

2012-2013 Annual Program Assessment Report

Please submit report to your department chair or program coordinator, the Associate Dean of your College and the assessment office by Monday, September 30, 2013. You may submit a separate report for each program which conducted assessment activities.

College: Health and Human Development

Department: Environmental and Occupational Health

Assessment liaison: John Schillinger

1. Overview of Annual Assessment Project(s). Provide a brief overview of this year's assessment plan and process.

Undergraduate SLO 1 (Demonstrate a comprehensive knowledge of the recognition, evaluation and control of biological, chemical, and physical factors that can impact human health and safety and the environment.) has been assessed using the graduate comprehensive exam.

Undergraduate SLO 2 (Demonstrate knowledge of how to work in interdisciplinary teams to promote public and private action to protect public health and the environment.) was assessed using internship preceptor data and will continue to be assessed using preceptor survey data from the EOH 494B internship reports.

Undergraduate SLO 3 (Communicate environmental and occupational health concepts and programs to a variety of audiences, using both written and verbal forms of communication.) was assessed and will continue to be assessed using student written completion reports from EOH 494B internships. Discussion is continuing on how to increase and assess verbal and written communication skills across the curriculum. An alumni survey performed by the accreditation team this spring is still being evaluated and should be made available to the department in September.

Graduate SLO 1 (Research design and analytical skills needed to critically evaluate scientific, technical and regulatory documents) was assessed using EOH 697 comprehensive exam questions related to skills developed in EOH 696A, 696B, 554 and 555.

Graduate SLO 2 (Oral, written and electronic communication skills to present information to professional groups, regulatory agencies and lay audiences.) was assessed and will continue to be assessed using student written completion reports for EOH 693A field training and will be assessed (except for oral skills) by using a common rubric for analyzing written papers in a section of EOH 554 and 555 graduate seminars.

Graduate SLO 3 (Sufficient level of technical expertise in environmental and occupational health to competently solve general EOH problems.) was assessed and will continue to be assessed by analyzing all of the scores from the 5 different technical sections of the EOH 697 comprehensive exams.

Graduate SLO 4 b (A broad set of management skills to initiate program planning and critical analysis of environmental or occupational health and safety programs.) was assessed and will continue to be assessed by analyzing a EOH 697 comprehensive exam problem solving assignment related to skills developed in EOH 554 and 555 graduate seminars. Part A. of SLO 4 (management skills to competently manage an environmental or occupational program) are assessed in part by the comprehensive exam .

2. **Assessment Buy-In.** Describe how your chair and faculty were involved in assessment related activities. Did department meetings include discussion of student learning assessment in a manner that included the department faculty as a whole?

The Department faculty as a whole had extensive discussions of the technical writing skills of our undergraduate and graduate students at our last two meetings. In response to those discussions informed in part by assessment data, the department agreed to submit a new graduate experimental course next year that deals with improving skills in reading the technical literature and writing that are addressed in Undergraduate SLO 3 and graduate SLO 3 and SLO 4.

3. **Student Learning Outcome Assessment Project.** Answer items a-f for each SLO assessed this year. If you assessed an additional SLO, copy and paste items a-f below, BEFORE you answer them here, to provide additional reporting space.

3a. Which Student Learning Outcome was measured this year?

Undergraduate SLO 1 / Graduate SLO 3 (Technical Knowledge)

3b. Does this learning outcome align with one or more of the university's Big 5 Competencies? (Delete any which do not apply)

- Critical Thinking

Quantitative Literacy

3c. Does this learning outcome align with University's commitment to supporting diversity through the cultivation and exchange of a wide variety of ideas and points of view? In what ways did the assessed SLO incorporate diverse perspectives related to race, ethnic/cultural identity/cultural orientations, religion, sexual orientation, gender/gender identity, disability, socio-economic status, veteran status, national origin, age, language, and employment rank?

There is some discussion of cultural and ethnic practices related to food safety.

3d. What direct and/or indirect instrument(s) were used to measure this SLO?

The graduate comprehensive exam (EOH 697) was used to assess technical competencies in all of the basic EOH subject areas except epidemiology.

3e. Describe the assessment design methodology: For example, was this SLO assessed longitudinally (same students at different points) or was a cross-sectional comparison used (Comparing freshmen with seniors)? If so, describe the assessment points used.

All of the graduating MS students are given the exams at the end of each semester and comparisons of trends by subject area are made.

