one other quick bread  
         Examples:  
         a. Banana  
         b. Date nut  
      2. Make two dozen of one kind of muffins  
         Examples:  
         a. Blueberry  
         b. Bran raisin  
   3. Make popovers  
   4. Make crepes
8. Produce cakes  
   a. High-fat cakes  
      1. Use creaming method  
         a. Make pound cake  
      2. Use two-stage method  
         a. Make devil’s food cake
b. Low-fat cakes
   1. Use sponge method - make one sponge cake
   c. Make cakes from mixes

9. Produce icings
   a. Buttercream icing
      1. Make one quart simple buttercream
   b. Foam-type icings
      1. Make one quart boiled icing
   c. Make ganache

10. Ice cakes
    a. Completely ice two different types of cake each with a different type of icing
    b. Work with fondant

11. Produce cookies - consider the different procedures (dropped, bagged, rolled, molded, icebox, bar, sheet) and use four of these
    a. Use creaming method to make two dozen each of two different kinds of cookies
       Examples:
       1. Chocolate chip cookies
       2. Scottish shortbread
       3. Peanut butter
    b. Use sponge method to make two dozen ladyfingers
    c. Make brownies
    d. Make almond macaroons

12. Produce pies
    a. Make pie dough and crusts
       1. Make two pounds of flaky dough
       2. Make two pounds of mealy dough
       3. Make two graham cracker or cookie crumb crusts
       4. Make one pound of short dough
       5. Bake pie crusts
    b. Prepare pie fillings
       1. Make one different kind of fruit fillings
          Examples:
          a. Cherry
          b. Rhubarb
          c. Apple
       2. Make one different kind of cream pie filling
          Examples:
          a. Chocolate
          b. Butterscotch
       3. Make one kind of custard or soft filling
          Examples:
          a. Coconut custard
          b. Pumpkin
          c. Pecan
    c. Assemble pies
       1. Make one whipped cream topped cream pie
       2. Make one different kind of fruit pie
       3. Make one soft filling pie
    d. Bake and finish pies
e. Bake pre-made pie
13. Make eclair (choux) paste
   a. Bake one product using pate choux
      Examples:
      1. Eclairs
      2. Cream puffs
14. Make puff pastry
15. Understand the handling of puff paste dough, how to work with it and use it to make several items
   Examples:
   a. Turnovers
   b. Cream horns
   c. Patty shells
   d. Napoleon
16. Work with frozen puff pastry
17. Make meringue
   a. Make common meringue
   b. Make either Swiss or Italian meringue
18. Make fruit desserts
   a. Make poached pears
   b. Make apple crisp
19. Make puddings and pastry fillings
   a. Make one quart vanilla custard sauce (creme anglaise)
   b. Make one quart pastry cream
   c. Make one dozen baked custards
   d. Make ten servings of baked pudding
      Examples:
      1. Rice
      2. Bread pudding
   e. Make one of the following:
      1. Bavarian cream
      2. Chocolate mousse
      3. Soufflé
20. Make ice cream desserts
   a. Make parfaits
   b. Make sundaes (coupes)
      1. Make traditional sundaes
      2. Make one of the following:
         a. Pear Belle Helene
         b. Peach Melba
         c. Bananas Foster
      3. Create a new sundae concoction
   c. Make a bombe
   d. Make Baked Alaska
21. Understand the principles of pastillage, marzipan, nougat chocolate, blown and spun sugar, the varieties of fancy pastry and candies
   a. Pick one of the above subjects and complete a project which can be used as a centerpiece
22. Portion and serve all desserts and pastries in appropriate dishes
E. Garnishment
   1. Use various toppings for ice cream to enhance color
   2. Make sweetened whipped cream and garnish desserts using a pastry bag
   3. Garnish ice cream with nuts, candies and other garnishes to make various concoctions
   4. Decorate a cake
   5. Egg wash baked goods
   6. Assemble pastry and cookie trays for display
   7. Set up the desserts and pastries for a buffet

F. Nutrition
   1. Substitute for sugars - fruit juices/concentrates, fruits, honey, artificial sweeteners
   2. Substitute for highly saturated fats
      Examples:
      a. Margarine for butter
      b. Oils for solid shortenings
      c. Low fat cottage cheese for cream cheese
      d. Yogurt for sour cream
      e. Low fat milk, evaporated skim milk for whole milk
   3. Substitute for heavy desserts by concentrating on fruit and lower fat and sugar preparations

X. Banquet Cook and Supervision - 360 or 400 hours
Perform supervisory management skills and be able to operate any of stations in the kitchen

A. Supervision
   1. Attend an in house managers meeting as the chef would
   2. Lead the work crew in the completion of a task
   3. Successfully supervise and direct food production and all related tasks in absence of the chef
   4. Be responsible for the successful completion of a banquet function
   5. Train a new employee in a task on food preparation

B. Menu planning and food costing
   1. Demonstrate a working knowledge of menu selection, working with emphasis on determining the use of food items on the menu that are most suitable for a particular establishment
   2. Demonstrate expertise in consistently portioning foods in relationship to quantity and cost
   3. Demonstrate a working knowledge of food related mathematics
      a. Cost out five menu items for each course
      b. Cost out a banquet menu
   4. Produce a complete menu with selections in a la carte breakfasts, luncheons, dinners, and desserts. Give a complete listing of food costs and profit margins of every menu item
   5. Lay out a menu, including design, drawings, section headings, prices, color suggestions and description of entrées
6. Work with the chef in the selling of banquet parties, planning menus and special events
7. Calculate the food cost over a one-month period

