Assessment Report

Environmental Science Major

Spring 2015

I. ***Executive Summary***

We developed a new assessment plan for the Environmental Science major that received state approval in fall 2014. This assessment plan outlines the major's goals, objectives and outcomes and 5 assessment tools. In this year's assessment meeting we focused our attention on assessment tool A5: Senior Thesis. Based on assessment data examined we agreed on three changes to the senior thesis course: change in the grading scale, addition of an exercise on citation, and increased efforts to gather audience feedback on quality of thesis presentations.

II. ***Annual Assessment Meeting***

The annual Environmental Science assessment meeting took place Wednesday, May 13, 2015 and lasted approximately 45 minutes. Niamh O' Leary (Major Chair), Jackie Schnurr and Chris Bailey were present. First we discussed the new assessment plan for Environmental Science, which had been crafted over the course of the academic year. Overall, we feel it is a strong plan that accurately reflects our goals and assessment measures. The plan outlines 8 major goals – we might consider combining goals 5 and 6 in the future if 8 goals prove to be too cumbersome.

We then turned our attention to one of our key assessment tools: the ENVR senior thesis (assessment tool A5 in our 2015 assessment plan). The senior thesis is undertaken by all students in the major in the spring of their senior year via the course ENVR 403. We have a large class of rising seniors (11 students in the class of 2016) and we felt that this was a good time to evaluate the senior thesis process and make any changes that are warranted. We used the current ENVR 403 syllabus and discussed its components. Based on student performance in ENVR 403 in the class in 2015, highlights and outcomes of our discussion are as follows:

- It would be preferable to weight the final draft of the thesis more heavily, and weight attendance at science colloquium more lightly. The amended grading scale better reflects the most important course objectives.
- We shared a common frustration about one particular component of thesis writing: citation style. Despite a consistent citation style being introduced at the ENVR 101L level and reiterated throughout many courses in the major and in the areas of specialization, many students arrive into ENVR 403 in the last semester of their senior year seemingly unable to use the APA citation style properly. Part of the problem seems to be that students don't closely

review graded work, with the aim of learning from their mistakes and applying this knowledge to future assignments and courses. We should make an effort to bring this to the attention of students in all of our classes. In addition we feel a change to ENVR 403 is warranted: addition of a specific exercise early in the course that reviews the APA citation style. With that in place failure to cite properly later in the course would be graded more harshly.

- Thesis presentations can be hard to grade critically, as it is difficult to separate content from presentation style. In order to help us grade these presentations in future we plan to gather feedback from members of the audience. Measures are already in place in BCS (Biological & Chemical Sciences) to collect student feedback on student presenters. This will give us another window on presentation quality.

III. ***2016 Assessment Plans***

In our next cycle of assessment work we will examine aspects of one of our key assessment tools: final exams in introductory courses in the major (assessment tool A1 in our 2015 assessment plan). In addition we also plan to review course elements in ENVR 101L to make sure they are explicitly tied to assessment outcomes of the major. As a key gateway course for the major it's essential that we confirm that this course addresses various assessment outcomes well. In a future assessment cycle we will also examine courses in the areas of specialization to see how they align with major's goals.

IV. ***Updated Assessment Plan***

A new assessment plan was created for the new major in Environmental Science, which received state approval in September, 2014. We have submitted this assessment plan as a separate document.

V. ***Summary of Data Used***

- We reviewed spring 2015 senior theses (n=5)
- We examined the ENVR 403 course syllabus
- We discussed this year's senior thesis oral presentations