

Degree/Certificate: Bachelor of Science
Major/Option: Technology/ Manufacturing
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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.

Communicate effectively.

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;
X SLO is met, but with changes forthcoming;
_____ 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.

Analysis of student performance in written communication, covering letters, essays, and technical reports in core curriculum classes (TECH 330, TECH 458, and TECH 462).

4. **Observations gathered from data:** Include findings and analyses based on the strategies and methods identified in item #3.
 - a. Findings: Approximately 10% of students, from all three classes, failed to hand in the assignments that were reviewed in this analysis. Approximately 15% of the students, from all three classes, did work that would be considered marginal, or an attempt to meet the minimum requirements to get a passing grade. Approximately 75% of the students, from all three classes, did work that would be considered being done correctly.

- b. Analysis of findings: To improve overall outcomes, students need more practice and work with technically written communication. When students feel more comfortable with technical writing, their performance should improve.

5. **What program changes will be made based on the assessment results?**

- a) Describe plans to improve student learning based on assessment findings (e.g., course content, course sequencing, curriculum revision, learning environment or student advising). The findings have led additional support to our previous program reasons, as part of a broader program review, for revising the TECH 330 and TECH 331 classes content and credit levels to improve overall outcomes. The TECH 330 and TECH 331 are the writing intensive classes that feed students into additional classes, such as TECH 458 and TECH 462.
- b) Provide a broad timeline of how and when identified changes will be addressed in the upcoming year. The curriculum for the TECH 330 and TECH 331 classes have been revised, and those changes are being implemented starting in Fall 2015. Evaluation of results for these changes will be assessed in the AY 2015-16 year, which will be the first year that the revised classes can be assessed.

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

This SLO is still central to the program mission and review of its learning objectives will continued to be monitored.

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

Develop an appropriate mastery of the knowledge, techniques, skills, and modern tools of their disciplines.

2. Strategies implemented during 2014-15 to improve student learning, based on findings of the 2013-14 assessment activities.

Paperwork to revise these classes was submitted through CPAC in the Fall of 2014 and was approved for implementation in the Fall of 2015. Course content was revised in 2014-15 in parallel with the CPAC process to insure preparation for implementation in the Fall of 2015.

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.

Evaluation of results for these changes will be assessed in the AY 2015-16 year, which will be the first year that the revised classes can be assessed.

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

This SLO is still central to the program mission and review of its learning objectives will continued to be monitored.

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 wh

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