

# Food Systems

The food systems minor, hosted by the Department of Environmental Science, Policy & Management (ESPM) at the College of Natural Resources (CNR), is an interdisciplinary program of study that explores the role of food within the environment and society. Drawing from diverse fields as far-ranging as ecology, sociology, the humanities, nutrition, history, and economics, the food systems minor critically examines issues of contemporary food and agriculture from a whole-systems perspective.

Students take five courses, one of which can be lower division and one of which can overlap with their major. A required community engagement project during the junior or senior year allows students to bring together what they have learned in a real-world setting.

Students who complete the minor will gain a broad and interdisciplinary understanding of critical themes and concepts related to the social, political, economic, environmental, cultural, nutritional, and public health issues of contemporary food and agriculture systems both domestically and internationally.

## General Guidelines

Courses must be taken for a letter grade unless the course is only offered on a *Pass/No Pass* basis. The student must achieve at least a C (2.0) average in the courses taken in satisfaction of a minor program. Students may take one lower division course to count toward the major requirements and may overlap one course, lower or upper division, with their major requirements. The five courses taken for the major, two core courses, two elective courses, and the experiential learning course must total at least 15 units.

All minors must be declared no later than one semester before a student's Expected Graduation Term (EGT). If the semester before EGT is fall or spring, the deadline is the last day of RRR week. If the semester before EGT is summer, the deadline is the final Friday of Summer Sessions. To declare a minor, contact the department advisor for information on requirements, and the declaration process.

The requirements of the minor include:

## 1. Two Core Courses

Choose two courses, from two different categories listed below.

### Natural Sciences

ESPM 118	Agricultural Ecology [3]
ESPM 120	Science of Soils [3]
ESPM 177A	Sustainable Water and Food Security [4]
PLANTBI 180	Environmental Plant Biology [2]

### Social Sciences

ESPM 155AC	Sociology and Political Ecology of Agro-Food Systems [4]
GEOG 130	Food and the Environment [4]
SOCIOL 139F	Selected Topics in Social Inequality: Social Problems of the Food Industry [3] (topic must be: Social Problems of the Food Industry)
SOCIOL 169F	Cultural Perspectives of Food [3]

### Food and Community Health

NUSCTX 10	Introduction to Human Nutrition [3] (*)
-----------	---

PB HLTH 196 Special Topics in Public Health [1-4] (Topic must be Global Nutrition\*\*\*)

## 2. Two Elective Courses

Choose two courses from the categories below. A minimum of one elective must be from the category not chosen for a core course. Core course options not taken to fulfill the core course requirement can be counted toward the elective requirement.\*

### Natural Sciences

ESPM 113	Insect Ecology [2]
ESPM 117	Urban Garden Ecosystems [4]
ESPM 118	Agricultural Ecology [3] **
ESPM 120	Science of Soils [3] **
ESPM 131	Soil Microbiology and Biogeochemistry [3]
ESPM C148	Pesticide Chemistry and Toxicology [3]
ESPM 150	Special Topics in Environmental Science, Policy, and Management [2-4] (Topic Green Water, Brown Ground and Global Food Security***)
ESPM 158	Biodiversity Conservation in Working Landscapes [4]
ESPM 177A	Sustainable Water and Food Security [4]
ESPM 186	Management and Conservation of Rangeland Ecosystems [4]
PLANTBI 40	The (Secret) Life of Plants [3]
PLANTBI 135	Physiology and Biochemistry of Plants [3]
PLANTBI 170	Modern Applications of Plant Biotechnology [2]
PLANTBI 180	Environmental Plant Biology [2] **

### Social Sciences

History 2 Foodways: A Global History\*\*\*

ANTHRO 140	The Anthropology of Food [4]
CY PLAN 119	Planning for Sustainability [3]
ENVECON 140	Economics of Race, Agriculture, and the Environment [3]
ENVECON 142	Industrial Organization with Applications to Agriculture and Natural Resources [4]
ENVECON 154	Economics of Poverty and Technology [3]
ENVECON 162	Economics of Water Resources [3]
ESPM 5	FROM FARM TO TABLE: FOOD SYSTEMS IN A CHANGING WORLD [4]
ESPM 155AC	Sociology and Political Ecology of Agro-Food Systems [4]
ESPM 163AC	Environmental Justice: Race, Class, Equity, and the Environment [4]
ESPM 165	International Rural Development Policy [4]
ESPM 168	Political Ecology [4]
GEOG 130	Food and the Environment [4] **
GEOG 170	Special Topics in Geography [3] (Topic must be The Political Ecology of Land Grabs: Food, Resources, Environment and Development)
GLOBAL 123L	Perspectives For Sustainable Rural Development [4]
HISTORY 2	Comparative World History [4] (Topic must be Foodways: A Global History to count towards minor) **

IAS 150	Advanced Studies in International and Area Studies [4] (***)Topic must be: Climate Change and Agriculture in Latin America)
NAT RES C101	Edible Education: The Rise and Future of the Food Movement [2]
NUSCTX/ ESPM C159	Human Diet [4]
NUSCTX 104	Food, Culture, and the Environment [2]
NUSCTX W104	Food, Culture, and the Environment AC [3]
SOCIOL 139F	Selected Topics in Social Inequality: Social Problems of the Food Industry [3] (Topic Social Problems of the Food Industry***)
SOCIOL 169F	Cultural Perspectives of Food [3]
SOCIOL 185	Global Sociology [3]

#### Food and Community Health

ESPM/ NUSCTX C159	Human Diet [4]
ESPM C167/ PB HLTH C160	Environmental Health and Development [4]
NUSCTX 10	Introduction to Human Nutrition [3] **
NUSCTX 103	Nutrient Function and Metabolism [3]
NUSCTX 104	Food, Culture, and the Environment [2]
NUSCTX 108A & NUSCTX 108B	Introduction and Application of Food Science and Application of Food Science Laboratory
NUSCTX 135	Food Systems Organization and Management [4]
NUSCTX C114/ ESPM C148	Pesticide Chemistry and Toxicology [3]
NUSCTX 160	Metabolic Bases of Human Health and Diseases [4]
NUSCTX 166	Nutrition in the Community [3]
PB HLTH 112	Global Health: A Multidisciplinary Examination [4]
PB HLTH 170C	Drinking Water and Health [3]
PB HLTH 196	Special Topics in Public Health [4] (Topic Global Nutrition only***)

\*Only one lower division class OR up to two units of relevant upper division DeCal credit can count toward the minor. DeCal classes must be approved by the minor adviser and are considered outside the three elective categories: therefore they do not satisfy the requirement of a minimum of one elective taken from the category not chosen for a core course. Students can petition to include other relevant classes, including graduate or study abroad classes.

\*\*Course is also a core course

\*\*\*Only this course topic is eligible for the minor

Only one overlapping course (upper or lower division) between this minor and a major

Central to the goal of the minor is an experiential learning internship, to be taken during the student's junior or senior year. During an entire semester (or longer if they choose), students will work with an organization focused on some aspect of food system change. Students will work with the Community Engagement Faculty Coordinator to identify a community engagement partner organization that fits best with the student's interest. Students will receive credit for community engagement through enrollment in ESPM 197.

Learn About Experiential Learning through Engagement in Food Systems (<https://nature.berkeley.edu/food-systems-projects>)

### 3. Community Engagement Project

Students will complete three (3) units of experiential learning through ESPM 197, consisting of two hours/week of in-class time with approximately 7 hours per week spent on-the-ground with a partner organization.

#### Experiential Learning through Engagement in Food Systems