



## INTRODUCTION TO BAKING SCIENCE

Course Syllabus

Date 11/29/11

C - L - CR  
0 - 3 - 1.0

**COURSE NUMBER:** HOS 112

**PREREQUISITE(S):** RDG 100, MAT 031/032

**CO-REQUISITE(S):** None

**COURSE DESCRIPTIONS** This course covers the applications of fundamentals and principles of basic baking. Emphasis is placed on skill development for quality commercial bakery products.

**TEXTBOOK(S):** Labensky, Sarah R. On Baking a Textbook of Baking and Pastry Fundamentals and Study Guide. 2<sup>nd</sup> Edition. Upper Saddle River, New Jersey: Prentice Hall, 2009. ISBN #: 0-13-157923-1

**REFERENCE(S):** None

**OTHER REQUIRED MATERIALS, TOOLS, AND EQUIPMENT:**

**Uniforms:**

Must be worn to ALL lab classes and official school functions

1. SCC embroidered chef jacket
2. Black and white check pants
3. Plain white T-shirt (worn underneath jacket)
4. White calotte flat hat
5. White apron
6. Non-skid, rubber sole shoes, black (tennis shoes and clogs with holes in them are not permitted)

**Supplies:**

1. SCC knife kit (includes thermometer\*)
2. 3-ring binder notebook with dividers
3. Writing implements: pens, pencils, highlighters, permanent markers/sharpies\*  
\*Permanent markers/sharpies and thermometers are to be worn on the chef coat sleeve as part of the uniform
4. USB flash drive
5. Calculator

**METHOD OF INSTRUCTION:**

Lecture, lab, guest speakers, demonstrations, field trips

**GRADING SYSTEM:**

90 - 100 = A  
80 - 89 = B  
70 - 79 = C  
60 - 69 = D  
Below - 60 = F

The standard mathematical procedure of rounding will be applied to arrive at a whole number percentage in final grade calculation.

**GRADE CALCULATION METHOD:**

|                      |   |             |
|----------------------|---|-------------|
| Class Participation  | = | 10%         |
| Lab Performance      | = | 25%         |
| Assignments          | = | 15%         |
| Unit Tests           | = | 25%         |
| Final Written Exam   | = | 10%         |
| Final Practical Exam | = | 15%         |
|                      | = | <u>100%</u> |

**ATTENDANCE POLICY:**

The student is responsible for punctual and regular attendance in all classes, laboratories, clinical, practica, internships, field trips, and other required class activities. The College does not grant excused absences; therefore, students are urged to reserve their absences for emergencies. When illness or other emergencies occur, the student is responsible for notifying instructors and completing missed work if approved for late submission by instructors.

The student is tardy if not in class at the time the class is scheduled to begin and is admitted to class at the discretion of the instructor.

Instructors maintain attendance records. However, it is the student's responsibility to withdraw from a course. A student enrolling in and attending at least one course session remains enrolled until the student initiates a withdrawal.

Withdrawal Policy: During the first 75% of the course, a student may initiate withdrawal and receive a grade of W. A student cannot initiate a withdrawal during the last 25% of the course. Extenuating circumstances require documentation and approval by the appropriate department head and academic dean.

Absences for Religious Holidays: Students who are absent from class in order to observe religious holidays are responsible for the content of any activities missed and for the completion of assignments occurring during the period of absence. Students who anticipate their observance of religious holidays will cause them to be absent from class and do not wish such absences to penalize their status in class should adhere to the following guidelines:

1. Observance of religious holidays resulting in three or fewer consecutive absences: Discuss the situation with the instructor and provide written notice at least one week prior to the absence(s). Develop (in writing) and instructor-approved plan which outlines the make up of activities and assignments.
2. Observances of religious holidays resulting in four or more consecutive absences: Discuss the situation with the instructor and provide the instructor with written notice within the first 10 days of the academic term. Develop an instructor-approved plan with outlines the make up of activities and assignments.

**CLASSROOM  
CONDUCT:**

**ACADEMIC DISHONESTY:** Students are expected to uphold the integrity of the College's standard of conduct, specifically in regards to academic honesty. All forms of academic dishonesty including, but not limited to, cheating on assignments/tests, plagiarism, collusion, and falsification of information will call for disciplinary action. Disciplinary action imposed may include one or more of the following: written reprimand, loss of credit for assignment/test, termination from course, and probation, suspension, or expulsion from the College. For further explanation of this and other conduct codes, please refer to the Student Handbook.

**CELLULAR PHONES AND PAGERS/BEEPERS:** Cellular phones, pagers and beepers are not permitted to be turned on or used within the classroom. Use of these devices during classroom time will be considered a violation of the student code as it relates to “disruptive behavior.”

