

CA A126: PRINCIPLES OF BAKING 2

Item	Value
Curriculum Committee Approval Date	10/06/2022
Top Code	130630 - Culinary Arts
Units	2 Total Units
Hours	90 Total Hours (Lecture Hours 18; Lab Hours 72)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	Yes
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

Advanced course in pastry arts production, including puff pastry, foam cakes, classical European tortes, pastry fillings, meringues, cake decorating, chocolate handling, glazes, icings, tarts, and pate a choux. Students will be required to follow hospitality department dress standards. PREREQUISITE: CA A124. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Develop skills in interpreting advanced pastry recipes and competently produce classic European patisserie.

Course Objectives

- I Demonstrate knowledge and skill in preparation of:
 - I. 1. puff pastry
 - I. 2. foam cakes
 - I. 3. classical European tortes
 - I. 4. pastry fillings
 - I. 5. meringues
 - I. 6. cake decorating
 - I. 7. chocolate handling
 - I. 8. glazes
 - I. 9. icings
 - I. 10. tarts and tartlets
 - I. 11. pate a choux
- II Develop skill in use of large and small equipment and utensils.
- III Cost out recipes and calculate selling price.
- IV Demonstrate time and motion procedures.
- V Apply principles of cake decorating.
- VI Apply principles of chocolate handling in baked goods.
- VII Evaluate principles of fine dessert presentations.
- VIII Develop skill in decorating techniques.
- IX Demonstrate appropriate techniques of safety and sanitation.

Lecture Content

Introduction to Cake Decorating Making paper decorating cones Use of pastry bag Basic decorating: line, shells, scrolls, printing, borders, basic roses Cake assembly and filling Puff Dough Principles of puff dough production and make up Production of napoleons, pin wheels, turnovers, bouché, etc. Foam Type Cakes Three basic foam cakes: sponge, angel food, and chiffon Principles of production of foam cakes Meringues History of meringues Kinds of meringues and their uses: French, Swiss, Italian Production: hard and soft meringue, japonaise Strudel and Phyllo Dough Production of classical strudel Theory of learning Prepare baklava and understand its relationship to puff dough Pate a Choux Leavening process History of product Production and use of pate a choux Icings and Glazes - Production and Use Butter cream Foam icing Royal icing Ganache Flat icing Pastry Fillings - Production and Use Bavarian Mousse Chiffon Pastry cream Whipping cream Classical European Tortes Theory and history Production Tarts and Tartlets Filled Baked Production of sucree Chocolate Handling and Production Chocolate makeup Temperature controls Decorations vs. baking Evaluation of all products and comparison to the standard Final project to be researched and developed by student outside of class and displayed for judging Research noted individual in the pastry field and give oral presentation and written report

Lab Content

Measurements Decorating Techniques Review of scaling ingredients Fractions Equipment Use Pastry Tips Paper Cone making filling and usage Plastic Cone use filling and usage European Sponge Cakes Egg white whipping Folding of ingredients Application techniques Cooling, wrapping, storage Mousses Filling of layer cakes Melting of chocolate Folding of ingredients Temperature variables Application in cakes Slicing cakes horizontally Protection of product Storage Icings Glazes Buttercream Production Application of Buttercream Crumbing cakes Offset use on cake Ganache Production Application Storage Specialty Cakes Definition application Preparation of cakes Production of fillings Assembly Slicing Storage Puff Pastry Production Reverse puff Blitz dough Regular puff Completion of desserts using puff Fillings Finishes Production of desserts Slicing Storage Candies Boiling sugar for edible products Production of candy varieties fudge taffy toffee caramel Meringue Types of meringue Production of meringue products Baking Storage Pate a Choux Production of choux Piping Baking Filling Storage Specialty Cookies Production of mignardise Tuiles Macarons Butter Piped Filled Dipped Presentation Storage Phyllo Uses Handling Production Baklavas Slicing Storage Tartlets Production of specialty short doughs Handling of dough in tartlets Variety of storage techniques Fillings Production of tartlets Finishings presentation Storage Ice Cream sorbet Bases Temperature Churning Equipment choices Freezing Scooping plating Final storage Marzipan Planning Production storage Presentation Plated desserts Production of plated desserts Planning and production of sauces Planning and production of garnishes

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- Lab (04)
- DE Live Online Lab (04S)

Instructional Techniques

Lecture, demonstration, group discussion, lab practice, videos, periodical and internet class searches

Reading Assignments

Text Reading and online lecture material, approx. 2 hours per week

Writing Assignments

Proficiency is evaluated during laboratory, as well as final independent project. Students will complete a written research project, approx. 20 hours

Out-of-class Assignments

Mathematical exercises, approx. 3 hours Dessert Costing exercises, approx. 2 hours Recipe conversions, approx. 1 hour Marzipan figure - approximately 4 - 6 hours

Demonstration of Critical Thinking

Lab participation and practical exams Quizzes, exams, written assignments, reports, and student workbook

Required Writing, Problem Solving, Skills Demonstration

Proficiency is evaluated during laboratory, as well as final independent project. Students will complete a written research project.

Eligible Disciplines

Culinary arts/food technology (food service, meat cutting, baking, waiter/ w...: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

Textbooks Resources

1. Required Gisslen. Principles of Baking, 7th ed. Wiley, 2016

Other Resources

1. Recipe syllabus for Lab, OCC. 2. Student supplied uniform: Chef coat, checkered pants, neckerchief, apron, side towel, hat, and work shoes. 3. Student supplied knife and utensils to include: chefs knife, paring knife, measuring spoons, pastry brush, vegetable peeler, wire whisk, carrying case.