



Baking Foundations I Master Course Outline

Day 1: Course Introduction

- **Lecture**
Program review, how to succeed in this class, facility and Cascade Culinary Institute environmental overview. Overview of Central Oregon Community College at, Syllabus review
<http://www.screencast.com/t/UBwMCbP7HD8>
 - **Learning Objectives**
 - Review BAK I Grading and Performance Expectations
 - Review *Professional Baking* Textbook
 - Learn Professionalism and Uniform Expectations
 - Review Peer “Dream” and Career Path Goals
 - Learn Knife Kit Anatomy and Nomenclature
<http://www.mercercutlery.com/how-tos>
 - Learn proper Campus Fire Drill Procedures
 - Learn about Campus Sustainability and Waste Management Programs
 - Complete photo/video consent form
- This class will cover the following competencies:
- Prepare a variety of baked products using pie methods,
 - Describe and use the equipment typical to the baking process
 - Understand and apply the basic baking science principles, ratio and technique
 - Prepare a variety of meringues
 - Prepare and bake a variety of cookies
 - Prepare pastry foundations including pastry cream, pate a choux, crème anglaise
- **Demonstration**
Knife Kit breakdown and ID, Kitchen Tour, Fire Drill, Sustainability and Waste Management Tour
 - **Competency-Based Applied Learning**
Population of Emergency Contact List, kitchen equipment overview and safe use
 - **Reading / Homework Assignment**
Professional Baking, Gisslen Chapter 3, Baking and Pastry Equipment
ServSafe Chapters 1 and 2
History of Baking Assignment

- **Assessment**
Uniform Standards / Line-Up
Safety and sanitation in the kitchen,
Identify baking equipment

Day 2: Safe Food / Microbes / Equipment ID and Safety

- **Lecture**
 - ServSafe Chapter 1: Providing Safe Food & Chapter 2: The Microworld
 - Food Safety Video
 - Equipment identification – Culinary Storage
- **Learning Objectives**
 - Describe and apply the principles of food safety and sanitation practices
 - Identify and select ingredients for use in a variety of baked products
 - Apply standards of professionalism to the baking industry
- **Demo**
Equipment Identification
Spice Identification
- **Competency-Based Learning Activity**
Equipment identification and safe use
ServSafe chapters 1 and 2
Product identification
- **Recipes**
Variety of products for ingredient identification
- **Reading / Homework Assignment**
ServSafe chapters 3 and 4
- **Assessment**
Uniform Standards / Line-Up,
Equipment identification and safe use exam

Day 3: ServSafe / Knife Skills

- **Lecture**
 - ServSafe, Chapter 3: Contamination, Food allergens and Foodborne Illness, Chapter 4: The Safe Food Handler
 - Ingredient identification
 - The importance of accuracy in the bakeshop
- **Learning Objectives**
 - Describe and apply the principles of food safety and sanitation practices
 - Identify and select ingredients for use in a variety of baked products
 - Apply standards of professionalism to the baking industry
 - Describe and apply the function of ingredients in the baking process
 - Demonstrate proper knife skills as they relate to pastry
- **Demo**
Knife skills
- **Competency-Based Learning Activity**
Product/ingredient identification
Knife skills

- **Recipes**
Product/spice identification
Variety of spices, flours, sugars, and fats commonly used in bakeshop
Variety of fruits for knife skills
- **Reading / Homework Assignment**
ServSafe Chapters 5 and 6, How Baking Works: Chapter 2
- **Assessment**
Uniform Standards / Line-Up,
Knife skills

Day 4: ServSafe / Product ID / Measurements / Scaling

- **Lecture**
 - ServSafe, Chapter 5: The Flow of Food; An Introduction, Chapter 6: The Flow of Food; Receiving and Purchasing
 - Glossary review B
 - Product identification continued
 - Scaling/measuring ingredients
- **Learning Objectives**
 - Obtain a ServSafe certificate
 - Demonstrate safety and sanitation in the kitchen
 - Identify, evaluate, and use a variety of products commonly used in the bakeshop to include:
spices, herbs, fruits, fats, sugars, and other bakeshop staples
 - Describe the effects of heat on food, and the methods of heat transfer
 - Examine and outline the major developments in the history of the baking industry
- **Demo**
Scaling ingredients
- **Competency-Based Learning Activity**
Product/ingredient identification continued
Student presentations on the history of baking
- **Recipes**
Product and spice identification
Scaling-flour, sugar, liquid
- **Reading / Homework Assignment**
ServSafe, Chapters 7 and 8
- **Assessment**
Uniform Standards / Line-Up,
Product identification,
Student presentations on the History of Baking

Day 5 – ServeSafe / Recipe Standardization

- **Lecture**
 - ServSafe, Chapter 7 the Flow of Food; Storage, Chapter 8 The Flow of Food; Preparation
 - Glossary review C
 - The Recipe
 - The Standard Recipe

Product Identification Cont.

