NUTF 0005 - FOOD PREPARATION FOR NUTRITION AND LIFE FITNESS

Catalog Description

Advisory: Eligibility for ENGL 1A
Hours: 90 (36 lecture, 54 laboratory)
Description: Focuses on the application of food science principles. Emphasis on ingredient function and interaction, food preparation techniques, sensory evaluation, food safety and sanitation, and nutrient composition of foods. Modification of recipes to optimize nutrient content. (C-ID NUTR 120) (CSU)

Course Student Learning Outcomes

- CSLO #1: Create recipe modifications to meet dietary guidelines with regard to family, ethnic, and cultural environments and disease prevention and management.
- CSLO #2: Evaluate the nutrient value of foods through the use of product food labels and recipes.
- CSLO #3: Apply sanitation principles for personal and workspace cleanliness to prevent foodborne illness.
- CSLO #4: Distinguish factors that affect sensory attributes of food.

Effective Term

Fall 2020

Course Type

Credit - Degree-applicable

Contact Hours

90

Outside of Class Hours

72

Total Student Learning Hours

162

Course Objectives

Lecture Objectives:
1. Explain basic food science principles at work in producing, processing, preparing, preserving, and metabolizing food
2. Describe accepted food safety and sanitation procedures
3. Identify and compare preparation methods to optimize nutrient content
4. Explain food preparation techniques using appropriate terminology
Laboratory Objectives:
1. Prepare and present a variety of products from each major category of food (e.g., dairy, grains, meat, etc.)
2. Apply basic food science principles in the preparation of food
3. Utilize accepted food safety and sanitation procedures
4. Demonstrate food preparation techniques using appropriate terminology
5. Apply the use of weights, measures and conversions in food preparation
6. Follow a standardized recipe
7. Evaluate sensory attributes of food (e.g. taste, texture, aroma, appearance)
8. Select, use and maintain laboratory equipment and utensils appropriately

General Education Information

- Approved College Associate Degree GE Applicability
  - AA/AS - Health Ed/Physical Ed
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

Articulation Information

- CSU Transferable

Methods of Evaluation

- Objective Examinations
  - Example: Students will complete an objective exam which assesses accepted food safety and sanitation procedures. Standard grading. At which temperature do bacteria multiply at an accelerated rate? A. below 0 degrees Fahrenheit B. 0-40 degrees Fahrenheit C. 41-135 degrees Fahrenheit D. 140-165 degrees Fahrenheit
- Reports
  - Example: Students will modify a recipe to meet the dietary requirements for a specific health condition of their choosing (e.g. celiac disease, lactose intolerance, heart disease) and compose a report comparing the original and modified recipes. Reports will be evaluated using an instructor created rubric.
- Skill Demonstrations
  - Example: 1. Students will prepare a dish using a standardized recipe and complete a sensory evaluation on the prepared dish. Students will be evaluated using an instructor created rubric. 2. Students will complete a final practical exam using ingredients provided by the instructor to produce a flavorful dish. Students will be evaluated using an instructor created rubric.

Repeatable

No

Methods of Instruction

- Laboratory
- Lecture/Discussion
- Distance Learning

Lab:

1. Instructor will outline the steps required to prepare 3 different egg dishes. Students will prepare each dish according to the recipe guidelines.
2. Instructor will guide student through the sensory evaluation of 3 prepared egg dishes. Students will complete a worksheet analyzing the taste, texture, aroma and appearance of each dish.

Lecture:

1. Instructor will demonstrate the use of the computer software program for recipe analysis and students will analyze and evaluate a family recipe.
2. Instructor will show a video of a controversial nutrition topic (e.g. GMOs, organic food production)and students will then discuss the pros and cons of each view point.

Distance Learning

1. Instructor will create a discussion board prompt on the most common home kitchen safety and sanitation blunders. Students will reply to the prompt by identifying which safety and sanitation procedures are lacking in their own personal cooking space and research the solutions for each. Students will reply to at least 2 other student posts with additional relevant information and/or a thought provoking question.
2. Instructor will provide a written recipe and video demonstration on how to prepare, assemble and bake pizza dough with toppings. Students will prepare according to the recipe guidelines using take-home laboratory kit ingredients, document the process using photos or video, and complete a sensory evaluation of the dish.

Typical Out of Class Assignments
Reading Assignments

1. Students will complete a quiz after reading the textbook and a handout on the topic of safe food handling. 2. Students will read 3 similar product recipes utilizing different preparation methods and complete a worksheet to determine which method most optimizes nutrient content.

Writing, Problem Solving or Performance

1. Students will research a family recipe by entering the ingredients into a diet analysis program, evaluating the data, and writing an analysis of the findings. 2. Students will prepare 5 types of dough using yeast, baking soda, baking powder, air and unleavened. Students will complete a written analysis of each leavening agent and how each affected the final outcome of the product. 3. Students will visit a local farmer's market, interview a farmer, and write a synopsis of their findings. 4. Students will modify a recipe to meet the dietary requirements for a specific health condition of their choosing (e.g. celiac disease, lactose intolerance, heart disease) and compose a report comparing the original and modified recipes.

Other (Term projects, research papers, portfolios, etc.)
Required Materials

- Understanding Food: Principles and Preparation
  - Author: Amy Brown
  - Publisher: Cengage Learning
  - Publication Date: 2018
  - Text Edition: 6th
  - Classic Textbook?:
  - OER Link:
  - OER:
- Introductory Foods
  - Author: Amanda Frye and Barbara Scheule
  - Publisher: Pearson
  - Publication Date: 2019
  - Text Edition: 15th
  - Classic Textbook?:
  - OER Link:
  - OER:
- Laboratory Manual for Foods: Experimental Perspectives
  - Author: Margaret McWilliams
  - Publisher: Pearson
  - Publication Date: 2011
  - Text Edition: 8th
  - Classic Textbook?:
  - OER Link:
  - OER:
- Lab Manual for Brown's Understanding Food, Principles and Preparation
  - Author: Amy Brown
  - Publisher: Cengage Learning
  - Publication Date: 2014
  - Text Edition: 5th
  - Classic Textbook?:
  - OER Link:
  - OER:

Other materials and-or supplies required of students that contribute to the cost of the course.

Access to a diet analysis program.