Mission / Purpose

The Department of Geological Sciences is committed to providing strong educational and research programs that benefit students, the science, society, and the state of Alabama. Our mission is to:

• Maintain quality educational programs that provide basic geologic instruction to nonmajors.
• Maintain quality undergraduate programs that prepare students for graduate education or careers in the geological sciences.
• Maintain a quality graduate program that provides M.S. and Ph.D. students with the skills necessary to carry out independent research and obtain employment in a specialized area of the geological sciences.
• Develop and maintain research programs that contribute new knowledge to the geological sciences.
• Provide service to the scientific community and the public.

Student Learning Outcomes, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Describe past and present earth processes
Students will be able to identify & describe past and present processes that formed the earth.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:

Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 1: GEO 495 – the geology capstone class
Field course (GEO 495 – the geology capstone class) grades with ≥50% of students achieving a grade of B or above
Source of Evidence: Academic direct measure of learning - other

Target:
≥50% of students will achieve a grade of B or above.

M 2: Field-based projects
Successful observation and interpretation of geological relationships during field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for the geological history sections of the 4-5 week long projects in GEO 495.

Source of Evidence: Project, either individual or group

Target:
≥ 75% of students will successfully describe past and present earth processes as measured by rubrics evaluating two projects in GEO 495 Field Course. Successful is defined as a score of 2 or better in the corresponding rubric categories.

SLO 2: Create a investigative strategy
Students will be able to create a strategy to investigate a geological question.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:

Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures
M 3: Research projects in GEO 399
90% of students enrolled in Geo 399 will earn a grade of C- or higher on research projects in GEO 399 Independent Study in Geology.
Source of Evidence: Project, either individual or group
Target:
≥75% of students will earn a C or better in GEO 399.

M 4: Field/problem solving strategy for field-based projects in Field Course [GEO 495]
Successful design of field/problem solving strategy for field-based projects in Field Course [GEO 495]. This is assessed from the rubric-generated grade given for methods sections of the 4-5 week long projects in GEO 495.
Source of Evidence: Project, either individual or group
Target:
≥75% of students will earn a satisfactory or higher score (≥2) in the Methods section of the rubrics used to grade two assignments in GEO 495.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Expand ways to assess this skill set.
Established in Cycle: 2011-2012
Additional measures will be sought to better assess this goal.

M 29: Research/Internship participation
More than 20% of majors will enroll and pass in an undergraduate research experience (GEO 399, GEO 499, Emerging Scholars, Computer-Based Honors, etc) and/or internship (GEO 497) each year.
Source of Evidence: Academic direct measure of learning - other

SLO 3: Evaluate scientific literature quality
Students will be able to evaluate the quality of scientific literature.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:
Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data
11 Writing - SLO is related to building on students' competency in academic writing skills and aims to extend those skills

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 5: Writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes
Successful completion (grade of C or higher) of writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes by ≥50% program majors
Source of Evidence: Written assignment(s), usually scored by a rubric
Target:
≥50% program majors will successfully complete (grade of C or higher) writing assignments in GEO 416 (Volcanology).

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Classes not always offered
Established in Cycle: 2011-2012
Due to a shortage of faculty and sabbatical leave alternative classes will be assessed.

M 6: Written and oral discussions conducted in GEO 416
Ability to critique and discuss scientific literature by program majors as shown in written and oral discussions conducted in GEO 410, GEO 416, and/or GEO 470.
Source of Evidence: Written assignment(s), usually scored by a rubric
Target:
≥50% of students will adequately reference literature based on rubric assessments in GEO 401 and GEO 416.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Addition of more oral assignments
Established in Cycle: 2011-2012
Faculty will be encouraged to add more oral assignments to better instruct and assess communication skills.
M 29: Research/Internship participation
More than 20% of majors will enroll and pass in an undergraduate research experience (GEO 399, GEO 499, Emerging Scholars, Computer-Based Honors, etc) and/or internship (GEO 497) each year.
Source of Evidence: Academic direct measure of learning - other

SLO 4: Express their scientific analyses
Students will be able to express their scientific analyses and findings in both written and oral format.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:

Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data
11 Writing - SLO is related to building on students’ competency in academic writing skills and aims to extend those skills

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 6: Written and oral discussions conducted in GEO 416
Ability to critique and discuss scientific literature by program majors as shown in written and oral discussions conducted in GEO 410, GEO 416, and/or GEO 470.
Source of Evidence: Written assignment(s), usually scored by a rubric

M 7: Presentations and projects in 200-level GEO classes
Successful completion (grade of C or higher) of presentations and projects in 200-level GEO classes by at least 70% of enrolled students.
Source of Evidence: Presentation, either individual or group
Target:
Successful completion (grade of C or higher) of presentations and projects in 200-level GEO classes.

M 8: Presentations and projects in 300-level GEO classes
Successful completion (rubric-generated grade of C or higher) of presentations and projects in 300-level GEO classes by at least 70% of enrolled students.
Source of Evidence: Presentation, either individual or group
Target:
≥75% successful completion (rubric-generated grade of C or higher) of presentations and projects in 314 Igneous and Metamorphic Petrology, 365 Structural Geology, and 369 Geophysics.

M 9: Presentations and projects in 400-level GEO classes
Successful completion (rubric-generated grade of C or higher) of presentations and projects in 400-level GEO classes by at least 70% of enrolled students.
Source of Evidence: Presentation, either individual or group
Target:
≥75% successful completion (rubric-generated grade of C or higher) of presentations and projects in GEO 416.

