Departmental/Program Assessment Report Form 2016-17

Assessment reports will be completed through Qualtrics to make it easier to share and compile data across campus. The reporting questions will be similar to the questions used in the past, but with some additional detail requested in some areas to help us in collecting and analyzing college and institution-wide data on assessment practices. Your assessment reports will be maintained on file electronically on a password secure site (SharePoint). Other individuals on campus will have access to your reports.

Please complete one Assessment report per learning outcome that you are reporting on.

Name Please identify your department or program and the name of your assessment liaison:

Department/Program: Management Information Systems
Assessment Liaison: Dr. Suresh Chalasani
Report Prepared by: Dr. Suresh Chalasani

Q1 1. What learning outcome did you assess for this report? (Reminder - if you assessed multiple learning outcomes this academic year, you should complete a separate report for each outcome.)
MISLG2: Undergraduate MIS majors will be able to design and develop a database that satisfies the third normal form (3NF). (Closely aligns with the shared learning goal **Reasoned Judgment**)

Q2 2. Which of the institution-wide shared learning goals does this outcome connect to?
- ❑ Communication (1)
- ❑ **Reasoned Judgment (2)**
- ❑ Social and Personal Responsibility (3)

Q3 3. What assessment tool(s) or method(s) did you utilize? (Check all that apply)
- ❑ Survey (1)
- ❑ Standardized exam (2)
- ❑ **Exam from a course or courses** (3)
- ❑ Assignment from a course or courses (4)
- ❑ Student portfolios (5)
- ❑ Direct observation of student work or performance (6)
- ❑ Other (7) _____

Q4 4. What type of measurement did you utilize?
- **Direct (asking students to demonstrate their learning)** (1)
- Indirect (asking students to self-report their perceived level of learning) (2)
- A combination of the above (3)

Q5 5. What type of methodology did you use?
- Qualitative (1)
- **Quantitative (2)**
- A combination of the above (3)

Q6 6. What type of course delivery methods did you use to collect your data? If your assessment project is course-based, please identify the course delivery method.
- **Face to face (1)**
- Online (2)
- Hybrid (3)
- Flex Option (Competency Based)
- A combination of the above (4)
- Other: Please Specify: _____

Q7 7. What was the process of analysis? How did you involve your department in the process of analysis? (100 words)

In MIS 328, students learn how to design and construct databases for business data and decision making. In fall 2016, Prof. Chalasani used Exam 1 to collect assessment results for MISLG2.

This year's MISLG2 assessment is different from the previous assessments in the following aspect: the learning goal itself is revised to place a stronger emphasis on database development. The two versions of the learning goal are reproduced below:

Previous MISLG2: Undergraduate MIS majors will be able to ***develop a data model*** that satisfies the third normal form (3NF).

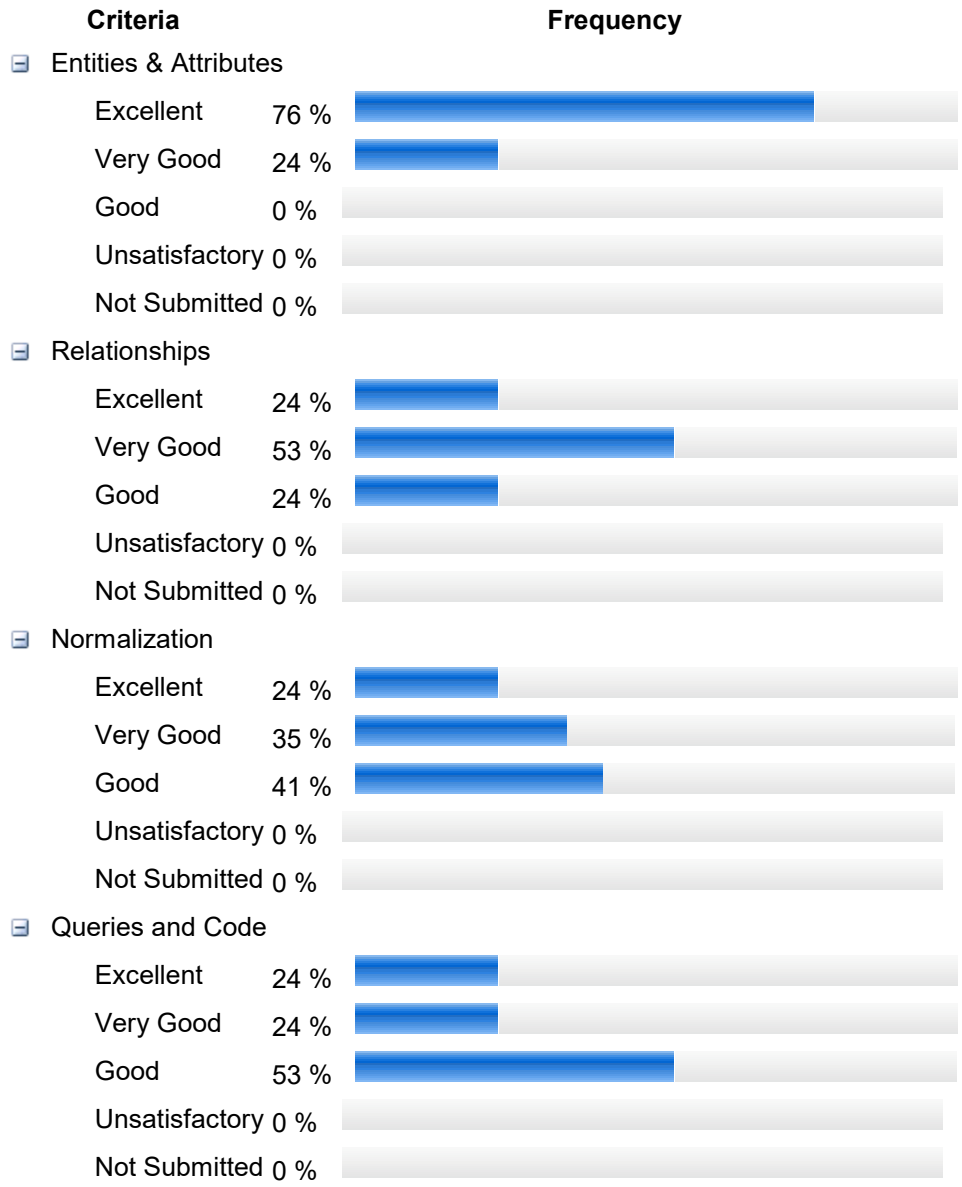
Revised Version: Undergraduate MIS majors will be able to ***design and develop a database*** that satisfies the third normal form (3NF).

