

**Degree/Certificate: Bachelor of Science**

**Major/Option: Technology/ Manufacturing**

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**Part I – Program SLO Assessment Report for 2015-16**

**Part I – for the 2015-16 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 outcome as published either in the catalog or elsewhere in your department literature.

Demonstrate effective team building and team dynamics.

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.

Analysis of Senior Capstone oral group presentations and group written reports (TECH 490), student performance on oral group presentations and group written reports (TECH 330 and TECH 331).

4. **Observations gathered from data:** Include findings and analyses based on the strategies and methods identified in item #3.
  - a. Findings: Students were initially challenged by how to divide up the responsibilities for the oral and the written reports, as well as the assembly process to completion in its final form for both areas. Some students verbalized concerns about the group dynamics and how it would affect their individual grades.
  - b. Analysis of findings: Students overcame their initial fear of trusting fellow students to be able to each do their required parts. Students had to develop an understanding of

thinking collaboratively as a group in order to complete the process in the oral report and in the written report. Students concern about grades is linked to the human nature of individuals as it applies to the business or real world work situations. It is part of the necessary discovery about the realities of working groups.

**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).

Continue to emphasize the importance of the SLO in the program.

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

Continued evaluation of the SLO with yearly gathering of data and sequential evaluation of the data to monitor for change.

- 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 2014-15 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 2014-15, and then describe actions taken during 2015-16 to improve student learning along, provide a brief summary of findings, and describe possible next steps.

**PLEASE NOTE:** The university also requests that Deans complete a College-Level Synthesis report, which synthesizes 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 2014-15

Communicate effectively.

**2. Strategies implemented** during 2015-16 to improve student learning, based on findings of the 2014-15 assessment activities.

Changed course curriculum for TECH 330 and TECH 331 in line with recommendation from the assessment results from the Program SLO Assessment Report for AY 2014-15.

**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.

Quality of written communication, in all four reviewed classes have improved. Approximately 4%, from all three classes failed to hand in the assignments, which is an improvement from 10% from the previous years assessment. Approximately 2% 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, which is an improvement from 15% from the previous years assessment. Approximately 96% of the students, from all three classes, did work that would be considered being done correctly, which is an improvement from the previous years assessment.

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 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](http://www.umass.edu/oapa/oapa/publications/online_handbooks/program_based.pdf)*