

Annual Assessment Report

Environmental Science Major

Spring 2016

1. Annual Assessment Meeting

The annual Environmental Science assessment meeting took place Wednesday, May 18, 2016 and lasted approximately 45 minutes. Niamh O' Leary (Major Chair) and Jackie Schnurr were present. In addition to the meeting numerous informal conversations and exchanges related to assessment took place throughout the academic year.

We discussed and reviewed the following:

- The assessment of outcomes data discussed in 2. below, and its interpretation;
- The warranted changes to the assessment plan for 2016, detailed in 5. below;
- The changes we had made to ENVR 403 based on last year's assessment work.

2. Examination of Assessment Data

This year we examined outcomes related to final exams in introductory courses, ENVR 101L and ENVR 102L, as we had indicated we would in last year's annual assessment report. Our benchmark from the 2015 assessment plan was that outcomes are considered met if 70% of the students received a passing grade on an assessed activity.

In ENVR 101L in fall 2015: 33 out of 35 (95%) got a passing grade on the final exam.

In ENVR 102L in spring 2016: 11 out of 12 (92%) got a passing grade on the final exam.

Thus, the following associated outcomes (listed below by number and name from 2016 assessment plan) in this area have very much been met:

Outcome 1.1.1: Display knowledge of major biogeochemical cycles

Outcome 1.1.2: Be able to describe the earth's biodiversity

Outcome 1.2.1: Demonstrate awareness of the world's energy resources

Outcome 1.2.2: Demonstrate awareness of the nature of the world's water resources

Outcome 1.3.1: Be able to describe how human activities degrade the earth

Outcome 1.3.2: Be able to describe how human activities protect and restore the earth

Outcome 2.2.1: Demonstrate knowledge of major contemporary global environmental issues

Outcome 4.1.1: Demonstrate knowledge of current environmental policies

Outcome 4.2.1: Explain nature and role of local and global conservation and environmental groups

3. Program Changes

- The data presented in 2. above suggest that certain outcomes have been met. While they don't suggest that we need to make any changes in courses or curriculum, they have given us an opportunity to reflect that the bar could be and should be higher for meeting outcomes. This is discussed in section 5. below.
- Other notable changes in the program this year include the addition of *ENVR 401: Advanced Research in Environmental Science*. This is an optional course for seniors in the major; it replaces an independent study option and as such it systematizes the offering and better articulates its goals. We also removed *ENVR 385: Special Topics in Environmental Science* as an elective in the specializations within the major. This change acknowledges that the varying content of special topics offerings is not always appropriate for every specialization.

4. Action Plan for 2016-2017

- Drill further down into and 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.

5. Updated Assessment Plan

We have submitted the 2016 assessment plan as a separate document. Significant changes since the 2015 plan include the following:

- Rather than an outcome being considered met if 70% of the students received a passing grade on an assessed activity, we will raise the bar so that an outcome is considered met if 70% of students get a C or higher, and 50% of students get a B or higher.
- We applied recent feedback received from EPC on our 2015 assessment documents; this involved some changes that agreed with our own reflections on what would support effective assessment, including reducing the number of goals in the major.
- Updates in structure and content to reflect the new guidelines posted by EPC
- Explicit reference to goals related to writing and technological competency
- Addition of a Table 2 that clarifies how outcomes are assessed in specific course elements.
- Addition of information related to the new course ENVR 401