EWU Programmatic SLO Assessment
AY 2014-15 and "Closing the Loop" for AY 2013-14

Introduction:

Assessment of student learning is an important and integrated part of faculty and programs. As part of ongoing program assessment at Eastern Washington University, each department is asked to report on assessment results for *each* program and *each* certificate for *at least one* Student Learning Outcome (SLO) this year. To comply with accreditation standards, the programs must also demonstrate efforts to "close the loop" in improving student learning and/or the learning environment. Thus, this template has been revised into two parts.

Resources:

Check this site for sample reports (created with the previous year's template) by EWU programs and other assessment resources: http://access.ewu.edu/undergraduate-studies/faculty-support/student-learning-assessment/program-slo-assessment.xml

Additional resources and support are available to:

1) Determine whether students can do, know or value program goals upon graduation and to what extent;
2) Determine students' progress through the program, while locating potential bottlenecks, curricular redundancies, and more; and
3) Embed assessments in sequenced and meaningful ways that save time.

Contact Dr. Helen Bergland for assistance with assessment in support of student learning and pedagogical approaches: hbergland@ewu.edu or 359.4305.

Use this template to report on your program assessment. **Reports are due to your Dean and to Dr. Helen Bergland (hbergland@ewu.edu), Office of Academic Planning, by Nov. 2, 2015.**

Degree/Certificate: MS Biology

Major/Option:
Submitted by: Dr. M. A. O'Connell
Date: 2 November 2015

Part I – Program SLO Assessment Report for 2014-15

Part I – for the 2014-15 academic year: Because Deans have been asked to create College-Level Synthesis Reports annually, the template has been slightly modified for a) clarity for Chairs and Directors, and b) a closer fit with what the Deans and Associate Deans are being asked to report.

1. **Student Learning Outcome:** The student performance or learning objective as published either in the catalog or elsewhere in your department literature.

Student Learning Outcome
1. Write a research proposal that demonstrates the ability to determine the veracity and value of published information.
2. Conduct research project, analyze data, and write thesis.
3. Present completed research in an open forum seminar with question/answer session

2. **Overall evaluation of progress on outcome:** Indicate whether or not the SLO has been met, and if met, to what level.

_____*SLO is met after changes resulting from ongoing assessments, referencing assessment results from the previous year to highlight revisions;*
_____*SLO is met, but with changes forthcoming;*
__x__*SLO is met without change required*

3. **Strategies and methods:** Description of assessment method and choices, why they were used and how they were implemented.

I. Coursework – All Biology MS students take BIOL 510 and 511 – Biological Research Methods I and II. BIOL 510 is designed to help student learn critical skills for conducting scientific research including analysis of scientific literature, writing proposals and research reports, and experimental design. BIOL 511 is designed to provide students with analytical background and skills to enable them to appropriately analyze data. For this assessment report, the mean scores on assignments and tests covering these topics were reviewed.

II. Prospectuses – Before graduate students in the Department of Biology may advance to candidacy they must successfully complete their research prospectus. This prospectus consists of a written research proposal and an oral presentation to the department. For this assessment report, the number of successful prospectuses is presented.

III. Final Thesis and Defense – Upon completion of their thesis research, all graduate students in the Department of Biology must write a comprehensive research thesis and present their research seminar to the department. For this assessment report, the number of successful Master's thesis submissions is presented.

4. **Observations gathered from data:** Include findings and analyses based on the strategies and methods identified in item #3.

a. Findings:

I. BIOL 510 and BIOL 511

BIOL 510	
Prospectus/Proposal Introduction	91.6 ± 5.5
Research Poster	93.2 ± 4.0
Oral Conference Style Presentation	92.6 ± 4.2
Experimental Design Exam	87.9 ± 6.3
Minigrant Proposal	90.1 ± 3.1
BIOL 511	
Midterm – data analysis	91.3 ± 4.5
Final – data analysis	90.7 ± 9.0
Project proposal – how data will be analyzed	95 ± 0.8
Project report – data analysis of hypothetical data related to students' research	90 ± 4.1

II. Prospectus

Eight students successfully presented their prospectus in both written and oral format and were advanced to candidacy.

