Note to Readers: The MIS Faculty takes seriously our challenge to provide a rigorous and relevant undergraduate education to our students and to improve our program through the continuous assessment of our efforts. The plan described below is a living document and our undergraduate curriculum will be a major focus of our 2003 Faculty Retreat in August. We anticipate that we will submit a revised version of this document following our meeting this summer. If you have any questions, please contact Dr. Mark W. Huber (mhuber@terry.uga.edu) or Dr. Dale Goodhue (dgoodhue@terry.uga.edu), the MIS Department Chair.

Overview

The undergraduate Management Information Systems major is currently under revision. Based upon our assessment of a significantly changed technological environment and upon data collected from graduates, employers, students, and our MIS Industry Advisory Board, the MIS faculty is in the midst of a reexamination of (1) what constitutes the body of “core knowledge” that serves as a foundation of IS knowledge common to all Management Information Systems students and (2) what additional knowledge and skills are or may be needed by our undergraduates to be prepared to succeed in a rapidly changing technological environment.

There are three parts to the assessment plan. The first part, concentrates on examining the students’ mastery of fundamental concepts. The second part, a continuing process, relies on market results – alumni surveys, and employers’ opinions of the qualifications of the Management Information Systems majors they hire and interview. The third part specifies specific learning objectives, links these objectives to MIS fundamental concepts and specifies how the learning objectives will be assessed.

Part 1 - Assessment of students’ mastery of fundamental concepts

The assessment procedure in the Department of Management Information Systems evaluates the student's command of the common body of Management Information Systems knowledge, which is covered in MIST 4600, MIST 4610, MIST 4620, and MIST 4630 (new course implemented for reasons listed above). Based on these courses, all graduates of the undergraduate Management Information Systems program should have command of the following fundamental concepts:

1. The analysis and design of information systems. The graduate of the Management Information Systems program should have command of the process of analyzing business situations and logically modeling the processes, data, and interactions present in the situation. The graduate should be able to perform such analyses utilizing a life cycle approach, with or without the aid of computer software.
2. The creation and implementation of computer programs. The graduate of the Management Information Systems program should have the ability to assess a given business problem, challenge, or opportunity, and create and implement an appropriate response using one or more programming languages. The graduate should understand the software life cycle, especially the need for rigorous testing and documentation of computer programs.

3. The capture, storage, retrieval, and transformation of data. The graduate of the Management Information Systems program should understand the fundamental importance of data to business operations and be able to model, create, and implement normalized data-based solutions to meet hypothetical or real business needs. The graduate should be able to use a structured query language or visual tool to add, update, and delete data and to create various views of the data to enhance managerial decision-making.

In addition, all graduates of the Management Information Systems program should be able to apply the above concepts to the following specific tasks, all of which are covered either in MIST 4600, MIST 4610, MIST 4620 or MIST 4630:

1. Determine the importance and value of the protection of the rights of software developers and vendors.
2. Utilize ethical approaches to IS analysis, design, and implementation.
3. Understand the impact of government regulation on information systems in business and in society.
4. Create an information system to improve organizational performance.
5. Understand methodologies for analyzing the following corporate IS policy decisions:
   a. Whether to make, outsource, or buy an IS or IS-based solution.
   b. What type IT architecture is appropriate for a given software or computer-based solution.
   c. How, when and why corporate data should be captured, stored, aggregated, and shared.

Assessment Methods – Fundamental Concepts

MIST Knowledge Pre and Post Tests
All students in MIST 4600 or MIST 4610 (prevent duplication of data due to concurrent enrollments) will take a multiple-choice examination that tests their knowledge of facts and concepts taught across all MIST courses. This is the pre-test. During their last semester as a MIS major, students will take a similar exam, over the same concepts, to provide data on how well they have learned MIS concepts.

MIST 4620 Project and MIST 4630 Project
All undergraduate Management Information Systems majors, as part of MIST 4620 (Systems Analysis and Design) and MIST 4630 (Developing Web-based IS) complete comprehensive computer-based projects for actual clients. These projects require the students to integrate the concepts learned in MIST 4600 and MIST 4610 with concepts learned in MIST 4620 and MIST 4630. More importantly, these projects must meet or exceed the clients’ needs. Many times, proprietary and/or customer data is used to complete the projects. Students must exercise sound
judgment and ethical decision-making when creating and implementing information systems that capture, store, and share such data. Both the professors and the clients evaluate success or failure of the students’ projects. The project assignments and evaluations were specifically designed to assess students’ abilities to integrate fundamental IS concepts and to extend their understanding beyond the traditional classroom.

**Administration of the Assessment Method**

**MIST Knowledge Pre and Post Tests (see above, same heading)**

**MIST 4620 and 4630 Projects**

A formal evaluation by the professor and the appropriate client, in addition to the normal project grading process, will be conducted to assess whether or not a given student’s project efforts demonstrate a mastery of the fundamental concepts described above. Results of these assessments will be presented to entire faculty at the end of each semester or as soon as is practical following the analysis of the assessments.

**Analysis of Assessment Evidence and Improvement**

At regularly scheduled faculty meetings:

- MIST Pre and Post-Tests – Responsible faculty present brief reports to the entire faculty on the results of a comparison between pre and post-test results for students who are graduating from the MIS program. Additional insight may be gained from examining the pretest scores of students who drop out of the MIS major.

- MIST 4620/4630 Projects – The instructors of MIST 4620 and MIST 4630 present brief reports to the entire faculty on the students’ achievement of project outcomes and on the instructors’ and clients’ assessments of the projects, relative to the fundamental concepts described above. If specific areas are particularly weak, the faculty may examine individual student projects and to identify areas needing improvement.

