

# NUTRITION AND FOOD SCIENCE

## Contact Information

### Division

Sciences and Mathematics

### Dean

Randy Lehr

### Associate Dean

Karen Warburton

### 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

- Kevin Fong, Head Trainer, Spare Time, Inc., Elk Grove
- Mike Putnam, Regional Fitness Manager, California Family Fitness, Orangevale

## Degrees/Certificates

### Associate Degree for Transfer

- Nutrition and Dietetics for Transfer (p. 1)

### Certificate of Achievement

- Nutrition and Fitness (p. 2)

## 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/2019-2020/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/2019-2020/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 & BIOL 0008B	Microbiology I and Microbiology II	
BIOL 0006	Human Physiology	5
CHEM 0001A	General Chemistry I (OR)	5-6
or CHEM 0003A & CHEM 0003B	General Chemistry I - Part 1 and General Chemistry I - Part 2	
CHEM 0001B	General Chemistry II	5
NUTF 0005	Food Preparation for Nutrition and Life Fitness	3
NUTF 0010	Principles of Nutrition	3
PSYC 0100	General Principles of Psychology	3
Total Units		29-30

## Nutrition and Fitness

### Certificate of Achievement

(formerly Nutrition and Fitness Trainer)

This certificate program provides a comprehensive understanding of the relationships between food, physical fitness and health. Students will gain the necessary skills and knowledge for entry-level employment in health clubs and recreation centers. The certificate curriculum prepares students for the American Council on Exercise Personal Trainer Certification Exam, allowing students greater employment opportunities as personal trainers, group fitness instructors and advanced fitness specialists. A certificate is designed to provide career technical skills; it is not equivalent to an associate degree.

#### Required Courses

Code	Title	Units
NUTF 0010	Principles of Nutrition	3
NUTF 0014	Nutrition for Physical Performance	3
KIN 0011	Instructional Methods for Group Fitness	3
or KIN 0012	Instructional Methods for Personal Trainers	
KIN 0080	ACE Personal Trainer Preparation	3
KIN 0083	Physiology of Fitness	3
KIN 0095	Internship in Kinesiology	1
<b>Select 3 units from the following:</b>		<b>3</b>
KIN 0003A	Cardio Fitness - Level I	
KIN 0003B	Cardio Fitness - Level II	
KIN 0004	Cross Training	
KIN 0005A	Weight Training	
KIN 0005B	Strength Training - Circuit and Power Lifting	
KIN 0006	Physical Fitness	
KIN 0007	Aerobic Fitness	
KIN 0009	Cardio Kickboxing	
KIN 0010	Fitness and Weight Management Boot Camp	
KIN 0018	Peaceful Self Defense	
KIN 0019	Combative Self Defense	
KIN 0020	Multi Self Defense System	
KIN 0023	Tai Chi	
KIN 0024	Self-Defense for Personal Safety	
KIN 0040	Aquacise	
KIN 0041	Fundamental Swimming	
KIN 0042	Swimming Conditioning	
KIN 0050A	Ballet I	
KIN 0050B	Ballet II	
KIN 0051	Jazz Dance	
KIN 0053	Modern Ballroom Dance	
KIN 0054	Modern Dance	
KIN 0055	Line Dance	
KIN 0062	Fundamentals of Yoga	
KIN 0069	Mat Pilates	
<b>Total Units</b>		<b>19</b>

## Courses

Understanding course descriptions (<http://catalog.sierracollege.edu/archive/2019-2020/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)

Course focuses on the application of food science principles. Ingredient function and interaction, food preparation techniques, sensory evaluation, food safety and sanitation, and nutrient composition of foods emphasized. Modification of some recipes to adhere to current dietary guidelines. (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. Nutrition for Physical Performance

Units: 3

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

Hours: 54 lecture

A comprehensive study of essential nutrients in food and supplements, their function and utilization during activities involving muscle strength, muscle endurance, cardiopulmonary fitness, and flexibility. (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)

## **Program Student Learning Outcomes (PSLOs)**

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