C. Labor and Payroll
1. Design a complete work schedule that includes workers in all sections of the kitchen.
   Determine the number of employees needed on duty to have the kitchen operate as efficiently and economically as possible
2. Demonstrate a knowledge of payroll percentages as it relates to gross food sales and desired net profits
3. Figure the labor cost over a one month period
4. Discuss the procedure for the termination of an employee
5. Outline the benefits offered the employees and relate the cost of these benefits to the company
6. Explain the concept of workman’s compensation
7. Relate procedures for an individual to collect unemployment

D. Purchasing
1. Demonstrate a working knowledge of purchasing procedures, including specifications for obtaining the best quality merchandise for the purpose at the best prices
2. Take inventory of all food items on a weekly basis for a one month period
3. Call in the food orders for items purchased for the kitchen for a one month period

E. Production
1. Has complete working knowledge of all banquet areas and stations in the kitchen and can perform all job tasks related to each section
2. Preparation of quantities of various banquet menu items
3. Plating of banquet menu items
4. Preparing a buffet
5. Prepare and set up of various stations
SCHEDULE OF RELATED INSTRUCTION

Apprentices must complete a total of 576 contact hours of related instruction over the term of apprenticeship. Generally, the best source of instruction is from a community college or vocational technical post-secondary institution. ACF recommends that students spend a minimum of forty eight classroom hours in each of twelve (12) areas of related instruction.

Suggested Curriculum

ACF recommends that courses follow the sequence described below for those enrolled in the 6000 hour program. The 4000 hour program will require the same 12 classes over a two year period. There must be some flexibility in terms of the titles, scope, and scheduling of courses to accommodate the policies of the postsecondary institutions. However, it is imperative that sanitation and safety be taught early in an apprentice's education.

Year One
Introduction to Food service
Sanitation and Safety
Basic Food Preparation/Introductory Cooking
Kitchen Laboratory
Business Mathematics/Food Cost Accounting

Year Two
Food and Beverage Service
Nutrition
Garde Manger / Kitchen Laboratory
Menu Planning and Design

Year Three
Baking (Basic Baking)
Kitchen Laboratory
Purchasing (Purchasing and Receiving)
Supervisory Management
This trade schedule is attached to and a part of the Apprenticeship Standards for the above identified occupation.

1. **TERM OF APPRENTICESHIP**

The term of apprenticeship shall be the satisfactory completion of the work processes as listed in these Standards and shall be a minimum period of 4,000 hours and a maximum period of 6,000 hours supplemented by the required hours of related technical instruction.

2. **RATIO OF APPRENTICES TO JOURNEYWORKERS**

Ratio of journeymen to apprentices are to be established on a local program basis and as indicated in Section 7 should be consistent with proper supervision, training, safety, however, as a guideline, it is suggested that the following ratio be considered for use where appropriate: One apprentice may be employed for the first journeyworker, and one apprentice may be employed for each two additional journeymen employed at the work site.

3. **APPRENTICE WAGE SCHEDULE**

Apprentices shall be paid a progressively increasing schedule of wages based on a percentage of the current journeyworker wage rate, as follows:

**2 year Term Example:**

- 1st 6 months + 0 hours = 60%
- 2nd 6 months + 1000 hours = 70%
- 3rd 6 months + 2000 hours = 80%
- 4th 6 months + 3000 hours = 90%
- 5th 6 months + 4000 hours = 100%

**3 Year Term Example:**

- 1st 6 months + 0 hours = 50%
- 2nd 6 months + 1000 hours = 55%
- 3rd 6 months + 2000 hours = 60%
- 4th 6 months + 3000 hours = 70%
- 5th 6 months + 4000 hours = 80%
- 6th 6 months + 5000 hours = 90%
- 7th 6 months + 6000 hours = 100%

Current Journeyworker Wage Rate $____ per hour.

4. **SCHEDULE OF WORK EXPERIENCE** (See attached Trade Schedule)

The Program Sponsor may add to the work processes prior to submitting these Standards to the appropriate Registration Agency for approval.

5. **SCHEDULE OF RELATED INSTRUCTION** (See attached Course Outline.)
SCHEDULE OF WORK EXPERIENCE

Pastry Cook:  

<table>
<thead>
<tr>
<th>4000 Hr. program</th>
<th>6000 Hr. program</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pastry Shop Orientation .......... 120</td>
<td>240</td>
</tr>
<tr>
<td>2. Baking Production ............ 1320</td>
<td>2000</td>
</tr>
<tr>
<td>3. Pastry Production ........... 2200</td>
<td>3240</td>
</tr>
<tr>
<td>4. Related Kitchen Production ..... 200</td>
<td>320</td>
</tr>
<tr>
<td>5. Lead Pastry Cook ............ 160</td>
<td>200</td>
</tr>
</tbody>
</table>

Total Hours ............ 4000 Hours 6000 Hours

WORK PROCESSES

I. Pastry Shop Orientation - 120 or 240 hours
   Responsible for the overall cleanliness and maintenance of the pastry shop which includes: The identification and working knowledge of equipment and hand tools, and the identification of food products used.

   A. Core Organization
      1. Review bakeshop setup
      2. Read job descriptions
      3. Understand bakeshop rules and regulations
      4. Describe the chain of command
      5. Describe company standards
         a. Rules of conduct
         b. Employee/manager’s rights
         c. Company benefits

