

2011-13 Cal Poly Catalog

Natural Resources Management & Environmental Sciences Department

BS Environmental Management and Protection

- ☐ 60 units upper division ☐ GWR
- ☐ 2.0 GPA ☐ USCP

* = Required in Major; also satisfies GE
 Note: No major, support or concentration courses may be taken as credit/no credit.

MAJOR COURSES

NR 140 Careers in Forestry & Env. Mgmt.....	1
NR 142 Environmental Management	3
NR 215 Land and Resource Measurements.....	2
NR 311 Environmental Measurements & Interpretation..	4
NR/LA 318 Applications in GIS	3
NR 326 Natural Resources Econ. & Valuation	4
NR 335 Conflict Mgmt. in Natural Resources.....	4
¹ NR 402 Forest Health <i>or</i>	
NR 320 Watershed Mgmt & Restoration.....	4
NR/CRP 404 Environmental Law <i>or</i>	
NR/CRP 408 Water Law	3
NR 412 Forest and Natural Resources Senior	
Assessment Project <i>or</i> NR 461 Senior Project I	
<i>or ERSC/NR 476 or ERSC/NR 477 or</i>	
<i>ERSC/NR 478 or ERSC/NR 479 (12/1/15)</i>	3
NR 416 Env. Impact Analysis and Mgmt.....	4
NR 425 Applied Resource Analysis and Assessmt	4
NR 465 Ecosystem Management.....	4
² ASCI 329/BIO 263/BIO 427/PHYS 122 (11/17/15).	3-4
BOT 121/BIO 111/BIO 161 (B2&B4)*	4
BIO 115 <i>or</i> BIO 114/BIO 162/NR 208 (7/2/13).....	4-5
BIO 325 General Ecology <i>or</i> NR 306 Ecology of	
Natural Resources & Habitat Mgmt.....	4
BRAE/NR 247/BRAE 237/BRAE 239	2-4
BRAE 348 Energy for a Sustainable Society <i>or</i>	
ENVE 324 Intro to Air Pollution (Area F)*	4
CHEM 111 Survey of Chemistry <i>or</i> CHEM 127	
General Chemistry (B3)*.....	4-5
CHEM 312 Survey of Organic Chemistry.....	5
GEOL 201 Physical Geology	3
³ MATH 161/221 (B1)*	4
PHYS 121 College Physics I (B3)*.....	4
PSY 201/202 Introduction to Psychology (D4)*.....	4
SS 121 Introductory Soil Science.....	4
STAT 217/218 Applied Statistics (B1)*	4
Concentration courses (see below)	36
	132

GENERAL EDUCATION (GE)

72 units required, 24 of which are specified in Major.
 →See page 39 for complete GE course listing.
 →Minimum of 12 units required at the 300 level.

Area A Communication (12 units)

A1 Expository Writing	4
A2 Oral Communication	4
A3 Reasoning, Argumentation, and Writing.....	4

Area B Science and Mathematics (no additional units req'd)

B1 Mathematics/Statistics * 8 units in Major.....	0
B2 Life Science * 4 units in Major.....	0
B3 Physical Science * 4 units in Major.....	0
B4 One lab taken with either a B2 or B3 course	

Area C Arts and Humanities (20 units)

C1 Literature	4
C2 Philosophy	4
C3 Fine/Performing Arts	4
C4 Upper-division elective	4
Area C elective (Choose one course from C1-C4)	4

Area D/E Society and the Individual (16 units)

D1 The American Experience (40404)	4
D2 Political Economy	4
D3 Comparative Social Institutions	4
D4 Self Development (CSU Area E) * 4 units in	
Major.....	0
D5 Upper-division elective	4

Area F Technology Elective (upper division)

(no additional units req'd) * 4 units in Major	0
	48

FREE ELECTIVES	0
	180

CONCENTRATIONS (Select one)

Environmental Impact Mitigation Strategies Concentration

BIO 427 Wildlife Management.....	4
CRP/NR 404 Environmental Law <i>or</i> CRP/NR 408	
Water Resource Law and Policy.....	3
NR 421 Wetlands	4
ZOO 329 Vertebrate Field Zoology.....	4
⁴ Approved electives.....	21
<i>Select 21 units from the following:</i>	
Any upper division BIO, CRP, LA, MSCI, NR, SS <i>or</i> ZOO course (8/20/15)	
	36

Environmental Policy and Management Concentration

CRP 212 Introduction to Urban Planning	4
CRP 420 Land Use Law <i>or</i> POLS 341 American	
Constitutional Law	4
ECON 431 Environmental Economics <i>or</i> POLS	
230 Basic Concepts of Political Thought	4
NR 435 Natural Resources Policy Analysis.....	4
NR/CRP 404 Env. Law <i>or</i>	
NR/CRP 408 Water Law (4)	3

- ¹ Students following Track 1 of Watershed Management and Hydrology Concentration must take NR 320.
- ² Students following Track 1 of Watershed Management and Hydrology Concentration, **must take** PHYS 122 **as a substitute is recommended** (11/17/15)
- ³ Students following Track 1 of Watershed Management and Hydrology Concentration must take MATH 161.
- ⁴ Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

¹ Approved electives.....	17
<i>Select 17 units from the following:</i>	
<i>Pre-Environmental Law: POLS 245, 334, 343, 344, NR 339, 400;</i>	
<i>Other:</i>	
ECON 311, 432; ENVE 330;	
NR 339, 400, 420; NR/ES 406 (6/30/13)	
SS 433; UNIV 330;	
Any CRP or POLS course	
	36

Watershed Management and Hydrology Concentration

NR 420 Advanced Watershed Hydrology	4
SS 321 Soil Morphology	4
² SS 440 Forest and Range Soils <i>or</i> ERSC 323	
Geomorphology	4
¹ Approved electives (<i>select one track</i>).....	24
³ <i>Track 1:</i>	
(a) Select 4 units from: BRAE 435, NR/BIO/SS 421 [†] , or NR/HNRS 475	
(b) GEOL 241 Physical Geology Laboratory (1)	
(c) Select 4 units from: ENVE 434, ERSC 323, NR/BIO/SS 421 [†] , NR/HNRS 475, PHYS 107, or SS 440	
(d) MATH 162 Calculus for Life Sciences II (4)	
(e) Select 11 units from: BRAE 345, NR 315, NR/HNRS 475 (1 unit max), NR 418, or STAT 313	
<i>Track 2 – Select 24 units from:</i>	
BRAE 435, ENVE 434, GEOL 241, MATH 162, NR 260, 339, 418, NR/BIO/SS 421, NR/CRP 408, NR/HNRS 475 (9 units max), PHYS 107, 122, or STAT 313	
	36

Individualized Course of Study

Select from the following:	36
NR 339 Internship/Forest and Natural Resources (1-12)	
Any course used in minor(s)	
	36

¹ Consultation with advisor is recommended prior to selecting approved electives; bear in mind your selections may impact pursuit of post-baccalaureate studies and/or goals.

² If a course is taken to meet a requirement, it cannot be double-counted as an approved elective for the concentration.

³ This track is designed to prepare students to become eligible for hydrology positions and meets the criteria for employment eligibility in the federal government (GS 1315).

[†] Course cannot be double-counted as an elective.