Improvement will be determined by comparison with historical data. When weaknesses are identified, the faculty will consider appropriate modifications to the content and teaching methods of the Management Information Systems undergraduate program.

**Part 2 - Assessment Based on Surveys of MIST Alumni, IS Recruiters, and IS Practitioners**

**Survey of Alumni**

Alumni will be surveyed annually during the fall semester. Results will be analyzed by a committee of faculty during fall semester and presented and discussed at a faculty meeting during the following spring semester. The purpose of this survey is to gather data on alumni perceptions of MIST program effectiveness and obtain suggestions and ideas for the continued improvement of the MIST Program.
Survey of Corporate Recruiters
A survey of corporate recruiters from firms who hire our graduates is conducted annually each fall semester at the Society for Management Information Systems Recruiting Dinner. The purpose of this data collection effort is to assess industry perceptions of MIST program effectiveness and obtain suggestions and ideas for the continued improvement of the MIST Program.

MIS Advisory Board Meeting
A survey of IS practitioners from corporations who hire our graduates is conducted annually each spring semester at the MIST Department Advisory Board Meeting. In the past this data was collected as meeting minutes. This qualitative data will be supplemented with a formal survey. The purpose of this data collection effort is to assess industry perceptions of MIST program effectiveness and obtain suggestions and ideas for the continued improvement of the MIST Program.

Analysis of Assessment Evidence and Improvement
At regularly scheduled faculty meetings, the faculty members responsible for administering the surveys described above will present the results to the entire faculty. Appropriate statistical methods will be used to highlight areas of strength and areas needing improvement. Presentation of these results will be made in the context of the MIST Department’s program of continuous improvement and periodic assessment. Any faculty member may examine the raw data to identify areas needing improvement or to suggest additional improvements to previously identified areas.

Improvement will be determined by comparison with historical data. When weaknesses are identified, the faculty will consider appropriate modifications to the content and teaching methods of the Management Information Systems undergraduate program.


A. Defined Learning Outcomes and MIS Fundamental Concepts

1. Understand a Socio-Technical Perspective of Information Systems (Fundamental Concepts: The analysis and design of information systems, The capture, storage, retrieval, and transformation of data, and The creation and implementation of computer programs)

2. Understand and demonstrate knowledge of object-oriented programming principles and methods (Fundamental Concept: The creation and implementation of computer programs)

3. Understand Data, Information, and Knowledge, especially as they are used to support decision makers through decision support systems, knowledge management systems, and other advanced IS (Fundamental Concepts: The analysis and design of information systems and The capture, storage, retrieval, and transformation of data)

4. Analyze Business Problems and Design, Develop, and Implement Information Systems-Based Solutions (Fundamental Concept: The analysis and design of information systems)
5. **Understand Telecommunications Fundamentals** (Fundamental Concepts: *The analysis and design of information systems* and *The capture, storage, retrieval, and transformation of data*

6. **Lead, Manage, and Communicate Effectively in a Team-Based Environment** (Fundamental Concepts: *The analysis and design of information systems* and *The capture, storage, retrieval, and transformation of data*)

7. **Understand and Anticipate Future Trends and Advances in Information Systems** (Fundamental Concepts: *The analysis and design of information systems*, *The capture, storage, retrieval, and transformation of data*, and *The creation and implementation of computer programs*)

B. Assessment Methods

1. Common examinations are given in MIST 4600, 4610, 4620, and 4630. Faculty members on the respective course committees review the results and present an analysis to the other members of the MIS faculty.

2. Pre-Test and Post-Test during a student’s first and last semester in the major (proposed).

3. Survey of senior MIS students through written curriculum reviews.

4. Survey of Corporate Representatives (re: MIS graduates) at the Fall MIS Recruiting Dinner.

5. Survey of Alumni during Fall Semester (in progress, website is under revision)

6. Full day’s discussion of overall MIS Program, specific curriculum issues, and success/shortcomings of recent graduates with the MIS Advisory Board.

C. Learning Objectives and Assessment Methods

The following assessment methods (numbers are from Sect. B., above) are in current use or will be used during AY 2003-2004:

<table>
<thead>
<tr>
<th>Learning Objective</th>
<th>Assessment Method(s)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand a Socio-Technical Perspective of Information Systems</td>
<td>1, 3, 4, 6</td>
</tr>
<tr>
<td>Understand and demonstrate knowledge of object-oriented programming principles and methods</td>
<td>1, 3, 4, 6</td>
</tr>
<tr>
<td>Understand Data, Information, and Knowledge, especially as they are used to support decision makers through decision support systems, knowledge management systems, and other advanced IS.</td>
<td>3, 4, 6</td>
</tr>
<tr>
<td>Analyze Business Problems and Design, Develop, and Implement Information Systems-Based Solutions</td>
<td>1, 3, 4, 5, 6</td>
</tr>
<tr>
<td>Understand Telecommunications Fundamentals</td>
<td>3, 4, 6</td>
</tr>
<tr>
<td>Lead, Manage, and Communicate Effectively in a Team-Based Environment</td>
<td>1, 3, 4, 5, 6</td>
</tr>
<tr>
<td>Understand and Anticipate Future Trends and Advances in Information Systems</td>
<td>1, 3, 4, 6</td>
</tr>
</tbody>
</table>

*Note: It is anticipated that Assessment Method II-2 will provide data relevant to the assessment of all Learning Objectives*