Departmental/Program Assessment Report Form 2015-16

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: **CBEC/ Management Information Systems**
Assessment Liaison: Prof. Suresh Chalasani
Instructor: Prof. Suresh Chalasani

Q1. 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.)

MISLG1: Document requirements of an information system using state-of-the-art modeling techniques.

Q2. 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)

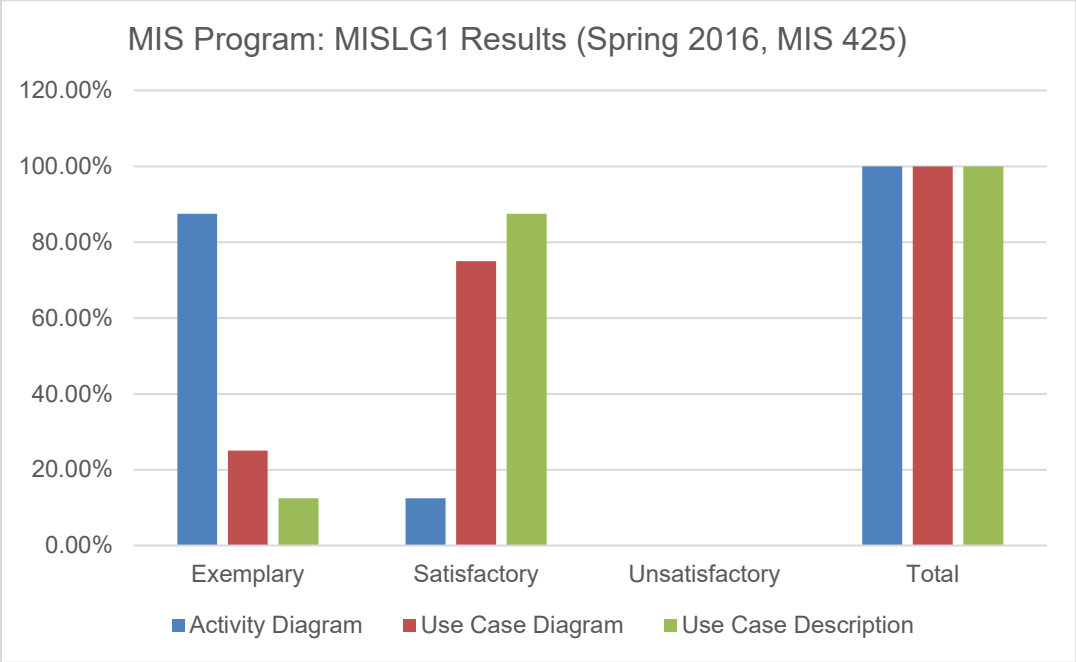
Students were given two labwork assignments in MIS 425 (See Appendix 1 for the complete assignments). The first assignment asked students to consider a business scenario of renting videos and arrive the process flows. Further, the assignment required students to document the processes as activity diagrams using Microsoft Visio. The second follow-up assignment asked students to construct use cases and document them using Microsoft Word (use case descriptions) and Visio (use case diagram). Student work was evaluated in terms of correctness of process flows, detailed descriptions of process flows, syntax of diagrams, and their ability to integrate complex details. Student performance was evaluated using a rubric (Appendix 2 presents the rubric) with three dimensions: Activity Diagram, Use Case Diagram, and Use Case Descriptions. The instructor scored the assignments and assigned students into different categories: Exemplary, Satisfactory, Unsatisfactory.

Q8 8. What were the results of this analysis? (250 words)
The following tables present the numbers and percentages of students in each category. The results for each student are presented in Appendix 3.

	Exemplary	Satisfactory	Unsatisfactory	Total
Activity Diagram	7	1	0	8
Use Case Diagram	2	6	0	8
Use Case Description	1	7	0	8

	Exemplary	Satisfactory	Unsatisfactory	Total
Activity Diagram	87.50%	12.50%	0.00%	100.00%
Use Case Diagram	25.00%	75.00%	0.00%	100.00%
Use Case Description	12.50%	87.50%	0.00%	100.00%

The following chart graphically depicts the percentages of students in different categories for each rubric dimension.



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) _____

Note: These results will be discussed in the Business Department's Undergraduate Curriculum Committee in fall 2016, and later in a department meeting. Time permitting, they will also be presented to the CBEC advisory board. The results will also be submitted to AACSB as part of the annual AoL (Assurance of Learning) report for the academic year 2015-16.

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

A few observations based on the assessment results are noted below.

