Cerro Coso College

Course Outline of Record Report

10/11/2021

HCRS C122 : Principles of Food Preparation

General Information

Author:	• Suzanne Ama • Wanta, Matthew • Davis, Clifford
Course Code (CB01) :	HCRS C122
Course Title (CB02) :	Principles of Food Preparation
Department:	Allied Health
Proposal Start:	Spring 2022
TOP Code (CB03) :	(1306.00) Nutrition, Foods, and Culinary Arts
SAM Code (CB09) :	Possibly Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000590711
Curriculum Committee Approval Date:	05/03/2019
Board of Trustees Approval Date:	06/13/2019
External Review Approval Date:	06/13/2019
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 and 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.
Submission Type:	Change to Content Changes made, based on discussion with Articulation Officer: Changed transferability to "UC and CSU Transferable" Removed CSU general education designations Also, Updated textbook Updated advisory reqs Delivery methods were previously approved, but not retained in eLumen for some reason. I redefined these.
Author:	No value

Faculty Minimum Qualifications

Master Discipline Preferred:	• Dietetics • Nutritional Science/ Dietetics
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Formerly Known As

Course Formerly Known As

No Value

Course Development Options

Basic Skills Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Pass/No Pass
- Letter Grade Methods

☐ Allow Students to Gain Credit by Exam/Challenge

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

Not applicable.

Rationale For Credit By Exam/Challenge

No value

Retake Policy Description

Non-Repeatable Credit

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

Course is not a support course

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
No value	No value	

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

Y

Transferability

Transferable to both UC and CSU

Transferability Status

Pending

C-ID	Categories	Status	Approval Date	Comparable Course
Nutrition/Dietetics	C-ID discipline	Approved	No value	NUTR 120

Units and Hours

Summary

Minimum Credit Units (CB07) 3

Maximum Credit Units (CB06) 3

Total Course In-Class (Contact) Hours	90
Total Course Out-of-Class Hours	72
Total Student Learning Hours	162
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Status (CB11)

Credit Course.

Funding Agency Category (CB23)

No value

☐ Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Classs
Lecture Hours	2	4
Laboratory Hours	3	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	36
Laboratory	54
Activity	0
Total	90
Course Out-of-Class Hours	
Lecture	72
Laboratory	0
Activity	0
Total	72

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

HCRSC121 - Nutrition (in-development)

It would be beneficial for students to have a prior fundamental understanding of macronutrients and micronutrients to better appreciate the effects of heat, oxygen, acids, fermenting, and storage on these nutrients.

This foundational knowledge is provided by HCRS C121.

AND

Advisory

ENGLC101 - Freshman Composition

Because HCRS C122 requires significant writing assignments, students are expected to be able to read and comprehend a college-level textbook explaining food science concepts and principles. In addition, they must critically analyze advanced scholarly articles for discussions, lab reports, and a term paper. This requires that they write in a clear and organized manner free from errors. The ENGL C101 advisory supports these skills and improves success for these assignments.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Audiovisual

Rationale	Video lectures are provided to clarify course concepts, and students record video of the application of various kitchen skills.
Methods of Instruction	Computational Work
Rationale	Students will learn out to convert measurements.
Methods of Instruction	Discussion
Rationale	A food science problem or scenario will be posted for students to discuss.
Methods of Instruction	Group Work
Rationale	Students may work in small groups to compare conclusions from lab assignments. Instruction through examination: Students must complete a weekly quiz covering the concepts in each chapter
Methods of Instruction	Laboratory
Rationale	Students prepare foods and think critically about how ingredients change the food's properties.
Methods of Instruction	Lecture
Rationale	Lectures are provided to the students to clarify concepts in each chapter
Methods of Instruction	Outside reading
Rationale	Students must read assigned articles and textbook readings, which relate to learning outcomes.
Methods of Instruction	Peer analysis, critique & feedback
Rationale	Peer review may be used to allow students to evaluate others' work, such as a laboratory report.

Assignments

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.

Methods of Evaluation	Rationale
Other	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.
Research Paper	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.
Tests	Examination - Multiple choice Example: Students will complete a multiple choice examination on concepts and principles covered in the class.
Distance Education Description: how outcomes are evaluated	All paper assignments are identical to those in an onsite class, except that they are uploaded to the course shell into a learning management system as an attachment. Weekly class discussions are conducted by means of online discussion forums within a learning management system. Uploaded quizzes or exams accessible through the class website are used. Feedback in online discussion forums and through e-mail is used. Substantive critiques of all essays and at least general responses to discussion posts are provided. Rubrics, stated in the syllabus, are used to evaluate online discussion work but are not required. As with any on-ground class, departmental rubrics are used to guide the assessment of essays.

