Marquette University  
Learning Outcomes Assessment Plan

Department: MSCS  
Degree: MS in Computing (COMP)  
Date Submitted: December 15, 2006 – Revised October 2015

<table>
<thead>
<tr>
<th>Program Learning Outcomes</th>
<th>Performance Indicators</th>
<th>Measures</th>
<th>Use of the Information</th>
</tr>
</thead>
</table>
| Students will be able to: | 1A Describe specific practices.  
1B Describe specific relationships of practices.  
1C Describe specific solutions and how practices and their relationships are integrated within. | Each performance indicator for this learning outcome will be addressed by faculty through an examination of evidence from classes. (See Appendix 1.)  
Performance on each indicator will be evaluated on a scale of 1 through 4, using the rubric in Appendix 2. | Each year, the Director of the COMP program will be responsible for executing a faculty survey process (see Appendix 1).  
The Director will submit a report to the MSCS Executive Committee each year. |
| 1 Appraise relationships among a variety of computing practices and technologies to create integrated solutions to computing problems. | | | |
| 2 Communicate computing problems and suggested solutions to other professionals and with business clients | 2A Explain how choices will help us serve particular kinds of clients.  
2B Explain how particular choices relate to specific areas of our intended profession  
2C Explain how the operation of a particular project relates to specific professional areas, and | As for Learning Outcome 1. | As for Learning Outcome 1. |
| 3 Formulate and defend realistic and detailed designs for solutions of problems of enterprise scope | 3A The design fits the problem.  
3B The projected performance of the solution has been considered.  
3C Alternate solutions have been considered and prepared. | As for Learning Outcome 1. | As for Learning Outcome 1. |
|---|---|---|---|
| 4 Evaluate and apply common standards for technology and technology management | 4A Exhibit awareness of and familiarity with organizations that promulgate standards both for technology and technology management  
4B Exhibit awareness of and familiarity with specific ways in which standards have been implemented  
4C Exhibit ability to determine the standards most appropriate for particular problem.  
4D Apply standards to situations described in cases and problems | As for Learning Outcome 1. | As for Learning Outcome 1. |
Appendix 1. The survey.

To facilitate the assessment process, the Director will remind the faculty to, when appropriate, include assignments that support assessing each of the learning objectives and retain materials to perform an analysis of the learning outcomes.

The primary measuring instruments will be a review of student work and other evidence from classes. A survey will capture and collect individual faculty assessments. The Director will create the survey and distribute it to the full-time faculty of the MSCS department responsible for teaching courses in the program. The survey will deliver to faculty a reminder of the list of their classes and the students registered for those classes. The faculty will judge the success in each of the learning outcomes based on the assignments and the rubrics contained in this plan. They will report the results for each class and each student to the Director.

The Director will produce summary and aggregate data to support examining the success on the outcomes across classes and within classes. The Director will convene the Computing Committee and other interested faculty to meet to discuss the results. Based on the discussion, the committee will make recommendations for specific courses and the overall program.

Appendix 2. Rubric for measures.

4. The student’s work reflects exemplary performance on this measure of the performance indicator.
3. The student’s work reflects an adequate overall performance, with gaps in some key points.
2. The student’s work reflects adequate knowledge of some key points but an overall lack of comprehension.
1. The student’s work reflects little accumulated comprehension regarding this measure.
[N/A The course did not include assignments or activities to evaluate the criteria.]