INSTRUCTIONAL PACKAGE

BKP 112

Intro to Baking Science

Effective Term
Spring / 2024

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: Spring 2024

COURSE PREFIX: BKP 112   COURSE TITLE: Intro to Baking Science

CONTACT HOURS: 1   CREDIT HOURS: 1

RATIONALE FOR THE COURSE:
Student will learn the functions of various ingredients, and nutrition. This course covers the chemical and physical changes in foods that occur with cooking, handling, and processing. Emphasis is placed on practical application of heat transfer and its effect on color/flavor/texture, emulsification, protein coagulation, leavening agents, viscosity, and gel formation. Upon completion, students should be able to demonstrate an understanding of these principles as they apply to food preparation in an experimental setting. This new knowledge will be important for developing new baked products and perfecting baking skills. Students will also study government regulations for food products and production.

COURSE DESCRIPTION:
This course is the study of ingredient functions, product identification, weights and measures as they apply to baking. Students learn to identify various types of flours, leaveners, and pastry ingredients that affect the outcomes of their finished baked goods.

PREREQUISITES/CO-REQUISITES:
CUL 113

REQUIRED MATERIALS:
Textbook: On Food and Cooking by Harold Mc Gee
Please visit the BOOKSTORE online site for most current textbook information.

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:
BPA Tool Bag, Masking Tape, Sharpie, Pen, Notebook, and Full BPA Uniform.

Uniform: Double Breasted Coat w/ College Logo and Name Embroidered, Checkered Black and White Pants, Black Bakers hat, White Apron, and Black Slip Proof Kitchen Shoes.

TECHNICAL REQUIREMENTS:
Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials.
Access to myHGTC portal for student self-services.
College email access – this is the college's primary official form of communication

STUDENT IDENTIFICATION VERIFICATION
Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:
As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit Online Netiquette.

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:
Upon successful completion of this course, the student should be able to:

- Use sensory evaluations for testing the various properties of foods.
- Explain the structure of proteins and the changes they go through during denaturization/coagulation.
- Explain the differences in the makeup of complex carbohydrates vs. simple carbohydrates.
- Explain how pH affects the pigmentation and texture of foods.
- Explain how temperature and solution relationships affect simple sugars and their crystalline structures.
- Explain the different properties of common food lipids and how those different properties affect finished food products.
- Explain how various biological leaveners are used, and how they are affected by various pH levels, salt levels, and temperatures.
- Define gluten and be able to identify structural characteristics and variables affecting gluten.

Course Objectives:

While objectives are specific areas of importance, competencies define a broader set of goals. At the completion of this course the student should be able to:

- Identify inorganic compounds most often used in food production and how they affect organic compounds.
- Identify the various chemical leavening agents used in baking/cooking, and explain how they react in various pH batters, solutions, and mixes.
- Identify common kitchen starches, and explain how they are different in their gelatinization and retro-gradation properties.
- Identify the different properties associated with solutions, colloidal dispersions, emulsions, and foams.

Employability Skills:

One of the instructional goals of the International Culinary Institute of Myrtle Beach is to assist the student in developing employability skills by coaching and teaching these skills. This is accomplished by setting high expectations, and establishing accountability for these expectations by giving timely, positive and consistent feedback. Both the instructor and the students will participate in a learning community that models excellent employability skills: Teamwork, Time Management, Communication, Problem Solving, and Professionalism.

Students – please refer to the Instructor's Course Information sheet for specific information on assessments and due dates.

General Education Outcomes

This course fulfills the following General Education Outcomes through:

- Use sensory evaluations for testing the various properties of foods.
- Identify inorganic compounds most often used in food production and how they affect organic compounds.
- Demonstrate standards for sanitary product use and storage of items produced in the baking and pastry class

Upon completion of this course, students will be able to:
☒Communicate effectively;
☒Think critically;
☒Self and professional development.

Effective Professional and Interpersonal Communication (EPIC)

This course fulfills HGTC's Quality Enhancement Plan for Effective Professional and Interpersonal Communication. Upon completion of this course, students will be able to:
(Check all that apply.)

☒Utilize appropriate communication formats when conveying professional and interpersonal thoughts and ideas.

☒Apply appropriate language when speaking and writing for their chosen field of study or Industry.

☒Demonstrate appropriate communication techniques when engaging audiences.

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*
Students' performance will be assessed, and the weight associated with the various measures/artifacts are listed below.

EVALUATION*

Daily grade - kitchen	**40%**
D2L quizzes	**30%**
Final Practical Exam	**20%**
Final Sugar or Chocolate Bean to Bar Paper	**10%**

Daily Points Breakdown (Total of 25 points per day) for 40% of Final Grade
 (An absence equals ZERO)

Personal Appearance / Uniform	1-5pts
Recipe Cards/Course Pack	1-5 pts
Technical skills/quality of work/participation	1-5 pts
Present and ON TIME	1-5 pts
Sanitation practices	1-5 pts

D2L QUIZZES (100-point scale) for 30% of Final Grade

There will be quizzes that will be given on D2L. These quizzes will also be your test bank for your final written exam.

