# Marquette University
## Learning Assessment Plan

### Mathematics, Statistics, and Computer Sciences

**Program:** Mathematics, Statistics and Computer Science  
**Degree:** MS in Computing (COMP)  
**Date Submitted:** December 15, 2006

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<th>Program Learning Outcomes Students will be able to:</th>
<th>Performance Indicators</th>
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<th>Use of the Information</th>
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| 1. Articulate relationships among a variety of computing practices and ways to integrate them into solutions to common computing problems. | 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 within a specific part of a learning portfolio assembled as a requirement for graduation from the program. (See Appendix 1.)  
Performance on each indicator will be evaluated on a scale of 1 through 4, using the rubric in Appendix 2. | The Director of the COMP program will be responsible for ensuring that its students compile their individual portfolios (see Appendix 2). Each September, the MS in Computing committee, together with other computing faculty, will review the portfolios of all graduating students with respect to each of the learning outcomes. The committee will make recommendations in regard both to specific courses and to the overall program.  
The Director will submit a report to the MSCS Executive Committee by the end of September. |
| 2. Communicate about computing problems and suggested solutions with computing professionals and with clients. | 2A Explain how learning choices will help us serve particular kinds of clients.  
2B Explain how particular learning choices relate to specific areas of our intended profession.  
2C Explain how the operation of a particular project relates to specific professional areas, and how it relates to the requirements of typical clients | As for Learning Outcome 1. | As for Learning Outcome 1. |
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<th>Learning Outcome</th>
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| 3. Prepare 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. Show awareness of the existence and importance of common standards for communication within enterprise systems. | 4A Exhibit common standards for every level of communication, ranging from network protocols to business level descriptions of services and products.  
4B Exhibit awareness of and familiarity with organizations that promulgate standards both for network-level communication, and for communication between separate businesses.  
4C Exhibit awareness of and familiarity with specific ways in which standards have been implemented within particular products.  
4D Exhibit ability to determine the standards most appropriate for particular computing problems. | As for Learning Outcome 1. | As for Learning Outcome 1. |