III. Thesis

Eight students successfully submitted their written thesis and presented a department-wide research seminar.

5. **What program changes will be made based on the assessment results?**
None

a) Describe plans to improve student learning based on assessment findings (e.g., course content, course sequencing, curriculum revision, learning environment or student advising).

b) Provide a broad timeline of how and when identified changes will be addressed in the upcoming year.

6. Description of revisions to the assessment process the results suggest are needed and an evaluation of the assessment plan/process itself.

NEW: PART II – CLOSING THE LOOP
FOLLOW-UP FROM THE 2013-14 PROGRAM ASSESSMENT REPORT

In response to the university's accrediting body, the Northwest Commission on Colleges and Universities, this section has been added. This should be viewed as a follow up to the previous year's findings. In other words, begin with findings from 2013-14, and then describe actions taken during 2014-15 to improve student learning along, provide a brief summary of findings, and describe possible next steps.

PLEASE NOTE: The College-Level Synthesis report includes a section asking Deans to summarize which programs/certificates have demonstrated "closing-the-loop" assessments and findings based on the previous year's assessment report.

> ***Working definition for closing the loop:*** *Using assessment results to improve student learning as well as pedagogical practices. This is an essential step in the continuous cycle of assessing student learning. It is the collaborative process through which programs use evidence of student learning to gauge the efficacy of collective educational practices, and to identify and implement strategies for improving student learning." Adapted 8.21.13 from http://www.hamline.edu/learning-outcomes/closing-loop.html.*

1. **Student Learning Outcome(s)** assessed for 2013-14

2. **Strategies implemented** during 2014-15 to improve student learning, based on findings of the 2013-14 assessment activities.
   We revamped our curriculum four years ago to 1) expand our Biological Research Methods from a single 5-credit, one quarter class to two 4-credit, two quarter course sequence and 2) requires graduating Masters students to present a widely advertised research seminar.

3. **Summary of results** (may include comparative data or narrative; description of changes made to curriculum, pedagogy, mode of delivery, etc.): Describe the effect of the changes towards improving student learning and/or the learning environment.
   Our graduate students are successfully entering jobs or PhD programs.

4. What **further changes to curriculum, pedagogy, mode of delivery,** etc. are projected based on closing-the-loop data, findings and analysis?

Definitions:

1. **Student Learning Outcome**: The student performance or learning objective as published either in the catalog or elsewhere in your department literature.
2. **Overall evaluation of progress on outcome:** This checklist informs the reader whether or not the SLO has been met, and if met, to what level.
3. **Strategies and methods used to gather student performance data,** including assessment instruments used, and a description of how and when the assessments were conducted. Examples of strategies/methods: embedded test questions in a course or courses, portfolios, in-class activities, standardized test scores, case studies, analysis of written projects, etc. Additional information could describe the use of rubrics, etc. as part of the assessment process.
4. **Observations gathered from data**: This section includes findings and analyses based on the above strategies and methods, and provides data to substantiate the distinction made in #2. For that reason this section has been divided into parts (a) and (b) to provide space for both the findings and the analysis of findings.
5. **Program changes based on the assessment results:** This section is where the program lists plans to improve student learning, based on assessment findings, and provides a broad timeline of how and when identified changes will be addressed in the upcoming year. Programs often find assessment is part of an ongoing process of continual improvement.
6. **Description of revisions to the assessment process the results suggest are needed.** Evaluation of the assessment plan and process itself: what worked in the assessment planning and process, what did not, and why.

Some elements of this document have been drawn or adapted from the University of Massachusetts' assessment handbook, "Program-Based Review and Assessment: Tools and Techniques for Program Improvement" (2001). Retrieved from http://www.umass.edu/oapa/oapa/publications/online_handbooks/program_based.pdf