Once they graduate, students are expected to design and construct databases in their work settings; thus, the MIS faculty felt that the revised leaning goal more closely aligns with what the industry is expecting in terms of students' competencies. Because of this change, the rubric for assessment was also redesigned. The revised rubric evaluated student work along four dimensions (see Appendix A for rubric details): Entities & Attributes; Relationships; Normalization; Queries and Code. Student performance from Exam 1 was analyzed using this rubric. The changed learning goal, rubric, and the results from this assessment need to be

discussed with the Business department's undergraduate curriculum committee; this discussion may happen in Spring 2017 or early Fall 2017.

Q8 8. What were the results of this analysis? (250 words)

Student performance in Exam 1 along the rubric dimensions is reproduced as a bar chart below.



Overall, student performance in various rubric dimensions is very good. The unsatisfactory rates in various rubric dimensions are zero. In the previous reports, students were in the unsatisfactory category, especially for the normalization dimension. The previous assessments focused on theory-based normalization exercises, while the assessment this year assessed normalization in the context of building a database using just one example. Thus, the revised

learning goal placed less emphasis on theoretical aspects of normalization and more emphasis on other aspects related to constructing the database and developing queries and code. Student performance is lower in the normalization and queries/code dimensions of the rubric. This is to be expected since both normalization and code development are introduced around the middle of the semester, just before exam 1, and students require further practice to master these concepts. Thus, it will be beneficial to study/compare the results of student performance for exam 1 and exam 2 in future assessment reports.

Q9 9. How were results shared/discussed with your department/external stakeholders? (Check all that apply)

- ❍ Special faculty meeting (1)
- ❍ Part of a regular faculty meeting (2)
- ❍ **Shared electronically (3)**
- ❍ Advisory board (4)
- ❍ **Other (5)** _They will be discussed in a future Business department's undergraduate curriculum committee meeting. _____

Q10 10. As a result of your analysis, what changes will your department or program make to improve student learning? (250 words)

No changes are planned at this point.

Q11 11. Looking back at your last assessment report, what is the current status of the plan for improvement of student learning that was discussed in your past reports? (Check all that apply)

- ❍ Proposed (1)
- ❍ **In consideration** (2)
- ❍ Implemented (3)
- ❍ Being assessed (4)
- ❍ Other (5)

Q12 12. Indicate all changes made to your program to improve student learning since the last assessment report you submitted. Some example changes include the following: Revising learning goals, outcomes and rubrics; Revising pre-requisites; Improving hands-on learning and labs; Introducing new courses; Changing emphasis on topics; Providing more tutoring help;

Progressive measurement of the same learning goals in multiple courses; Redesigning assessment instruments such as assignments, exams, labs, and quizzes. (250 words)

The learning goal MISLG2 is revised to place a stronger emphasis on database development; the two versions of the learning goal are reproduced below:

Previous MISLG2: Undergraduate MIS majors will be able to ***develop a data model*** that satisfies the third normal form (3NF).

Revised Version: Undergraduate MIS majors will be able to ***design and develop a database*** that satisfies the third normal form (3NF).

Reasons for the changes: Once they graduate, students are expected to design and construct databases in their work settings; thus, the MIS program faculty felt that the revised leaning goal more closely aligns with what the industry is expecting in terms of students' competencies.

