Unit Name: Geosciences Assessment Summary Fall 2008-Spring 2009

What are the student learning outcomes in your unit?

General Education quantitative (mathematical) skills Scientific Reasoning

Which outcome did you assess this academic year?

- 1. Scientific Reasoning
- 2. The role of G 102 Introduction to Earth Science Laboratory in G 101 Introduction to Earth Science lecture performance

How did you assess their skills before, during and / or at the end of the semester / academic year?

- 1. We assumed that students' skills and understanding of the subject before taking this course were poor. During the semesters their skills were tested by quizzes and assignments that contained questions which measured students' ability to use mathematical and logical means to solve new problems. At the end of the semester six common questions that measured students ability to solve problems by logical and mathematical skills were included in the final exam.
- 2. Study on the role of G 102 Laboratories in G 101 Lecture performance is completed (attached)

Please summarize the data you have collected this semester / academic year.

- 1. 72 % of questions were answered correctly and 28 % answered incorrectly
- 2. Nontraditional students benefit most from G 102 labs. Nontraditional students who had G 102 Lab concurrently with G 101 Lecture scored 21.1 % better (85.5% of total points) than those not enrolled (70.6% of total points) in the lab.
- 3. Traditional students enrolled in G 102 lab (81.5% of total points) also increased their performance by 2.6% over traditional students (79.5% of total points) not enrolled in the lab.

Please describe any programmatic changes you have made or are planning to make based on the data you have collected.

We plan to continue assessing the role of the G 102 labs in student learning. We collected data from Fall 2008 and Spring 2009 semester that will be processed in near future.

Note: Please use this template to provide the responses to the prompts above.