   B. Sanitation and Hygiene
      1. Maintain cleanliness of pastry shop
         a. Provide clean wiping cloths
         b. Recognize unclean work areas
         c. Identify and select appropriate cleaning and sterilizing agents
         d. Sanitize wooden baker’s bench
      2. Waste management and disposal
         a. Control disposal of food waste and garbage
         b. Control storage of perishable goods
         c. Recycle waste
         d. Collect garbage
         e. Clean garbage cans
         f. Maintain garbage area
         g. Know laws about disposal of oil and fat
         h. Check grease traps
      3. Identify and exterminate insects and vermin
         a. Prepare pastry shop areas for bug spraying
      4. Safety
         a. Identify and read Material Safety Data Sheets
         b. Store toxic chemicals properly
c. Dispose of toxic chemicals properly

d. Recognize and correct unsafe safety hazards

e. Identify different types of fire extinguishers

f. Use hand fire extinguishers

g. Use and insist on safe lifting and carrying procedures

h. Apply survival first aid

i. Ensure adequate ventilation and lighting in work areas and washrooms

5. Maintain standard of personal hygiene

6. Identify, select, use, care for, and store the following equipment and tools:

   a. Broom
   b. Mop
   c. Mop pail with wringer
   d. Carts, mobile, assorted sizes
   e. Dishwasher, commercial model
   f. Sink, utility, 3 compartment
   g. Freezer, walk-in
   h. Refrigerators, reach-in
   i. Refrigerators, walk-in
   j. Trash cans
   k. Holding bins for garbage
   l. Freezer, reach-in
   m. Storage cabinet
   n. Table, utility
   o. Skirting for buffet tables
   p. Clipboard
   q. Tables, folding
   r. Linens
   s. Ventilation system
   t. Lavatories

7. General pastry shop and kitchen cleaning

   a. Clean refrigerators and freezer
   b. Prepare work areas
   c. Clean work areas
   d. Polish stainless steel
   e. Clean floors
   f. Clean walls
   g. Clean restrooms
   h. Clean filters
   i. Clean hood system
   j. Clean ovens
   k. Filter fat in deep fryer
   l. Clean deep fryer
8. Warewashing
   a. Prepare pots and pans for cleaning
   b. Wash pots and pans
   c. Sanitize pots and pans
   d. Dry pots and pans
   e. Store pots and pans
   f. Set up/turn on dish machine
   g. Prepare dishwashing area
   h. Prepare dishware for washing
   i. Wash dishware
   j. Clean dishwashing area
   k. Break down/clean/dish machine
   l. Store dishes
   m. Prepare utensils for washing
   n. Wash utensils
   o. Store utensils
   p. Prepare silverware for washing
   q. Wash silverware
   r. Store silverware

9. Miscellaneous Pastry Shop Sanitation and Hygiene
   a. Store flours to prevent vermin infection
   b. Handle cooked pastry product to prevent bacteria growth
   c. Store baked products and pastry goods
      1. Wrap, date, and seal goods
      2. Freeze and refrigerate goods
      3. Freeze dough properly
   d. Keep fine sieves, sifters, and other tools dry and free of rust
   e. Clean mixers
   f. Clean wooden pastry board
   g. Clean baker’s table

C. Tools and Equipment
   1. Identify different types of scales
   2. Operate scales
   3. Demonstrate accuracy in scaling
   4. Use weights and measures accurately in baking
   5. Identify and select tools for measuring
      a. Liquid and dry measuring containers
      b. Scales - metric, and U.S.
      c. Measuring spoons
   6. Identify and select handtools used in baking and pastry
      a. Bench scraper
      b. Bowl scraper
      c. Wire whips
      d. Biscuit cutters
      e. Donut Cutter
      f. Sifter
      g. Paring knife
      h. Brad knife
      i. Palette knife
j. Rolling pin
k. Mixing bowls
l. Cutting board
m. Bench brush
n. Pastry wheel
o. Pastry bag
p. Tips for pastry bag
q. Ice cream disher
r. Zester
s. Miscellaneous cutters
t. Dipping forks for chocolate
u. Thermometers
   1. Candy
   2. Chocolate
v. Tools for sugar work
w. Brumé meter (Saccharometer)
x. Air brush
y. Offset spatula
z. Flower nails
aa. Pastry cutter set
bb. Cookie cutters
cc. Marzipan tools
dd. Cake comb
ee. Bear claw cutter
ff. Docker
gg. Fondant funnel
hh. Pastry brush

7. Identify and select all types of pans and molds used in baking and pastry
   a. Spring form
   b. Muffin tins
   c. Bread loaf pans
d. Turk’s head
e. Angel food tubes
   f. Sheet pans
   g. Round cake - 8”, 10”
h. Pie pans
   i. Tart pans
   j. Barquette tins
   k. Flan rings
   l. Brioche molds
   m. Tartlet molds
   n. Madeleine molds
   o. Terrine molds
   p. Charlotte molds
   q. Vacherin rings
   r. Wedding cake pans
   s. Bombe molds
t. Candy molds/chocolate molds
   u. Savarin molds
   v. Timbales
8. Identify and select pots and pans for pastry cooking
   a. Sauce pots
   b. Double boiler
   c. Sauté pan
   d. Copper pots
   e. Crepe pan
   f. Copper kettle
9. Identify and select glassware, platters and china for serving desserts
   a. Parfaits
   b. Coupe
   c. Cake and pie plates
   d. Sundae dishes
   e. Dessert plates
   f. Silver platters
   g. Mirrors
10. Identify and select stationary equipment for baking and pastry
    a. Ovens
        1. Deck oven
        2. Convection oven
        3. Revolving tray oven
        4. Rack oven
        5. Microwave oven
    b. Burners
        1. Hotel range
        2. Confectioner's stove
        3. Bunsen burner
        4. Propane torch
    c. Mixers
        1. Spiral
        2. Vertical cake mixer
        3. Horizontal
    d. Proof box
    e. Refrigeration
        1. Walk-in
        2. Reach-in
    f. Freezers
        1. Walk-in
        2. Reach-in
        3. Blast freezer or holding cabinet
        4. Batch freezer
    g. Steam kettle
    h. Sheeter
    i. Dough divider/rounder
    j. Bread slicer
    k. Donut fryer or deep fate fryer
    l. Marble slab
    m. Buffalo chopper
    n. Robot coupe
11. Demonstrate proper use and care of baking tools and equipment
12. Layout an operating bakeshop including equipment
D. Product Identification and Knowledge