Because of this change, the rubric for assessment was also redesigned. The revised rubric evaluates student work along four dimensions (see Appendix A for he detailed rubric): Entities & Attributes; Relationships; Normalization; Queries and Code. To implement these changes, student performance in Fall 2016 was evaluated using practical questions related to constructing databases.

Q13 13. Please write an abstract of no more than 250 words to summarize your assessment report this year. Your abstract should address items completed above, including which learning outcome was assessed, which data were collected and analyzed, how the department discussed the findings, and what changes are planned as a result of what was learned. In addition, please emphasize the changes made to your program since the last assessment report (see questions 11 and 12). This abstract will be the basis of the assessment poster that the OIE will generate for the Assessment Showcase, and will be used as an easy way to share a summary of your report with others on campus.

Abstract:

For the Management Information Systems program, student performance in learning goal #2 (MISLG2) is often measured in the class "MIS 328: Database Management Systems." In MIS 328, students learn how to design and construct databases for business problems. In fall 2016, Exam 1 was used to collect assessment results for MISLG2. This year's MISLG2 assessment is different from the previous assessments for the same learning in the following aspects: the learning goal itself is revised to place stronger emphasis on database development; the rubric for assessment is revised to suit the changes to the learning goal. The revised MISLG2 learning goal states "Undergraduate MIS majors will be able to design and develop a database that satisfies the third normal form (3NF)." Upon graduation, students are expected to design and

construct databases in their work settings; thus, the MIS program faculty felt that the revised leaning goal more closely aligns with what the industry is expecting in terms of students' competencies. Because of this change to the learning goal, the rubric for assessment was also redesigned. The revised rubric evaluated student work along four dimensions: Entities & Attributes; Relationships; Normalization; Queries and Code. Student performance from Exam 1 was analyzed using this rubric. The changed learning goal, rubric, and the results from this assessment need to be discussed with the Business department's undergraduate curriculum committee in 2017. Overall, student performance results in the revised goal are very encouraging; no students were placed in the unsatisfactory category in any rubric dimension. Students performed relatively better in the "Entities & Attributes" and "Relationships" dimensions compared to "Normalization" and "Queries and Code" dimensions. This is to be expected since both normalization and code development are introduced around the middle of the semester, just before exam 1, and require further practice. In future, it will be beneficial to study/compare the results of student performance for exam 1 and exam 2.

The deadline for submission of reports is May 31. (Note, if due to the timing of your data gathering you would like to request a different deadline, please contact the Institutional Research Office, John Standard, standard@uwp.edu. The Assessment Showcase this year will be held on November 3, 2017.

SPECIAL QUESTION RELATED TO DISTANCE EDUCATION COURSES:

If your program is delivered fully or partly via distance education (online, hybrid, or flex-option/competency-based), please indicate the assessment efforts/plans undertaken in distance education (DE) courses/programs. Please emphasize topics such as assessment plans for distance education courses/programs, assessment results for DE courses/programs. (No limit on the length)

MIS program is a face-to-face program and, except MIS 320 and PMGT courses, no courses are offered online. In future, assessment results from online sections of MIS 320 and PMGT courses will be shared.

Appendix A: Rubric to Measure Student Performance for MISLG2

MISLG2: Students will be able to effectively use computer technology to support a business decision

Criteria	Excellent 24 points	Very Good 22.5 points	Good 20 points	Unsatisfactory 14 points	Not Submitted 0 points
Entities & Attributes	Student's solution captures all of the entities and attributes that correspond to the data requirements mentioned for the business problem.	Student's solution captures about 90% of the entities and attributes that correspond to the data requirements mentioned for the business problem.	Student's solution captures 80-90% of the entities and attributes that correspond to the data requirements mentioned for the business problem.	Student's solution captures less than 80% of the entities and attributes that correspond to the data requirements mentioned for the business problem.	This aspect of the assessment was not submitted.
Relationships	Student's solution captures all of the relationships among entities correctly.	Student's solution captures most of the relationships among entities correctly.	Student's solution captures some of the relationships among entities correctly.	Student's solution does not capture any of the relationships among entities correctly.	This aspect of the assessment was not submitted.
Normalization	Student's data model satisfies the requirements of the third normal form.	Student's data model is close to the third normal form, but does not completely meet the requirements of the third normal form.	Student's data model satisfies the second normal form, but does not satisfy the requirements of the third normal form.	Student's data model does not satisfy the requirements of the second normal form.	This aspect of the assessment was not submitted.
Queries and Code	Student's solution constructs all of the queries and the code correctly to read (write) information from (to) the database.	Student's solution constructs about 90% of the queries and the code correctly to read (write) information from (to) the database.	Student's solution captures 80-90% of the queries and the code correctly to read (write) information from (to) the database.	Student's solution captures less than 80% of the queries and the code correctly to read (write) information from (to) the database.	This aspect of the assessment was not submitted.
Overall Score	**Excellent 95 or more**	**Very Good 90 or more**	**Good 80 or more**	**Unsatisfactory 0 or more**	
	Excellent work.	Very good work.	Good work.	Student's work is below satisfactory.	