

Assessment: Course Four Column

Courses (SCI) - Geology

GEOL 102:Earth/Life Through Time

<i>Course Outcomes</i>	<i>Assessment Measures</i>	<i>Results</i>	<i>Actions</i>
<p>Communication- Historical Geology - GenEd: Communication Identify connections between concepts across Historical Geology</p> <p>Course Outcome Status: Active Next Assessment: 2022-2023</p>	<p>Exam - Representative exam essay question (see notes)</p> <p>Criterion: The average on the question is 70% or better</p>	<p>Reporting Period: 2017-2018 Criterion Met: Yes 72.5%</p> <p>Results Analysis: This is an example of a question that requires students to synthesis information from GEOL 101 AND GEOL 102. (02/05/2019)</p>	<p>Action: Provide additional synthesis questions in lab/class so students have more opportunities to tie information together. (02/05/2019)</p>
<p>Reasoning- Read and Interpret Graphs - Critical Thinking: Reasoning Communication Read and Interpret Graphs</p> <p>Course Outcome Status: Active Next Assessment: 2022-2023</p>	<p>Exam - Exam question using a graph</p> <p>Criterion: The class average on the question is 70% or better</p>	<p>Reporting Period: 2017-2018 Criterion Met: Yes 87.5%</p> <p>Results Analysis: This graph shows linear changes in elevation over time. Based on the rates shown in the graph, students are to analyze if the graph represents accurate uplift through time. Students did an excellent job discussing that uplift rates are not always linear, instead they depend on tectonic setting and erosion rates (as well as other variables). (02/05/2019)</p>	<p>Action: Continue to thoroughly review graphs and allow students to interpret in class. (02/05/2019)</p>
<p>Quantitative - Critical Thinking: Quantitative Demonstrate the quantitative skills needed to succeed in geology</p> <p>Course Outcome Status: Active Next Assessment: 2021-2022</p>	<p>Exam - Exam 1 – half life exercise</p> <p>Criterion: 70% or better</p>	<p>Reporting Period: 2017-2018 Criterion Met: Yes 72%</p> <p>Results Analysis: Using the RuGGEd research and discussing how geochron techniques are being applied to our area helps students make connections with the content. (02/05/2019)</p>	<p>Action: Once RuGGEd geochron tutorials are complete, add them to WebCampus (02/05/2019)</p>

Course Outcomes	Assessment Measures	Results	Actions
<p>Scientific Understanding - Scientific Understanding: Apply the principles of scientific inquiry to help solve geologic problems</p> <p>Course Outcome Status: Active Next Assessment: 2022-2023</p>	<p>Internal Tracking - Overall Course Grade Criterion: The class average is 70% or better</p>	<p>Reporting Period: 2017-2018 Criterion Met: Yes and No 84.5%</p> <p>Results Analysis: This class was one of the strongest I had in GEOL 102. (02/05/2019)</p>	<p>Action: Continue to provide examples from my field work. Continue to use Ends of the World as a supplement to help tie biology and geology and environmental science concepts together. (02/05/2019)</p> <p>Follow-Up: This class was fantastic. The students were diligent, attentive and they wanted to learn. I added Ends of the World – a book that discusses the 5 major mass extinction events that have plagued our planet throughout geologic time. This added the opportunity for discussions about how we currently treat our planet and discussions about whether or not we are in the middle of Earth’s 6th mass extinction event. We discuss how CO2 level have changed throughout time and what happens to life when massive amounts of CO2 are added to our atmosphere at high rates. Students learned that mass extinctions are rarely attributed to one major event, instead, mass extinctions are generally a perfect storm of a variety of events (even the mass extinction of the dinosaurs wouldn’t have been ‘as’ severe but major volcanism in India (caused by a hotspot similar to the hotspot causing chaos currently in Hawaii) was the icing on the cake. It was fun to add a major discussion portion to the course.</p>

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In addition to adding 'Ends' I also recorded lectures and discussions in front of a live student audience. To help incorporate online students into the discussion, I asked them to email me questions/comments about the chapter prior to class so we could incorporate their ideas.
(02/05/2019)