

Management Information Systems BBA

Management Information Systems- A Broad Base Of Knowledge

Goal Description:

The goal of the BBA program in Management Information Systems is to provide students with a broad base of knowledge in the Management Information System discipline.

Providing Department: Management Information Systems BBA

Progress: Completed

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

Data Analytics

Learning Objective Description:

The Data Analytics focus is placed on the importance of collecting and analyzing data by creating models for making better decisions and improving business practices and strategies. Topics covered include descriptive analytics, predictive analytics, and prescriptive analytics. Students learn to apply business analytic tools, and to communicate the results. Emphasis is placed on applications, concepts and interpretation of results. (MGIS4315)

RELATED ITEM LEVEL 2

Data Analytics Assessment

Indicator Description:

Assessment of the Learning Objectives will be measured using assignments and exams related to collecting and analyzing data by creating models for making better decisions and improving business practices and strategies. (MGIS4315)

Criterion Description:

Students will average at least a 70% mastery level in the following areas:

descriptive analytics, predictive analytics, and prescriptive analytics

RELATED ITEM LEVEL 3

Data Analytics Assessment

RELATED ITEM LEVEL 1

Database

Learning Objective Description:

Students who complete the BBA in Management Information Systems will demonstrate an understanding of the design and implementation of database applications and how database software works and its inclusion in design solutions. (MGIS 3330 and 4330)

RELATED ITEM LEVEL 2

Database Assessment

Indicator Description:

Assessment of the Learning Objectives will be measured using student performance in the areas of design and implementation of database applications will be measured through practical exams in MGIS 3330 and specific exam questions on the design and implementation topics in MGIS4330. (MGIS3330 and MGIS 4330)

Criterion Description:

Students are assumed to have no previous knowledge of database design and implementation skills and are not given a pretest. The class average on both, **design** and **implementation** of databases will be 70% correct. Skills in these two areas will be included on each unit examination. M/C questions and/or

hands-on exercises/projects may be utilized dependent on the instructor and course, MGIS 3330 and MGIS 4330.

Findings Description:

One section of MGIS 4330 – Business Management Database II (10 students) Fall 2022 was assessed.

Table 1 below indicates the percentage of students that demonstrated an understanding of topic areas comprising the first learning objective and their performance on the project for the second learning objective. Included in the table is the % Correct for each Learning Objective.

Table 2 shows the level of understanding of students performing “Excellent” (>=90%), “Good” (between 70% and 90%), and “Poor” (<70%) for each topic area.

The performance of the students meets the criterion for all topic areas except for Manipulating Data (69%).

Table 1: Student Performance on Learning Objectives

Topic	% Correct	Learning Objective	% Correct
1. Core DB Concepts	70%	Understand and apply essential relational database design and implementation concepts.	70%
2. Manipulating Data	69%	Understand and apply essential SQL skills to create, retrieve, update, and delete relational databases.	69%
3. Creating DB Objects	79%	Understand and apply advanced SQL skills such as views, scripts, stored procedures, and functions.	79%

Table 2: Student Performance on Specific Topic Areas

Topic	Excellent	Good	Poor
1. Core DB Concepts	10%	40%	50%
2. Manipulating Data	20%	30%	50%
3. Creating DB Objects	30%	50%	20%

RELATED ITEM LEVEL 3

Database Assessment

Action Description:

Given that the average for the data manipulation learning objective is below 70% (69%), actions for improvement will be to allocate more time for more in-class examples and discussions and mini-quizzes for reinforcement.

RELATED ITEM LEVEL 1

Electronic Commerce

Learning Objective Description:

Students who complete the BBA in Management Information Systems will demonstrate the ability to implement business oriented systems for electronic commerce and skills in using Internet technologies. (MGIS4320)

RELATED ITEM LEVEL 2

Electronic Commerce Assessment

Indicator Description:

Assessment of the Learning Objectives will be measured using assignments and exams related to the ecommerce and internet technology topics. (MGIS 4320)

Criterion Description:

Students will average at least a 70% mastery level in the following areas:
XHTML, CSS, Graphics, and JavaScript.

