

Degree/Certificate: Bachelor of Science

Major/Option: Technology/ Manufacturing

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Part I – Program SLO Assessment Report for 2013-14

Part I – for the 2013-14 academic year: Because Deans have been asked to create College-Level Summary 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.

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

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;
 SLO 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 class activities and class assignments in technical knowledge and skills in core curriculum classes (TECH 452, TECH 454, and TECH 456).

4. **Observations gathered from data:** Include findings and analyses based on the strategies and methods identified in item #3.
 - a. Findings: In TECH 452, students are receiving the technical knowledge but are struggling with the class assignments due to their skill level when entering the class. In TECH 454, the students are receiving most of the technical knowledge of the topic area, but need additional material to be more complete in their knowledge base. In TECH 456, students are receiving the technical knowledge of the subject matter but do not have enough interaction with it.

- b. Analysis of findings: All of these three classes share one major problem; not enough time with the material covered. Students in the TECH 452 class need more preparation time to be able to handle class assignments. TECH 454 students need more time to be able cover the class topics more in depth. TECH 456 students need more time to be able to interact with the subject matter.

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 reviewed core classes (TECH 452, 454, and 456) will have their course content revised to increase student success, as appropriate, with the subject matter. Currently these classes are 2 credits, they will be revised upward to 4 credits to handle additional assignments, class discussions, core material, and student interaction. New syllabuses will be created for all of these classes.

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

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

- 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 2012-13 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 2012-13, and then describe actions taken during 2013-14 to improve student learning along, provide a brief summary of findings, and describe possible next steps.

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 2012-13

Identify, analyze, and solve technical and creative problems.

2. Strategies implemented during 2013-14 to improve student learning, based on findings of the 2012-13 assessment activities.

Continue to emphasize the importance of the SLO in the program.
Continued evaluation of SLO with quarterly gathering of data and yearly evaluation of the data to monitor for change.

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.

N/A

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

N/A