



Term 1	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
17-118	Precalculus Algebra	An ACT Math score of 22 or higher, or a score of PASS on the NW Algebra Review OR Strategies for Precalculus Algebra	3	
27-110/111 OR 27-114/115	General Geology & Lab OR General Earth Science & Lab		4	
77-101	University Seminar		1	
10-111	Composition I		3	
29-102	Fundamentals of Oral Communication		3	
<b>Total Hours</b>			<b>14</b>	
Term 2	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
27-212	Historical Geology	General Geology & Lab OR General Earth Science & Lab	4	Spring
10-112	Composition II	Composition I	3	
24-112/113 OR 24-114/115	General Chemistry & Lab OR General Chemistry I & Lab		4	
	Social & Behavioral Science		3	Intro. to Geography recommended
<b>Total Hours</b>			<b>14</b>	
Term 3	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
27-220	Mineralogy	General Geology & Lab OR General Earth Science & Lab AND General Chemistry & Lab	4	Fall
27-360	Environmental Geology	General Geology & Lab OR General Earth Science & Lab	4	Fall
	Digital Literacy		3	
	Social & Behavioral Science		3	
<b>Total Hours</b>			<b>14</b>	
Term 4	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
27-420	Petrology	Mineralogy	4	Spring
	Humanities Requirement		3	Peoples & Cultures of the World recommended
	Civics: History Requirement		3	
10-220	Introduction to Literature		3	
	Geology Elective		3-4	See list below
<b>Total Hours</b>			<b>16-17</b>	

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Term 5	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
	Fine Art		3	
34-102	Intro. to American Gov't and Politics		3	
	Humanities Requirement		3	Intro. to Philosophy recommended
27-424	Geochemistry	Mineralogy	3	Fall, even years
	Collateral elective		3	See list below
<b>Total Hours</b>			<b>15</b>	
Term 6	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
	Life Science & Lab		4	
27-340	Intro to Hydrogeology	General Geology & Lab OR General Earth Science & Lab AND Precalculus Algebra	3	Spring, even years
32-365 OR 32-463 OR 32-207	Geographic Information Systems OR Remote Sensing OR GPS Fundamentals	Maps & Spatial Reasoning	3	
	Geology Elective		3-4	See list below
	Elective		3	
<b>Total Hours</b>			<b>16-17</b>	
Term 7	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
27-455	Geological Field Methods	Geology Major or Minor with 20 hours in geology	3	Summer, odd years
<b>Total Hours</b>			<b>3</b>	
Term 8	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
27-498	Senior Seminar in Geology		1	Fall
	Geology Electives		6-8	See list below
	Collateral Electives		6	See list below
	Electives		2-3	See note below
<b>Total Hours</b>			<b>15-16</b>	
Term 9	Course Title/Description	Pre-requisite	Cr Hrs	Milestone/Notes
27-515	Environmental Regulations	Environmental Geology OR Environmental Issues OR Conservation of Natural Resources	2	Spring, odd years
27-595	Geological Data Analysis & Scientific Writing	Precalculus Algebra	3	Spring, odd years
	Collateral Elective		6	See list below
	Electives		3-4	See note below
<b>Total Hours</b>			<b>14-15</b>	

Electives must include 5 credit hours from the following courses to complete the 30 credit hours for the certificate:

- 27-599 – Special Investigations in Earth Science (1-3 hours)
- 32-401 – Conservation of Natural Resources (3 hours)
- 04-420 – Environmental Issues (4 hours)

Completion of the certificate also requires a final assessment administered by AIPG (\$100 exam fee)



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### Geology Electives

Course #	Course Name	Prerequisites	Hours	Semesters Offered
27-326	Geology of Natural Parks	General Geology & Lab OR General Earth Science & Lab	3	Fall, even years
27-335	Physical Oceanography	Completion of NW Science Core	3	Spring, even years
27-423	Economic Geology	Mineralogy	4	Fall, odd years
27-424	Geochemistry	Mineralogy	3	Fall, even years
27-440	Stratigraphy	Historical Geology	4	Fall, odd years
27-450	Structural Geology	Historical Geology & Petrology	4	Spring
27-510	Geomorphology	General Geology & Lab OR General Earth Science & Lab	3	Spring, even years
27-530	Sedimentology	Historical Geology	4	Fall, odd years
27-540	Paleontology	Historical Geology	4	Spring
27-555	X-Ray Analysis	Mineralogy	3	Spring, even years
27-560	Optical Mineralogy	Mineralogy	3	Fall, even years

### Collateral Electives

Course #	Course Name	Prerequisites	Hours	Semesters Offered
03-234	Fundamentals of Soil Science	General Chemistry & Lab OR General Chemistry I & Lab	4	Fall and Spring
04-420	Environmental Issues	Principles of Biology & Lab (min. grade of C) AND General Chemistry I & Lab	4	Spring
24-242/243	Organic Chemistry/Organic Chemistry Lab	General Chemistry & Lab (min. grade of C)	3	Fall
27-515	Environmental Regulations	Environmental Geology OR Environmental Issues	2	Spring, odd years
32-201	Maps and Spatial Reasoning		3	Fall and Summer
32-207	GPS Fundamentals		3	Fall and Spring
32-221	Economic Globalization		3	Spring
32-360	Dynamic and Synoptic Meteorology		3	Spring, even years
32-361	Climatology		3	Spring, odd years
32-362	Web Mapping	Maps and Spatial Reasoning	3	Spring
32-365	Geographic Information Systems	Maps and Spatial Reasoning	3	Fall and Spring
32-370	Natural Disasters		3	Spring
32-401	Conservation of Natural Resources		3	Fall
32-462	Digital Cartography and Geovisualization	Maps and Spatial Reasoning	3	Fall
32-463	Remote Sensing	Maps and Spatial Reasoning	3	Fall
32-522	Cities and Urban Design		3	Spring, even years
32-565	Advanced Geographic Information Systems	Geographic Information Systems	3	Spring
17-114	General Statistics	ACT Math score of 22 or higher, high school GPA of 3.00 or higher, or min. grade of C in MATH 17082, or concurrent enrollment in MATH 17014	3	Fall and Spring

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