3f. Assessment Results & Analysis of this SLO: Provide a summary of how the results were analyzed and highlight findings from the collected evidence.

Comprehensive Graduate Exam Averages by Section (n=15, 19, 9, 5, 15, 8, 18, & 17 for S 08, 09, 10, F10, S11, F11, S12, and S13)

	Env Health	Occup Health	Toxicology	Admin
Spr 08	73.0	68.6	89.1	79.0
Spr 09	75.0	56.6	91.1	78.9
Spr 10	79.6	74.8		88.5
Fall 10	83.4	76.0	92.2	87.3
Spr 11	68.5*	69.1*	93.1	78.0
Fall 11	80.0	70.0		85.6
Spr 12	70.8	76.1		82.8
Spr 13	71.6	77.7		85.0

- Format and some questions were altered from previous exams.
- The scores do not seem to show a trend, but spring 2013 repeats were higher for env health (41% did not succeed in first attempt, and occupational health (47% did not succeed in first attempt -- n=17).

3g. Use of Assessment Results of this SLO: Describe how assessment results were used to improve student learning. Were assessment results from previous years or from this year used to make program changes in this reporting year? (Possible changes include: changes to course content/topics covered, changes to course sequence, additions/deletions of courses in program, changes in pedagogy, changes to student advisement, changes to student support services, revisions to program SLOs, new or revised assessment instruments, other academic programmatic changes, and changes to the assessment plan.)

No changes have been made, but a better review system for the comprehensive exams is under consideration.

3a. Which Student Learning Outcome was measured this year?

Undergraduate SLO 2 (Work in Interdisciplinary Teams)

3b. Does this learning outcome align with one or more of the university's Big 5 Competencies? (Delete any which do not apply)

- Critical Thinking
- Oral Communication

3c. Does this learning outcome align with University's commitment to supporting diversity through the cultivation and exchange of a wide variety of ideas and points of view? In what ways did the assessed SLO incorporate diverse perspectives related to race, ethnic/cultural identity/cultural orientations, religion, sexual orientation, gender/gender identity, disability, socio-economic status, veteran status, national origin, age, language, and employment rank?

Most of the issues above are addressed by the supervisors of interns in the workplace environments of southern California. They are relevant in particular to the eoh intern evaluation rating of "Relations With Others".

3d. What direct and/or indirect instrument(s) were used to measure this SLO?

Preceptor reports from the EOH 494B internship were evaluated and compared.

3e. Describe the assessment design methodology: For example, was this SLO assessed longitudinally (same students at different points) or was a cross-sectional comparison used (Comparing freshmen with seniors)? If so, describe the assessment points used.

All of the students in EOH 494B internship for each semester were included in an ongoing assessment.

3f. Assessment Results & Analysis of this SLO: Provide a summary of how the results were analyzed and highlight findings from the collected evidence.

The Internship Evaluation form is attached to this report. The three categories related to SLO 2 were Relations With Others, Initiative, and Attitude – Application to Work. The averages of the responses from the 1-5 scale (1 being best) were:

	Rel. With Others	Initiative	Attitude – Application
Fall 08	1.11	1.22	1.33
Spr 09	1.38	1.88	1.62
Fall 09	1.57	1.78	1.57
Spr 10	1.28	1.72	1.39
Fall 10	1.33	1.71	1.71
Spr 11	1.23	1.42	1.54
Fall 11	1.43	1.86	1.57
Spr 12*	1.55	1.75	1.70
Fall 12	1.55	1.67	1.50
Spr 13	1.33	1.27	1.60

*Includes summer session 2012

3g. Use of Assessment Results of this SLO: Describe how assessment results were used to improve student learning. Were assessment results from previous years or from this year used to make program changes in this reporting year? (Possible changes include: changes to course content/topics covered, changes to course sequence, additions/deletions of courses in program, changes in pedagogy, changes to student advisement, changes to student support services, revisions to program SLOs, new or revised assessment instruments, other academic programmatic changes, and changes to the assessment plan.)

A discussion was had with internship coordinator on how best to incorporate HHD Comportment Code ratings into the department internship evaluation form. It was decided that adding to the length of the preceptor evaluation forms was not practical due to time considerations.

3a. Which Student Learning Outcome was measured this year?