(1) For each rubric dimension, all of the students are either in "Exemplary" or "Satisfactory" categories. Students who did not submit work for the assignments were not included in the results.
(2) There are no students in the "Unsatisfactory" category during academic year 2015-16. In 2014-15, only one rubric dimension ("Use Case Descriptions") had unsatisfactory rates. Historical results for this learning goal including this year's results are indicated below:

Rubric Dimension	***Year***	***% Students Exemplary***	***% Students Satisfactory***	***% Students Unsatisfactory***
Use Case Diagram (Requirements Diagram)	2008	43.75%	43.75%	12.50%
	2011	55%	45%	0%
	2012	50%	50%	0%
	2015	37.50%	62.50%	0%
	2016	25.00%	75.00%	0%
Use Case Descriptions (Requirements Descriptions)	2008	43.75%	43.75%	12.50%
	2011	55%	45%	0%
	2012	50%	50%	0%
	2015	31.25%	56.25%	12.50%
	2016	12.50%	87.50%	0%
Activity Diagram (Process Diagram)	2008	43.75%	43.75%	12.50%
	2011	55%	45%	0%
	2012	50%	50%	0%
	2015	68.75%	31.25%	0%
	2016	87.50%	12.50%	0%

(3) In spring 2016, more emphasis has been added to designing and constructing activity, use case diagrams and descriptions. The increased emphasis based on class discussions and practical hands-on examples may have led to zero unsatisfactory rates.
(4) In spring 2016, a more stringent grading guide has been applied to grade the assignment. For example, students need to indicate normal, exception and sub-flows while describing use cases to achieve "exemplary" rating; similarly, use case diagrams need to include all relationships and pay attention to details such as placing actors outside the system boundary. This more stringent assessment evaluation led to less students receiving the exemplary rating in spring 2016 compared to previous years.
(5) Arriving at activity diagrams is relatively easier since the process steps are clearly indicated in the assignment for students to follow. This led to high "Exemplary" rates for the activity diagram dimension. However, construction of use case diagrams and use case descriptions is more difficult compared to activity diagrams, since students need to synthesize use cases from the business scenario and construct detailed flows. This is possibly one additional reason why most students are in the "satisfactory" category

rather than “exemplary” category for the use case diagram/descriptions dimensions (as compared to the activity diagrams dimension).

(6) As historical results point out, students tend to do well in this learning goal. This is in part because students are exposed to these concepts in multiple settings: class lectures, practical hand-on work, in-class discussions, application of these concepts to community projects, and feedback from the instructor on drafts of the activity diagrams, use case diagrams, and use case descriptions.

(7) It is concluded that no changes are needed to the curriculum and we will continue to collect data in future years.

Q11 11. Looking back at your assessment report from the last five years (since Fall 2012), 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 in the past five years (since Fall 2012) as part of the continuous improvement process. 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)

MIS program made several changes to its curriculum in the past five years. Some of these changes are included in the table below:

Learning Goal that Caused the Changes	***Course in which changes were made***	***Implemented changes and results***	***Possible Future Changes***
MISLG 1: Documenting Requirements	MIS 425	Devoted one class session to in-class exercises on writing use-case descriptions. Over the years, increased coverage of documenting requirements via: practical hands-on work; in-class discussions; application of these concepts to community projects; and feedback from the instructor on drafts of the activity diagrams, use case diagrams, and use case descriptions.	None at this time.

		In response to employer needs, healthcare applications and systems have been added to this course since 2015. These changes resulted in zero unsatisfactory ratings for spring 2016.	
MISLG 2: Data Model & 3NF	MIS 328	In fall 2015, Increased coverage of the normalization topic to about 1.5 weeks (from 1 week). MySQL database coverage included since 2013. Student unsatisfactory rates are zero except for the normalization dimension.	None at this time.
MISLG 3: Object-Oriented Systems	MIS 322	Course modified to utilize C# .NET (2014); Programming with Microsoft SQL Server covered since 2012. In fall 2014, nearly 90% of the students are in “exemplary” or “satisfactory” for the base class design and procedural logic rubric dimensions.	Place more emphasis on the topic of class design and inheritance – particularly in areas of deficient performance. Future changes: Remove one topic from the course (Sorted Lists) and reallocate time so that more time and effort is devoted to class design and inheritance, e.g. overloading and developing methods with proper signatures, better utilization the features of inheritance such as not duplicating base class members and overriding methods to add functionality in derived classes.
MISLG 4: Computer Network Architecture	MIS 327	Introduced CISCO networking equipment in Fall 2013, and upgraded with latest equipment and server software in fall 2015. Very minimal unsatisfactory ratings have been observed.	Provide more guidance on references aspects of technical proposals; provide further instructions to students on standards for network diagrams. Reduce some topic redundancy that came following the textbook’s topic flow in order to allow for additional hands-on lab exercises.
MISLG 5: Project Management	MIS 428	SharePoint has been added to the curriculum in spring 2016 and project management has been emphasized	In future, increase the coverage of Salesforce.com and SharePoint, and relate

		further. Assessment results will be gathered in future semesters.	project management concepts to these applications.

