



**California State Polytechnic University, Pomona
Degree Curriculum Sheet**

Plan (Major) GEOLOGY
Subplan/Option _____

Catalog Year 2011-2012 Name _____
Minimum Units Required 180 Student ID _____

Evaluator _____
GWT Satisfied _____ Yes _____ No _____

Required Core Courses		
Course		Units
Principles of Geology	GSC 111	4
Earth, Time and Life	GSC 112	3
Principles of Geology Lab	GSC 141L	1
Earth, Time and Life Lab	GSC 151L	1
Mineralogy	GSC 215/215L	3/1
Field Methods Lab	GSC 255L	2
Introduction to Geochemistry	GSC 300/300L	3/1
Introduction to Global Geophysics	GSC 307/307L	3/1
GIS Applications for Earth Scientists I	GSC 310/310L	1/2
or GIS Applications for Earth Scientists II	GSC 311/311L	(1/2)
Geomorphology	GSC 323/323L	3/1
Structural Geology	GSC 333/333L	3/1
Groundwater Geology	GSC 360/360L	3/1
Earth Science Seminar	GSC 410	2
Senior Thesis	GSC 461	2
Senior Thesis	GSC 462	2
Senior Seminar	GSC 463	2
or Writing for the Professions	ENG 301	(4)
or Report Writing	COM 216	(4)
or Technical Communication and Documentation	CE 362/362A	(2/1)
Total Units		46-48

Required Support Courses		
Course		Units
Life Science (B2, B3)	BIO 110/111L	3/1
or Basic Biology/Activity (B2, B3)	BIO 115/115A/115L	(3/1/1)
General Chemistry (B1,B3)	CHM 121/121L	3/1
General Chemistry	CHM 122/122L	3/1
General Chemistry	CHM 123/123L	3/1
Natural Disasters (B5)	GSC 350	4
Analytic Geom & Calc I (B4)	MAT 114	4
Analytic Geom & Calc II	MAT 115	4
Analytic Geom & Calc III	MAT 116	4
or Quantitative Applications in the Earth Sciences	GSC 225	(4)
College Physics	PHY 121/121L	3/1
or General Physics	PHY 131/131L	(3/1)
College Physics	PHY 122/122L	3/1
or General Physics	PHY 132/132L	(3/1)
College Physics	PHY 123/123L	3/1
or General Physics	PHY 133/133L	(3/1)
Total Units		44-45

Restricted Support Electives	
Course	Units
Choose 34 units from a chosen Emphasis on the back side	34
Total Units	34

Unrestricted Electives	
Course	Units
Select a sufficient number of courses so that the total from "Required Core", "Required Support", "GE", and "Unrestricted Electives" is at least 146 units.	0-4
Total Units	0-4

General Education Requirements	
Area	Units
Area A Communication & Critical Thinking	12
1 Oral Communication	
2 Written Communication	
3 Critical Thinking	
Area B Mathematics & Natural Sciences	16
<i>Select at least one lab course from sub-area 1 or 2.</i>	
1 Physical Science	
2 Biological Science	
3 Laboratory Activity	
4 Math/Quantitative Reasoning	
5 Science & Technology Synthesis	
Area C Humanities	16
1 Visual and Performing Arts	
2 Philosophy and Civilization	
3 Literature and Foreign Language	
4 Humanities Synthesis	
Area D Social Sciences	20
1 U.S. History, Constitution, American Ideals	
2 History, Economics and Political Science	
3 Sociology, Anthropology, Ethnic & Gender Studies	
4 Social Science Synthesis	
Area E Lifelong Understanding & Self Development	4
Total Units	68

American Institutions	
Course	Units
Courses that satisfy this requirement may also satisfy G.E. Area D1	8

American Cultural Perspectives Requirement	
Course	Units
Refer to catalog for list of courses that satisfy this requirement. Course may also satisfy major, minor, GE, or unrestricted elective requirements.	4

The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.

Course	GE Area
General Chemistry	CHM 121/121L B1, B3
Life Science	BIO 110/110L B2, B3
or Basic Biology	BIO 115/115A/115L (B2, B3)
Calculus I	MAT 114 B4
Natural Disasters	GSC 350 B5

The remaining GE requirements may be satisfied by any course approved for that area.

No more than 105 community college quarter units or 36 extension credit quarter units may be applied toward a Bachelor's degree.
A minimum 2.0 cumulative GPA is required in core (including option) courses, Cal Poly Pomona courses, and overall work completed in order to receive a degree in this major.

College of Science
Geology Tracks
2011-12

Select one of the following Tracks:

Geology Emphasis

Course		Units
Optical Mineralogy/Lab	GSC 325/325L	2/2
Invertebrate Paleontology/Lab	GSC 331/331L	3/1
Sedimentary Geology/Lab	GSC 423/423L	3/2
Igneous and Metamorphic Petrology	GSC 424	3
Igneous and Metamorphic Petrography Lab	GSC 425L	2
Ore Deposits/Lab or Geotectonics/Lab	GSC 433/433L GSC 444/444L	3/1
Summer Field Geology Lab or <i>four</i> Field Module Labs	GSC 490L GSC 491L	8
Choose 4 additional units from 300 or 400 level GSC courses to complete 34 units for this Track.		4
Total Units		34

Geophysics/Earth Exploration Emphasis

Course		Units
Introduction to Astronomy or Introduction to Oceanography	GSC 116 GSC 120	4
Meteorology or Studies of a Blue Planet	GSC 304 GSC 320	4
Engineering Geology I/Lab	GSC 321/321L	3/1
Engineering Geology II/Lab	GSC 415/415L	3/1
Shallow Subsurface Geophysics/Lab	GSC 434/434L	3/1
Introduction to Seismology, Earthquakes and Earth Structure/Lab	GSC 450/450L	3/1
Field Module Lab	GSC 491L	2
Fortran or Introduction to C++ or Introduction to Computer Sci.	CS 125 CS 128 CS 140	4
Choose 4 additional units from 300 or 400 level GSC courses to complete 34 units for this Track.		4
Total Units		34

Environmental Resources Emphasis (Choose 34 units from the list of classes outlined below)

Course	Units	<i>continued</i> Course	Units	
Meteorology	GSC 304	Ethical Considerations in Technology and Applied Science	EGR 402	4
Studies of a Blue Planet	GSC 320	Climatology	GEO 303	4
Exploring the Oceans: Oceanography	GSC 335	Advanced Geographic Information Systems I/Activity	GEO 442/442A	3/1
Shallow Subsurface Geophysics/Lab	GSC 434/434L	Advanced Geographic Information Systems II/Activity	GEO 443/443A	3/1
Field Module Lab	GSC 491L	Energy and Society	PHY 301	4
Environment and Society	BIO 304	Current Applications in Regenerative Studies/Lab	RS 414/414L	3/1
Environmental Resource Management/Lab	CE 351/351L	California Water	URP 482	4
Water Resource Management	EC 439	Total Units	34	
see next column				