

# NUTRITION AND FOOD SCIENCE

## Contact Information

### Division

Sciences and Mathematics

### Dean

Randy Lehr

### Associate Dean

Ishtar Thomas-Lane (Interim)

### Division Office

V 211, Rocklin Campus

## Overview

The Nutrition and Food Science curriculum is designed to provide students with knowledge of nutrition principles and skills in food preparation techniques. The curriculum provides education for transfer to upper division institutions for careers in foods, food preparation or food service, dietetics and dietary health care and promotes optimum health to maximize one's physical, social and economic potential.

## Faculty

### Sonia Klenner

#### Professor, Nutrition and Food Science

B.S., California State University, Sacramento

M.S., San Diego State University

### Mithia Mukutmoni

#### Professor, Nutrition and Food Science

B.S., University of California, Irvine

Ph.D., University of California, Davis

## Nutrition, Food Science, and Fitness Advisory Committee

- Randy Cowen, Area Director of Fitness, Crunch Fitness, Sacramento
- Amy Summy, Fitness Director, Villa Sports, Roseville

## Degrees/Certificates

### Nutrition and Dietetics for Transfer

#### AS-T Degree

This program provides students with a strong foundation in nutrition, dietetics, and food science. Upon completion of this degree, students will be able to evaluate personal energy and nutrient requirements and food sources using current dietary assessment tools; demonstrate the understanding of the physiological processing of nutrients as they relate to energy balance, metabolism and physical activity; evaluate the impact of external variables on food safety, food choices, food beliefs, and disease risk; and identify dietary and lifestyle modifications for improving health throughout the life cycle.

The Associate in Science in Nutrition and Dietetics for Transfer degree (AS-T) prepares students to transfer into the CSU system to complete a bachelor's degree in nutrition, or a major deemed similar by a CSU campus.

Students earning an associate degree for transfer and meeting the CSU minimum transfer admission requirements are guaranteed admission with

junior standing within the CSU system. Students are also given priority admission consideration to their local CSU campus but not to a particular campus or major. Upon transfer, students will be required to complete no more than 60 additional prescribed units to earn a bachelor's degree.

To earn the Associate in Science in Nutrition and Dietetics for Transfer degree, students must complete 60 CSU-transferable semester units with a minimum grade point average of 2.0, including both of the following:

- completion of all courses required for the major with grades of "C" or better; and
- completion of the California State University General Education Breadth (CSU GE) (<http://catalog.sierracollege.edu/archive/2020-2021/student-resources/general-education/california-state-university-general-education-breadth-requirements>) pattern or the Intersegmental General Education Transfer Curriculum (IGETC) (<http://catalog.sierracollege.edu/archive/2020-2021/student-resources/general-education/intersegmental-general-education-transfer-curriculum-igetcpattern>). (Students transferring to a CSU campus using IGETC must complete Area 1C Oral Communication to be eligible for admission.)

The exact wording of the law pertaining to associate degrees for transfer may be found in Education Code Section 66746.

It is highly recommended that, prior to transferring, students complete courses that satisfy the CSU United States History, Constitution and American Ideals graduation requirement. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

**RESTRICTION:** International coursework from non-United States regionally accredited institutions cannot be applied to associate degrees for transfer.

### Required Courses

| Code                          | Title  | Units |
|-------------------------------|--|-------|
| BIOL 0004                     | Microbiology (OR)  | 5     |
| or BIOL 0008A<br>& BIOL 0008B | Microbiology I<br>and Microbiology II                            |       |
| BIOL 0006                     | Human Physiology   | 5     |
| CHEM 0001A                    | General Chemistry I (OR)   | 5-6   |
| or CHEM 0003A<br>& CHEM 0003B | General Chemistry I - Part 1<br>and General Chemistry I - Part 2 |       |
| CHEM 0001B                    | General Chemistry II   | 5     |
| NUTF 0005                     | Food Preparation for Nutrition and Life<br>Fitness               | 3     |
| NUTF 0010                     | Principles of Nutrition  | 3     |
| PSYC 0100                     | General Principles of Psychology                                 | 3     |
| Total Units                   |  | 29-30 |

## Courses

Understanding course descriptions (<http://catalog.sierracollege.edu/archive/2020-2021/student-resources/course-information/understanding-course-descriptions>)

**NUTF 0005. Food Preparation for Nutrition and Life Fitness**

*Units: 3*

Advisory: Eligibility for ENGL 1A

Hours: 90 (36 lecture, 54 laboratory)

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)

**NUTF 0010. Principles of Nutrition**

*Units: 3*

Advisory: Eligibility for ENGL 1A

Hours: 54 lecture

Scientific concepts of nutrition related to the function of nutrients in basic life processes and current health issues with emphasis on individual needs. The specific nutrient needs throughout the lifespan will also be examined. (C-ID NUTR 110) (CSU, UC)

**NUTF 0013. Nutrition Throughout the Life Cycle**

*Units: 3*

Also known as HDEV 61

Advisory: Completion of NUTF 10 with grade of "C" or better

Hours: 54 lecture

Examination of nutritional requirements, concerns, and interventions during several stages of the life cycle, from preconception to old age. Analysis of cultural, environmental, physical, and economic factors affecting nutritional status. Practical application of adequate nutrition through dietary selection and promotion of health throughout each life cycle stage. (CSU)

**NUTF 0014. Sports Nutrition**

*Units: 3*

Advisory: Completion of NUTF 10 with grade of "C" or better

Hours: 54 lecture

Presents fundamental nutrition concepts and applies them to individuals interested in physical activity, exercise, and sport. Nutrition topics include short-term and long-term nutrient intake, hydration status, supplement use, and body composition as they relate to physical performance. Basic fitness information regarding the key components of fitness, energy systems, and energy balance will also be explored. (CSU)

**NUTF 0028. Independent Study**

*Units: 1-3*

Designed for students interested in furthering their knowledge at an independent study level in an area where no specific curriculum offering is currently available. Independent study might include, but is not limited to, research papers, special subject area projects, and research projects. See Independent Study page in catalog. (CSU)

**NUTF 0095. Internship in Nutrition and Food Science**

*Units: 0.5-4*

Designed for advanced students to work in an area related to their educational or occupational goal. Provides new on-the-job technical training under the direction of a worksite supervisor, allowing students to expand knowledge and skills in the chosen field. Mandatory orientation session and faculty approval to determine eligibility. Students may earn up to a total of 16 units in internship courses (any course numbered 95 and PDEV 94). (CSU-with unit limitation)

- Demonstrate the understanding the physiological processing of nutrients as they relate to energy balance, metabolism and physical activity.
- Evaluate the impact of external variables on food safety, food choices, food beliefs, and disease risk.
- Identify dietary and lifestyle modifications for improving health throughout the life cycle.

## Program Student Learning Outcomes (PSLOs)

- Evaluate personal energy and nutrient requirements and food sources using current dietary assessment tools.