

Natural Sciences
Institutional (ILO), Program (PLO), and Course (SLO) Alignment

Program: Earth Sciences (Geography, Geology, Oceanography)		Number of Courses: 19		Date Updated 11.11.13		Submitted by T. James Noyes, ext. 3356								
Institutional SLOs	I. Content Knowledge	II. Critical, Creative, and Analytical Thinking	III. Communication and Comprehension	IV. Professional and Personal Growth	V. Community and Collaboration	VI. Information and Technology Literacy								
Program Rating	4	4	4	2	2	2								
Program Level SLOS						ILOs to PLOs Alignment (Rate 1.-4)								
						I	II	III	IV	V	VI			
PLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of earth science and geography. This includes the ability to recall the definitions of the specialized vocabulary of earth science and geography.						4	2	2	2	2	2			
PLO #2. Relationship with Their Environment Students recognize and can accurately articulate how their environment (including the Earth, the atmosphere, ocean, and biosphere) affects humans' lives and how human activities affect their environment.						4	4	4	2	2	2			
PLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.						4	4	2	2	2	2			
Course Level SLOs					Course to Program SLO Alignment Mark with an X			ILOs to Course SLOs Alignment (Rate 1.-4)						
					P1.	P2.	P3.	I	II	III	IV	V	VI	
GEOG 1 Physical Elements: SLO#1. Basic Knowledge Students can identify the salient features of the basic concepts of physical geography. (This includes the ability to recall the definitions of the specialized vocabulary of physical geography.)						X			4	2	2	2	2	2
GEOG 1 Physical Elements: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how their physical environment affects humans' lives and how human activities affect their physical environment.							X		4	4	2	2	2	2

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	P1.	P2.	P3.	I	II	III	IV	V	VI
GEOG 1 Physical Elements: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	4	2	2	2
GEOG 2 Cultural Geography: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of cultural geography. (This includes the ability to recall the definitions of the specialized vocabulary of cultural geography.)	X			4	2	2	2	2	2
GEOG 2 Cultural Geography: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how their cultural environment affects humans' lives and how human activities affect their cultural environment.		X		4	4	4	2	2	2
GEOG 2 Cultural Geography: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2
GEOG 5 World Religion Geography: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of physical geography. (This includes the ability to recall the definitions of the specialized vocabulary of cultural geography.)	X			4	2	2	2	2	2
GEOG 5 World Religion Geography: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how their cultural environment affects humans' lives and how human activities affect their cultural environment.		X		4	4	4	3	2	2
GEOG 5 World Religion Geography: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2

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	P1.	P2.	P3.	I	II	III	IV	V	VI
GEOG 6 Physical Geography Laboratory: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of physical geography. (This includes the ability to recall the definitions of the specialized vocabulary of physical geography.)	X			4	2	2	2	2	2
GEOG 6 Physical Geography Laboratory: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how their physical environment affects humans' lives and how human activities affect their physical environment.		X		4	4	4	2	2	2
GEOG 6 Physical Geography Laboratory: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	3	2	2	2	3
GEOG 7 Geography of California: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of physical geography. (This includes the ability to recall the definitions of the specialized vocabulary of physical geography.)	X			4	2	2	2	2	2
GEOG 7 Geography of California: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how their physical environment affects humans' lives and how human activities affect their physical environment.		X		4	4	4	2	2	2
GEOG 7 Geography of California: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2
GEOG 8 Introduction of Geographic Information Systems: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of mapping and Geographic Information Systems (GIS). This includes the ability to recall the definitions of the specialized vocabulary of maps and GIS.	X			4	2	4	2	2	4

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GEOG 8 Introduction of Geographic Information Systems: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate the manner in which maps and GIS are used to show both how human activities affect their environment and how human lives are affected by their environment.		X		4	4	3	2	2	4
GEOG 8 Introduction of Geographic Information Systems: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions /interpretation of observations) when using maps and GIS to analyze and manipulate geographic data.			X	4	4	2	2	2	4
GEOG 9 Weather and Climate: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of meteorology and climate science. (This includes the ability to recall the definitions of the specialized vocabulary of meteorology and climate science.)	X			4	2	2	2	2	2
GEOG 9 Weather and Climate: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how weather and climate affect humans' lives and how human activities affect weather and climate.		X		4	4	3	2	2	2
GEOG 9 Weather and Climate: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	2	2	2	2	2
GEOG 20abcd Geography Field Studies: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geography. (This includes the ability to recall the definitions of the specialized vocabulary of geography.)	X			4	4	4	2	2	2

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GEOL 1 Physical Geology: SLO #1. Basic Knowledge Students recognize and can accurately articulate how the Earth affects humans' lives and how human activities affect the Earth.	X			4	2	2	2	2	2
GEOL 1 Physical Geology: SLO #2. Relationship with Their Environment Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)		X		4	4	4	2	2	2
GEOL 1 Physical Geology: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2
GEOL 2 History of Planet Earth: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
GEOL 2 History of Planet Earth: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how the Earth affects humans' lives and how human activities affect the Earth.		X		4	4	4	2	2	2
GEOL 2 History of Planet Earth: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2
GEOL 3 Physical Geology Laboratory: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
GEOL 3 Physical Geology Laboratory: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how the Earth affects humans' lives and how human activities affect the Earth.		X		4	4	4	2	2	2
GEOL 3 Physical Geology Laboratory: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2

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GEOL 4 History of Planet Earth Laboratory: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
GEOL 4 History of Planet Earth Laboratory: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how the Earth affects humans' lives and how human activities affect the Earth.		X		4	4	4	2	2	2
GEOL 4 History of Planet Earth Laboratory: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2
GEOL 6 Earth Science in Education SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
GEOL 6 Earth Science in Education: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how the Earth affects humans' lives and how human activities affect the Earth.		X		4	4	4	2	2	2
GEOL 6 Earth Science in Education: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2
GEOL 15 Natural Disasters: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
GEOL 15 Natural Disasters: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how the Earth affects humans' lives and how human activities affect the Earth.		X		4	4	4	2	2	2
GEOL 15 Natural Disasters: SLO #3. Nature of Science Students can identify the key elements of the scientific method (hypotheses, tests, observations, conclusions/interpretation of observations) in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2

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GEOL 30 Geology Laboratory of Death Valley: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
GEOL 32 Geology Laboratory of Owens Valley and Sierra Nevada: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
GEOL 34 Geology Laboratory of Southeaster California: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
GEOL 36 Geology Laboratory of Coastal California: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of geology. (This includes the ability to recall the definitions of the specialized vocabulary of geology.)	X			4	2	2	2	2	2
OCEA 10 Introduction to Oceanography: SLO #1. Basic Knowledge Students can identify the salient features of the basic concepts of oceanography. This includes the ability to recall the definitions of the specialized vocabulary of oceanography.	X			4	2	2	2	2	2
OCEA 10 Introduction to Oceanography: SLO #2. Relationship with Their Environment Students recognize and can accurately articulate how the ocean affects humans' lives and how human activities affect the ocean.		X		4	4	4	2	2	2
OCEA 10 Introduction to Oceanography: SLO #3. Nature of Science Students can identify the key elements of the scientific method in popular accounts of scientific research in magazines, newspapers, etc.			X	4	4	2	2	2	2