M 29: Research/Internship participation
More than 20% of majors will enroll and pass in an undergraduate research experience (GEO 399, GEO 499, Emerging Scholars, Computer-Based Honors, etc) and/or internship (GEO 497) each year.
Source of Evidence: Academic direct measure of learning - other

SLO 5: Visualize and interpret geological structures
Students will be able to visualize and interpret geological structures in three-dimensions

Connected Document
BS Geology Curriculum Maps

Relevant Associations:

Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.
**Related Measures**

**M 10: Geological maps and cross sections**
Successful construction of geological maps and cross sections during 4-5 field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for cross sections and maps
Source of Evidence: Project, either individual or group
Target:
250% of students will successfully construct geological maps and cross sections during 4-5 field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for the Nacimiento and Rancheros exercises with successful defined as a score of 2 or better.

**M 11: Subsurface imaging exercises**
Successful completion of subsurface imaging exercises for seismic, gravity, and magnetic exercises in GEO 369
Source of Evidence: Academic direct measure of learning - other
Target:
250% of students will successfully complete (C- or better) exercises focused on seismic, gravity, and magnetic subsurface imaging in GEO 369.

**Other Outcomes, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**OthOtcm 6: Recognized quality**
The program will improve and sustain a high level of recognized quality
Connected Document
BS Geology Curriculum Maps

**Related Measures**

**M 12: Geological Sciences program review**
A list of the strengths related to the BSG degree from the most recent Geological Sciences program review will be reported
Source of Evidence: Academic indirect indicator of learning - other

**M 13: Opportunities for improvement**
A list of the opportunities for improvement related to the BSG degree from the most recent Geological Sciences program review will be reported.
Source of Evidence: Academic indirect indicator of learning - other

**M 14: Response to the recommendations**
A list of actions in response to the recommendations related to the BSG degree from the Geological Sciences program review will be reported
Source of Evidence: Academic indirect indicator of learning - other

**OthOtcm 7: Optimal enrollment and completion levels**
The program will build and sustain an optimal level of annual program enrollments and degree completions.
Connected Document
BS Geology Curriculum Maps

**Related Measures**

**M 15: Undergraduate majors**
The number of undergraduate majors during Fall semester will be reported
Source of Evidence: Academic indirect indicator of learning - other

**M 16: Completions in Geology**
Degree completions in Geology per year will be reported and compared to ACHE standards.
Source of Evidence: Academic indirect indicator of learning - other

**M 17: Student credit hour production**
Student credit hour production in Geological Science classes will be reported
Source of Evidence: Academic indirect indicator of learning - other

**OthOtcm 8: Program Value**
The program will be highly valued by its program graduates and other key constituencies it serves
Connected Document
BS Geology Curriculum Maps

**Related Measures**

**M 18: Employment data**
The employment data of Geology graduates will be reported
Source of Evidence: Academic indirect indicator of learning - other

**M 19: Graduate school placement**
The graduate school placement of Geology graduates will be reported
Source of Evidence: Academic indirect indicator of learning - other

**M 20: Survey data**
Survey data from Geology graduates will be reported as frequently as it is practical to measure.
OthOtm 9: Department Outcome: Demonstrate excellence
Faculty will demonstrate excellence in teaching at all levels.

Department Outcome #1 Improvement Action(s) to be advanced (copied from 2010-11 report). The change in the system of polling students for faculty assessment was not anticipated. Though promised a summary of departmental assessments, this has not yet been received. Previously the assessment information was kept and tabulated by the departmental secretary. For the moment this information is being extracted from the faculty activity reports. A more efficient method of examining all departmental syllabi needs to be initiated. Prior to the electronic submittal of syllabi by individual faculty, the departmental secretary kept all syllabi on file. This is not now the case. The secretary is still trying to find out how she can best carry obtain all the syllabi. Faculty will be encouraged to report the use of new technologies and pedagogies in their syllabi.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 21: Instructor scores from student opinion
50% of instructor scores from student opinion ratings administered in class will meet or exceed the college average
Source of Evidence: Academic indirect indicator of learning - other

M 22: Infuse new technologies and pedagogies
Course syllabi will show that 80% of faculty have made an effort to infuse technology and active-learning pedagogies into their classrooms.
Source of Evidence: Academic indirect indicator of learning - other

OthOtm 10: Department Outcome: Engage in research
Faculty will engage in research and scholarly activity

Department Outcome #2 Improvement Action(s) to be advanced (copied from 2010-11 report). In future years it will be easier to extract the data for measure 3.1 from the FAR. The data for measure 3.2 do not give a true measure of faculty productivity. In future years the data for this measure will be obtained from the Office of Sponsored Programs and reflect average grant proposal submission and funding rates.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 23: The Faculty Activity Report
The Faculty Activity Report will show that 75% of tenured faculty will be an author on at least two refereed publications each year.
Source of Evidence: Academic indirect indicator of learning - other

M 24: Data from the Office of Sponsored Programs
Data from the Office of Sponsored Programs will show that 80% of faculty will submit at least one grant proposal over the course of 12 months
Source of Evidence: Academic indirect indicator of learning - other

OthOtm 11: Department outcome: Provide leadership
Faculty will participate and provide leadership in the geoscience profession at local, national, and international levels

Department Outcome #3 Improvement Action(s) to be advanced (copied from 2010-11 report). A greater effort will be made to mentor junior faculty and encourage participation in geoscience leadership.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 25: Faculty will serve as reviewers for journals
Faculty Activity Reports will show that 50% of faculty will serve as reviewers for journals and funding agencies.
Source of Evidence: Academic indirect indicator of learning - other

M 26: Faculty will be active in the leadership
Faculty Activity Reports will show that 35% of the faculty will be active in the leadership of professional societies and involved in funding agency review panels
Source of Evidence: Academic indirect indicator of learning - other

OthOtm 12: Department outcome: Offer quality education programs for non-majors
The department of Geological Sciences will offer quality education programs for non-majors.

