

NATURAL SCIENCES
Institutional (ILO), Program (PLO), and Course (SLO) Alignment

Program: Earth Sciences (Geography, Geology, Oceanography)	Number of Courses: 19	Date Updated: 09.10.2014	Submitted by: T. Jim Noyes, ext. 3356
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ILOs	1. Critical Thinking <i>Students apply critical, creative and analytical skills to identify and solve problems, analyze information, synthesize and evaluate ideas, and transform existing ideas into new forms.</i>	2. Communication <i>Students effectively communicate with and respond to varied audiences in written, spoken or signed, and artistic forms.</i>	3. Community and Personal Development <i>Students are productive and engaged members of society, demonstrating personal responsibility, and community and social awareness through their engagement in campus programs and services.</i>	4. Information Literacy <i>Students determine an information need and use various media and formats to develop a research strategy and locate, evaluate, document, and use information to accomplish a specific purpose. Students demonstrate an understanding of the legal, social, and ethical aspects related to information use.</i>
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SLO-PLO-ILO ALIGNMENT NOTES:

Mark boxes with an 'X' if: SLO/PLO is a major focus or an important part of the course/program; direct instruction or some direct instruction is provided; students are evaluated multiple times (and possibly in various ways) throughout the course or are evaluated on the concepts once or twice within the course.

DO NOT mark with an 'X' if: SLO/PLO is a minor focus of the course/program and some instruction is given in the area but students are not formally evaluated on the concepts; or if the SLO/PLO is minimally or not at all part of the course/program.

PLOs	PLO to ILO Alignment			
	<i>(Mark with an X)</i>			
	1	2	3	4
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.	X			
PLO #2 Relationship with 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.	X	X		
PLO #3 Scientific Method 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			

SLOs	SLO to PLO Alignment <i>(Mark with an X)</i>			COURSE to ILO Alignment <i>(Mark with an X)</i>			
	P1	P2	P3	1	2	3	4
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			X	X		
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					
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				
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			X	X		
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					
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				
GEOG 20 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			X			
GEOG 5 World Regional 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			X	X		
GEOG 5 World Regional 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					
GEOG 5 World Regional 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				

SLOs	SLO to PLO Alignment <i>(Mark with an X)</i>			COURSE to ILO Alignment <i>(Mark with an X)</i>			
	P1	P2	P3	1	2	3	4
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			X	X		
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					
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				
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			X	X		
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					
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				
GEOG 8 Introduction to 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			X	X		
GEOG 8 Introduction to 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					
GEOG 8 Introduction to 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				

SLOs	SLO to PLO Alignment <i>(Mark with an X)</i>			COURSE to ILO Alignment <i>(Mark with an X)</i>			
	P1	P2	P3	1	2	3	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			X	X		
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					
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				
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			X	X		
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					
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				
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			X	X		
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					
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				

SLOs	SLO to PLO Alignment <i>(Mark with an X)</i>			COURSE to ILO Alignment <i>(Mark with an X)</i>			
	P1	P2	P3	1	2	3	4
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			X	X		
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					
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		X		
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			X	X		
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					
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				
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			X			
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			X			
GEOL 34 Geology Laboratory of Southeastern 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			X			
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			X			

SLOs	SLO to PLO Alignment <i>(Mark with an X)</i>			COURSE to ILO Alignment <i>(Mark with an X)</i>			
	P1	P2	P3	1	2	3	4
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			X	X		
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					
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				
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			X	X		
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					
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				
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			X	X		
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					
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				