RELATED ITEM LEVEL 3

Electronic Commerce Assessment

RELATED ITEM LEVEL 1

Information Systems

Learning Objective Description:

Students who complete the BBA in Management Information Systems will be able to:

1. Recognize and describe the role of and developments in management information systems for various businesses and industries.
2. Demonstrate the ability to use of information systems to solve business problems. (MGIS3310)

RELATED ITEM LEVEL 2

Information Systems Assessment

Indicator Description:

Assessment of the Learning Objectives will be made with the student's performance on exams and practical labs. Exams will have sections/topics targeting the Learning Objective 1 and the practical labs will be evaluated for Learning Objective 2. (MGIS 3310)

Criterion Description:

The learning objective is accomplished when an average score of 70% or higher for concepts and principles is obtained by 70% of the students taking MGIS3310.

Results of the assessment for online modality is attached.

For each of the Topics areas, the percentage of students getting performing "Excellent" (>90%), "Good" (between 70% and 90%), and "Poor" (<70%) were also calculated.

RELATED ITEM LEVEL 3

Information Systems Assessment

RELATED ITEM LEVEL 1

Networking

Learning Objective Description:

Students who complete the BBA in Management Information Systems will demonstrate an understanding of telecommunications services and networking technologies and skills in installing and managing networks within business organizations. (MGIS4350)

RELATED ITEM LEVEL 2

Networking Assessment

Indicator Description:

Assessment will be made using test performance on understanding of telecommunications services and networking technologies. A project will be used to assess skills in working as a team to install and manage a network. (MGIS4350)

Criterion Description:

The class average on individual test questions will be 70% correct. Test questions will be included on each unit examination. Seventy five percent of Management Information Systems majors will receive a score of at 70% on the Test and the Networking Project.(MGIS4350)

RELATED ITEM LEVEL 3**Networking Assessment****RELATED ITEM LEVEL 1****Programming****Learning Objective Description:**

Students who complete the BBA in Management Information Systems will demonstrate the ability to analyze and define business problems from a programming perspective and an understanding of the basic concepts of programming, problem solving, and program logic. This includes the understanding of fundamental concepts of procedural, object-oriented, and event-driven programming paradigms and the ability to apply them to solve business problems. (MGIS2320)

RELATED ITEM LEVEL 2**Programming Assessment****Indicator Description:**

Assessment will be made using exams to evaluate both the understanding of fundamental concepts of the three programming paradigms (procedural, object-oriented, and event-driven) and the ability to apply them to solve business problems. Common multiple-choice questions will be used to assess the understanding, while coding problems will be used to assess the ability to apply. (MGIS 2320)

Criterion Description:

The average across class sections on each exam will be 75% (originally 70% correct, but we determined that the hurdle needed to be higher to stay competitive with peer schools) correct. The class average on the section testing the understanding of fundamental concepts of both procedural and object-oriented paradigms will be 75% (originally 70% correct, but we determined that the hurdle needed to be higher to stay competitive with peer schools)correct. Also, the class average on the section testing the ability to apply the concepts of concepts of both procedural and object-oriented paradigms will be 75% (originally 70% correct, but we determined that the hurdle needed to be higher to stay competitive with peer schools)correct. The class average on the exam on event-driven paradigm will be 70% correct; this last exam contains one coding problem, combining the understanding and application. We are particularly interested to determine whether our interventions are working with the procedural paradigm, a weakness that emerged in 2010-2011. (MGIS2320)

RELATED ITEM LEVEL 3**Programming Assessment****RELATED ITEM LEVEL 1****Systems Analysis And Design****Learning Objective Description:**

Students who complete the BBA in Management Information Systems will demonstrate an understanding of the design and application of information systems in business and a knowledge of the tools and processes used in systems analysis and design. (MGIS4340)

RELATED ITEM LEVEL 2**Systems Analysis And Design Assessment****Indicator Description:**

Assessment of the Learning Objectives will be measured using vocabulary exam questions and semester long project assignments targeting specific related topics. (MGIS 4340)

Criterion Description:

For each Learning Objective there is a 70% cutoff level whereby above 70% is deemed achieving the learning objective and below 70% attainment is considered no achieving the learning objective.