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 in the past five years (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.

In this report, we presented and analyzed the assessment results for MISLG 1 of the Management Information Systems program. This learning goal requires students to analyze a business scenario and document the requirements through activity diagrams, use diagrams, and use case descriptions. The assessment project distributed two related assignments to students in the course MIS 425. Student performance was scored using a rubric with three different dimensions: Activity Diagram, Use Case Diagram, and Use Case Descriptions. Students were placed in one of the three categories: Exemplary, Satisfactory, or Unsatisfactory. For each rubric dimension, all students were either in “Exemplary” or “Satisfactory” categories. In spring 2016, the instructor devoted one class session to in-class exercises on writing use-case descriptions. Over the years, the instructor increased the coverage of documenting requirements via: practical hands-on work; in-class discussions; application of these concepts to community projects. Further, the instructor provided feedback on early drafts of the activity diagrams, use case diagrams, and use case descriptions. In response to employer needs, healthcare applications and systems have been added to this course since 2015. These changes resulted in zero unsatisfactory ratings for spring 2016. The results from this assessment project will be shared and discussed with the Business department’s undergraduate committee in fall 2016 and presented in a department meeting. These results are also shared with AACSB as part of the annual report on Assurance of Learning.

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 4, 2016.

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, and changes made over the past five years. (250 words)

None of the required/elective courses specific to the MIS major are offered online at this time. MIS 320, a required course for non-MIS majors (including Business, Accounting, and Marketing majors), is offered in both F2F and Online formats. The assessment results from MIS 320 online sections are included in the Business department's assessment report for PLLG 4.

Appendix 1: Assignments Used for PLLG Assessment

In spring 2016, the following assignments were given to students in MIS 425 to assess student performance MISLG1.

Labwork Assignment #5

Note: *Submit your solutions as a Visio file to the dropbox in D2L.*

Create an activity diagram for the following system. A Video Store (AVS) runs a series of fairly standard video stores. Before a video can be put on the shelf, it must be cataloged and entered into the video database. Every customer must have a valid AVS customer card in order to rent a video. Customers rent videos for three days at a time. Every time a customer rents a video, the system must ensure that they do not have any overdue videos. If so, the overdue videos must be returned and an overdue fee paid before customer can rent more videos. Likewise, if the customer has returned overdue videos, but has not paid the overdue fee, the fee must be paid before new videos can be rented. Every morning, the store manager prints a report that lists overdue videos. If a video is two or more days overdue, the manager calls the customer to remind them to return the video. If a video is returned in damaged condition, the manager removes it from the video database and may sometimes charge the customer.

Labwork Assignment #6

Note: *Submit your solutions in Word and Visio format to the dropbox in D2L.*

(1) Identify use cases and create a detailed set of use case descriptions for the AVS video store mini-case in lab assignment #5 for the following use cases: Rent Videos, Obtain Account, Inspect Videos, Catalog Videos. (This part needs to be done in Microsoft Word)

(2) Create a use case diagram for the AVS video store mini-case from the previous problem. (This part needs to be done in Microsoft Visio)

Appendix 2: Rubric Used for PLLG Assessment

	Exemplary	Satisfactory	Unsatisfactory
Use Case Diagram	Student's use case diagram captures most of the requirements stated in the assignment and the use case diagram uses the correct symbols and terminology without errors.	Student's use case diagram captures more than 75% of the requirements stated in the assignment and more than 75% of the use case diagram uses the correct symbols and terminology.	Student's use case diagram reflects only 75% (or less) of the requirements, or 25% or more of the student's use case diagram uses the incorrect symbols or terminology.

Use Case Descriptions	Student describes all use cases correctly by discussing normal business flows, associated actors and relationships.	Student describes more than 75% of the use cases correctly by discussing normal business flows, associated actors and relationships.	Student does not correctly describe 25% or more of the use cases.
Activity Diagrams	Student creates correct activity diagrams for all of the business processes described in the assignment.	Student creates correct activity diagrams for more than 75% of the business processes described in the assignment.	Student does not create (or creates incorrect) activity diagrams for at least 25% of the business processes described in the assignment.

Appendix 3: Assessment Results By Student

Name	***Activity Diagram***	***Use Case Diagram***	***Use Case Description***
Student 1	E	S	S
Student 2	E	S	S
Student 3	E	S	S
Student 4	E	S	S
Student 5	S	S	S
Student 6	E	E	E
Student 7	E	E	S
Student 8	E	S	S