Department Outcome #6 Improvement Action(s) to be advanced (copied from 2010-11 report). The Department of Geological Sciences will further explore the reason for the decrease in student credit hour production and explore ways to further increase introductory course diversity.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 27: Increased the number credit hours
Annual reports will show that the department increases the number credit hours produced in 100-level classes at a pace equal to or greater than the overall enrollment increases to the University.
Source of Evidence: Academic indirect indicator of learning - other

**M 28: Increase the diversity of topics**
The department will maintain at least four different themes in 100-level classes in order to better serve non-majors.
Source of Evidence: Academic indirect indicator of learning - other

### Details of Action Plans for This Cycle (by Established cycle, then alpha)

**Addition of more oral assignments**
Faculty will be encouraged to add more oral assignments to better instruct and assess communication skills.

- **Established in Cycle:** 2011-2012
- **Implementation Status:** Planned
- **Priority:** Low

**Relationships (Measure | Outcome/Objective):**
- **Measure:** Written and oral discussions conducted in GEO 416 | **Outcome/Objective:** Evaluate scientific literature quality

**Classes not always offered**
Due to a shortage of faculty and sabbatical leave alternative classes will be assessed.

- **Established in Cycle:** 2011-2012
- **Implementation Status:** Planned
- **Priority:** Medium

**Relationships (Measure | Outcome/Objective):**
- **Measure:** Writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes | **Outcome/Objective:** Evaluate scientific literature quality

**Expand ways to assess this skill set.**
Additional measures will be sought to better assess this goal.

- **Established in Cycle:** 2011-2012
- **Implementation Status:** Planned
- **Priority:** Medium

**Relationships (Measure | Outcome/Objective):**
- **Measure:** Field/problem solving strategy for field-based projects in Field Course [GEO 495] | **Outcome/Objective:** Create a investigative strategy
Mission / Purpose
The Department of Geological Sciences is committed to providing strong educational and research programs that benefit students, the science, society, and the state of Alabama. Our mission is to:
- Maintain quality educational programs that provide basic geologic instruction to nonmajors.
- Maintain quality undergraduate programs that prepare students for graduate education or careers in the geological sciences.
- Maintain a quality graduate program that provides M.S. and Ph.D. students with the skills necessary to carry out independent research and obtain employment in a specialized area of the geological sciences.
- Develop and maintain research programs that contribute new knowledge to the geological sciences.
- Provide service to the scientific community and the public.

Student Learning Outcomes, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Describe past and present earth processes
Students will be able to identify & describe past and present processes that formed the earth.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:
Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 1: GEO 495-- the geology capstone class
Field course (GEO 495-- the geology capstone class) grades with ≥50% of students achieving a grade of B or above
Source of Evidence: Academic direct measure of learning - other

Target:
≥50% of students will achieve a grade of B or above.

Finding (2012-2013) - Target: Met
63% of students earned a B or better.

M 2: Field-based projects
Successful observation and interpretation of geological relationships during field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for the geological history sections of the 4-5 week long projects in GEO 495.

Source of Evidence: Project, either individual or group

Target:
≥ 75% of students will successfully describe past and present earth processes as measured by rubrics evaluating two projects in GEO 495 Field Course. Successful is defined as a score of 2 or better in the corresponding rubric categories.

Finding (2012-2013) - Target: Met
78% of students in Field Course successfully described past and present earth processes as measured by rubrics evaluating two projects.

SLO 2: Create an investigative strategy
Students will be able to create a strategy to investigate a geological question.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:
Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific
method and analysis of data

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 3: Research projects in GEO 399
Successful (grade of C or higher) completion of research projects in GEO 399 Independent Study in Geology.
Source of Evidence: Project, either individual or group
Target:
≥75% of students will earn a C or better in GEO 399.
Finding (2012-2013) - Target: Met
19 students enrolled in Geo 399 in Fall 12 and Spring 13. All (100%) earned a C or better.

M 4: Field/problem solving strategy for field-based projects in Field Course [GEO 495]
Successful design of field/problem solving strategy for field-based projects in Field Course [GEO 495]. This is assessed from the rubric-generated grade given for methods sections of the 4-5 week long projects in GEO 495.
Source of Evidence: Project, either individual or group
Target:
≥75% of students will earn a satisfactory or higher score (≥2) in the Methods section of the rubrics used to grade two assignments in GEO 495.
Finding (2012-2013) - Target: Met
85% of students earned a satisfactory or higher score (≥2) in the "Methods" section of the rubrics used to grade two assignments in GEO 495.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Expand ways to assess this skill set.
Established in Cycle: 2011-2012
Additional measures will be sought to better assess this goal.

SLO 3: Evaluate scientific literature quality
Students will be able to evaluate the quality of scientific literature.