1. Recipe conversion
   a. Increase baking and pastry recipes
   b. Decrease baking and pastry recipes
2. Identify and select flours
   a. Bread/patent
   b. High gluten
   c. Clear
   d. High ratio cake
   e. Whole wheat
   f. Rye
      1. Light
      2. Dark
      3. Medium
   g. Pastry
   h. Pumpernickel
   i. Seven grain
   j. Whole grain
   k. Rice
   l. Durham
   m. Semolina
   n. All purpose
   o. Graham
   p. Buckwheat
3. Describe the uses and functions of flours
4. Describe gluten and its functions
5. Describe the cross-section of a grain of wheat
6. Identify and select meals
   a. Cornmeal
      1. Fine
      2. Coarse
      3. White
      4. Yellow
      5. Blue
   b. Bran - wheat
   c. Bran - oat
   d. Graham cracker
   e. Rye chops
7. Identify and select grains
   a. Rice
   b. Barley
   c. Oats
   d. Rye
   e. Buckwheat groats
   f. Wild rice
   g. Quinoa
   h. Millet
8. Identify and select starches
   a. Cornstarch
   b. Potato starch
   c. Arrowroot
   d. Tapioca
   e. Wheat
   f. Rice
   g. Instant starch (Pre-gelatinized starch)

9. Explain the different thickening properties of each starch

10. Identify and select sizes and grades of fresh eggs

11. Describe the function of fresh eggs in baked goods and desserts

12. Identify and select prepared egg products
   a. Frozen sugared yolks
   b. Frozen egg whites
   c. Frozen whole eggs
   d. Frozen blended eggs
   e. Dried egg products

13. Describe the differences in results using fresh eggs and frozen eggs

14. Identify and select dairy products
   a. Milk products
      1. Whole
      2. Skim
      3. 2%
      4. Whipping cream
      5. Half and half
      6. Evaporated
         a. Skim
      7. Sweetened condensed
      8. Dry milk solids
         a. Dry buttermilk
      9. Buttermilk
   b. Sour cream
      1. Low fat
   c. Yogurt
      1. Frozen yogurt
   d. Bakers cheese
   e. Cottage cheese
      1. Low fat
   f. Cream cheese
      1. Neufchatel
   g. Ice creams
   h. Sherbets
   i. Cheeses
      1. Soft cheese
      2. Semi-soft cheeses
      3. Hard cheeses
      4. Hard-grating cheeses
15. Describe the uses and functions of milk and other dairy products in baking and pastry production

16. Identify and select fats, oils, and shortenings
   a. All purpose shortening
   b. High ration shortening
   c. Butter
   d. Margarine
   e. Vegetable oil
   f. Olive oil
   g. Lard
   h. Cocoa butter

17. Describe the uses and functions of fats, oils, and shortenings in baking and pastry production

18. Identify and select sweeteners
   a. Granulated sugar
   b. Powdered sugar
   c. Invert sugar
   d. Brown sugar
   e. Corn syrup
   f. Honey
   g. Maple syrup
   h. Reduced fruit juices
   i. Malt
   j. Rice syrup
   k. Cane syrup
   l. Molasses
   m. Glucose
   n. Aspartame
   o. Saccharin

19. Describe the uses and functions of sweeteners in baking and pastry production

20. Identify and select leavening agents
   a. Biological
      1. Yeast
   b. Chemical
      1. Baking soda
      2. Baking powder
      3. Ammonium bicarbonate
   c. Aeration
      1. Whole eggs
      2. Egg yolks
      3. Egg whites
      4. Fat or butter
   d. Lamination (Puff pastry dough)
      1. Butter
      2. Margarine
      3. Puff pastry shortening
e. Combination of lamination and biological
   1. Yeast and laminating shortenings
      a. Croissant dough
      b. Danish dough
21. Describe the uses and functions of leavening agents in baking and pastry production
22. Identify and select salt, flavorings and spices used in the pastry shop
   a. Salt
   b. Extracts
   c. Flavoring oils
   d. Flavoring emulsions
   e. Bakery spices and herbs
      1. Nutmeg
      2. Cinnamon
      3. Mace
      4. Cloves
      5. Ginger
      6. Allspice
      7. Cardamom
      8. Cumin
      9. Coriander
     10. Tarragon
     11. Basil
     12. Oregano
     13. Mint
   f. Seeds
      1. Caraway
      2. Poppy
      3. Anise
      4. Sesame
      5. Sunflower
      6. Carniska
      7. Fennel
   g. Flavor concentrations
   h. Flavor compounds
23. Describe the functions of salt in baking and pastry
24. Describe the uses and functions of spices, seeds and flavorings in baking and pastry production
25. Identify and select chocolate products
   a. Unsweetened chocolate liquor
   b. Cocoa powder
   c. Coating chocolate
   d. Couverture
      1. White
      2. Dark
      3. Milk
   e. Cocoa butter
   f. Gianduja
   g. Plastic modeling chocolate
26. Describe the uses of chocolate products in baking and pastry
27. Identify and select nuts
   a. Almonds
   b. Hazelnuts
   c. Chestnuts
   d. Brazil nuts
   e. Pistachio nuts
   f. Pecans
   g. Walnuts
   h. Pine nuts
   i. Macadamia nuts
   j. Cashew nuts

28. Identify forms of nuts used in the pastry shop
   a. Whole nuts
   b. Halves
   c. Pieces
   d. Ground
      1. Flour
      2. Meal
   e. Sliced
   f. Slivered
   g. Blanched

