



Food Science and Nutrition
Empowering Students to Nourish the World

MISSION STATEMENT

The mission of the Food Science and Nutrition Department at Cal Poly is to provide students with contemporary knowledge and practical skills to prepare them for satisfying careers in the food and health industries, and for the pursuit of graduate studies. Learning experiences of Food Science and Nutrition Science students are enhanced by curricula that blend theory and application, reflecting Cal Poly's "learn by doing" philosophy.

**EDUCATIONAL OUTCOMES FOR ALL GRADUATES
OF THE FOOD SCIENCE AND NUTRITION DEPARTMENT**
(Revision date: December 11, 2003)

1. FSN program graduates make ethical decisions and understand their professional responsibility to consumers, the community, and the environment.
2. FSN program graduates display critical thinking and problem solving skills, including the ability to apply the scientific method in addressing food and nutrition science problems.
3. FSN program graduates are prepared for, and value, life-long learning.
4. FSN program graduates have the knowledge and understanding of the basic sciences and math needed for entry-level positions in food science and nutrition fields.
5. FSN program graduates demonstrate effective written and oral communication skills.
6. FSN program graduates are well-prepared to succeed in post-graduate study and industry positions.

**PROGRAM EDUCATIONAL OUTCOMES FOR GRADUATES
IN FOOD SCIENCE**

- Food Science graduates can describe food component properties and structure, including changes during processing, and can choose appropriate methods for component analysis.
- Food Science graduates understand principles of food microbiology and safety, and have the ability to develop food safety and sanitation plans.
- Food Science graduates understand principles of food preservation, engineering, processing, and packaging; and can apply the principles in practical settings for the conduct and optimization of key food processing systems.
- Food Science graduates can plan experiments and evaluate data to assess the sensory and objective attributes of foods.
- Food Science graduates are familiar with food laws, regulations, and standards.
- Food Science graduates can apply their training in food chemistry, food analysis, food safety, plant sanitation, and food processing to control and assure the quality of food products.

**GRADUATES OF THE NUTRITION MAJOR
ADDITIONAL PROGRAM EDUCATIONAL OUTCOMES**

- Graduates from the Nutrition major can explain the role of nutrients and food in the prevention of disease and optimization of human health.
- Graduates from the Nutrition major can assess diets, prepare foods, and promote consumption of foods to meet the nutritional needs of healthy people throughout the life cycle.
- Graduates from the Nutrition major demonstrate sensitivity toward diverse populations (including people in varied physiological, psychological, cultural, and economic circumstances).

**CONCENTRATION SPECIFIC EDUCATIONAL OUTCOMES
APPLIED NUTRITION CONCENTRATION, NUTRITION MAJOR**

Graduates of the Applied Nutrition concentration:

- can use their working knowledge of food composition, food preparation principles, and commercial food technology to produce palatable, safe, affordable, and nutritious foods.
- can define diets, and promote consumption of foods, to meet the nutritional and health needs of individuals and groups.
- demonstrate their understanding of effective and ethical management concepts and functions, particularly as applied to foodservice operations and nutrition programs.
- have working knowledge of public policies, regulations, and the health care system as each relate to and impact the field of nutrition.

**CONCENTRATION SPECIFIC EDUCATIONAL OUTCOMES
NUTRITION SCIENCE CONCENTRATION, NUTRITION MAJOR**

Graduates of the Nutrition Science concentration:

- can define diets, and promote consumption of foods, to meet the nutritional and health needs of individuals and groups.
- have working knowledge of public policies, regulations, and the health care system as each relate to and impact the field of nutrition.
- are successful in post-graduate study in nutrition research or in allied health fields (such as medicine, physical therapy, and nursing).

**CONCENTRATION SPECIFIC EDUCATIONAL OUTCOMES
NUTRITION & FOOD INDUSTRIES CONCENTRATION, NUTRITION MAJOR**

Graduates of the Nutrition & Food Industries concentration:

- can describe food component properties and structure, including changes during processing, and can choose appropriate methods for component analysis.
- can apply their training in food chemistry, food analysis, food safety, and food processing to control and assure the quality of food products.

- are familiar with food laws and regulations.
- can summarize and evaluate the impact of food industry practices on the nutritional quality of foods, and apply training in product development and sensory evaluation to development of foods.