

Curriculum Map: Geology

Date: 02/28/19

#	Program Goals (PGs) & Program Student Learning Outcomes (PSLOs)	Required Courses								Foundation Courses								Core Courses					Program Electives								
		BIO 201 Biology I	BIO 202 Biology II	Chem 108 General Chemistry I	Chem 109 General Chemistry I Lab	Chem 111 General Chemistry II	Chem 112 General Chemistry II Lab	Math 121 Calculus I	PHYS 113 Lab Physics	PHYS 117 Lecture Physics	PHYS 114 Lab Physics	PHYS 118 Lecture PHYSICS	GEOL 140 Our Earth	CHEM 111 Principles of Chemistry II	CHEM 112 Principles of Chemistry II Lab	GEOL 211 Structural Geology	GEOL 217 Earth History with Paleontology	GEOL 225 Mineralogy	GEOL 323 Field Methods	GEOL 332 Optical Mineralogy	GEOL 334 Petrology	GEOL 425 Field Mapping	GEOL 282 Weather and Climate	GEOL 308 Geomorphology	GEOL 341 Ground Water Hydrology	GEOL 342 Rock and Soil Mechanics	GEOL 349 Assessment of Environmental Impact	GEOL 411 Sedimentation	EHS 140 Introduction to Environmental Sciences	EHS 426 Solid Waste Management	
PG1	Demonstrate an overall comprehension of geological principles, facts, and concepts.	I	R	I	I	R	R	I	I	I	R	R	I	R	R	R	R	R	R	M	M	I	R	R	R				I		
PSLO 1.1	Identify and describe minerals, rocks, and fossils.															M	R		R	M	M					R		R			
PSLO 1.2	Apply observation skills to suggest their origin as part of interpreting earth history.	I	R												R	M		R		R	M		R					R			
PG 2	Demonstrate proficiency in routinely-used geoscience laboratory and field techniques.														R		R	R		R	M	I	R	R	R	I	M	I			
PSLO 2.1	Make systematic observations of field and laboratory data.					I	I	I										R			M										
PSLO 2.2	Make clear and substantive observation of field data (rock samples, outcrop, structure, etc.) and ably connect with established scientific principles.														R		R			R	M	I	R		R	I	M	I	R		
PSLO 2.3	Analyze and manipulate data using basic statistics.														I	I	I			R	M	I			R		R	I	R		
PG 3	Assess geosciences content knowledge as applied to their own continuing education and professional development.														I	I	I			R	M		R		R		R		R		
PSLO 3.1	Accomplish an independent research project in collaboration with a member of the geoscience faculty.														I		I			R	M					R	R		R		
PSLO 3.2	Disseminate the outcome of that research to the professional audience.														I		I				M	I	I		R		R		R		
PSLO 3.3	Demonstrate a capacity for self-evaluation of personal skills and needs.														I		I			R	M	I	I	I		R	R	I	R		
PG 4	Disseminate geoscience-related information to the community (non-scientific audiences) and generate scientific awareness.														I		I			R	M	I				R		I			
PSLO 4.1	Share relevant information related to the Earth, such as global climate change, ozone depletion, water pollution, and other environmental issues to the community as part of civic engagement.														I		I			R	M	I				R					
PG 5	Successfully integrate geoscience content knowledge and skills with respect to the societal context in which these knowledge and skills will be applied.																				M	R	R	R	R	R	R	R	I	R	
PSLO 5.1	Highlight essential components of societal issues relative to the geosciences.																				M	R	R	R	R	R	R	R	I	R	
PSLO 5.2	Create or design science-based solutions to societal problems relative to the geosciences.																				M	R	R	R	R	R	R	R	I	R	

Scale: I-Introduced; R-Reinforced; M-Mastered