29. Describe the uses of nuts in baking and pastry

30. Identify and select fruits used in the pastry shop
   a. Dried fruits
      1. Raisin
      2. Sultanas
      3. Prunes
      4. Apricots
      5. Dates
      6. Figs
      7. Apples
      8. Peaches
      9. Pears
     10. Currants
     11. Cherries
     12. Bananas
     13. Cranberries
     14. Blueberries
     15. Pineapple
   b. Fresh fruits - common
   c. Fresh fruits - tropical
   d. Fresh fruits - exotic
   e. Candied fruits
      1. Cherries
      2. Orange peel
      3. Citron
      4. Pineapple
   f. Canned fruits
   g. Individual quick frozen

31. Describe the uses and functions of fruits in baking and pastry
32. Identify and select the most commonly used liquors and wines used in the pastry shop
   a. Grand Marnier
   b. Frangelico
   c. Brandy
   d. Kirschwasser
   e. Poire Williams
   f. Cointreau
   g. Rum
   h. Midori
   i. Bourbon
   j. Drambuie
   k. Champagne
   l. Marsala
   m. Port
   n. Sherry
   o. Red wines
   p. White wines
   q. Kahlua
   r. Calvados
   s. Curacao
   t. Tia Maria
   u. Creme de menthe
   v. Creme de cacao
   w. Creme de banana
   x. Chambord
   y. Creme de cassis

33. Describe the uses of liquor and wine in baking and pastry
34. Identify prepared mixes for baking and pastry items
35. Identify prepared baked goods
   a. Sheet gelatin
   b. Granular gelatin
   c. Flavored gelatin

E. Purchasing and Receiving
   1. Receive goods
   2. Store goods
   3. Inventory goods
   4. Prepare daily food order
   5. Distribute goods
   6. Clean storage and receiving areas
   7. Demonstrate proper buying techniques
   8. Identify all basic food products and where they are stored
   9. Identify various cleaning chemicals and agents
  10. Identify different sizes of canned goods
  11. Identify various forms and containers that fresh produce comes in
  12. Identify the forms that frozen food comes in
  13. Recognize quality standards in fresh vegetables, fish, seafood, dairy products and meats
  14. Identify canned heat
15. Identify proper storage techniques for all foods - frozen, fresh, or canned

F. Garnishment - Presentation and Display
1. Assemble pastry and cookie trays for display
2. Set up the desserts and pastries for a buffet
3. Set up buffet
   a. Table linen and color coordinations
   b. Layout and design
   c. Set-up and buffets
   d. Individual dessert plate presentations
   e. Decoration of table
   f. Proper garnishing of desserts
   g. Set up buffet tables
   h. Cover and drape buffet tables
   i. Clean chafing dishes
   j. Assemble chafing dishes
   k. Light chafing dishes
   l. Deliver food to buffet
   m. Set up food on buffet
4. Arrange desserts on plates
5. Sauce plates for desserts in an artistic fashion
6. Finish desserts with garniture as part of the dessert
7. Garnish plates to complement the dessert

II. Baking Production - 1320 or 2000 hours
Responsible for the preparation and production of baked goods including yeast dough breads, yeast dough pastries, chemically leavened dough products, and doughnuts. Within this section it is understood that for each item listed, a minimum of two batches must be produced.

A. Yeast Dough Breads - includes in all cases, mixing dough, fermenting dough, forming dough (make-up), baking dough
1. Produce crusty yeast breads
   a. French bread
   b. Sour dough bread
   c. Rye bread
   d. Pumpernickel bread
   e. Rolls
      1. Hard rolls
      2. Rye rolls
      3. Salt sticks
      4. Kaiser rolls
      5. Specialty rolls
         a. American
         b. European
   f. Specialty breads
      1. American
      2. European
3. Produce soft yeast breads
   a. White bread
   b. Whole wheat bread
   c. Challah bread (braided egg bread)
   d. Brioche
   e. Seven grain (Bran breads)
   f. Rolls
      1. Parkerhouse
      2. Cloverleaf
      3. Knot or twist braided rolls
      4. Snowflake rolls
      5. Specialty rolls

6. Produce specialty yeast breads
   a. Croissants - mixing, performing roll-in process, make-up, proofing and baking
   b. Hot Cross buns
   c. Christmas stollen
   d. Babka
   e. Pizza dough

B. Yeast Dough Pastry - Mixing, proofing, forming, baking
   1. Produce Danish dough items
      a. Snails
      b. Bear claws
      c. Cheese pockets
      d. Prune Danish
      e. Eyeglasses
      f. Danish rings
      g. Coffee cakes
   2. Produce sweet dough items
      a. Coffee cakes
      b. Cinnamon rolls
      c. Sticky buns
      d. Gugelhopf

   3. Produce savarin and rum babas

C. Chemically leavened dough products - mixing, shaping, baking
   1. Produce biscuit dough’s
      a. Scones
      b. Buttermilk Biscuits
      c. Shortcake Biscuits
   2. Produce quick breads - four different types
      Examples:
      a. Banana
      b. Date Nut
      c. Zucchini
      d. Carrot
      e. Cranberry
      f. Pumpkin
3. Produce muffins - four different types
   Examples:
   a. Blueberry
   b. Bran
   c. Carrot
   d. Apple
4. Produce corn breads
   a. Corn bread
   b. Corn muffins
5. Produce coffee cakes
   a. Sour Cream

D. Doughnuts - mixing, make-up, frying, finishing
   1. Produce yeast-raised doughnuts
      a. Rings
      b. Filled
   2. Produce cake doughnuts
      a. Crullers
   3. Produce French crullers
   4. Demonstrate knowledge of proper frying temperatures and frying shortenings

III. Pastry Production - 2200 or 3240 hours
Responsible for the preparation and production of pastry goods and related products
Within this section it is understood that for each item listed, a minimum of two batches must be produced