- **Learning Objectives**

- Describe and apply the principles of food safety and sanitation practices
- Identify and select ingredients for use in a variety of baked products
- Apply standards of professionalism to the baking industry
- Examine and outline the major developments in the history of the baking industry
- Describe and apply the function of ingredients in the baking process
- Explain the use of formula and the standardized recipe as it relates to the baking process

- **Demo**

Writing a standard recipe

- **Competency-Based Learning Activity**

Writing a standard recipe

Product identification

- **Recipes**

Product identification

- **Reading / Homework Assignment**

ServSafe Chapter 9, How baking works-chapter 16

- **Assessment**

Uniform Standards / Line-Up

Product identification exam

Day 6: ServeSafe / Knife Skills

- **Lecture**

- ServSafe, Chapter 9: The Flow of Food; Service
- Glossary review D and E
- Fruit identification and selection
- Fruit desserts-seasonality
- Fruit desserts-review EP/AP yields
- Knife skills-brunoise, dice-small/medium/large, julienne, battonet,
- Video

www.youtube.com/watch?v=gB4MNU6W9sg – *Fruit Salad*

- **Learning Objectives**

- Describe and apply the principles of food safety and sanitation practices
- Identify and select ingredients for use in a variety of baked products
- Apply standards of professionalism to the baking industry
- Describe and apply the function of ingredients in the baking process
- Demonstrate proper knife skills as they relate to pastry
- Understand and apply the basic baking science principles, ratio and technique
dice-small/medium

- **Demo**

Knife skills-brunoise, /large, julienne, battonet

- **Competency-Based Learning Activity**

Fruit identification

Knife skills-brunoise, dice-small/medium/large, julienne, battonet

- **Recipes**

A variety of fruits for identification

Fruit for knife skills

- **Reading / Homework Assignment**

ServSafe chapter 10

- **Assessment**

Uniform Standards / Line-Up,

Fruit identification

Knife skills-small medium and large dice, julienne

Day 7: ServSafe / Fruit and Fruit Desserts

- **Lecture**

- ServSafe, Chapter 10: Food Safety Management Systems

- Glossary review F and G

- Knife skills continued-citrus supreme, slicing

- Fruits-the ripening process and storage

- Fruit desserts

- Dried

- Candied zest

- **Learning Objectives**

- Obtain a ServSafe certificate

- Demonstrate safety and sanitation in the kitchen

- Demonstrate effective knife skills as they apply to baking and pastry

- Prepare a variety of fruit based desserts

- Understand and apply the basic baking science principles, ratio and technique

- **Demo**

Knife skills,

Candied zest

- **Competency-Based Learning Activity**

Knife skills-brunoise, dice-small, medium, large, julienne, battonet, citrus supreme

Dried/dehydrated fruit

- **Recipes**

Professional Baking:

Apple Crisps, Page 601

- **Reading / Homework Assignment**

ServSafe Chapter 11

- **Assessment**

Uniform Standards / Line-Up,

Knife skills-brunoise, julienne, battonet, supreme

Dried fruits

Candied Zest

Day 8: ServSafe / Fruit Desserts – Cooking and Poaching

- **Lecture**

- ServSafe, Chapter 11: Sanitary Facilities and Equipment

- Glossary review H, I and J
- Review knife skills
- Fruit desserts
- Cooking Methods
- Poaching
- Compote
- Minimizing waste in fruit desserts

- **Learning Objectives**

- Obtain a ServSafe certificate
- Demonstrate safety and sanitation in the kitchen
- Demonstrate effective knife skills as they apply to baking and pastry
- Prepare a variety of fruit based desserts
- Understand and apply the basic baking science principles, ratio and technique

- **Demo**

Fruit Compote

- **Competency-Based Learning Activity**

Practicing knife skills
Fruit desserts-poaching and compote

- **Recipes**

Professional Baking

Pears Poached in Wine, page 586

- **Reading / Homework Assignment**

ServSafe Chapter 12

How Baking Works, Chapter 2 – Heat Transfer

- **Assessment**

Uniform Standards / Line-Up,
Fruit desserts-poaching and compote

Day 9: ServSafe / Fruit Desserts

- **Lecture**

- ServSafe, Chapter 12: Cleaning and Sanitizing
- Glossary review K and M
- Fruit Desserts
- Cooking methods - roasting, flambé

