

**BS EARTH SCIENCES**  
**2007-09 Cal Poly Catalog**  
[Earth and Soil Sciences Department](#)  
**Science Bldg. (52), Room C-43**  
**(805) 756-2261 FAX (805) 756-5412**

- 60 units upper division       GWR  
 2.0 GPA                               USCP

\* = Satisfies General Education requirement

**MAJOR COURSES**

ASTR 101 Introduction to the Solar System.....	4
BOT 121 General Botany (B2 & B4)*.....	4
BOT 326 Plant Ecology .....	4
BRAE 237 Intro to Engineering Surveying .....	2
CHEM 127, 128 General Chemistry (B3 & B4)* ....	4,4
ERSC 144 Introduction to Earth Systems .....	4
ERSC/GEOG 250 Physical Geography .....	4
ERSC/GEOG 333 Human Impact on the Earth .....	4
ERSC/GEOG 414 Global & Regional Climatology .....	4
ERSC/SS 110 Orientation in Earth & Soil Sciences .....	1
ERSC 223 Rocks and Minerals.....	4
ERSC 323 Geomorphology.....	4
ERSC 461, 462 Senior Project I, II.....	1,3
FNR/LA 318 Applications in GIS or GEOG 318 Applic in GIS (10-30-07).....	3-4
GEOG 328 Applications in Remote Sensing .....	4
GEOL 201 Physical Geology.....	3
GEOL 241 Physical Geology Lab.....	1
GEOL 415 Structural Geology.....	4
PSC 201 Introduction to Physical Oceanography ....	4
SS 121 Introductory Soil Science.....	4
SS 321 Soil Morphology .....	4
STAT 218 Applied Statistics/Life Sciences (B1)* Concentration (see below; 4 units B1)* .....	4 41-42
	<b>123-124</b>

**GENERAL EDUCATION (GE)**

72 units required; 16 units are in Major.  
→See page 56 for complete GE course listing.  
→Minimum of 12 units required at the 300-400 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 add'l units req'd)**

B1 Math/Statistics * 8 units in Major & Conc .....	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 (20 units)**

D1 The American Experience (40404) .....	4
D2 Political Economy .....	4
D3 Comparative Social Institutions .....	4

D4 Self Development (CSU Area E) .....	4
(KINE 250 recommended for Geosciences Teaching Concentration)	
D5 Upper-division elective .....	4
(PSY 352 recommended for Environmental Interpretation and Assessment Concentration)	
<b>Area F Technology Elective (upper division) .....</b>	<b>4</b>
(BRAE 340 recommended for Geosciences Teaching Concentration)	

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**ELECTIVES .....** **0-1**

**180**

**CONCENTRATIONS (select one):**

**Environmental Interpretation and Assessment Concentration**

CRP 420 Land Use Law .....	4
ERSC 202 Soil Erosion and Water Conservation .....	4
ERSC/GEOG 325 Climate and Humanity .....	4
ERSC 463 Undergraduate Seminar.....	2
GEOG 301 Geography of Resource Utilization .....	4
MATH 118 Pre-Calculus Algebra (B1)* .....	4
MATH 119 Pre-Calculus Trigonometry .....	4
PHYS 121 College Physics I .....	4
Restricted electives .....	12
	<b>42</b>

**Geosciences Teaching Concentration**

ASTR 102 Introduction to the Stars and Galaxies .....	4
BIO 113 Animal Diversity and Ecology.....	4
EDUC 300 Intro to the Teaching Profession .....	3
GEOG 301 Geography of Resource Utilization .....	4
GEOG 325 Climate and Humanity .....	4
GEOL 203 Fossils and the History of Life .....	4
GEOL 204 Geologic History of California.....	3
MATH 118 Pre-Calculus Algebra .....	4
MATH 119 Pre-Calculus Trigonometry .....	4
PHYS 121 College Physics I .....	4
PSC 424 Organizing/Teaching of Phys Sciences or EDUC 480 Computer Based Curriculum .....	4/3
	<b>41-42</b>

**Land and Water Resources Concentration**

ERSC 202 Soil Erosion and Water Conservation .....	4
ERSC 463 Undergraduate Seminar.....	2
BRAE 415 Hydrology.....	4
CHEM 129 General Chemistry.....	4
MATH 141, MATH 142 Calculus I, II (B1)*.....	4,4
PHYS 141, 132 General Physics IA, II.....	4,4
Restricted electives .....	12
	<b>42</b>

**Individualized Course of Study**

ERSC 463 Undergraduate Seminar.....	2
MATH 118 Pre-Calculus Algebra (B1)* .....	4
MATH 119 Pre-Calculus Trigonometry .....	4
PHYS 121 College Physics I .....	4
Restricted electives (min 18 units 300-400 level)...	28
	<b>42</b>