A. Preparation of Pie Dough - mixing, rolling, shaping, and baking)

B. Preparation of Puff Pastry Dough and Quick Puff Pastry Dough - mixing, roll-in process, make up and baking
   Produce the following
   1. Cream horns
   2. Napoleon sheets
   3. Palmiers
   4. Vol au vent
   5. Bouchées
   6. Turnovers
   7. Fruit slices
   8. Fleurons
   9. Cheese straws

C. Preparation of Sweet Pastry Dough - mix, form, bake
   1. Tart shells
   2. Tartlet shells

D. Make Choux Paste
E. Production of Choux Dough Pastries
   Forming, baking
   1. Eclairs
   2. Cream puffs
   3. Paris-Brest
   4. Profiteroles
   5. St Honore (with puff dough)
   6. Swans
   7. Croquembouche

F. Preparation of Cakes and Tortes - mixing batters, sealing and panning, baking batters:
   1. Produce butter mixtures
      a. Pound cake
      b. Basic yellow cake
      c. Devil's food
   2. Produce sponge mixtures
      a. Sponge cake (Genoise): White and chocolate
      b. Angel food
      c. Chiffon cakes
      d. Nut sponge cakes
   3. Produce biscuit batters
      a. Lady fingers
      b. Roulade
         Examples:
         1. Swiss roll
         2. Jelly roll
         3. Ice cream roll
      c. Othellos
   4. Make classical tortes
      a. Sacher torte
      b. Dobos torte
      c. Zuger kirsch torte
      d. Black Forest torte
      e. Pear Williams torte
      f. Three others of choice
   5. make baked cheesecake
   6. Make no bake cheesecake
   7. Assemble mousse cakes
   8. Make fruit cake and holiday batters
      a. Light
      b. Dark

G. Production of Fritters:
   1. Mix batter
   2. Make up fritters
   3. Fry fritters
   4. Finish fritters
H. Production of Poached Fruits:
   1. make poached pears
   2. Make poached apples
   3. Make one other type
      Examples:
      a. Plums
      b. Peaches

I. Preparation of Crepes:
   1. Make batter
   2. Cook batter
   3. Fill crepes
   4. Finishing crepes
   5. Make crepes suzette

J. Preparation Fruit Cobblers and Crisps:
   1. Make cobbler batter
   2. Make apple cobbler’
   3. Make fruit crisp

K. Preparation of Creams, Custards, and Puddings:
   1. Make pastry cream
   2. Make whipped cream
      a. Flavored whipped cream
   3. Make blancmange
      a. Make mixture
      b. Assemble
   4. Make Bavarian cream
      a. Make mixture
      b. Assemble dessert
   5. Make puddings
      a. Baked
         1. Bread
         2. Rice
      b. Boiled - Prepare three different types
         Examples:
         1. Chocolate
         2. Butterscotch
         3. Coconut
         4. Banana
         5. Vanilla
         6. Tapioca
         7. Pistachio
      c. Steamed pudding
         1. Plum (Christmas)
         2. One other of your choice
            (examples: Apple, cranberry)
   6. Make sabayon (Make sauce, assemble fruit dessert)
7. Make baked custards
   a. Pot de crème
   b. Crème brûlée
   c. Crème Caramel
   d. Egg Custard

8. Mousses
   Making mixture & assembly for each:
   a. Chocolate
   b. Fruit Mousse
   c. Nut Mousse

9. Make hot soufflé
   a. Make soufflé base mix
   b. Prepare two kinds of hot soufflés
      Examples:
      1. Chocolate
      2. Grande Marnier

10. Make charlottes
    a. Prepare Charlotte Russe
    b. Prepare Charlotte Royale

11. Make a dessert terrine
    Examples:
    a. Chocolate
    b. Fruit

12. Make English trifle

13. Make Tiramisu

L. Preparation of Fillings and Toppings for Pastries and Baked Goods:
1. Make frangipane
2. Make a nut filling
   Examples:
   a. Walnut
   b. Hazelnut
   c. Almond
3. Make two fruit fillings
   Examples:
   a. Lemon
   b. Cherry
   c. Apple
   d. Blueberry
   e. Peach
4. Make caramel topping
5. Make streusel or crisp topping
6. Make beesting topping
7. Make poppyseed filling
8. Make cheese filling
M. Preparation of Frostings or Icings for Cakes and Pastries:
   1. Make butter cream
      a. Common
      b. French
      c. Italian
      d. German
   2. Make fondant
   3. Make boiled icing
   4. Make royal icing
   5. Make fudge icing
      a. White
      b. Chocolate
      c. Devil’s
   6. Make cream cheese icing
   7. Make marshmallow icing

N. Preparation of Dessert Sauces:
   1. Prepare fruit sauces - four different ones
      Examples:
      a. Raspberry
      b. Strawberry
      c. Lemon
      d. Apricot
      e. Kiwi
   2. Prepare chocolate sauces
      a. White
      b. Dark
      c. Fudge sauce
   3. Prepare crème anglaise
   4. Prepare caramel sauce
   5. Prepare nut sauces
   6. Prepare dried fruit compote
   7. Prepare sauces for flaming tablesides desserts
      a. Bananas Foster
      b. Cherries Jubilee

O. Pies and Tarts:
   1. Prepare fruit pies - produce five different types
      a. Apple
      b. Cherry
      c. Blueberry
      d. Peach
      e. Blackberry
      f. Rhubarb
      g. Lemon Meringue
      h. Mincemeat
      i. Gooseberry
      j. Strawberry
      k. Raisin
2. Produce cream pies
   Roll shells, blind bake, fill shells
   a. Banana
   b. Coconut
   c. Chocolate

3. Prepare soft pies - Produce three different types
   Roll, make, fill, bake, finish
   Examples:
   a. Pumpkin
   b. Sweet Potato
   c. Custard
   d. Pecan
   e. Chess
   f. Fudge
   g. Jefferson Davis