Final Sugar or Chocolate Bean to Bar Paper (100-point scale) for 10% of Final Grade

A five-page paper to include the following:
        (1) Title page with Name, Course Number, Date, Title of Paper
        (2) Introduction or BRIEF SUMMARY of the paper (one paragraph)
        (3) Three pages of actual (BODY) of Paper in (Double space, Times roman numeral, 12-point font)
        (4) Citations in APA Format
        (5) Content of the paper is to include - History and How Sugar or Chocolate gets to the "Bag" or "Bar" stage
        (6) Any assistance as pertaining to the Actual Writing can be attained through the SSTC. They are aware of this project and the due date. Please do not wait till week 6 to try and complete this paper.

Final Exam and Process for 20% of Final Grade

There are combined Quiz questions that make up the Final Exam Process

No late assignments will be graded. You will receive a Zero for the Journal, Report or Test. This is your responsibility to keep up with!

*Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.

GRADING SYSTEM:
State the College's or departmental grading system as delineated in the Catalog. Please note the College adheres to a 10 point grading scale A = 100 – 90, B = 89- 80, C = 79 – 70, D = 69 – 60, F = 59 and below. You must have your Dean's approval if changes in the scale are made.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop (http://www.hgtc.edu/academics/academiccalendars.html).   You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the

course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.**

For online and hybrid courses, check your Instructor's Course Information Sheet for any required on-site meeting times. Please note, instructors may require tests to be taken at approved testing sites, if you use a testing center other than those provided by HGTC, the center may charge a fee for its services.

Attendance for Face-to-Face Courses:
For a 14-week course (fall and spring) the allowed number of absences for a MW or TR class is as follows: 5 absences are allowed regardless of reason. After the allowed number of misses, the student will be dropped from the course with a W or a WF.

Part V: Student Resources

THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

The SSTC offers to all students the following **free** resources:
1.   **Academic tutors** for most subject areas, **Writing Center support**, and **college success skills**.
2.   Online **tutoring** and academic support resources.
3.   Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the Student Success & Tutoring Center website for more information. To schedule tutoring, contact the SSTC at sstc@hgtc.edu or self-schedule in the Penji iOS/Android app or at www.penjiapp.com. Email sstc@hgtc.edu or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the Online Resource Center to access on-demand resources.

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STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following <u>free</u> resources:

1. **Getting around HGTC**: General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. Use the [Online Resource Center (ORC)](#) including Office 365 support, password resets, and username information.
3. **In-person workshops, online tutorials and more services** are available in Desire2Learn, Student Portal, Degree Works, and Office 365.
4. **Chat with our staff on TECH Talk**, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the [Tech Central](#) website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.

HGTC LIBRARY:

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries are equipped with computers to support academic research and related school work; printing is available as well. Visit the [Library](#) website for more information or call (843) 349-5268.

STUDENT TESTING:

Testing in an **online/hybrid** course and in **make-up exam** situations may be accomplished in a variety of ways:

- Test administered within D2L
- Test administered in writing on paper
- Test administered through Publisher Platforms (which may have a fee associated with the usage)

Furthermore, tests may have time limits and/or require a proctor.

Proctoring can be accomplished either face-to-face at an approved site or online through our online proctoring service. To find out more about proctoring services, please visit the [Online Testing](#) section of the HGTC's Testing Center webpage.

The **Instructor Information Sheet** will have more details on test requirements for your course

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DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's [Accessibility and Disability Service webpage](). The Accessibility and Disability staff will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

TITLE IX REQUIREMENTS:

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college's Chief Student Services Officer, campus law enforcement, or with the college's Title IX Coordinator or designee.

> *Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

INQUIRIES REGARDING THE NON-DISCRIMINATION/TITLE IX POLICIES:

Student and prospective student inquiries concerning Section 504, Title II, Title VII, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.

> **Dr. Melissa Batten, VP Student Affairs**
> *Title IX, Section 504, and Title II Coordinator*
> Building 1100, Room 107A, Conway Campus
> PO Box 261966, Conway, SC 29528-6066
> 843-349-5228
> Melissa.Batten@hgtc.edu

Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their

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application to the College may be directed to the Vice President for Human Resources.

Jacquelyne Snyder, VP Human Resources
Affirmative Action/Equal Opportunity Officer and Title IX Coordinator
Building 200, Room 205B, Conway Campus
PO Box 261966, Conway, SC 29528-6066
843-349-5212
Jacquelyne.Snyder@hgtc.edu