KERN COMMUNITY COLLEGE DISTRICT – CERRO COSO COLLEGE HCRS C122 COURSE OUTLINE OF RECORD

1. **DISCIPLINE AND COURSE NUMBER:** HCRS C122

2. **COURSE TITLE:** Principles of Food Preparation

3. SHORT BANWEB TITLE:

4. **COURSE AUTHOR:** Ama, Suzanne N.

5. COURSE SEATS: -

6. **COURSE TERMS:** 30 = Spring 7. **CROSS-LISTED COURSES:**

8. PROPOSAL TYPE: CC New Course9. START TERM: 30 = Spring, 2017

10. **C-ID:** NUTR 120

11. **CATALOG COURSE DESCRIPTION:** This course introduces concepts of food composition and selection of quality foods. Principles of professionalism in food preparation include food service sanitation, safety, and demeanor. Students learn basic culinary concepts, including moist and dry cooking or preparation of meats, eggs, dairy, fruits and vegetables, cereals and breads, desserts, and beverages. Students also learn techniques in recipe specification and food cost calculations.

12. **GRADING METHOD**

Default: S = Standard Letter Grade

Optional:

13. **TOTAL UNITS:** 3

14. INSTRUCTIONAL METHODS / UNITS & AMP; HOURS:

| <u>Method</u> | <u>Min</u> | <u>Min</u> |
|-----------------------------------|--------------|------------|
| | <u>Units</u> | Hours |
| Lecture | 2 | 36 |
| Lab | 1 | 54 |
| Activity | 0 | 0 |
| Open Entry/Open Exit | 0 | 0 |
| Volunteer Work Experience | 0 | 0 |
| Paid Work Experience | 0 | 0 |
| Non Standard | 0 | 0 |
| Non-Standard Hours Justification: | | |

15. **REPEATABILITY**

Type: Non-Repeatable Credit

16. MATERIALS FEE: No 17. CREDIT BY EXAM: No

18. CORE MISSION APPLICABILITY: Associate Degree Applicable (AA/AS); CSU Transfer

19. **STAND-ALONE:** No

20. PROGRAM APPLICABILITY

Required: Nutrition and Dietetics (AS-T Degree Program)

Restricted Elective:

Elective:

21. GENERAL EDUCATION APPLICABILITY

Local:

IGETC:

CSU:

UC Transfer Course:

CSU Transfer Course: California Polytechnic State University = FSN 121: Fundamentals of Food California State University, Long Beach = HFHM 176: Fundamentals of Food Preparation California State University, Sacramento = FACS 11: Principles of Food Preparation

22, STUDENT LEARNING OUTCOMES Upon completion of the course, the student will be able to

- 1. Apply safety and sanitation procedures in the preparation and preservation of foods.
- 2. Evaluate the sensory attributes of foods.
- 3. Identify food preparation terminology and techniques.
- 4. Compare preparation and preservation methods for a variety of foods to optimize nutrient content.
- 5. Apply knowledge of weights, measures, and conversions to the use of a standardized recipe.
- 6. Apply basic food science principles in the preparation and presentation of a variety of products from each food category.

23. **REQUISITES**

Advisory:

HCRS C121

Content Review/Content Review + Statistics

ENGL C070

Content Review/Content Review + Statistics

24. **DETAILED TOPICAL OUTLINE:**

Lecture:

Course 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
- 3. Describe and utilize accepted food safety and sanitation procedures
- 4. Identify and compare preparation methods to optimize nutrient content
- 5. Demonstrate basic knowledge of food preparation terminology and techniques
- 6. Demonstrate basic knowledge of weights, measures and conversions
- 7. Demonstrate the ability to follow a standardized recipe
- 8. Evaluate sensory attributes of food
- 9. Select, use and maintain laboratory equipment and utensils appropriately