Connected Document
RS Geology Curriculum Maps

Relevant Associations:

Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science – SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data
11 Writing - SLO is related to building on students' competency in academic writing skills and aims to extend those skills

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 5: Writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes
Successful completion (grade of C or higher) of writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes by ≥50% program majors
Source of Evidence: Written assignment(s), usually scored by a rubric
Target:
≥50% program majors will successfully complete (grade of C or higher) writing assignments in GEO 416 (Volcanology).
Finding (2012-2013) - Target: Met
Geo 416 was not taught this cycle, so data were collected from another designated writing class. In Geo 470 (General Geochemistry) the undergraduate grades on writing assignments and component of assignments ranged from 79% to 94%, thus 100% met expectations. Next cycle additional data will be added from Geo 416 (it is being taught now) and Geo 401 (to be taught Spring 14).

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Classes not always offered
Established in Cycle: 2011-2012
Due to a shortage of faculty and sabbatical leave alternative classes will be assessed.

M 6: Written and oral discussions conducted in GEO 416
Ability to critique and discuss scientific literature by program majors as shown in written and oral discussions conducted in GEO 416
Source of Evidence: Written assignment(s), usually scored by a rubric

Target:
≥50% of students will adequately reference literature based on rubric assessments in GEO 401 and GEO 416.

Finding (2012-2013) - Target: Not Reported This Cycle
No data were collected since this class was not taught during this assessment cycle due to loss of a faculty member. It will be measured again in the next cycle since the class is now being taught.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Addition of more oral assignments
Established in Cycle: 2011-2012
Faculty will be encouraged to add more oral assignments to better instruct and assess communication skills.

SLO 4: Express their scientific analyses
Students will be able to express their scientific analyses and findings in both written and oral format.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:
Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data
11 Writing - SLO is related to building on students' competency in academic writing skills and aims to extend those skills

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 7: Presentations and projects in 200-level GEO classes
Successful completion (grade of C or higher) of presentations and projects in 200-level GEO classes

Source of Evidence: Presentation, either individual or group

Target:
Successful completion (grade of C or higher) of presentations and projects in 200-level GEO classes.

Finding (2012-2013) - Target: Met
81% of students met this threshold in Geo 210.

M 8: Presentations and projects in 300-level GEO classes
Successful completion (rubric-generated grade of C or higher) of presentations and projects in 300-level GEO classes

Source of Evidence: Presentation, either individual or group

Target:
≥75% successful completion (rubric-generated grade of C or higher) of presentations and projects in 314 Igneous and Metamorphic Petrology, 365 Structural Geology, and 369 Geophysics.

Finding (2012-2013) - Target: Not Reported This Cycle
This measurement was not made due to faculty departure. It will be measured in the next cycle.

M 9: Presentations and projects in 400-level GEO classes
Successful completion (rubric-generated grade of C or higher) of presentations and projects in 400-level GEO classes

Source of Evidence: Presentation, either individual or group

Target:
≥75% successful completion (rubric-generated grade of C or higher) of presentations and projects in GEO 416.

Finding (2012-2013) - Target: Not Reported This Cycle
This was not measured due to faculty departure. It will be measured next cycle.

SLO 5: Visualize and interpret geological structures
Students will be able to visualize and interpret geological structures in three-dimensions

Connected Document
BS Geology Curriculum Maps

Relevant Associations:
Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data.

**Strategic Plan Associations**

- University of Alabama
  - 1.1 Promote and enhance areas of academic, scholarship, and research excellence.

**Related Measures**

**M 10: Geological maps and cross sections**

Successful construction of geological maps and cross sections during 4-5 field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for cross sections and maps.

Source of Evidence: Project, either individual or group

**Target:**

≥50% of students will successfully construct geological maps and cross sections during 4-5 field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for the Nacimiento and Rancheros exercises with successful defined as a score of 2 or better.

**Finding (2012-2013) - Target: Met**

91% of students successfully constructed geological maps and cross sections during the field-based projects in the 12-13 Field Course.

**M 11: Subsurface imaging exercises**

Successful completion of subsurface imaging exercises for seismic, gravity, and magnetic exercises in GEO 369.

Source of Evidence: Academic direct measure of learning - other

**Target:**

≥50% of students will successfully complete (C- or better) exercises focused on seismic, gravity, and magnetic subsurface imaging in GEO 369.

**Other Outcomes, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**OthOtm 6: Recognized quality**

The program will improve and sustain a high level of recognized quality

**Connected Document**

- BS Geology Curriculum Maps

**Related Measures**

**M 12: Geological Sciences program review**

A list of the strengths related to the BSG degree from the most recent Geological Sciences program review will be reported.

Source of Evidence: Academic indirect indicator of learning - other

**M 13: Opportunities for improvement**

A list of the opportunities for improvement related to the BSG degree from the most recent Geological Sciences program review will be reported.

Source of Evidence: Academic indirect indicator of learning - other

**M 14: Response to the recommendations**

A list of actions in response to the recommendations related to the BSG degree from the Geological Sciences program review will be reported.

Source of Evidence: Academic indirect indicator of learning - other

**OthOtm 7: Optimal enrollment and completion levels**

The program will build and sustain an optimal level of annual program enrollments and degree completions.

**Connected Document**

- BS Geology Curriculum Maps

**Related Measures**

**M 15: Undergraduate majors**

The number of undergraduate majors during Fall semester will be reported.

Source of Evidence: Academic indirect indicator of learning - other

**M 16: Completions in Geology**

Degree completions in Geology per year will be reported and compared to ACHE standards.

