



**DEPARTMENT OF BUSINESS**

**ASSURANCE OF LEARNING REPORT  
MIS MAJORS**

**FOR ACADEMIC YEAR 2012-13**

## 1. Introduction

This document describes the results from the assurance of learning exercises conducted by the MIS program in 2012-13. The complete assessment plans used by the Department of Business are described in three documents: *Assessment Plan for the Undergraduate Business Program*, *MIS Major Assessment Plan*, and *Assessment Plan for the MBA Program*. Each plan identifies program level learning goals (PLLGs) that are periodically assessed. These plans also specify rubrics for the assessment, processes for performing the assessment, processes for taking action on the assessment results, and processes for updating the assessment procedures. The latest assessment plans, were discussed and approved through a series of department and advisory board meetings in the Spring 2006. The assessment plans and the data generated are periodically reviewed for quality improvement.

MIS students also take part in the business program assessment process. This document only summarizes the results of the assessment unique to MIS students. The MIS learning goals (MISLG) are summarized below. The MISLGs assessed during 12-13 are stated.

Undergraduate MIS majors will be able to:

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

**\*MISLG2:** Develop a data model that satisfies the third normal form (3NF).

**MISLG3:** Understand and apply the concepts of object-oriented systems.

**MISLG4:** Understand the design principles of computer network architectures and apply them to a business problem.

**MISLG5:** Understand project management principles and apply these principles to a practical situation.

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

Course in which this learning goal is assessed: MIS 328: Database Management Systems.

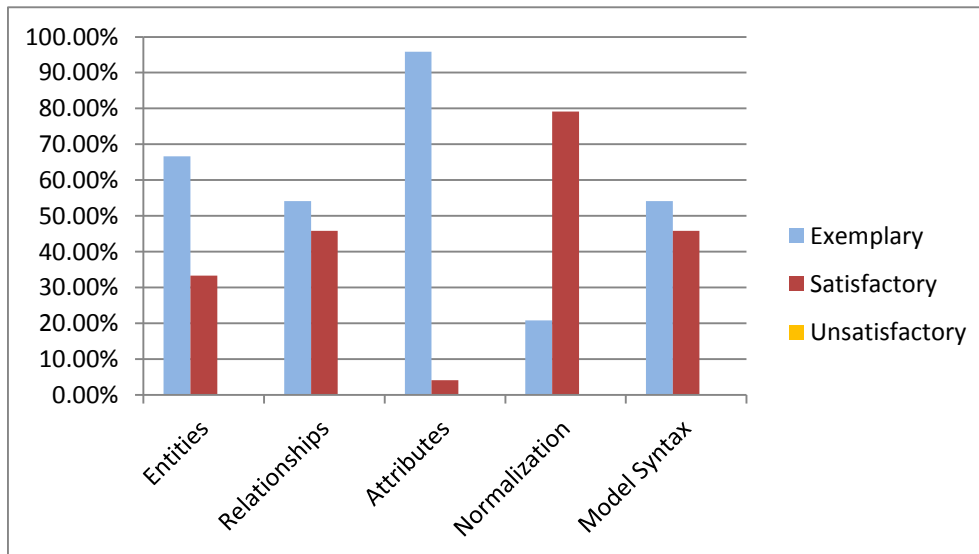
Course Embedded Activity for Assessment: An assignment that discusses a business problem with several pieces of data that needs to be captured for the business will be administered to the student. Each student is required to develop a logical relational data model that satisfies the third normal form.

Assessment Rubric:

	Exemplary	Satisfactory	Unsatisfactory
Entities	Student's solution captures all of the entities that correspond to the data requirements mentioned for the business problem.	Student's solution captures more than 75% of the entities that correspond to the data requirements mentioned for the business problem.	Student's solution does not correctly identify at least 25% of the entities for the data model based on the requirements mentioned for the business problem.
Relationships	Student's solution captures all of the relationships among entities correctly.	Student's solution captures more than 75% of the relationships among entities correctly.	Student's solution does not correctly identify at least 25% of the relationships among the entities.
Attributes	Student's data model correctly identifies all of the attributes for the data model.	Student's data model correctly identifies more than 75% of the attributes for the data model.	Student's data model does not correctly identify at least 25% of the attributes for the data model.
Normalization	Student's data model satisfies 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.
Syntax of the entity relationship models	Student's data model uses the correct syntax for the data model diagram without any errors.	Student's data model uses the correct syntax for more than 75% of the data model diagram.	Student's data model does not use the correct syntax for the data model diagram in at least 25% of the diagram.

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	Exemplary	Satisfactory	Unsatisfactory	Total
Entities	16 <b>67%</b>	8 <b>33%</b>	0 <b>0%</b>	24
Relationships	13 <b>54%</b>	11 <b>46%</b>	0 <b>0%</b>	24
Attributes	23 <b>96%</b>	1 <b>4%</b>	0 <b>0%</b>	24
Normalization	5 <b>21%</b>	19 <b>79%</b>	0 <b>0%</b>	24
Model Syntax	13 <b>54%</b>	11 <b>46%</b>	0 <b>0%</b>	24



#### Comments

- Significant improvement in performance since 11-12. Results are likely due to increased attention to database design during the course.