OREGON COAST COMMUNITY COLLEGE

Quarter Assessment Conducted:	Winter
Year Assessment Conducted:	2019
Course Prefix:	GS
Course Number:	106
Section Type:	Z1
Instructor Conducting Assessment:	Lara, Genifer
# Students Satisfactorily Completing Course:	**23**

Section Type:
DC = Dual Credit
OL = online
HY = hybrid
OG = on-ground
Z = Zoom

Assessment Method Used for Course Learning Outcomes			
Essay	1	Documented Observation of Student	7
Objective Exam	2	Individual Oral Presentation	8
Research Paper	3	Group Presentation	9
Individual Assignment	4	Special Project	10
Group Assignment	5	Other	11
Portfolio of Work	6		

Intended Course Learning Outcomes	**Assessment Method Used**	**Student Achievement of Intended Course Learning Outcomes:**		**Mapped to Intended Program/Discipline Learning Outcomes:**	**Student Achievement of Intended Program/ Discipline Learning Outcomes:**	
Upon satisfactory completion of this course, students should be able to:			*# Completing Students Performing at Each Level:*			*# Completing Students Performing at Each Level:*
Use an understanding of the rock cycle, plate tectonics and surface processes to explain how the Earth's surface wears away and is renewed	2 (Final Exam)	Advanced	5		Advanced	
		Competent	7		Competent	
		Developing	7		Developing	
		Emerging	4		Emerging	
Use an understanding of geologic dating methods and the interpretation of geologic deposits to explain how geologists reconstruct the history of the Earth	3 (Geologic Time Term Paper)	Advanced	5		Advanced	
		Competent	12		Competent	
		Developing	5		Developing	
		Emerging	1		Emerging	
Access earth science information from a variety of sources, evaluate the quality of this information, and compare this information with current models of geologic processes identifying areas of congruence and discrepancy	4 (Marcus Landslide Analysis)	Advanced	3		Advanced	
		Competent	5		Competent	
		Developing	7		Developing	
		Emerging	8		Emerging	
Make field and laboratory based observations and measurements of earth materials and landscapes, use scientific reasoning to interpret these observations and measurements, and compare the results with current models of geologic processes identifying areas of congruence and discrepancy	4 (Igneous Rock Lab/ Bowen's Reaction Series)	Advanced	4	DLO 1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions, and generate further questions	Advanced	4
		Competent	8		Competent	8
		Developing	7		Developing	7
		Emerging	4		Emerging	4
Use scientifically valid modes of inquiry, individually and collaboratively, to critically evaluate the hazards and risks posed by geologic processes both to themselves and society as a whole, evaluate the efficacy of possible ethically robust responses to these risks, and effectively communicate the results of this analysis to their peers	4 (Earthquake Discussion Board)	Advanced	2	DLO 2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanation, solve problems, and make evidence-based decisions in an ethical manner	Advanced	2
		Competent	7		Competent	7
		Developing	13		Developing	13
		Emerging	1		Emerging	1
Assess the contributions of geology to our evolving understanding of global change and sustainability while placing the development of geology in its historical and cultural context	4 (Plate Tectonics Discussion Board)	Advanced		DLO 3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment	Advanced	
		Competent	13		Competent	13
		Developing	7		Developing	7
		Emerging	3		Emerging	1

Learning Outcome Assessment Narrative and Analysis
1. What did you discover about student performance based on the evidence you identified and used above? Student performance against course and discipline learning outcomes did not directly correspond with the grades earned overall in the course. This is making me wonder if they should. There was a extra credit available in the course...and discussion boards, which most students participated in and did quite well, make up a fairly significant part of the grade. What is perhaps more interesting, is that direct comparison of student conceptual understanding between weekly quizzes and performance on the final exam showed improvement from the start of the course to the end on two of the topics called out by the Course Learning Outcomes -- calculating the Earth's age and Location of the Tectonic Plates.
2. Future Planning: What changes or high impact practices do you plan to implement to your course and/or teaching methods based on your response to question #1 above? There is a Geoscience Concpet Inventory that has been developed to gague student conceptual growth as a pre-test and post-test. I expect this must be purchased, but I would be very interested in exploring this as an assessment tool. It may allow me at the start of the course to rapidly identify areas that the class has conceptual misunderstandings in, and then spend more time on or develop activities that explore concepts differently in these areas than my current approach.
3. (To be answered after having implemented these changes the next time the course is taught by you): After having implemented the above changes in your course, what changes did you observe in student achievement of course learning outcomes? Was the change successful? How will you adjust your teaching methods or presentation moving forward?