Undergraduate SLO 3 (Written and Oral Communication)

3b. Does this learning outcome align with one or more of the university's Big 5 Competencies? (Delete any which do not apply)

- Critical Thinking
- Oral Communication

- Written Communication
- Information Literacy

3c. Does this learning outcome align with University's commitment to supporting diversity through the cultivation and exchange of a wide variety of ideas and points of view? In what ways did the assessed SLO incorporate diverse perspectives related to race, ethnic/cultural identity/cultural orientations, religion, sexual orientation, gender/gender identity, disability, socio-economic status, veteran status, national origin, age, language, and employment rank?

Oral communication has a great deal to do with the diverse perspectives above but the department has not focused yet on undergraduate oral communication in teaching or assessment.

3d. What direct and/or indirect instrument(s) were used to measure this SLO?

Student written completion reports for EOH 494B Internships were used.

3e. Describe the assessment design methodology: For example, was this SLO assessed longitudinally (same students at different points) or was a cross-sectional comparison used (Comparing freshmen with seniors)? If so, describe the assessment points used.

All of the internship students were assessed each semester in an ongoing assessment.

3f. Assessment Results & Analysis of this SLO: Provide a summary of how the results were analyzed and highlight findings from the collected evidence.

Using a 1-10 scale for writing skills, the following data (averages) from the internship reports are: fall 08 8.2, spr 09 7.9, fall 09 8.7, spr 10 8.5, fall 10 9.4, spr 11 8.6, fall 11 8.1, spr 12 8.1, fall 12 8.2, and Spr 13 7.9.

The averages do not show a strong trend but the number of unacceptable writing examples (scale value of 7 or less) declined from 33% in spr 09 to 10% in spr 10, 12% in spr 11, 14% in spr 12, 15% in fall 12, and 18% (3/17) in spr 13.

3g. Use of Assessment Results of this SLO: Describe how assessment results were used to improve student learning. Were assessment results from previous years or from this year used to make program changes in this reporting year? (Possible changes include: changes to course content/topics covered, changes to course sequence, additions/deletions of courses in program, changes in pedagogy, changes to student advisement, changes to student support services, revisions to program SLOs, new or revised assessment instruments, other academic programmatic changes, and changes to the assessment plan.)

The Department has discussed increasing the number of writing assignments in each of the upper division core courses.

3a. Which Student Learning Outcome was measured this year?

Graduate SLO 1 (Research Design / Analytical Skills)

3b. Does this learning outcome align with one or more of the university's Big 5 Competencies? (Delete any which do not apply)

- Critical Thinking
- Written Communication
- Quantitative Literacy

3c. Does this learning outcome align with University's commitment to supporting diversity through the cultivation and exchange of a wide variety of ideas and points of view? In what ways did the assessed SLO incorporate diverse perspectives related to race, ethnic/cultural identity/cultural orientations, religion, sexual orientation, gender/gender identity, disability, socio-economic status, veteran status, national origin, age, language, and employment rank? Not sure of relevance to this SLO.

3d. What direct and/or indirect instrument(s) were used to measure this SLO?

A set of questions dealing with EOH 696A Research Design and 696B Seminar: Research Methods was evaluated as part of the comprehensive exams (EOH 697).

3e. Describe the assessment design methodology: For example, was this SLO assessed longitudinally (same students at different points) or was a cross-sectional comparison used (Comparing freshmen with seniors)? If so, describe the assessment points used.

All of the graduating MS students in EOH 697 (in their last semester of attendance) were evaluated as part of an ongoing assessment.

3f. Assessment Results & Analysis of this SLO: Provide a summary of how the results were analyzed and highlight findings from the collected evidence.

This part of the comprehensive exams was started in Spring 2010. The following are average scores:

Spr 10	n= 9	79.2
Fall 10	n= 5	75.0
Spr 11	n=15	78.0
Fall 11	n= 8	82.5
Spr 12	n=18	74.7
Spr 13	n=17	89.1

It is quite possible that statistical skills need improvement, especially as they are used to develop sampling strategies because the average score for 2013 does not reflect the 8/17 (47%) of those taking the exam who did not succeed on the first attempt.

3g. Use of Assessment Results of this SLO: Describe how assessment results were used to improve student learning. Were assessment results from previous years or from this year used to make program changes in this reporting year? (Possible changes include: changes to course content/topics covered, changes to course sequence, additions/deletions of courses in program, changes in pedagogy, changes to student advisement, changes to student support services, revisions to program SLOs, new or revised assessment instruments, other academic programmatic changes, and changes to the assessment plan.)