- **Learning Objectives**

- Obtain a ServSafe certificate
- Demonstrate safety and sanitation in the kitchen
- Demonstrate effective knife skills as they apply to baking and pastry
- Prepare a variety of fruit based desserts
- Understand and apply the basic baking science principles, ratio and technique

- **Demo**

Flambe

- **Competency-Based Learning Activity**

Serve-safe,
Cooking methods-roasting, flambé
Baked Apple

- **Recipes**
Black Board
Baked Apple – with modifications – flambé only
- **Reading / Homework Assignment**
ServSafe - Chapter 13
How Baking Works – Chapter 8, Sugar and Other Sweeteners
- **Assessment**
Uniform Standards / Line-Up,
Cooking methods-roasting and flambé

Day 10: ServSafe / Sugar and Other Sweeteners

- **Lecture**
 - ServSafe, Chapter 13: Integrated Pest Management
 - Glossary review N and O,
 - Ingredient functions-sugar
 - Sugar stages
 - Maillard reaction
 - Jams, jellies, marmalades
 - Canning
- **Learning Objectives**
 - Obtain a ServSafe certificate
 - Demonstrate safety and sanitation in the kitchen
 - Prepare a variety of fruit based desserts
 - Understand and apply the basic baking science principles, ratio and technique
 - Demonstrate proper canning technique
- **Demo**
Marmalade/Canning
- **Competency-Based Learning Activity**
Sugar and its functions in jams, jellies, and marmalades
Sugar stages
Strawberry marmalade
- **Recipes**
Professional Baking
Strawberry Marmalade, page 598 - refrigerate
Sugar for stages
- **Reading / Homework Assignment**
How Baking Works, Chapter 16, Fruit and Fruit Products
- **Assessment**
Uniform Standards / Line-Up,
Ingredient function-sugar
Jams, jellies, marmalades

Day 11: ServSafe / Fruit and Fruit Products

- **Lecture**

- ServSafe, Review and practice for ServSafe exam, Glossary review P and Q
- Ingredient functions-flour and grains (brief overview – It will be discussed extensively in Foundations II)
- Fruit desserts- water-bath canning
- Sugar stages

- **Learning Objectives**

- Obtain a ServSafe certificate
- Demonstrate safety and sanitation in the kitchen
- Prepare a variety of fruit based desserts
- Understand and apply the basic baking science principles, ratio and technique
- Demonstrate proper canning technique

- **Demo**

Jelly

- **Competency-Based Learning Activity**

Sugar Stages

Sour Cherry Preserves – ½ the class, Three Citrus Marmalade - ½ the class – make day 11/ can day 12

- **Reading / Homework Assignment**

Review Serv-Safe

- **Assessment**

Uniform Standards / Line-Up,

Jelly/canning

Sugar stages

Jams/Waterbath - Canning

- **Recipes**

BlackBoard:

Sour Cherry Preserves, Three Citrus Marmalade

Day 12: Mid-Term Exam ServSafe

- **Learning Objectives**

- Obtain a ServSafe certificate
- Demonstrate safety and sanitation in the kitchen

- **Reading / Homework Assignment**

How Baking Works, Chapter 10- Eggs and Egg Products

- **Assessment**

Uniform Standards / Line-Up,

- **Mid-Term Assessment / ServSafe exam**

Day 13: Eggs and Egg Products

- **Lecture**

- Ingredient properties-eggs
- Meringue-French, Italian, Swiss
- Piping/baking

- **Learning Objectives**

- Describe and apply the principles of food safety and sanitation practices

- Identify and select ingredients for use in a variety of baked products
- Apply standards of professionalism to the baking industry
- Describe and apply the function of ingredients in the baking process
- Understand and apply the basic baking science principles, ratio and technique
- Prepare a variety of meringues

- **Demo**

Meringue

- **Competency-Based Learning Activity**

Meringue-French, Italian, Swiss

Piping and baking meringue

- **Recipes**

Professional Baking:

French Meringue, Italian Meringue, Swiss Meringue, pages 263 and 264

- **Reading / Homework Assignment**

How Baking Works, Chapter 11 – Leavening Agents

- **Assessment**

Uniform Standards / Line-Up,

Meringues

Day 14: Leavening Agents / Altitude

- **Lecture**

- Ingredient functions-leavening

- Mixing-creaming, Cookies

- Altitude Adjustments

- **Learning Objectives**

- Describe and apply the principles of food safety and sanitation practices

- Identify and select ingredients for use in a variety of baked products

- Describe and apply the function of ingredients in the baking process

- Prepare a variety of baked products using creaming, sponge, muffin and basic custards methods

