

Forestry & Natural Resources Major Snapshot

Department of Environmental Science, Policy & Management

Conserving and restoring the earth's natural resources requires broad knowledge and experience. The Forestry and Natural Resources major offers concentrations in *Forestry & Natural Sciences* or *Human Dimensions of Natural Resources*. Students in the program, regardless of concentration, have ample opportunity to acquire interdisciplinary skills in the ecology, stewardship, and management of ecosystems such as forests, woodlands, and grasslands. Within the program, students can choose to emphasize such topics as wildlife biology, water policy, fire science, ecosystem restoration, environmental justice, remote sensing and GIS, and rural sociology.

A minor in Forestry is available for students who are interested in learning about forestry and renewable resource management as an adjunct to their chosen fields. Students in many diverse majors such as zoology, business administration, and civil engineering may find this minor complimentary to their professional career goals.

The major advisor is Shandrika Combs, whose office is in 245 Mulford Hall. She is the best place to start for most of your questions about the major. She has drop in hours Monday-Friday from 9:30-12 and 1:30-4. If you cannot make these hours, please contact her via e-mail at scombs@nature.berkeley.edu or by telephone at 510-642-6730 to make an appointment.

Research Opportunities ♦ Honors Program ♦ Forestry, Wildlife Management, & Other Careers

Students with a GPA of 3.2 or higher may enroll in the College of Natural Resources Honors Program (H196) once they have reached upper division standing. To fulfill the program requirements, students design, conduct, and report on an individual research project working with a faculty sponsor. For more information, visit http://nature.berkeley.edu/site/honors_program.php.

In addition to the Berkeley campus Undergraduate Research Apprenticeship Program (URAP), CNR students can also apply for the CNR Sponsored Projects for Undergraduate Research (SPUR). Visit http://nature.berkeley.edu/site/undergraduate_research.php for details.

FNR graduates are well-prepared for graduate school and careers in environmental consulting, public agencies, non-profit conservation organizations, and private companies. Students also have the option of preparing for professional careers in forestry, wildlife, and range management. The FNR career snapshot is located at http://nature.berkeley.edu/site/planning_resources.php.

Getting a Degree

To earn a Bachelor of Science from U.C. Berkeley in Forestry & Natural Resources, students must fulfill unit and GPA requirements, university and campus requirements, college requirements, and major requirements. Please see the major advisor for more details about the major requirements.

Unit and GPA Requirements

In order to graduate, students must complete a total of 120 units, 36 of which must be upper division units. Students must have at least a 2.0 cumulative GPA, and a 2.0 GPA in the courses required for the major.

University and Campus Requirements

- Subject A
- American Cultures (if taken for a letter grade, this course may overlap with a Social & Behavioral Science course)
- American History & Institutions

College Requirements

- Two courses in Reading & Composition (8 units): R1A and R1B
- 15 upper division units must be in the College of Natural Resources

Forestry & Natural Resources Lower Division Requirements:				
1) <u>Environmental Science Core</u> : ESPM 2, 6, or C10 (also listed as L&S C30V)				
2) <u>Social Science Core</u> : ESPM C11 (also listed as L&S C30U), C12 (also listed as UGIS C12 and English C77), 50AC or 60				
3) <u>From L&S Breadth List</u> http://ls-advise.berkeley.edu/requirements/lsreq.html :				
a) <u>Humanities</u> : 1 course chosen from Arts and Literature, Philosophy and Values, or Historical Studies				
b) <u>Social Science</u> : 1 course chosen from Social and Behavioral Studies, or International Studies				
Forestry & Natural Sciences (FNS) Concentration		Human Dimensions of Natural Resources (HDNR) Concentration		
<u>Chemistry (4 units)</u> : Chem 1A		<u>Physical Science</u> : One course from Physical Sciences L&S Breadth List		
<u>Biology (4 units)</u> : Biology 1B		<u>Biology (3-4 units)</u> : Biology 1B or 11		
<u>Mathematics (6-8 units)</u> : Math 16A-B or Math 1A- B		<u>Mathematics (3-4 units)</u> : Math 16A, 1A, or 32		
<u>Statistics (4 units)</u> : Stat 2 or 20		<u>Statistics (4 units)</u> : Stat 2, 20, Poli Sci 3, or Soc 5		
<u>Geographic Information Systems (3 units)</u> : ESPM 72		<u>Geographic Information Systems (3 units)</u> : ESPM 72		
<u>Economics (4 units)</u> : EEP 1 (recommended); Econ 1 or 2		<u>Economics (3-4 units)</u> : EEP 1 (recommended), Econ 1 or 2, or UGBA 10		
<u>Physical Science (4 units)</u> : EPS 50 or GEOG 1				
Upper Division Requirements:				
8-week Summer Field Program ("Summer Camp") in the northern Sierra Nevada (10 units):				
ESPM 101A: Sierra Nevada Ecology (4)				
ESPM 101B: Silviculture (1)				
ESPM 101C: Forest Measurements, Aerial Photography, & Surveying (2)				
ESPM 101D: Timber Resource Utilization (1)				
ESPM 101E: Forest Resource Management (2)				
OR: ESPM C107, <u>Biology & Geomorphology of Tropical Islands</u> , a 13-unit fall semester course on the Polynesian island of Moorea.				
Forestry & Natural Resources Core Courses (16):				
ESPM 102A: Terrestrial Resource Ecology (4)		ESPM 102C: Resource Management (4)		
ESPM 102B/L: Natural Resource Sampling (2/2)		ESPM 102D: Resource & Environmental Policy (4)		
Restricted Electives (18-21 units):				
FNS Restricted Electives (6 courses):		HDNR Restricted Electives (6 courses):		
The FNS Concentration has two specializations for the restricted elective requirement: Professional Forestry or Natural Sciences.		Select six courses from four subject categories, one from each category plus two from anywhere:		
PROFESSIONAL FORESTRY SPECIALIZATION:		(a) Biology, Ecology, & Taxonomy (BET)		
ESPM 108A, 134, 182, 183, and 185		(b) Physical Environment (PE)		
plus one additional course from one of the following subject categories: PE or MM .		(c) Monitoring & Measurement (MM)		
NATURAL SCIENCES SPECIALIZATION:		(d) Management (M)		
Two courses each from both the BET and the PE subject categories, plus one additional course from each of the following: MM and M .				
Subject Categories				
A. Biology, Ecology, & Taxonomy (BET)				B. Physical Environment (PE)
ESPM C103	ESPM 111	ESPM 115B	ESPM 134	ESPM 120
ESPM 106	ESPM 112	ESPM 116A	ESPM 135	ESPM 121
ESPM 108A	ESPM 113	ESPM 116B	IB 102	ESPM C129
ESPM 108B	ESPM 114	ESPM 116C	IB 102L	ESPM C130
ESPM 109				ESPM C180
				ESPM 181A
				ESPM 181B
				CEE 103
				GEOG 140A
				GEOG 143
				GEOG 144
C. Monitoring & Measurement (MM)				D. Management (M)
ESPM 171				CYPLAN 112A
ESPM 172				ESPM 165
EPS C120				ESPM 166
LAEP C188				ESPM 167
ANTHRO 169B				ESPM 155
				ESPM 168
				ESPM 169
				ESPM 182
				ESPM 183
				ESPM 184
				ESPM 185
				ESPM 186
				ESPM 187
				ESPM 188
				ESPM 189