Topical Outline

- A. Basic food science principles, terminology and techniques
 - a. Heat Transfer
 - b. Egg Structure and Uses
 - Effects of Heat on Starches & Sugars
 - d. Denaturing Proteins

- e. Function of Cooking Fats
- f. States and Function of Water in Cooking
- g. Forming Emulsions
- h. Weights, measures, and unit conversions
- Following a standardized recipe
- B. Ingredient functions and interactions
 - Fats a.
 - b. Starches/sugars
 - c. Proteins
 - d. Leavening agents
 - e. Seasonings
 - f. **Probiotics**
- C. Product standards and sensory evaluation
 - a. Government regulation of foods and certifications
 - b. Determining ripeness/freshness
 - c. Sweet, salty, bitter, sour, pungent, and umami sensory evaluation
- Equipment and utensils D.
 - a. Appliances
 - b. Measuring utensils
 - c. Mixing utensils
 - d. Cooking/baking utensils
 - e. Aluminum, Stainless Steel, Ceramic, Glass
 - Cutlery f.
- E. Storage standards
 - a. Food preservation methods
 - b. Storing Unfrozen meat, poultry, and fish

 - c. Storing Dairyd. Storing Condiments
 - e. Storing Produce
 - f. Storing Leftovers
- Sanitation and safety F.
 - a. Sanitation of surfaces, equipment, and utensils
 - b. Cleaning foods
 - c. Cutlery safety
 - d. Preventing burns
- G. **Preparation Methods**
 - a. Meats, poultry, fish
 - b. Phytochemical-dense foods
 - c. Carbohydrate starch foods
 - d. Using fats
- Nutrient composition and retention Н.
 - a. Vitamin and mineral sources in foods
 - b. Cooking and preservation methods that lose nutrients

c. Cooking and preservation methods that retain nutrients

Lab:

Course Objectives

- 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
- 3. Describe and utilize accepted food safety and sanitation procedures
- 4. Identify and compare preparation methods to optimize nutrient content
- 5. Demonstrate basic knowledge of food preparation terminology and techniques
- 6. Demonstrate basic knowledge of weights, measures and conversions
- 7. Demonstrate the ability to follow a standardized recipe
- 8. Evaluate sensory attributes of food
- 9. Select, use and maintain laboratory equipment and utensils appropriately

Topical Outline

- A. Basic food science principles, terminology and techniques
 - a. Heat Transfer
 - b. Egg Structure and Uses
 - c. Effects of Heat on Starches & Sugars
 - d. Denaturing Proteins
 - e. Function of Cooking Fats
 - f. States and Function of Water in Cooking
 - g. Forming Emulsions
 - h. Weights, measures, and unit conversions
 - Following a standardized recipe
- B. Ingredient functions and interactions
 - a. Fats
 - b. Starches/sugars
 - c. Proteins
 - d. Leavening agents
 - e. Seasonings
 - f. Probiotics
- C. Product standards and sensory evaluation
 - a. Government regulation of foods and certifications
 - b. Determining ripeness/freshness
 - c. Sweet, salty, bitter, sour, pungent, and umami sensory evaluation
- D. Equipment and utensils
 - a. Appliances
 - b. Measuring utensils

- c. Mixing utensils
- d. Cooking/baking utensils
- e. Aluminum, Stainless Steel, Ceramic, Glass
- f. Cutlery
- E. Storage standards
 - a. Food preservation methods
 - b. Storing Unfrozen meat, poultry, and fish
 - c. Storing Dairy
 - d. Storing Condiments
 - e. Storing Produce
 - f. Storing Leftovers
- F. Sanitation and safety
 - a. Sanitation of surfaces, equipment, and utensils
 - b. Cleaning foods
 - c. Cutlery safety
 - d. Preventing burns
- G. Preparation Methods
 - a. Meats, poultry, fish
 - b. Phytochemical-dense foods
 - c. Carbohydrate starch foods
 - d. Using fats
- H. Nutrient composition and retention
 - a. Vitamin and mineral sources in foods
 - b. Cooking and preservation methods that lose nutrients
 - c. Cooking and preservation methods that retain nutrients

