CA A131: PRINCIPLES OF ARTISAN

Item	Value
Curriculum Committee Approval Date	02/07/2024
Top Code	130630 - Culinary Arts
Units	3 Total Units
Hours	117 Total Hours (Lecture Hours 27; Lab Hours 90)
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

Study in fundamentals of bread development. Analysis of ingredient composition and function of natural and manufactured yeasts as it interacts with pre-ferments, levains, sourdough rye, and straight doughs. Bakers' percentages and recipe conversions will be examined with international weight standards. Students will be required to follow hospitality department dress standards. Field trips optional. PREREQUISITE: CA A124. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Demonstrate competence in using hand skills to form different hydrated doughs, create and maintain a thriving bread starter, and produce and evaluate hand-formed breads.

Course Objectives

- 1. Use sanitary practices at work stations and throughout the lab wear clean, approved uniforms while exercising proper food handling in each lab.
- 2. Practice proper techniques of station organization and bread log timing.
- 3. Explain evolution and historical context of artisan breads.
- 4. Skillfully operate equipment in the baking lab and OCC main kitchen and bakery.
- 5. Explain the function of specific ingredients used in artisan bread making.
- 6. Explain the process that occurs in the preparation of a starter.
- 7. Identify a variety of organic and non-organic ingredients used in starters.
- 8. Explain how time, temperature, and feeding affect the healthy and flavor of starters.
- 9. Evaluate starters before use in bread project.
- 10. Demonstrate the ability to prepare miscellaneous breads such as brioche, bagels, bialys, pretzels, bread sticks, pitas, and flatbreads.
- 11. Demonstrate the ability to mix, and hand manipulate a variety of dough types; straight, yeasted pre-fermented, levain, and sourdough rye, while using natural and manufactured yeasts.
- 12. Demonstrate the ability to properly bake a variety of bread and loaf shapes.
- 13. Compare and contrast standards for quality in breads.
- 14. Analyze causes of bread failures.
- 15. Define terminology used in bread production.
- 16. Analyze bread formulas and show capability in altering production size.
- 17. Evaluate finished product.

Lecture Content

Introduction Explanation of Artisan breads and historical evolution of bread Identification of and demonstration of safe operation of equipment used in bread production Definition of basic terminology Ingredients and their effects Classification of breads: Straight, levain, Sourdough, Misc. Develop and perpetuate a live sourdough culture Seeding of starter Flour varieties and requirements Water requirements Temperature needs Flavor manipulation Ingredient Function and Manipulation Protein levels of flour Organic advantages Salt timing Pre-ferments for flavor and texture Basic Bakers percentages Breakdown of bread formulas Re-calibration to achieve different quantities Mixing Methods/Desired Dough Temperature Hand and machine techniques Autolyse Fermenation Folds Machine effect on dough temperature Time Development and Alteration Division and Shaping of doughs Digital Scale/Balance Scale Techniques Pre-shaping and Final Shaping Proofing/Retarding Techniques of dough development for proper texture Taste alterations Production schedule Baking/Steam/Retardation Oven type effect on finished bread Bread Evaluation Taste, crumb, crust, and texture No-knead and high-hydration breads Overview of the differences in dough varieties Straight Doughs Levains Sourdough Rye Heritage breads from parts of the world European Indian/Middle Eastern, Central and S outh America Miscellaneous doughs Creation of New Bread Formula Master Bread Bakers/American Bread Trends Orange County/Los Angeles California National

Lab Content

Initiating and perpetuating a starter whole wheat and rye liquid all purpose firm Hand forming of Straight Dough Continuation Straight Dough Working with Pre-ferments Continuation of Pre-ferments Working with Levains Continuation of Levains Midterm Practical Miscellaneous Breads Continuation of Miscellaneous Breads Working with Baguettes, Continuation of Bagettes Working with Sourdough Rye Continuation of Sourdough Rye Ancient Grains/Ancient Breads Final Practical

Method(s) of Instruction

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

Instructional Techniques

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

Reading Assignments

Chapters in textbooks - approximately 1.5 hours per week Online videos, blogs and library/online text - approximately 2 hours per week

Writing Assignments

Create a bread log and diary - approximately 1.5 hours per week Develop a bread technique to relate in an oral presentation - 1 hour Write a report on a bread technique- approximately 3 hours Description History How it

is used in different areas Areas of culinary arts it can be used or altered Shapes that correspond to uses

Out-of-class Assignments

Maintaining a starter throughout the semester - approximately 3 hours per week Preparing a pre-ferment - approximately 10 hours Bakers percentage exercises - approximately 60 minutes per exercise Creating a bread formula - approximately 10 hours Altering the timing of a bread - approximately 1 hour

Demonstration of Critical Thinking

Students will need to evaluate dough and determine at multiple times, when to move on to the next phase of dough development.

Required Writing, Problem Solving, Skills Demonstration

Write a report on an artisan bread technique Practical examinations of individual hand forming skills Practical examination of formula creation

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 DiMuzio, D. Bread Baking, ed. Wiley, 2010 Rationale: Student exercises that correspond with all areas of bread development.