The class average on the vocabulary exam will be => 70% correct to be deemed acceptable.

The rubric is based on the four phases of development methodology. A draft version of each phase I-III deliverable is graded as well as a final version. Only one version of the phase IV deliverable is graded as this phase is an outline of deliverables (installation guidelines, recovery guidelines,etc.). Management Information Systems majors will receive a score of at least 70% on the rubric for the project final draft. (MGIS4340).

Findings Description:

One section of MGIS 4340 students) was assessed. The table below indicates the percentage of students that correctly answered questions on the vocabulary quizzes or their performance on the semester long project assignments for each topic area. Included in the table is the % Correct for each Learning Objective.

Table 1: Student Performance on Learning Objectives

Topic	% Correct	Learning Objective	% Correct
1. Terminology of SA&D	99.6%	(1)Understanding the process of design and application of information systems in business.	89%
3. Project Selection & Initiation (Phase I)	87.4%		
4. System Analysis (Phase II – Part 1)	86.2%	(2) Attain knowledge of the tools and processes used in systems analysis and design (SA&D).	
5. System Analysis (Phase II – Part 2)	77.5%		85.6%
6. System Design & Implementation/Maintenance (Phase III/IV)	91.2%		

All of the Learning Objectives were above the 70% cutoff level. Phase II Part 2 (5) appears to the area which could be improved the most at 77.5%. Phase II Part 2 includes the Entity Relationship Diagram, Weighted Ranking Analysis, detailing the selected solution and updating the Baseline Project Plan with the recommended solution information is the area that will be given extra time and practice going forward for continuous improvement.

RELATED ITEM LEVEL 3

Systems Analysis And Design Assessment

Action Description:

Phase II Part 2 includes the Entity Relationship Diagram, Weighted Ranking Analysis, detailing the selected solution and updating the Baseline Project Plan with the recommended solution information is the area that will be given extra time and practice going forward for continuous improvement.

Update to Previous Cycle's Plan for Continuous Improvement Item

Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

Closing Summary

Discussion on requiring MGIS 4315 Decision Analytics & Analysis for MIS majors is tabled for future discussion. We'll explore various options for providing certifications towards data analytics. There was additional discussion regarding a second Decision Analytics course to include more advanced topics.

Courses to be assessed for 2022 - 2023

MGIS 3310 f2f (Fall 2022)

MGIS 3330 online (Spring 2023)

MGIS 4330 (Fall 2022)

MGIS 4340 (Spring 2023)

Update of Progress to the Previous Cycle's PCI:

It was decided that the new Data Analytics course should be a required course for MIS majors. The discussion regarding a second Data Analytics course was tabled until after a few semesters of the new Data Analytics course have completed and we have more evidence as to if a second course is needed.

The scheduled course assessments were handled as follows:

1. MGIS 3310 f2f, MGIS3330 online were moved to Fall2023 in keeping with the new evaluation schedule of data collection in the Fall semester and analysis in the Spring semester.
2. MGIS 4330, MGIS4340 were evaluated in Fall 2022.

New Plan for Continuous Improvement Item

Closing Summary:

Work with the new Center for Building Business Professionals focusing on MIS internships and job placements. Continue exploring the STEM designation which should be conducive to growing the major. With COVID remote requirements over we will focus on continuing ACE class work, in particular for the Systems Analysis & Design class. We plan to explore how to use current classes for certifications.