25. METHODS OF INSTRUCTION--Course instructional methods may include but are not limited to

- 1. Audiovisual;
- 2. Computational Work;
- 3. Discussion;
- 4. Group Work;
- 5. Instruction through examination or guizzing;
- 6. Laboratory;
- 7. Lecture;
- 8. Outside reading;
- 9. Peer analysis, critique & feedback;

26. OUT OF CLASS ASSIGNMENTS: Out of class assignments may include but are not limited to

Reading – Textbook and other assigned readings are required outside of class. Example: Students read about what jurisdictions are assigned to the FDA versus the USDA.

Lab Reports – Students apply critical thinking skills by forming a hypothesis about the effects of ingredients, manipulation, and cooking methods upon prepared foods. Materials and methods are described, and the results are documented. Students discuss the results and extrapolate conclusions that could be applied to the preparation of other types of foods. Students will be

required to properly cite references.

Example: Students will write a report about the oxidation of vegetables.

Term Paper – Students will write a position paper on a current issue in food safety or quality. Example: A student may write a paper about what organic certification means and what consumer and special interests have influenced current policy.

27, METHODS OF EVALUATION: Assessment of student performance may include but is not limited to

Lab Reports – Students apply critical thinking skills by forming a hypothesis about the effects of ingredients, manipulation, and cooking methods upon prepared foods. Materials and methods are described, and the results are documented. Students discuss the results and extrapolate conclusions that could be applied to the preparation of other types of foods. Students will be required to properly cite references. Example: Students will write a report about the oxidation of vegetables.

Term Paper – Students will write a position paper on a current issue in food safety or quality. Example: A student may write a paper about what organic certification means and what consumer and special interests have influenced current policy.

Examination - Multiple choice

Example: Students will complete a multiple choice examination on concepts and principles covered in the class.

28, TEXTS, READINGS, AND MATERIALS: Instructional materials may include but are not limited to

Textbooks

Brown, A.. (2015) Understanding Food Principles and Preparation, 5th, Cengage Learning Brown, A.. (2015) Understanding Food Principles and Preparation - Lab Manual, 5th, Cengage Learning

Manuals

Periodicals

Software

Other

- 29. **METHOD OF DELIVERY:** Online with some required face-to-face meetings ("Hybrid"); Face to face;
- 30. **MINIMUM QUALIFICATIONS:** Dietetics (Masters Required); Nutritional Science/Dietetics (Masters Required);
- 31. APPROVALS:

Origination Date 09/09/2015

Last Outline Revision

Curriculum Committee Approval

Board of Trustees

State Approval

UC Approval UC Approval Status

CSU Approval CSU Approval Status

IGETC Approval Status

CSU GE Approval CSU GE Approval Status

Data Element Changes

Data Justification A new AS-T in Nutrition and Dietetics will be proposed, and this course is the only one that is not already in Cerro Coso's inventory.

Course Element Changes

Course Change Justification

Course ID (CB00)

TOP Code (CB03) 1306.00 - Nutrition, Foods, and Cul;

Course Credit Status (CB04) D - Credit - Degree Applicable;

Course Transfer Status (CB05) B = Transferable to CSU only

Course Units of Credit Maximum High (CB06): 3

Course Units of Credit Minimum Low (CB07): 3

Course Basic Skills (BS) Status (CB08): N = Course is not a basic skills course.

SAM Code (CB09): D = Possible Occupational;

Cooperative Education Course Status (CB10):

Course Classification Code (CB11):

Course Special Status (CB13):

CAN Code (CB14):

CAN-Code Seq (CB15):

Course Prior to College Level (CB21):

Course Non-Credit Category (CB22): Not Applicable, Credit Course;

Funding Agency Category (CB23):

Course Program Status (CB24): 1 - Program Applicable;