- **Demo**

Cookies-creaming method

- **Competency-Based Learning Activity**

Cookies

Creaming method

- **Recipes**

Professional Baking:

Chocolate Chip cookies-page 493

Oatmeal raisin cookies-page 493

- **Reading / Homework Assignment**

How Baking Works, Chapter 9 Fats, Oils, and Emulsifiers

- **Assessment**

Uniform Standards / Line-Up,

Cookies-creaming method

Day 15: Fats and Oils / Cookies

- **Lecture**
 - Ingredient functions-fats and oils
 - Cookies-tuile method
 - Cookies-rolling
- **Learning Objectives**
 - Describe and apply the principles of food safety and sanitation practices
 - Identify and select ingredients for use in a variety of baked products
 - Describe and apply the function of ingredients in the baking process
 - Prepare a variety of baked products using creaming, sponge, muffin and basic custards methods
- **Demo**

Cookies-tuile
- **Competency-Based Learning Activity**

Tuiles -shaping and baking
Sugar Cookies - rolled
- **Recipes:**

Professional Baking:
Rolled sugar cookies, page 495
BlackBoard:
Honey Tuile recipe
- **Reading / Homework Assignment**

How Baking Works, Chapter 12 – Thickening and Gelling Agents
- **Assessment**

Uniform Standards / Line-Up,
Tuile - shaping and baking
Sugar Cookies - rolled

Day 16: Thickening and Gelling Agents

- **Lecture**
 - Ingredient functions-thickening and gelling agents
 - Pastry cream, stabilized whipped cream
 - Tempering yolks
- **Learning Objectives**
 - Describe and apply the function of ingredients in the baking process
 - Prepare pastry foundations including pastry cream, pate a choux, crème anglaise
- **Demo**

Pastry cream
- **Competency-Based Learning Activity**

Pastry cream
Stabilized whipped cream
Recipes

Professional Baking

Pastry cream, page 267

How Baking Works

Stabilized Whipped Cream, page 345 - 348

- **Reading / Homework Assignment**

How Baking Works, Chapter 13 – Milk and Milk Products

- **Assessment**

Uniform Standards / Line-Up,

Pastry cream

Stabilized Whipped Cream

Day 17: Dairy and Dairy Products

- **Lecture**

- Ingredient functions-dairy

- Pate a choux

- Cream puffs and éclairs

- Crème anglaise

- **Learning Objectives**

- Identify and select ingredients for use in a variety of baked products

- Describe and apply the function of ingredients in the baking process

- Prepare pastry foundations including pastry cream, pate a choux, crème anglaise

Demo

Pate a choux

Crème anglaise

- **Competency-Based Learning Activity**

Pate a choux

Cream puffs,

Éclairs

Crème Anglaise

- **Recipes**

Professional Baking:

Pate a Choux, page 334 (using the optional milk)

Cream Puffs page 337

Eclairs, page 337

Crème Anglaise, page 265

- **Reading / Homework Assignment**

How Baking Works, Chapter 15 Cocoa and Chocolate Products

- **Assessment**

Uniform Standards / Line-Up,

Pate a choux

Crème anglaise

Day 18: Chocolate and Cocoa Products

- **Lecture**

- Ingredient Functions-Chocolate

Buttercream

- **Learning Objectives**

Identify and select ingredients for use in a variety of baked products

Apply standards of professionalism to the baking industry

Describe and apply the function of ingredients in the baking process

Understand and apply the basic baking science principles, ratio and technique

- **Demo**

Chocolate Buttercream

- **Competency-Based Learning Activity**

Chocolate Buttercream

Piping

Recipes

Professional Baking

Swiss or Italian Buttercream, Chocolate Variation, page 424

- **Reading / Homework Assignment**

Professional Baking - Gisslen, chapter 1

- **Assessment**

Uniform Standards / Line-Up,

Chocolate Handling

Buttercream

Day 19: Practical exam – 1st half of class

- **Lecture**

Review for final

- **Learning Objectives**

- **Competency-Based Learning Activity**

Practical exam:

Pate a Choux, Italian Meringue, Sugar Cookie

- **Reading / Homework Assignment**

Review material

- **Assessment**

Uniform Standards / Line-Up,

Practical exam

Day 20: Practical exam- 2nd half of class

- **Lecture**

Review for final exam

- **Assessment**

Uniform Standards / Line-Up,

Practical exam:

Pate a Choux, Italian Meringue, Sugar Cookie

Day 21: Final Exam - Written

- **Assessment**

Uniform Standards / Line-Up,

Written final exam

Day 22: TBD