



SAINT LOUIS
UNIVERSITY

Saint Louis University
Program Assessment Plan

Program (Major, Minor, Core): B.S./B.A. Meteorology, B.S./B.A. Geology, BS./B.A. Environmental Science, B.S. Geophysics, B.A. Environmental Studies

Department: Earth & Atmospheric Sciences

College/School: Arts & Sciences

Person(s) Responsible for Implementing the Plan: Benjamin de Foy

Date Submitted: 10 December 2015

| Program Learning Outcomes | Curriculum Mapping | Assessment Methods | Use of Assessment Data |
|---|--|--|---|
| <i>What do you expect all students who complete the program to know, or be able to do?</i> | <i>Where is the outcome learned/assessed (courses, internships, student teaching, clinical, etc.)?</i> | <i>How do students demonstrate their performance of the program learning outcomes? How does the program measure student performance? Distinguish your direct measures from indirect measures.</i> | <i>How does the program use assessment results to recognize success and "close the loop" to inform additional program improvement? How/when is this data shared, and with whom?</i> |
| Students will know the founding principles in their field of study as well as the facts and content appropriate to the field. | This will be demonstrated mainly within the lecture courses and the lab courses. | Students will pass content-based questions of their knowledge in their respective classes. Where appropriate, student presentations will demonstrate the ability to know and understand the class material. The test results will serve as a measure of their knowledge. | Faculty in the sub-disciplines will meet to discuss the results, to identify strength areas as well as areas needing more attention. |

| | | | |
|--|--|--|---|
| Students will be able to use their knowledge to reason about issues in their discipline. | This will be demonstrated mainly within the lecture courses and the lab courses. | The reasoning skills of the students will be assessed during courses as well as in tests and exams. | Faculty will evaluate the outcome of the tests within the courses and share anonymous information for the purposes of improving the coaching of reasoning skills as well as their evaluation. |
| Students will be able to solve quantitative problems in their discipline. | This will be demonstrated mainly within the lecture courses and the lab courses. | Quantitative skills will be tested within the lecture and lab courses with appropriate questions and problem sets. | Faculty will coordinate across classes to develop quantitative problem solving skills so that the students can carry the skills across different courses. Success will be demonstrated when students are better prepared to solve problems in all of their EAS courses. |

1. It is not recommended to try and assess (in depth) all of the program learning outcomes every semester. It is best practice to plan out when each outcome will be assessed and focus on 1 or 2 each semester/academic year. Describe the responsibilities, timeline, and the process for implementing this assessment plan.

Our department is in the first wave of program reviews, starting in spring 2016. We will be developing a detailed plan at that time.

Faculty will meet at regular intervals (every 3 years) to review the program and the course offerings. Minor adjustments will be made on an ongoing basis. If, as a result of this consultation, the faculty find that major adjustments are needed, they will launch a more extensive process to revise the program.

Undergraduate program directors will be responsible for collecting feedback from their advisees and from course evaluations to have ongoing evaluation of our program.

We will appoint someone responsible for alumni relations in the department who will be able to collect feedback and carry out career outcomes assessment of our programs. These will feed into the periodic reviews held by the faculty.

The chair performs exit interviews with all graduating seniors to obtain overall feedback on the program.

2. Please explain how these assessment efforts are coordinated with Madrid (courses and/or program)?

SLU-Madrid only offers introductory classes in EAS subjects. We do not at this time coordinate with SLU-Madrid. We are planning to review this situation during the upcoming program review.

- 3. The program assessment plan should be developed and approved by all faculty in the department. In addition, the program assessment plan should be developed to include student input and external sources (e.g., national standards, advisory boards, employers, alumni, etc.). Describe the process through which your academic unit created this assessment plan. Include the following:**
- a. Timeline regarding when or how often this plan will be reviewed and revised. (This could be aligned with program review.)
Our department will be carrying out program reviews starting in spring 2016 – we will revise and expand the plan at this time.
 - b. How students were included in the process and/or how student input was gathered and incorporated into the assessment plan.
The chair has been carrying out exit interviews with all graduating seniors. Their suggestions have been taken into consideration in the elaboration of this plan.
 - c. What external sources were consulted in the development of this assessment plan?
We consulted other science departments (Chemistry, Biology). Within our department, the individual disciplines consult the guidelines from the governing professional bodies (eg. American Meteorological Society for the Meteorology program).
 - d. Assessment of the manageability of the plan in relation to departmental resources and personnel
This plan will require extra work from department members. The department is working on implementing a new workload policy which will help to clarify different tasks and expected contributions from people in the department. Once the workload policy is in place next fall, we will be able to revise the implementation of this plan (this will also coincide with the completion of our department program reviews which are scheduled to start in spring 2016.)