

Student Learning Outcomes Assessment Summary

Environmental Studies Certificate

UAF College of Rural and Community Development

AY 2013-14

Submitted by: Todd Radenbaugh

Contact Information: taradenbaugh@alaska.edu

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1. Assessment information collected

- a) Number of students enrolled and graduated in AY 2013-14
- b) Average Academic performance in ENVI classes as measured by GPA.
- c) Directed Individual capstone projects with local, state and national conference presentations;
- d) Job preparedness and successful employment;
- e) Numbers of successful interns;
- f) Pre-Assessment of mathematical skills in core science courses

2. Conclusions drawn from the information summarized above

- a) *Number of students enrolled and graduated in AY 2013-14*

There were six (6) active students enrolled in the ENVI Certificate in AY 2013-14

Three of these students graduated with the ENVI Certificate

- Fall 2013 = 1 graduate
- Spring 2014 = 2 graduates

- b) *Average Academic performance in ENVI classes as measured by GPA.*

Current ENVI students have satisfactory academic performance with a GPA above 2.0

- c) *Directed Individual capstone projects with local, state and national conference presentations;*

Two students completed directed Individual capstone projects/reports and each made a presentation at a region conference.

- Project title: Biodiversity of the Epibenthic organisms of Nushagak Bay.
 - Presented at Western Alaska Interdisciplinary Science Conference, Ecology, Environment and Climate Change Session Kotzebue, Alaska. April 23-24, 2014
- Project title: Design of an meaningful electric *snuukuuq* (snowmachine)- Phase 1
 - Society of Automotive Engineers 2014 Clean Snowmobile Challenge, March 6, 2014 at Michigan Tech University, Houghton, MI

d) *Job preparedness and successful employment;*

Faculty works with local government and agencies to help incentivize employees include the ENVI certificate as an indicator of good job performance.

To increase number of students prepared for both jobs and to enter the ENVI Certificate Program faculty worked on the integration the ENVI Certificate with a proposed Occupational Endorsement in Environmental Studies.

Two ENVI Certificate graduates received successful employment

- Telida Village – Water Quality Program Technician
- UAF BBB, Sustainable Energy Program – Sustainable Energy Technician

e) *Numbers of successful interns;*

There were 7 successful interns (3 in summer semester, 2 in Fall semester and 2 in Spring semester) Students did their internships at 5 organizations including University of Alaska Bristol Bay Environmental Science lab, Dillingham; Togiak City Public Works Department; Alaska Department of Fish and Game, Fairbanks; City of Dillingham Public Works, Dillingham; and University of Alaska Fairbanks Greenhouse, Fairbanks.

Interviews with the 2013-14 five ENVI Interns and their employer show high satisfaction with the ENVI intern programs and responsibilities.

f) *Pre-Assessment of mathematical skills in core science courses*

ENVI Faculty met in Oct 2013 to discuss the results of the pre-assessments of mathematical skills and agreed that, on average, the mathematical skills are lower than desired.

3. Curricular changes resulting from conclusions drawn above

- Many potential ENVI students have commented on the difficulties of taking the three required 100 level four credit core lab science classes. Many students and partners have ask if three sciences lab classes are necessary for this certificate (only two are required for an AS degree). ENVI faculty and staff will investigate the possibility of reducing the lab science requirement form three to two.
- Faculty added pathways to align relevant and existing UAF Occupational Endorsements and Certificates (i.e., OE Sustainable Energy and proposed OEs in Solid Waste Management and Spill Response and Surface Water Quality Technician).

4. Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting

- Dr. Tom Marsik, Dr. Todd Radenbaugh, and Dr. Debi McLean