Source of Evidence: Academic indirect indicator of learning - other

**M 17: Student credit hour production**

Student credit hour production in Geological Science classes will be reported.

Source of Evidence: Academic indirect indicator of learning - other

**OthOtm 8: Program Value**

The program will be highly valued by its program graduates and other key constituencies it serves

**Connected Document**

- BS Geology Curriculum Maps

**Related Measures**
M 18: Employment data
The employment data of Geology graduates will be reported
Source of Evidence: Academic indirect indicator of learning - other

M 19: Graduate school placement
The graduate school placement of Geology graduates will be reported
Source of Evidence: Academic indirect indicator of learning - other

M 20: Survey data
Survey data from Geology graduates will be reported
Source of Evidence: Academic indirect indicator of learning - other

OthOtcm 9: Department Outcome: Demonstrate excellence
Faculty will demonstrate excellence in teaching at all levels.

Department Outcome #1 improvement Action(s) to be advanced (copied from 2010-11 report). The change in the system of polling students for faculty assessment was not anticipated. Though promised a summary of departmental assessments, this has not yet been received. Previously the assessment information was kept and tabulated by the departmental secretary. For the moment this information is being extracted from the faculty activity reports. A more efficient method of examining all departmental syllabi needs to be initiated. Prior to the electronic submittal of syllabi by individual faculty, the departmental secretary kept all syllabi on file. This is not now the case. The secretary is still trying to find out how she can best carry obtain all the syllabi. Faculty will be encouraged to report the use of new technologies and pedagogies in their syllabi

Connected Document
BS Geology Curriculum Maps

Related Measures

M 21: Instructor scores from student opinion
50% of instructor scores from student opinion ratings administered in class will meet or exceed the college average
Source of Evidence: Academic indirect indicator of learning - other

M 22: Infuse new technologies and pedagogies
Course syllabi will show that 80% of faculty have made an effort to infuse new technologies and pedagogies into their classroom
Source of Evidence: Academic indirect indicator of learning - other

OthOtcm 10: Department Outcome: Engage in research
Faculty will engage in research and scholarly activity

Department Outcome #2 improvement Action(s) to be advanced (copied from 2010-11 report). In future years it will be easier to extract the data for measure 3.1 from the FAR. The data for measure 3.2 do not give a true measure of faculty productivity. In future years the data for this measure will be obtained from the Office of Sponsored Programs and reflect average grant proposal submission and funding rates.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 23: The Faculty Activity Report
The Faculty Activity Report will show that 75% of tenured faculty will be an author on at least two refereed publications each year.
Source of Evidence: Academic indirect indicator of learning - other

M 24: Data from the Office of Sponsored Programs
Data from the Office of Sponsored Programs will show that 80% of faculty will submit at least one grant proposal over the course of 12 months
Source of Evidence: Academic indirect indicator of learning - other

OthOtcm 11: Department outcome: Provide leadership
Faculty will participate and provide leadership in the geoscience profession at local, national, and international levels

Department Outcome #3 improvement Action(s) to be advanced (copied from 2010-11 report). A greater effort will be made to mentor junior faculty and encourage participation in geoscience leadership.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 25: Faculty will serve as reviewers for journals
Faculty Activity Reports will show that 50% of faculty will serve as reviewers for journals and funding agencies.
Source of Evidence: Academic indirect indicator of learning - other

M 26: Faculty will be active in the leadership
Faculty Activity Reports will show that 35% of the faculty will be active in the leadership of professional societies and involved in funding agency review panels
Source of Evidence: Academic indirect indicator of learning - other

OthOtcm 12: Department outcome: Offer quality education programs for non-majors
The department of Geological Sciences will offer quality education programs for non-majors.
Department Outcome 4n Improvement Action(s) to be advanced (copied from 2010-11 report). The Department of Geological Sciences will further explore the reason for the decrease in student credit hour production and explore ways to further increase introductory course diversity.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 27: Increased the number credit hours
Annual reports will show that the department has increased the number credit hours produced in 100-level classes
Source of Evidence: Academic indirect indicator of learning - other

M 28: Increase the diversity of topics
The department will increase the diversity of topics covered in 100-level classes in order to better serve non-majors
Source of Evidence: Academic indirect indicator of learning - other

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Addition of more oral assignments
Faculty will be encouraged to add more oral assignments to better instruct and assess communication skills.

Established in Cycle: 2011-2012
Implementation Status: Planned
Priority: Low

Relationships (Measure | Outcome/Objective):
Measure: Written and oral discussions conducted in GEO 416 | Outcome/Objective: Evaluate scientific literature quality

Classes not always offered
Due to a shortage of faculty and sabbatical leave alternative classes will be assessed.

Established in Cycle: 2011-2012
Implementation Status: Planned
Priority: Medium

Relationships (Measure | Outcome/Objective):
Measure: Writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes | Outcome/Objective: Evaluate scientific literature quality

Implementation Description: The assessment coordinator will seek data from GEO 470 (General Geochemistry)

Expand ways to assess this skill set.
Additional measures will be sought to better assess this goal.