4. Prepare chiffon pies - Produce two different types
   Make chiffon filling, fill shells
   Examples:
   a. Orange
   b. Lemon
   c. Strawberry
   d. Chocolate
   e. Mocha

5. Prepare specialty pies - Produce two different types
   Examples:
   a. Ice cream pies
   b. Boston cream pie
   c. Mississippi mud pie
   d. Key lime pie

6. Make special pie crusts
   a. Graham cracker
   b. Cookie
   c. Chocolate
   d. Nut
   e. Meringue

7. Produce fruit tarts and tartlets
   a. Make sweet paste
   b. Form shell
   c. Bake shell
   d. Fill with cream
   e. Layer with sponge cake
   f. Top with cream
   g. Top with fruit
   h. Glaze tarts

8. Make classical tarts
   a. Linzertorte (roll dough, fill and bake)
   b. Engedine (roll sweet paste, fill and bake)
   c. Bakewell tart (roll sweet paste, fill and bake)
9. Prepare a quiche Lorraine (roll dough, make custard mixture, prepare fillings, bake)

P. Preparation of Cookies:
   1. Make macaroons (mix dough, pipe, bake)
      a. Coconut
      b. Almond
      c. Chocolate
   2. Make sable cookies (roll cookies, cut out)
      a. Short bread
      b. Sugar Cookies
   3. Make butter spritz cookie (bagged)
   4. Make ice box cookies
      a. Butterscotch
      b. Chocolate
      c. Nut
      d. Two Tone
         1. Checkerboard
         2. Swirls
   5. Make the American classics
      a. Chocolate chip
      b. Oatmeal raisin
      c. Peanut butter
      d. Gingerbread cookies
      e. Brownies
      f. Sugar cookies
   6. Make holiday cookies
      a. Springerle
      b. Pfeffernüsse
      c. Lebkuchen
      d. Two others of your choice

Q. Petit Fours and Friandise:
   1. Prepare petit four glacé
      a. Make sheets of cake or frangipane
      b. Fill with jam or cream
      c. Cover with marzipan
      d. Cut in portions
      e. Coat with fondant
      f. Finish (decorate)
   2. Produce petit four sec (six different types)
   3. Produce mini filled pastries and tartlets
   4. Produce candied fruits - two kinds (8 each)
      a. Candy fruit
      b. Dip in glaze, chocolate, or other coating
         Examples:
         1. Candied pineapple
         2. Candied orange rind
   5. Produce marzipan fruits - 5 different (8 each)
R. Preparation of Ice Creams & Frozen Desserts:
   1. Make ice cream
      a. Make base
      b. Flavor
         Prepare:
         1. Chocolate
         2. Vanilla
         3. Three other types
      c. Freeze
   2. Make sorbets
      a. Raspberry
      b. Lemon
      c. One other of your choice
   3. Make sherbet
      a. Orange
      b. Lime
   4. Make granité
      Example:
      a. Lemon
      b. Red wine
   5. Prepare ice cream cakes (Assemble and finish - two different)
   6. Prepare ice bombe (Assemble and finish - one kind)
   7. Prepare baked Alaska (Assemble and finish)
   8. Prepare coupes
      a. Pear Belle Helene
      b. Peach Melba
      c. Two other types
   9. Prepare sundaes - three types
  10. Prepare banana splits
  11. Prepare vacherin glacé
  12. Make frozen parfaits - Prepare two kinds
      Making mixture and assembly
      Examples:
      a. Grand Marnier
      b. Creme de menthe
      c. Mocha
  13. Make frozen soufflés - Prepare one kind
      Example:
      a. Pistachio
      b. Nesselrode
  14. Prepare Cassata

S. Meringues:
   1. Make common meringue
   2. Make Italian meringue
   3. Make Swiss meringue
   4. Make Vacherin (baked meringue)
   5. Make Japonaise (baked nut meringue)
   6. Make Dacquoise
   7. Prepare floating island
T. Cake Decorating and Finishing:
   1. Make marzipan
   2. Decorate with royal icing
   3. Decorate with buttercream icing
   4. Make borders and flowers
   5. Make chocolate and sugar decor
   6. Do writing and piping
   7. Make ganache
   8. Work with fondant
   9. Assemble cakes
  10. Fill cakes
  11. Frost cakes
  12. Enrobe cakes with rolled icing
  13. Decorate cakes
  14. make at least two wedding cakes (three tiers or more)

U. Confectionery - Chocolate and Candies Making:
   1. Temper couverture
   2. Make truffles
   3. Make pralines
   4. Make molded and filled chocolates
   5. Make liquor chocolates and fruits
   6. Make nut brittles
   7. Make nougat
   8. Make toffee
   9. make fondant mints
  10. Make caramels
      a. Soft
      b. Hard

V. Showpieces (making of):
   Work with each of the following formats:
   1. Chocolate (molding and forming)
   2. Sugar - One of the following:
      a. Poured
      b. Pulled Blown
      c. Blown
   3. Gum paste - pastillage
   4. Croquant (nougatine)
   5. Marzipan
   6. Royal icing
   7. Produce bread sculpture
      Examples:
      a. Cornucopia
      b. Basket
IV. Related Kitchen Production - 200 or 320 hours
Responsible for food production in areas of the kitchen other than the pastry shop.