___ * A new graduate course (552) is in development to address Grad SLO 1, particularly in terms of statistical tools applied to EOH problems and the critical thinking skills needed to understand research results and to develop sampling plans.

3a. Which Student Learning Outcome was measured this year?

Graduate SLO 2 (Written Communication)

3b. Does this learning outcome align with one or more of the university's Big 5 Competencies? (Delete any which do not apply)

- Critical Thinking
- Written Communication
- Information Literacy

3c. Does this learning outcome align with University's commitment to supporting diversity through the cultivation and exchange of a wide variety of ideas and points of view? In what ways did the assessed SLO incorporate diverse perspectives related to race, ethnic/cultural identity/cultural orientations, religion, sexual orientation, gender/gender identity, disability, socio-economic status, veteran status, national origin, age, language, and employment rank?

3d. What direct and/or indirect instrument(s) were used to measure this SLO?

Written reports from EOH 693A Internship and written reports as part of EOH 697 Comp Exams were evaluated in an ongoing assessment.

3e. Describe the assessment design methodology: For example, was this SLO assessed longitudinally (same students at different points) or was a cross-sectional comparison used (Comparing freshmen with seniors)? If so, describe the assessment points used.

All graduate students in EOH 693A each semester and all graduate students in EOH 697 each semester were evaluated in an ongoing assessment of writing skills.

3f. Assessment Results & Analysis of this SLO: Provide a summary of how the results were analyzed and highlight findings from the collected evidence.

The average results for the writing assignment for EOH 693A on a 1-10 scale were: Fall 08 9.4, Spr 09 8.9, Fall 09 9.6, Spr 10 9.3, Fall 10 9.4, Spr 11 8.8, Fall 11 8.9, Spr 12 9.6, Fall 12 8.4 and Spr 13 9.3 .

All the assignments scored an 8.0 or higher in fall 10, spr 11, fall 11 and spr 12 and 2 of 13 were 7.5 in fall 12 and 1 of 5 was 7.0 in spr 13. There were some indications that students for whom English is a second language have some language/writing deficiencies .

The writing section of the EOH 697 comps average scores on a 1-10 scale were: Fall 10 8.4, Spr 11 8.3, Spr 12 8.5 and Spr 13 8.7. Two students scored 50% in Spr 12 (11.8% of the total) and 1 of 17 (6 % of total) in Spr 13. They also were an indication of problems with students for whom English is a second language.

3g. Use of Assessment Results of this SLO: Describe how assessment results were used to improve student learning. Were assessment results from previous years or from this year used to make program changes in this reporting year? (Possible changes include: changes to course content/topics covered, changes to course sequence, additions/deletions of courses in program, changes in pedagogy, changes to student advisement, changes to student support services, revisions to program SLOs, new or revised assessment instruments, other academic programmatic changes, and changes to the assessment plan.)

The results for the writing assignment for EOH 693A on a 1-10 scale were: Fall 08 9.4, Spr 09 8.9, Fall 09 9.6, Spr 10 9.3, Fall 10 9.4, Spr 11 8.8, Fall 11 8.9, and Spr 12 9.6 .

All the assignments scored an 8.0 or higher in fall 10, spr 11, fall 11 and spr 12. There were some indications that students for whom English is a second language have some language/writing deficiencies .

The writing section of the EOH 697 comps scored on a 1-10 scale were Fall 10 8.4, Spr 11 8.3, and Spr 12 8.5. Two students scored 50% in Spr 12 (11.8% of the total) and they also were an indication of problems with students for whom English is a second language.

___*Dr Sullivan continues to offer a 6 week voluntary course to MS students for developing writing skills.

- 4. Assessment of Previous Changes:** Present documentation that demonstrates how the previous changes in the program resulted in improved student learning.
- 5. Changes to SLOs?** Please attach an updated course alignment matrix if any changes were made. (Refer to the Curriculum Alignment Matrix Template, http://www.csun.edu/assessment/forms_guides.html.)
- 6. Assessment Plan:** Evaluate the effectiveness of your 5 year assessment plan. How well did it inform and guide your assessment work this academic year? What process is used to develop/update the 5 year assessment plan? Please attach an updated 5 year assessment plan for 2013-2018. (Refer to Five Year Planning Template, plan B or C, http://www.csun.edu/assessment/forms_guides.html.)
- 7. Has someone in your program completed, submitted or published a manuscript which uses or describes assessment activities in your program?** Please provide citation or discuss.
- 8. Other information, assessment or reflective activities or processes not captured above.**