

Student Learning Outcomes Assessment Summary

Safety, Health, and Environmental Awareness Technology Certificate

Community and Technical College

AY 2014/15 and 2015/16

Submitted by: Brian Ellingson

Contact Information: beellingson@alaska.edu

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1. Assessment Information Collected

Note: "Test Results" reflect aggregated data from several test questions selected during each semester, reflecting the individual SLOA topic. Percentages reported here represent the percentage of the class that have met the desired outcomes; the minimum target is 75%. Individual topic observations are included in the discussion session.

Note: "Skill Observations" reflect instructor observation of overall class performance on specific activities.

a. SLOA 1: Workplace Safety:

Instructor evaluation of students' individual project work – OSH-110: Program Assessments, Development and Implementation. Students investigate real-world incidents and prepare documentation as though they were the safety officer, over the course of the semester. Activities must include:

- Determination of regulations violated by the incidents, per student research
- Preparation of a site safety plan
- Following all regulatory procedures learned in class
 1. Results: 2015 class – student performance is acceptable in all required areas. Student work product was professionally presented.

b. SLOA 2: Workplace Injury Prevention, Risk Management, and Incident Investigation:

Instructor evaluation of students' Incident Investigations – course OSH-201: Workplace Injury and Incident Evaluations. Evaluations are done as student team projects

- i. Vehicle Accident, simulated. Investigation must include:
 - Interviews of witnesses
 - Mapping of vehicles, landmarks, site
 - Photo documentation
 - Determination of vehicle speed
 - Fault determination
 - ii. Industrial Accident, simulated. Investigation must include:
 - Interviews of witnesses/workers
 - Accident scene investigation
 - Photo documentation
 - Determination of sequence of events
 - Identification of any policy/regulation violations
1. Results from Spring 2016: 6-person team did outstanding work. All required aspects of the investigations were included, and the presentation was professional. The students successfully rotated responsibilities during the course of the investigation. Reports were prepared per the prescribed format.
- c. SLOA 3: Safety Recordkeeping and Management
 - i. See exercises listed in SLOA 1,2 – all require safety recordkeeping and demonstrate the role of the Safety Manager.
 - d. SLOA 4: Industrial Hygiene
 - i. Test Results from OSH 180, Spring 2016:
 - 1. Final Exam 2016: 95% acceptable test results.
 - ii. Instructor observation, OSH 180, Spring 2016:
 - 1. General observation – class access to safety equipment used in the workplace (detectors, etc.) was limited this year. Instructor noted that student general knowledge was lower in areas where there were no hands-on instruments.
 - e. SLOA 5: Hazardous materials
 - i. The OSH course OSH 250 was not taught here over the last two years; instead, students were referred to the OSH 250 distance course from UAA. Course is then transferred to UAF transcript. Future collaborations will require some method of checking student learning in these outside courses (currently just require a passing grade).

2. Conclusions drawn from the information summarized above

- a. SLOA 1: Workplace Safety:
 - i. Student project work was excellent. The project-based format works well for this class.
- b. SLOA 2: Workplace Injury Prevention, Risk Management, Incident Investigation
 - i. The team approach to incident investigations is very effective.
 - ii. Student success demonstrates that the format of the class, and the information presented, is appropriate and achieves student learning outcomes.
- c. SLOA 3: Safety Recordkeeping and Management
 - i. See comments for SLOA 1 and SLOA 2.
- d. SLOA 4: Industrial Hygiene:
 - i. Students successfully demonstrated fundamental knowledge of physical and chemical hazards in the workplace.
- e. SLOA 5: Hazardous Materials
 - i. No detailed data from which to draw conclusions.

3. Curricular changes resulting from conclusions drawn above

- a. SLOA 1: Workplace Safety:
 - i. OSH 110: No recommended changes to this course.
- b. SLOA 2: Workplace Injury Prevention, Risk Management, Incident Investigation
 - i. OSH 201: No recommended changes to this course.
- c. SLOA 3: Safety Recordkeeping and Management
 - i. Tied in to other classes – no specific recommendations at this time.
- d. SLOA 4: Industrial Hygiene:
 - i. OSH-180: Recommend purchasing some hand-held safety monitoring equipment to improve student understanding of the principles of industrial hygiene.
- e. SLOA 5: Hazardous Materials
 - i. No recommendations at this time.

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

- a. Brian Ellingson, Associate Professor, Program Coordinator
- b. Robert Hook, Assistant Professor
- c. Teresa Lantz, Assistant Professor
- d. Marie Scholle, Adjunct Instructor
- e. Charles Hamby, Adjunct Instructor