Established in Cycle: 2011-2012
Implementation Status: Planned
Priority: Medium

Relationships (Measure | Outcome/Objective):
Measure: Field/problem solving strategy for field-based projects in Field Course [GEO 495] | Outcome/Objective: Create a investigative strategy
Mission / Purpose

The Department of Geological Sciences is committed to providing strong educational and research programs that benefit students, the science, society, and the state of Alabama. Our mission is to:

- Maintain quality educational programs that provide basic geologic instruction to nonmajors.
- Maintain quality undergraduate programs that prepare students for graduate education or careers in the geological sciences.
- Maintain a quality graduate program that provides M.S. and Ph.D. students with the skills necessary to carry out independent research and obtain employment in a specialized area of the geological sciences.
- Develop and maintain research programs that contribute new knowledge to the geological sciences.
- Provide service to the scientific community and the public.

Student Learning Outcomes, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Describe past and present earth processes
Students will be able to identify & describe past and present processes that formed the earth.

 Connected Document
BS Geology Curriculum Maps

Relevant Associations:

Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 1: GEO 495— the geology capstone class
Field course (GEO 495— the geology capstone class) grades with \( \geq 50\% \) of students achieving a grade of B or above
Source of Evidence: Academic direct measure of learning - other

 Target:
\( \geq 50\% \) of students will achieve a grade of B or above.

 Finding (2011-2012) - Target: Met
Grades for the 2012 summer field school ranged from A to D-. 7/8 earned B or above = 87.5%.

M 2: Field-based projects
Successful observation and interpretation of geological relationships during field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for the geological history sections of the 4-5 week long projects in GEO 495.
Source of Evidence: Project, either individual or group

 Target:
\( \geq 75\% \) of students will successfully describe past and present earth processes as measured by rubrics evaluating two projects in GEO 495 Field Course. Successful is defined as a score of 2 or better in the corresponding rubric categories.

 Finding (2011-2012) - Target: Met
8 students were enrolled in GEO 495. The results for each project are:
Nacimiento Project Report: 5 of 8 earned scores of 2 or better
Ranchos Project Report: 8 of 8 earned scores of 2 or better.
Overall success rate = 81%

SLO 2: Create a investigative strategy
Students will be able to create a strategy to investigate a geological question.

 Connected Document
BS Geology Curriculum Maps

Relevant Associations:

Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data.

Strategic Plan Associations
- University of Alabama
  1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 3: Research projects in GEO 399
Successful (grade of C or higher) completion of research projects in GEO 399 Independent Study in Geology.

Source of Evidence: Project, either individual or group

Target:
≥75% of students will earn a C or better in GEO 399.

Finding (2011-2012) - Target: Met
16 students enrolled in GEO 399 this assessment period and all (100%) earned grades of B or above.

M 4: Field/problem solving strategy for field-based projects in Field Course [GEO 495]
Successful design of field/problem solving strategy for field-based projects in Field Course (GEO 495). This is assessed from the rubric-generated grade given for methods sections of the 4-5 week long projects in GEO 495.

Source of Evidence: Project, either individual or group

Target:
≥75% of students will earn a satisfactory or higher score (≥2) in the Methods section of the rubrics used to grade two assignments in GEO 495.

Finding (2011-2012) - Target: Met
8 of 8 students (100%) enrolled in GEO 495 earned 2 or higher in the associated rubric category for both the Nacimiento and Ranchos exercises.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Expand ways to assess this skill set.
Established in Cycle: 2011-2012
Additional measures will be sought to better assess this goal.

SLO 3: Evaluate scientific literature quality
Students will be able to evaluate the quality of scientific literature.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:

Standard Associations
- SACS 3.3.1
  3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
- 9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data
- 11 Writing - SLO is related to building on students’ competency in academic writing skills and aims to extend those skills

Strategic Plan Associations
- University of Alabama
  1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 5: Writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes
Successful completion (grade of C or higher) of writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes by ≥50% program majors

Source of Evidence: Written assignment(s), usually scored by a rubric

Target:
≥50% program majors will successfully complete (grade of C or higher) writing assignments in GEO 416 (Volcanology).

Finding (2011-2012) - Target: Met
16 of 18 students in Geo 416 were declared geology majors (13 BS or BSG). All (100%) of these students passed the writing components of the class.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Classes not always offered
Established in Cycle: 2011-2012
Due to a shortage of faculty and sabbatical leave alternative classes will be assessed.

M 6: Written and oral discussions conducted in GEO 416
Ability to critique and discuss scientific literature by program majors as shown in written and oral discussions conducted in GEO 416

Source of Evidence: Written assignment(s), usually scored by a rubric
Target: 
≥50% of students will adequately reference literature based on rubric assessments in GEO 401 and GEO 416.

Finding (2011-2012) - Target: Met
27 of 34 students earned C- or better on research-based writing assignments and 34 or 34 students had adequate literature referencing based on rubric assessment. The grading methods in Geo 416 class changed due to a faculty member leaving the department and direct measurement was not possible for this outcome in isolation. However, since 100% of the student passed the writing elements of the class, and literature discussion was a key component of the overall project, these data suggest most students achieved the goal.

Related Action Plans (by Established cycle, then alpha):
For full information, see the Details of Action Plans section of this report.

Addition of more oral assignments
Established in Cycle: 2011-2012
Faculty will be encouraged to add more oral assignments to better instruct and assess communication skills.

SLO 4: Express their scientific analyses
Students will be able to express their scientific analyses and findings in both written and oral format.

Connected Document
BS Geology Curriculum Maps

Relevant Associations:
Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes

General Education/Core Curriculum Associations
9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data
11 Writing - SLO is related to building on students’ competency in academic writing skills and aims to extend those skills

Strategic Plan Associations
University of Alabama
1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 7: Presentations and projects in 200-level GEO classes
Successful completion (grade of C or higher) of presentations and projects in 200-level GEO classes
Source of Evidence: Presentation, either individual or group

Target:
Successful completion (grade of C or higher) of presentations and projects in 200-level GEO classes.

