

Management Information Systems Program **Assurance of Learning (AoL) Summary: 2015-2020**

Between 2015 and 2020, the assurance of learning activities in the undergraduate Business program were consistent and they guided curricular revisions. In 2017-18, MIS faculty revised the curriculum as follows: (1) Given the importance of project management for MIS graduates, a new required course on project management (PMGT 341) was added. (2) A 200-level required course in MIS was replaced with 300-level course on management information systems (MIS 320), since the new course provided coverage of a breadth of technologies for MIS students. In addition, a new course on data analytics was developed and taught in 2019-20, and is likely to become a required/elective course in the curriculum. These changes were made based on student feedback, discussions with the ITPC members, and faculty review of the curriculum. In the following paragraphs, we highlight the assurance of learning work done for each PLLG.

PLLG1 – Documenting Business Requirements: In the past five years, this learning goal has been assessed twice. Students do well in this goal and they obtain hands-on experience through community-based projects. Due to revisions in the curriculum, coverage for this learning goal has been increased. The concepts related to this goal are also now emphasized in MIS 327 where students document the business needs for arriving at the IT infrastructure. Further, PMGT 341 covers a few topics related to project requirements, deliverables and plans, though the projects covered in this class are not always IT projects.

Plans moving forward: Beginning 2020-21, this goal will continue to be assessed at the senior level in the systems analysis and design class, while other courses such as IT infrastructure may also be used in future.

PLLG2 – Data Model/Analytics: In the last five years, this learning goal has been revised. Previous version of the learning used to emphasize the theoretical concepts of database development. The revised learning goal placed more emphasis on database development. Once they graduate, students are expected to design and construct databases in their work settings; thus, the MIS program faculty and advisory board members (ITPC) felt that the revised learning goal more closely aligns with industry expectations. Rubric has also been updated to reflect the revised learning goal. Since 2016, this learning goal was assessed twice and student performance has been highly satisfactory (87-93% in the satisfactory or exemplary categories; 6-13% unsatisfactory rates). In the context of this learning goal, MIS faculty also designed and developed a new data analytics course. This was offered in Spring 2020, and likely will become a required/regular course in the MIS curriculum. Further, MIS 320, now a required course, also covers database design and construction; thus, the coverage of this learning goal has been significantly increased in the last five years.

Plans moving forward: This learning goal will be assessed on a rotational basis between MIS 328 (Database Management Systems) and the new data analytics course.

PLLG3 – Programming: In the past five years, this learning goal has been assessed twice. Noting the importance of programming in the MIS graduate's career, we increased the emphasis on programming in the last five years through two additional courses that students are required to complete. The new data analytics course, for example, requires students to program in statistical package R and also utilize visualization software Tableau. Further, the MIS 320 course requires

students to complete several technology assignments in spreadsheets and databases that aim to strengthen students' aptitude related to this learning goal.

Plans moving forward: This learning goal will be assessed in MIS 322 (C# programming).

PLLG4 – Infrastructure: In 2017-18, MISLG4 was revised to place a stronger emphasis on computer/IT infrastructure and not just computer networking. Some topics that have been revised and more emphasized since 2017 include cloud infrastructure and virtualization. Once they graduate, students are expected to be familiar with technical topics such as cloud infrastructure and virtualization and present the requirements of an infrastructure proposal to key stakeholders; hence this change was made to the learning goal. Because of this change, the rubric for assessment was also redesigned to include the following three dimensions: Infrastructure proposal technical requirements; Infrastructure business proposal; Infrastructure/network diagram.

Plans moving forward: This learning goal will continue to be assessed in MIS 327 (IT infrastructure).

PLLG5 – Project Management: Since 2017, the coverage on the project management (PMGT) learning goal has been significantly increased due to curricular revisions. In addition to systems analysis and design which used to cover PMGT for about two weeks, there is a required course on project management that MIS students need to complete. Another required course MIS 320 also covers project management for about a week.

Plans moving forward: Moving forward this learning goal will be measured in the required project management course (rather than MIS 320).

Future Plans: As discussed above, a new assurance of learning plan for the MIS major was approved by the faculty in 2019-20 and it will be used beginning 2020-21. Though there are no new learning goals, the curricular revisions strengthened the coverage of all learning goals by emphasizing topics in existing courses and adding two new required courses (management information systems and project management) as well as a course on data analytics. In future, MIS faculty plan to monitor student learning in these goals, review and revise as needed.