A. Vegetable Preparation:
   1. Be able to recognize various types of vegetables
      a. Root
      b. Stem
      c. Leaf
      d. Tubers
   2. Prepare several different vegetables raw and cooked demonstrating the proper methods of retaining food value and crispness
   3. Demonstrate different cooking techniques of vegetables

B. Breakfast Cookery:
   1. Prepare eggs five different ways
   2. Identify and prepare breakfast meats
   3. Prepare pancake batter, waffle, French toast
   4. Prepare cooked cereals

C. Sandwich Preparation:
   1. Make and present variety of sandwiches
      a. Plain
      b. Combination
      c. Club
      d. Finger Sandwiches
      e. Hot Sandwiches
   2. Set up, maintain and supply a station

D. Soup and Sauce Cookery:
   1. Understand the varieties of the basic sauces, and their uses
   2. Recognize the methods for thickening sauces
   3. Produce stock
   4. Produce three different soups

E. Garde Manger Department:
   1. Prepare and present eight different types of canapés that are tasteful and decorative
   2. Prepare and present a cold meat buffet platter for a minimum of eight people
   3. Understand the concept of emulsion and salad dressing preparation
   4. Prepare and present cold salads
      a. One individual
      b. Two for a buffet
      c. Recognize food garnishes and understand their proper combinations

F. Frying Methods:
   1. Demonstrate knowledge of sauté and pan frying
   2. Recognize all duties and responsibilities of the fry cook
G. Broiler/Roast Cookery:
   1. Demonstrate a proper knowledge of roasting, holding temperatures, and internal temperatures of various meats and poultry
   2. Understand preparation of marinades and their proper uses
   3. Demonstrate the use of the broiler
   4. Identify the different types of meats and poultry
   5. Prepare hot hors d’oeuvres and appetizers

H. Fish Cookery:
   1. Demonstrate the knowledge of different types of fish and shell fish
   2. Understand the types of preparation for fish and seafood

I. Pasta and Rice Cookery:
   1. Recognize the different types of pasta and rice, fresh and dried
   2. Demonstrate the proper methods of cooking rices and pastas

V. Lead Pastry Cook - 160 or 200 hours
   Responsible for the performance of supervisory management skills and be able to operate the pastry shop

A. Supervision:
   1. Attend an in house managers meeting as the pastry chef would
   2. Lead the work crew in the completion of a task
   3. Successfully supervise and direct baking and pastry production and all related tasks in absence of the pastry chef
   4. Be responsible for the successful completion of a banquet function
   5. Train a new employee in a task on baking and pastry preparation

B. Menu Planning and Food Costing:
   1. Demonstrate a working knowledge of menu selection, working with emphasis on determining the use of food items on the menu that are most suitable for particular establishment
   2. Demonstrate expertise in consistently portioning foods in relationship to quantity and cost
   3. Demonstrate a working knowledge of food related mathematics
      a. Cost out five dessert items
      b. Cost out the dessert items on a banquet menu
   4. Produce a complete menu with selections in à la carte breakfasts, luncheons, dinners, and desserts. Give a complete listing of food costs and profit margins of every menu item
   5. Layout a menu, including design, drawings, section headings, prices, color suggestions and description of desserts
   6. Work with the chef in the selling of banquet parties, planning menus and special events
   7. Calculate the food cost over a one month period
C. Labor and Payroll:
1. Design a complete work schedule that includes workers in all sections of the pastry shop. Determine the number of employees needed on duty to have the pastry shop operate as efficiently and economically as possible.
2. Demonstrate a knowledge of payroll percentages as it relates to gross food sales and desire net profits.
3. Figure the labor cost over a one month period.
4. Discuss the procedure for the termination of an employee.
5. Outline the benefits offered the employees and relate the cost of these benefits to the company.
6. Explain the concept of workman’s compensation.
7. Relate procedures for an individual to collect unemployment.
8. Discuss procedure for an employee grievance.

D. Purchasing:
1. Demonstrate a working knowledge of purchasing procedures, including specifications for obtaining the best quality merchandise for the purpose at the best prices.
2. Take inventory of all food items on a weekly basis for two weeks.
3. Requisition the food orders for items purchased for the pastry shop for a two week period.

E. Production:
1. Has complete working knowledge of all stations in the pastry shop and can perform all job tasks related to each section.
2. Successfully produce a grand dessert buffet, producing all items for this.

F. Service of Delivery:
1. Schedule timing of delivery of product to food outlets.

G. Nutrition:
1. Substitute for sugars - fruit juices/concentrates, fruits, honey, artificial sweeteners.
2. Substitute for highly saturated fats.
   Examples:
   a. Margarine for butter
   b. Oils for solid shortenings
   c. Low fat cottage cheese for cream cheese
   d. Yogurt for sour cream
   e. Lowfat milk, evaporated skim milk for whole milk.
3. Substitute for heavy desserts by concentrating on fruit and lower fat and sugar preparation.
4. Display proper portion sizes in desserts.
5. Breakdown one dessert and one baked good in a nutritional analysis.
6. Identify vitamins and minerals found in fruits, dairy products, nuts and flours.
7. Create and produce six different low-fat desserts.
8. Create and produce six different low-cholesterol desserts.
9. Create and produce six different low-sugar desserts
10. Create and produce a lactose-free dessert

**SCHEDULE OF RELATED INSTRUCTION**
Apprentices must complete a total of 576 contact hours of related instruction over the term of apprenticeship. Generally, the best source of instruction is from a community college or vocational technical post-secondary institution. ACF recommends that students spend a minimum of forty eight classroom hours in each of twelve (12) areas of related instruction.

**Suggested Curriculum**

ACF recommends that courses follow the sequence described below for those enrolled in the 6000 hour program. The 4000 hour program will require the same 12 classes over a two year period. There must be some flexibility in terms of the titles, scope, and scheduling of courses to accommodate the policies of the postsecondary institutions. However, it is imperative that sanitation and safety be taught early in an apprentice's education.

**Year One**
Introduction to Foodservice  
Sanitation and Safety  
Introductory Baking/Pastry Preparation  
Business Mathematics/Food Cost Accounting

**Year Two**
Food and Beverage Service  
Nutrition  
Basic Food Preparation/Introductory Cooking  
Menu Planning and Design

**Year Three**
Advanced Baking Preparation  
Purchasing  
Supervisory Management  
Advanced Pastry Preparation