Finding (2011-2012) - Target: Not Reported This Cycle
Incomplete data are available at this time. Class size necessitated a change in teaching methods.

M 8: Presentations and projects in 300-level GEO classes
Successful completion (rubric-generated grade of C or higher) of presentations and projects in 300-level GEO classes
Source of Evidence: Presentation, either individual or group

Target:
≥75% successful completion (rubric-generated grade of C or higher) of presentations and projects in 314 Igneous and Metamorphic Petrology, 365 Structural Geology, and 369 Geophysics.

Finding (2011-2012) - Target: Met
11/13 students in Geo 314 successfully completed projects (one additional student dropped due to medical reasons), 8/9 students successfully completed projects in Geo 367. 8/12 students successfully completed projects in Geo 369. Overall 79% of students met the goal.

M 9: Presentations and projects in 400-level GEO classes
Successful completion (rubric-generated grade of C or higher) of presentations and projects in 400-level GEO classes
Source of Evidence: Presentation, either individual or group

Target:
≥75% successful completion (rubric-generated grade of C or higher) of presentations and projects in GEO 416.

Finding (2011-2012) - Target: Not Reported This Cycle
No data available due to change in faculty who teaches the class.

SLO 5: Visualize and interpret geological structures
Students will be able to visualize and interpret geological structures in three-dimensions

Connected Document
BS Geology Curriculum Maps

Relevant Associations:
Standard Associations
SACS 3.3.1
3.3.1.1 Educational programs, to include student learning outcomes
General Education/Core Curriculum Associations

  9 Natural Science - SLO is related to a hands-on laboratory or field experience that emphasizes the scientific method and analysis of data

Strategic Plan Associations

  University of Alabama
  1.1 Promote and enhance areas of academic, scholarship, and research excellence.

Related Measures

M 10: Geological maps and cross sections
Successful construction of geological maps and cross sections during 4-5 field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for cross sections and maps
Source of Evidence: Project, either individual or group
Target:
  ≥50% of students will successfully construct geological maps and cross sections during 4-5 field-based projects in Field Course [GEO 495]. This will be assessed from the rubric-generated grade given for the Nacimiento and Rancheros exercises with successful defined as a score of 2 or better.

Finding (2011-2012) - Target: Met
  8 of 8 students earned 2 or higher in the rubrics for both the Nacimiento and Rancheros projects.

M 11: Subsurface imaging exercises
Successful completion of subsurface imaging exercises for seismic, gravity, and magnetic exercises in GEO 369
Source of Evidence: Academic direct measure of learning - other
Target:
  ≥50% of students will successfully complete (C- or better) exercises focused on seismic, gravity, and magnetic subsurface imaging in GEO 369.

Finding (2011-2012) - Target: Met
  Two exercises require students to develop a 3 dimensional understanding of structures based on geophysical data. 8 out of 12 student successfully completed subsurface imaging exercises (successfully = C- or above)

Other Outcomes, with Any Associations and Related Measures, Targets, Findings, and Action Plans

OthOtcm 6: Recognized quality
The program will improve and sustain a high level of recognized quality
Connected Document
  BS Geology Curriculum Maps

Related Measures

M 12: Geological Sciences program review
A list of the strengths related to the BSG degree from the most recent Geological Sciences program review will be reported
Source of Evidence: Academic indirect indicator of learning - other

M 13: Opportunities for improvement
A list of the opportunities for improvement related to the BSG degree from the most recent Geological Sciences program review will be reported.
Source of Evidence: Academic indirect indicator of learning - other

M 14: Response to the recommendations
A list of actions in response to the recommendations related to the BSG degree from the Geological Sciences program review will be reported
Source of Evidence: Academic indirect indicator of learning - other

OthOtcm 7: Optimal enrollment and completion levels
The program will build and sustain an optimal level of annual program enrollments and degree completions.
Connected Document
  BS Geology Curriculum Maps

Related Measures

M 15: Undergraduate majors
The number of undergraduate majors during Fall semester will be reported
Source of Evidence: Academic indirect indicator of learning - other

M 16: Completions in Geology
Degree completions in Geology per year will be reported and compared to ACHE standards.
Source of Evidence: Academic indirect indicator of learning - other

M 17: Student credit hour production
Student credit hour production in Geological Science classes will be reported
Source of Evidence: Academic indirect indicator of learning - other

OthOtcm 8: Program Value
The program will be highly valued by its program graduates and other key constituencies it serves
Connected Document
Related Measures

M 18: Employment data
The employment data of Geology graduates will be reported
Source of Evidence: Academic indirect indicator of learning - other

M 19: Graduate school placement
The graduate school placement of Geology graduates will be reported
Source of Evidence: Academic indirect indicator of learning - other

M 20: Survey data
Survey data from Geology graduates will be reported
Source of Evidence: Academic indirect indicator of learning - other

OthOtcn 9: Department Outcome: Demonstrate excellence
Faculty will demonstrate excellence in teaching at all levels.

