GEO 103: Understanding the Earth

- Introductory level course (with lab)
- Foundation for the GEO major
- Fulfils General Education Requirements: STEM, Information Literacy
- Course description:
  In this class we examine the processes operating within and upon the Earth. We study the relationship of plate tectonics to volcanism, earthquakes and mountain building, and examine the development and modification of landscapes by rivers, glaciers, wind, waves, and groundwater. We investigate limits on Earth resources and human interactions with the Earth.

- Average number of students: 70/class
- Student demographics (Spring 2017):
  Freshman 47%, Sophomore 36%, Junior 12%, Senior 5%
- Teaching formats: lecture/discussion, in-class response cards, laboratory
- Grading: midterms=20%, homework=15%, in-class assignments=15%, laboratory=25%, paper project=10%, final exam=15%

Simple Course Additions for Greater Student Reflection

Course Background

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Course Changes

K-W-L graphic organizers are three-columned charts in which the students write about what they already know and want to know before the class lecture and then what they learned after the class lecture.

I included this activity because I wanted the students to reflect and engage more.

Pre- and Post-exam wrappers are a metacognitive exercise for the students to contemplate their study strategies and identify the best ways to prepare for future exams.

I incorporated exam wrappers because I felt like many students were not effectively preparing for exams.

Results

K-W-L charts:
Students seemed engaged in the activity and provided interesting questions and comments.

Exam wrappers:
Post-exam wrapper student answers to “Set a goal to get a certain percentage correct in the next exam. What study strategies and schedule will enable you to earn that score?”

My goal is to get an 80%. I will definitely start studying much earlier and give more time to study. Also take the exam much slower than I did.

I want at least a 90% next exam. I will take and understand all of the questions on the quizzes online, go through the study guide thoroughly and review all lecture powerpoints again before the exam.

I would like at least an 85 or 90. I’ll definitely study this material more frequently and also make sure I don’t have other big exams around it. I sacrificed a lot of studying time to prepare for my physics exam that I had to take the day after this exam. I need to be more conscious of my own schedule.

I will start studying days before and will read the book. The chapters that I didn’t read were the topics that I struggled.

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