

## SYLLABUS

<b>DATE OF LAST REVIEW:</b>	07/27/2019
<b>CIP CODE:</b>	12.0501
<b>SEMESTER:</b>	Departmental syllabus
<b>COURSE TITLE:</b>	Bakeshop Principles
<b>COURSE NUMBER:</b>	BAKE 0100
<b>CREDIT HOURS:</b>	3
<b>INSTRUCTOR:</b>	Departmental syllabus
<b>OFFICE LOCATION:</b>	Departmental syllabus
<b>OFFICE HOURS:</b>	Departmental syllabus
<b>TELEPHONE:</b>	Departmental syllabus
<b>EMAIL:</b>	Departmental Syllabus <i>KCKCC-issued email accounts are the official means for electronically communicating with our students.</i>

**PREREQUISITES:** None

**REQUIRED TEXT AND MATERIALS:** Please check with the KCKCC bookstore, <http://www.kckccbookstore.com> for the required text for your particular class.

**COURSE DESCRIPTION:** Students will explore the historical background and careers in baking and pastry. Students will learn bakeshop principles and skills, such as: math; recipe reading; recipe conversion; equipment uses and care of; ingredients and their specific functions; and the various elements/techniques used to create baked goods. This course provides students with the foundation and skills necessary that will be utilized and expanded on throughout the program.

**METHOD OF INSTRUCTION:** A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

## **COURSE OUTLINE:**

- I. The Baking Profession
  - A. History of Baking and Pastry
  - B. Technology in the industry
  - C. Careers
    - 1. Professional requirements
- II. Bakeshop Math
  - A. Formulas and Measurement
    - 1. Standardized recipes and formulas
    - 2. Reading recipes and formulas
    - 3. Measurement
    - 4. Conversions of formulas and recipes
      - a. Problems in converting recipes
    - 5. Cost calculations
- III. Equipment
  - A. Safety and Sanitation
  - B. Large Equipment
    - 1. Types
    - 2. Uses
  - C. Dough Handling Equipment
  - D. Pans, Containers, and Molds
    - 1. Types
    - 2. Uses
  - E. Hand Tools and Misc. Equipment
    - 1. Types
    - 2. Uses
- IV. Ingredients
  - A. Flours, Meals and Starches
  - B. Sugars and sweeteners
  - C. Fats
  - D. Milk and Milk Products
  - E. Eggs
  - F. Leavening Agents
  - G. Gelling Agents
  - H. Fruits and Nuts
  - I. Chocolate and Cocoa
  - J. Salt, spices, and flavorings
- V. Basic Baking Principles
  - A. Mixing and Gluten Development
    - 1. Mixing processes
    - 2. Controlling gluten
  - B. The Baking Process
    - 1. Stages

- C. After Baking
  - 1. Cooling
  - 2. Staling

**EXPECTED LEARNER OUTCOMES:**

1. *The student will be able to summarize the history of baking; identify careers in the baking and pastry industry; and explain and demonstrate key professionalism components of the industry.*
2. *The student will be able to apply mathematical formulas to recipes in to: convert, weigh, yield, and cost baking formulas/recipes.*
3. *The student will be able to identify and use bakeshop equipment; and demonstrate proper care and cleaning of the equipment.*
4. *The student will be able to list and describe the major baking ingredients, characteristics and functions of each ingredient.*
5. *The student will be able to apply procedures for substituting ingredients.*
6. *The student will be able to list and describe the twelve basic steps in the production of yeast goods.*

**COURSE COMPETENCIES:**

Upon successful completion of the course:

*The student will be able to summarize the history of baking; identify careers in the baking and pastry industry; and explain and demonstrate key professionalism components of the industry.*

1. The student will be able to summarize the history of baking throughout the ages.
2. The student will be able to identify and explore careers in the baking and pastry industry.
3. The student will be able to simulate key professionalism characteristics.

*The student will be able to apply mathematical formulas to recipes to: convert, weigh, yield, and cost baking formulas/recipes.*

4. The student will be able to identify and solve issues with written formulas and converting those formulas.
5. The student will be able to demonstrate proper use of a baker's scale.
6. The student will be able to calculate raw fruit yields, convert formulas to various yields, calculate edible portion costs and formula costs.

*The student will be able to identify and use bakeshop equipment; and demonstrate proper care and cleaning of the equipment.*

7. The student will be able to identify, explain and demonstrate proper usage of equipment and the purposes of each.
8. The student will be able to identify, explain and demonstrate use of pans, containers and molds and the purposes of each.

9. The student will be able to identify, explain and demonstrate use of hand tools and other small equipment/tools used in the bakeshop.
10. The student will be able to explain and demonstrate proper care, cleaning and sanitation of all equipment and hand tools.

*The student will be able to list and describe the major baking ingredients, characteristics and functions of each ingredient.*

11. The student will be able to classify the different wheat varieties and describe each.
12. The student will be able to compare and contrast the various types of flour and the composition of each type.
13. The student will be able to identify other flours, meals and starches and explain the function of each.
14. The student will be able to classify the various sugars and explain their functions.
15. The student will be able to list the types of fats and explain their functions.
16. The student will be able to categorize milk and milk products according to the composition and explain the functions of each milk product.
17. The student will be able to draw and label the parts of an egg.
18. The student will be able to categorize eggs according to grades and quality.
19. The student will be able to identify the various market forms of eggs.
20. The student will be able to define leavening agents.
21. The student will be able to identify different leavening agents used in baking and explain how each works.
22. The student will be able to identify gelling agents and explain the process of gelatinization.
23. The student will identify, explain the characteristics, and functions of fruits and nuts.
24. The student will classify the varieties of chocolate and cocoa and explain the functions and usage in the bakeshop.
25. The student will understand the characteristics and functions of salt, spices, and other flavorings.

*The student will be able to apply procedures for substituting ingredients.*

26. The student will be able to create a chart of substitutions for ingredients as well as procedures for making substitutions in baking.
27. The student will be able to summarize the importance of correctly substituting ingredients in the bakeshop and the consequences of incorrectly substituting.

*The student will be able to list and describe the twelve basic steps in the production of yeast goods.*

28. The student will be able to outline the three basic mixing processes in the production of doughs and batters.
29. The student will be able to understand and control the factors affecting dough fermentation.

30. The student will be able to explain the changes that occur to dough or batter as it goes through the baking process.
31. The student will be able to explain the importance of cooling and staling that occur after baking.
32. The student will be able to recognize and correct faults in yeast production.

**ASSESSMENT OF LEARNER OUTCOMES:** Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

**SPECIAL NOTES:**

This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student's progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college's policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center, in Rm. 3354 or call at: 288-7670.