Department Outcome #1 Improvement Action(s) to be advanced (copied from 2010-11 report). The change in the system of polling students for faculty assessment was not anticipated. Though promised a summary of departmental assessments, this has not yet been received. Previously the assessment information was kept and tabulated by the departmental secretary. For the moment this information is being extracted from the faculty activity reports. A more efficient method of examining all departmental syllabi needs to be initiated. Prior to the electronic submittal of syllabi by individual faculty, the departmental secretary kept all syllabi on file. This is not now the case. The secretary is still trying to find out how she can best carry obtain all the syllabi. Faculty will be encouraged to report the use of new technologies and pedagogies in their syllabi.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 21: Instructor scores from student opinion
50% of instructor scores from student opinion ratings administered in class will meet or exceed the college average
Source of Evidence: Academic indirect indicator of learning - other

M 22: Infuse new technologies and pedagogies
Course syllabi will show that 80% of faculty have made an effort to infuse new technologies and pedagogies into their classroom
Source of Evidence: Academic indirect indicator of learning - other

OthOtcn 10: Department Outcome: Engage in research
Faculty will engage in research and scholarly activity

Department Outcome #2 Improvement Action(s) to be advanced (copied from 2010-11 report). In future years it will be easier to extract the data for measure 3.1 from the FAR. The data for measure 3.2 do not give a true measure of faculty productivity. In future years the data for this measure will be obtained from the Office of Sponsored Programs and reflect average grant proposal submission and funding rates.

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BS Geology Curriculum Maps

Related Measures

M 23: The Faculty Activity Report
The Faculty Activity Report will show that 75% of tenured faculty will be an author on at least two refereed publications each year.
Source of Evidence: Academic indirect indicator of learning - other

M 24: Data from the Office of Sponsored Programs
Data from the Office of Sponsored Programs will show that 80% of faculty will submit at least one grant proposal over the course of 12 months
Source of Evidence: Academic indirect indicator of learning - other

OthOtcn 11: Department outcome: Provide leadership
Faculty will participate and provide leadership in the geoscience profession at local, national, and international levels

Department Outcome #3 Improvement Action(s) to be advanced (copied from 2010-11 report). A greater effort will be made to mentor junior faculty and encourage participation in geoscience leadership.

Connected Document
BS Geology Curriculum Maps

Related Measures

M 25: Faculty will serve as reviewers for journals
Faculty Activity Reports will show that 50% of faculty will serve as reviewers for journals and funding agencies.
Source of Evidence: Academic indirect indicator of learning - other

M 26: Faculty will be active in the leadership
Faculty Activity Reports will show that 35% of the faculty will be active in the leadership of professional societies and involved in funding agency review panels
Source of Evidence: Academic indirect indicator of learning - other
OthOtcn 12: Department outcome: Offer quality education programs for non-majors

The department of Geological Sciences will offer quality education programs for non-majors.

Department Outcome #n Improvement Action(s) to be advanced (copied from 2010-11 report). The Department of Geological Sciences will further explore the reason for the decrease in student credit hour production and explore ways to further increase introductory course diversity.

Connected Document
BS Geology Curriculum Maps

Related Measures

**M 27:** Increased the number credit hours
Annual reports will show that the department has increased the number credit hours produced in 100-level classes
Source of Evidence: Academic indirect indicator of learning - other

**M 28:** Increase the diversity of topics
The department will increase the diversity of topics covered in 100-level classes in order to better serve non-majors
Source of Evidence: Academic indirect indicator of learning - other

Details of Action Plans for This Cycle (by Established cycle, then alpha)

**Addition of more oral assignments**
Faculty will be encouraged to add more oral assignments to better instruct and assess communication skills.

**Established in Cycle:** 2011-2012
**Implementation Status:** Planned
**Priority:** Low

**Relationships (Measure | Outcome/Objective):**
**Measure:** Written and oral discussions conducted in GEO 416
**Outcome/Objective:** Evaluate scientific literature quality

**Classes not always offered**
Due to a shortage of faculty and sabbatical leave alternative classes will be assessed.

**Established in Cycle:** 2011-2012
**Implementation Status:** Planned
**Priority:** Medium

**Relationships (Measure | Outcome/Objective):**
**Measure:** Writing assignments (W classes) and/or research projects in 200 to 400-level geological science classes
**Outcome/Objective:** Evaluate scientific literature quality

**Implementation Description:** The assessment coordinator will seek data from GEO 470 (General Geochemistry)

**Expand ways to assess this skill set.**
Additional measures will be sought to better assess this goal.

**Established in Cycle:** 2011-2012
**Implementation Status:** Planned
**Priority:** Medium

**Relationships (Measure | Outcome/Objective):**
**Measure:** Field/problem solving strategy for field-based projects in Field Course [GEO 495]
**Outcome/Objective:** Create a investigative strategy
Curriculum Maps #1 (In which courses are Student Learning Outcomes Addressed)

Use “Introduce” when outcome is first addressed; “Reinforce” when outcome is reinforced; and “Master” when outcome is expected to be mastered.

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<tr>
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<th>Student Learning Outcome 1</th>
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Curriculum Maps #2 (What assessment measures will be employed in which courses for each SLO)

Indicate which measure is being obtained in which course by typing “Measure n.n” in the appropriate cell. If you’d rather use a description of the measure, that is fine. Also, indicate the year/semester in which the measure will be obtained (e.g., Fall 2011). Student learning outcomes must be assessed at least once within a 2-year period. Note that a measure does not need to be obtained from every course in which an outcome is covered (see Map #1).

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Optional Additional Narrative: Use this space to provide any additional detail concerning the 2011-12 Department Assessment Plan
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