On February 19, 2009, the Geology faculty, consisting of Dr. Tania-Maria Anders, Dr. James Gibeaut, Dr. Thomas Naehr, Dr. Jennifer Smith-Engle, and Dr. Egon Weber discussed the items listed below as related to the annual assessment of the Geology B.S. program. Following discussion the faculty unanimously agreed on the following and voted to accept the program description, outcomes/objectives, and measures and findings.

Description:
The mission of the Geoscience Program is to provide an integrated and process oriented curriculum, based on fundamental scientific principles and processes, and to prepare graduates for a variety of career paths in the geosciences and related fields.

Outcomes/Objectives:

1: Broad understanding of Geology
BS graduates of the geology program will demonstrate broad understanding of major concepts central to the geological sciences.

2: Ability to discuss geological issues
BS graduates of the geology program will be able to discuss issues related to geology that impact society.
Student Learning Outcome: Yes

3: Competence in scientific inquiry
BS graduates of the geology program will show competence in scientific inquiry, writing, and oral presentation.

4: Competence in field, laboratory, and computer app. (Approval Pending)
BS graduates of the geology program will demonstrate competence in field and laboratory methods, data analysis, and computer applications relevant to the geological sciences.

5: Graduates will be employable
BS graduates of the geology program will be employable in geology-related fields, or able to continue their education in graduate programs.

Measures & Findings

1: Successful performance in Geology core courses (Related Outcomes/Objectives: 1) (Approval Pending)
Percentage of geology majors who will score above 70% in the final
Source of Evidence: Writing Exam - Writing exam to assure certain proficiency level
Associated Documents:

* Geology Program 07-08 Measure 1

Outcome/Objective 1:
Broad understanding of Geology

Achievement Target
At least 70% geology majors who will score above 70% in the final exams of upper-level geology core courses and selected electives.
GEOL 3411: Mineralogy GEOL 3414: Igneous and Metamorphic Petrology GEOL 4411: Sedimentation and Stratigraphy GEOL 4421: Structural Geology GEOL 4436: Petroleum Geology

Associated Documents:

* Geology Program 07-08 Measure 1

Findings:
2007-2008 Assessment Results / Findings
Target: Partially Met
Although the aggregate statistics show that the 70% criterion was met, Mineralogy and Hydrogeology were below the acceptance statistic. These classes are among the more difficult and quantitative classes so such results are not problematic. Note: Invertebrate Paleontology assessment does not usually include a final exam.

2: Successful presentation of Geological topics (Related Outcomes/Objectives: 2)
Percentage of Geology students who score 80% or higher on written or oral presentations in: GEOL 3326: Introduction to Field Methods GEOL 3329: Geology of National Parks GEOL 3441: Invertebrate Paleontology GEOL 4326: Field Seminar GEOL 4411: Sedimentation and Stratigraphy
Outcome/Objective 2:
Ability to discuss geological issues

70% of the students will score 80% or higher on written and/or oral presentations in: GEOL 3326: Introduction to Field Methods GEOL 3329: Geology of National Parks GEOL 3441: Invertebrate Paleontology GEOL 4326: Field Seminar GEOL 4411: Sedimentation and Stratigraphy

Associated Documents:
* Geology Program 07-08 Measure 2

Outcome/Objective 4:
Competence in field, laboratory, and computer app.

Achievement Target
At least 50% of geology majors will score above 70% in: Field Projects GEOL 3326: Introduction to Field Methods Lab Grade GEOL 4411: Sed Strat Lab Grade GEOL 3414: Petrology Lab Grade GEOL 4444: Hydrogeology
2007-2008 Assessment Results / Findings
Target: Met
A total of 61% of geology majors scored above 70% in the activities listed for this measure.
Last Updated by Thomas Naehr on 1/22/2009 Established by Thomas Naehr on 1/22/2009

4: Percentage of students pursuing career placement
(Reserved Outcomes/Objectives: 5)
Percentage of students request recommendations from Geology faculty for employment, and percentage of students who have employers request references on their behalf.

Source of Evidence: Benchmarking - Benchmarking

* Geology Program 07-08 Measure 4

Graduates will be employable
Achievement Target
At least 20% of students (or prospective employers) will request recommendations from Geology faculty for employment, or placement will be known through personal contact.

Associated Documents:
* Geology Program 07-08 Measure 4

Assessment Results / Findings
Target: Partially Met
Data show that 11 out of approximately 65 Geology majors (17%) requested recommendations or provided information about their post-graduate placement. Since there is no College- or University-level mechanism in place to track our graduates, we suspect that more Geology graduates will find employment or will pursue graduate careers.

Related Action Plan(s):
Establish staff position for tracking alumni 2007-2008

5: Pursuit of Graduate Studies (Reserved Outcomes/Objectives: 5)
Percentage of BS graduates in geology who apply to graduate schools
within one year after graduation.

Source of Evidence: Document Analysis
Associated Documents:

* Geology Program 07-08 Measure 4

Outcome/Objective 5:
Graduates will be employable

Achievement Target
At least 30% of graduating students will require recommendation letters from Geology faculty for their application to graduate school.

Associated Documents:

* Geology Program 07-08 Measure 4

Established in Cycle: 2007-2008
Last Updated by Egon Weber on 1/16/2009 Established by Migration Tool on 9/16/2008

Findings:
2007-2008 Assessment Results / Findings
Target: Not Met
Only four students requested recommendation letters during AY 2007/08.

Related Action Plan(s):
Add staff position to track alumni 2007-2008

Submitted by Thomas Naehr
Geology Program Coordinator
Associate Professor of Geology and Environmental Science
Harte Research Associate
Coordinator, Geology Program
Dept. of Physical and Environmental Sciences