**CLASS/LAB  
PROCEDURES:**

Students must master all HOS 120 competencies (documented below) in order to receive an overall passing grade in this course. Failure to master any one of the competencies will result in a failing grade for this semester. Mastery is considered 70% or higher on all practical exams,

papers, projects, assignments and a 70% or higher average of all written tests and exams. Failure to receive 70% or higher for class requirements will result in failure of the course.

Students will adhere to all rules in the lab. The lab must be thoroughly cleaned before students are allowed to leave. Students are not dismissed until the instructor dismisses the class.

**The Learning Center**, located in the rooms E-2 & E-5 of the East Building, provides computers for your use. Check the website <http://www.sccsc.edu/resources/tutoring/tlc> or call 592-4968 for current semester operating hours.

**ACCOMMODATIONS:**

Students who need special accommodations in this class because of a documented disability should notify Student Disability Services by calling (864) 592-4818, toll-free 1-800-922-3679; via email through the SCC web site at [www.sccsc.edu/resources/disabilities](http://www.sccsc.edu/resources/disabilities); or by visiting the office located in the East Building Room 30-B on the SCC Central campus. Contacting Student Disability Services early in the semester gives the College an opportunity to provide necessary support services and appropriate accommodations.

**Inclement Weather Schedule:**

- Check SCC Web Site: [www.sccsc.edu](http://www.sccsc.edu)
- Tune to **Channel-7** Local T.V. Station (CBS)
- Tune to an FM/AM Local radio station

**Program Coordinator:**

Chief Dawn Larrieu  
592-4836  
[larrieud@sccsc.edu](mailto:larrieud@sccsc.edu)

**Program Chair:**

Mrs. Karen Ravan  
592-4840  
[ravank@sccsc.edu](mailto:ravank@sccsc.edu)

**COURSE OUTCOMES  
& OBJECTIVES:**

**Upon satisfactory completion of this course, the student will be able to:**

- I. Basic Baking: To apply the fundamentals of baking science to the preparation of a variety of products. To use and care for equipment normally found in the bakeshop or baking area.
  1. Define baking terms.
  2. Identify equipment and utensils used in baking and discuss proper use and care.
  3. Demonstrate proper selection of equipment and utensils for specific application.
  4. Identify ingredients used in baking.
  5. Demonstrate proper scaling and measurement techniques.
  6. Apply basic math skill to recipe conversions.
  7. Describe properties and list function of various ingredients.
  8. Define and describe quick-breads and the mixing methods utilized to produce them.
  9. Define and describe the steps in the production of yeast-leavened breads.
  10. Define and describe the various types of pies and tarts and the mixing methods utilized to produce them.
  11. Define and describe the variety of cookie types and the mixing methods utilized to produce them.
  12. Define and describe the variety of cake types and the mixing methods utilized to produce them.
  13. Produce and evaluate the quality of a variety of types of quick breads, cookies and pie doughs.
  14. Discuss the application of mixes and other value added products.
  15. Demonstrate the presentations of baked goods and desserts.
  16. Discuss nutritional concerns as they apply to baking.
  17. Discuss recipe modification to create more nutritionally beneficial baked goods and desserts.
  
- II. Business and Math Skills: To perform mathematical functions related to foodservice operations
  1. Perform basic math functions.
  2. Calculate food costs and percentages.
  3. Perform recipe yield conversions.

4. Perform the process of recipe costing.
  5. Determine selling price of menu items.
- III. Food Preparation: To develop skills in knife tool and equipment handling and Apply principles of food preparation to produce a variety of food products. To operate equipment safely and correctly. To Apply knowledge of laws and regulations relating to safety and sanitation in the kitchen.
1. Demonstrate knife skills, hand tool and equipment operation, emphasizing proper safety techniques.
  2. Identify the parts/components of a recipe.
  3. Describe and use a standardized recipe.
  4. Outline the procedure for writing a standardized recipe.
  5. Write a standardized recipe.
  6. Identify and use utensils, pots and pans and Demonstrate safe practices using stoves, mixers, ovens, etc.
  7. Utilize standard weights and measures to Demonstrate proper scaling and measurement techniques.
- IV. Sanitation: To develop an understanding of the basic principles of sanitation and safety and to be able to apply them in the foodservice operations. To reinforce personal hygiene habits and food handling practices that protects the health of the consumer.
1. List and define the fundamentals of good personal hygiene.
  2. Demonstrate good personal hygiene and health habits in a laboratory setting.
  3. Demonstrate acceptable procedures when preparing potentially hazardous foods to include time/temperature principles.
  4. Develop cleaning and sanitizing schedule and procedures for equipment and facilities.
  5. Identify proper methods of waste disposal and recycling.
  6. Demonstrate appropriate emergency policies for kitchen and dining room injuries.
  7. Describe appropriate types and use of fire extinguishers used in the foodservice area.
  8. Review and discuss laws and rules of the regulatory agencies governing sanitation and safety in foodservice operation.

