

FOOD SAFETY PRINCIPLES MINOR

Offered at: San Luis Obispo Campus

The Food Safety Principles Minor program is designed to provide students with a strong foundation in the principles and practices of ensuring the safety and quality of food. This interdisciplinary program combines coursework from various fields, including Food Science & Nutrition, Animal Science, Dairy Science, Bioresource & Agricultural Engineering, and Plant Sciences, to equip students with the necessary knowledge and skills to contribute to the prevention of foodborne illnesses, uphold food safety standards, and promote public health in the food industry. Graduates of the Food Safety Principles Minor program will be well-prepared for various career opportunities in the food industry, public health agencies, regulatory bodies, and research institutions. Potential career paths include but are not limited to Food Safety Specialist, Quality Assurance Technician, Food Inspector, Regulatory Compliance Officer, Food Safety Auditor, Research Assistant in Food Safety, Foodborne Disease Epidemiologist, and Food Product Development Specialist. The Food Safety Principles minor is not open to Food Science major students.

Program Learning Objectives

1. Analyze scientific problems using logic and fundamental principles of basic science as they relate to food safety.
2. Evaluate appropriate biological data and information, and apply it to a specific problem in the safe delivery of food.
3. Formulate and evaluate empirical predictions and/or problems using models and simulations that predict and show relationships among variables between systems and their components in natural, physical, and/or designed conditions.
4. Articulate food processing and manufacturing principles, including food accountability at all levels of the agricultural environment, from farm to table.
5. Examine agriculture, food, and environmental crises and emphasize effective communication of complex science using crisis communication language, theories, and principles.
6. Apply Hazard Analysis and Critical Control Point (HACCP) and Hazard Analysis and Risk-Based Preventive Controls (HARPC) plans to reduce, eliminate, or prevent potential hazards from the food supply chain.

Minor Requirements and Curriculum

The minor must be completed prior to, or at the same time as, the requirements for the bachelor's degree. A major and a minor may not be taken in the same degree program, and a minor is not required for a degree. Requirements for the minor include:

- At least half of the units must be from upper-division courses (3000-4000 level).
- At least half of the units must be taken at Cal Poly (in residence).
- No more than one-third of the units will be taken with credit-no credit grading (CR/NC), not counting courses with mandatory CR/NC. Departments may further limit CR/NC grading if desired.
- A minimum 2.0 GPA is required in all units counted for completion of the minor.

Code	Title	Units
REQUIRED COURSES		
Microbiology		
Select from the following:		4
ASCI 2215	Safe Handling of Animal-Derived Foods	
BRAE 2220	Introduction to Biological Systems	
MCRO 2221	Introduction to Microbiology	
Foundational Electives		
Select from the following:		6-7
ASCI 2210	Meat Science	
ASCI 2220	Animal Nutrition and Feeding	
DSCI 2229	General Dairy Manufacturing	
FDSC 1110	Introduction to Food Science and Sustainability	
FSN 1111	Elements of Food Processing	
FSN 2245	Elements of Food Safety	
Advanced Electives		
Select from the following:		10-11
AGC 4475	Crisis Communication in Food and Agriculture	
ASCI 3321	Zoonoses and Veterinary Public Health Concerns	
ASCI 4415	HACCP for Meat and Poultry Operations	
ASCI 4484	Poultry Meat and Egg Production and Processing	

DSCI 3344	Dairy Microbiology
DSCI 4402	Quality Assurance and Control of Dairy Products
FDSC 3310	Food Laws and Regulations
FDSC 3340	Food Quality Assurance and Prerequisite Programs
FDSC 3345	Food Safety and Sanitation
FDSC 4445	Food Safety Modernization Act: Human Food Safety and Produce Safety
FDSC 5545	Advanced Food Safety
MCRO 3342	Public Health Microbiology
MCRO 4421	Food Microbiology
PLSC 4421	Postharvest Technology

Total Units**20**