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
Brown, A.	Understanding Food Principles and Preparation, 6th,	Cengage Learning	2018	978-1337557566
Brown, A	Understanding Food Principles and Preparation - Lab Manual, 5th	Cengage Learning	2014	978-1133607168

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

Prepare and present a variety of products from each major category of food (e.g., dairy, grains, meat, etc.)

Apply basic food science principles

Describe and utilize accepted food safety and sanitation procedures

Identify and compare preparation methods to optimize nutrient content

Demonstrate basic knowledge of food preparation terminology and techniques

Demonstrate basic knowledge of weights, measures and conversions

Demonstrate the ability to follow a standardized recipe

Evaluate sensory attributes of food

Select, use and maintain laboratory equipment and utensils appropriately

CSLOs

Apply safety and sanitation procedures in the preparation and preservation of foods. Expected SLO Performance: 70.0

Evaluate the sensory attributes of foods. Expected SLO Performance: 70.0

Identify food preparation terminology and techniques. Expected SLO Performance: 70.0

Compare preparation and preservation methods for a variety of foods to optimize nutrient content. Expected SLO Performance: 70.0

Utilize proper weights, measures, and conversions within a standardized recipe. Expected SLO Performance: 70.0

Apply basic food science principles in the preparation and presentation of a variety of products from each food category. Expected SLO Performance: 70.0

Outline

Course 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
- i.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

Lab 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
i.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

Delivery Methods

Delivery Method: Please list all that apply -Face to face -Online (purely online no face-to-face contact) -Online with some required face-to-face meetings (“Hybrid”) -Online course with on ground testing -iTV – Interactive video = Face to face course with significant required activities in a distance modality -Other

- Face to face
- Online (purely online no face-to-face contact)

Rigor Statement: Assignments and evaluations should be of the same rigor as those used in the on-ground course. If they are not the same as those noted in the COR on the Methods of Evaluation and out-of-class assignments pages, indicate what the differences are and why they are being used. For instance, if labs, field trips, or site visits are required in the face to face section of this course, how

will these requirements be met with the same rigor in the Distance Education section? Describe the ways in which instructor-student contact and student-student contact will be facilitated in the distance ed environments.

All assignments in distance education course sections of HCRS C122 are of the same rigor as those in the on-ground section, except that students in purely online sections will submit all of their assignments virtually. Instructor evaluation of student work in distance education course sections is the same as in the on-ground course section, except that evaluation of student work in the online version is presented virtually. Instead of onsite lectures, hybrid and online courses use a variety of methods including, but not limited to videos, and written lecture notes. Students will interact with the instructor and other students via discussion forums or similar methods.

Good practice requires both asynchronous and synchronous contact for effective contact. List the methods expected of all instructors teaching the course. -Learning Management System -Discussion Forums -Message -Other Contact -Chat/Instant Messaging -E-mail -Face-to-face meeting(s) -Newsgroup/Discussion Board -Proctored Exam -Telephone -iTV - Interactive Video -Other

- Discussion Forums
- Message
- Chat/Instant Messaging
- E-mail
- Newsgroup/Discussion Board

Software and Equipment: What additional software or hardware, if any, is required for this course purely because of its delivery mode? How is technical support to be provided?

No additional software or hardware is required for this class.

Accessibility: Section 508 of the Rehabilitation Act requires access to the Federal government's electronic and information technology. The law covers all types of electronic and information technology in the Federal sector and is not limited to assistive technologies used by people with disabilities. It applies to all Federal agencies when they develop, procure, maintain, or use such technology. Federal agencies must ensure that this technology is accessible to employees and the public to the extent it does not pose an "undue burden". I am using -iTV—Interactive Video only -Learning management system -Publisher course with learning management system interface.

- Learning management system

Class Size: Good practice is that section size should be no greater in distance ed modes than in regular face-to-face versions of the course. Will the recommended section size be lower than in on-ground sections? If so, explain why.

Online sections are not required to be lower than on-ground sections.

Emergency Distance Education Options The course will operate in remote delivery mode when all or part of the college service area is under an officially declared city, county, state, or federal state of emergency, including (check all that apply) - Online including all labs/activity hours - Hybrid with online lecture and onsite lab/activity hours - Correspondence education in high school and prison facilities - None. This course will be cancelled or paused if it cannot be held fully onsite.

- Online including all labs/activity hours