

# CA A124: PRINCIPLES OF BAKING 1

Item	Value
Curriculum Committee Approval Date	10/06/2021
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
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)

## Course Description

Study the fundamentals of baking, including ingredient composition and function, preparation and evaluation of yeast, roll-in yeast, and quick breads, biscuits and muffins, cookies, shortened cakes, pies, custards, and recipe conversion. Students will be required to follow hospitality department dress standards. PREREQUISITE: FBM A102 or FSM A160 or concurrent enrollment. Transfer Credit: CSU.

## Course Level Student Learning Outcome(s)

1. Demonstrate competence in making bread, cookies, custards, and doughs, while operating with professional tools and equipment.

## Course Objectives

1. Identify and practice proper techniques of sanitation and safety.
2. Practice proper techniques in station organization and timing.
3. Apply principles of baking production to obtain quality baked goods.
4. Skillfully operate equipment in baking lab.
5. Produce successfully yeast rolls, breads, roll-in yeast dough, quick breads, pies, shortened cakes, cookies, custards, puddings and sauces.
6. Compare and contrast standards for quality baked products.
7. Define terminology used in bakery production.
8. Demonstrate skill to use given recipes.
9. Develop skill to alter standard baking recipes.
10. Evaluate finished product.

## Lecture Content

Introduction Explanation of the duties of the baker/pâtissier  
 Demonstration of safe operation of equipment used in preparation of baked goods  
 Definition of basic terminology  
 Basic Baking Skills  
 Weights and measures  
 Balance scale  
 Portion scale  
 Volume measures  
 Measuring spoons  
 Safe use and cleaning of small and large equipment  
 Floor mixer and attachments  
 Table mixers and attachments  
 Revolving oven  
 Convection oven  
 Proof Box  
 Sheeter  
 Donut fryer  
 Use of recipes and recipe conversion  
 Sanitation in bakeshop  
 Proper set up and use of pot

sink  
 Personal sanitation  
 Bench and equipment cleaning  
 Proper food handling and holding temperatures  
 Baking theory  
 Yeast bread, quick bread, cookie, shortened cakes, pie production  
 Leavening process  
 Starch cookery  
 Ingredients and their uses  
 Basic bread ingredients: flour, water, yeast, salt  
 Other ingredients: chemical leavening, shortening, sugar, eggs, milk, flavoring, spices, other additives  
 Basic understanding of the production of: Yeast bread: pan breads, soft and hard rolls, crisp crust breads, specialty breads  
 Quick bread: biscuits, muffins, popovers, loaf breads  
 Shortened cakes: chocolate, white and yellow  
 Simple cookies, chocolate chip, peanut butter, oatmeal, brownies  
 Simple pudding: baked custard, bread pudding, cr me anglaise  
 Evaluation  
 Learn the minimum standards for baked products  
 Learn to evaluate finished product as to crumb, texture, flavor, crust, etc.

## Lab Content

Measurements  
 Fractions, Ounces/Pounds  
 Scaling ingredients by weight and volume  
 Cookies  
 Mixing and production methods  
 Tarts  
 Dough mixing and production methods  
 Fillings for baked tarts  
 Quick Breads  
 Biscuits and muffins  
 Mixing and production methods  
 Donuts  
 Mixing and production methods  
 Pie dough and pies  
 Crusts and fillings  
 Mixing and production methods  
 Cakes  
 Creaming, one and two-stage methods  
 Scaling, panning, baking, de-panning, storage  
 Custards and sauces  
 Basic custards, fillings, and sauces  
 Baked and stove-top production  
 Yeast doughs  
 Soft dough- dinner rolls  
 Rich dough- braided challah and caramel rolls/cinnamon rolls  
 Crisp crust dough- sourdoughs  
 Rolled-in yeast dough - croissant and Danish

## 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 and online lecture assignments, approx. 2 hours per week

## Writing Assignments

Students will complete a written project and periodic essay assignment, approx. 8 hours. Proficiency is evaluated during laboratory as well as practical baking test.

## Out-of-class Assignments

Production of bread product, approx. 10 hours total

## Demonstration of Critical Thinking

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

## Required Writing, Problem Solving, Skills Demonstration

Students will complete a written project and periodic essay assignment. Proficiency is evaluated during laboratory as well as practical baking test.

## Eligible Disciplines

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

## **Textbooks Resources**

1. Required Gisslen, W. . Professional Baking, 7th ed. Hoboken, NJ: J. 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: chef s knife, paring knife, measuring spoons, pastry brush, vegetable peeler, wire whisk, carrying case.