

## **Part I. 2006-2007 Program Assessment Report\***

**Name of Department:** Information Systems

**List of Programs:** Bachelor of Science in Information Systems

**Department Mission:** The BSIS Program offers educational opportunities to students with diverse backgrounds who are interested in information systems (IS). The Program provides students a synthesis of technological and business knowledge to develop and integrate effective IS solutions that support management decision making and organizational strategies. The Program prepares graduates for a variety of IS careers in business, government, and non-profit organizations.

### **Program Learning Goals:**

#### General Learning Goals:

1. Our graduates are able to recognize and analyze ethical problems in organizational situations and select and defend a course of action.
2. Our graduates are able to effectively communicate complex information system and business concepts orally and in writing.
3. Our graduates are able to apply critical thinking and problem-solving skills when analyzing and solving information system and business problems.
4. Our graduates understand the individual and group dynamics of project teams.

#### Information Systems and Management Specific Learning Goals:

1. Our graduates have knowledge of IS technology components and their interrelations.
2. Our graduates have the knowledge to implement information systems that support an organization's strategic objectives.
3. Our graduates develop skills through research in IS literature that will prepare them for life-long learning in the field.

**Assessment Liaison:** Leah Marcal

**College:** Business and Economics

*\*The deadline for submitting this report to the Associate Dean is September 24th.*

## Part II. 2006-2007 Assessment Activities for the Information Systems Program

Student Learning Outcomes	Assessment Dates	Assessment Procedures	Summary of Findings	Use of Findings for Program Improvement
Recognize and analyze ethical problems	Fall 2006	<p><u>BUS 302</u>: Students' understanding of ethics was assessed with an ethics case analysis wherein students must apply ethical theories and recommend a course of action.</p> <p><u>FIN 303</u>: Multiple-choice exam questions covered students' knowledge of financial ethics and regulatory requirements.</p>	<p><u>BUS 302</u>: Most students (87%) demonstrated a good or very good understanding of ethics in their case analysis.</p> <p><u>FIN 303</u>: More than 85% of students correctly answered questions covering ethics and regulatory requirements.</p>	<p><u>BUS 302</u>: Over the past year, Gateway faculty have made a concerted effort to improve their coverage of ethics.</p>
Effectively communicate orally and in writing	Fall 2006 and Spring 2007	<p><u>BUS 302</u>: (fall only) Students' writing skills were assessed with case analysis and students' oral presentation skills were assessed with a formal oral presentation of their written case analysis. Students received all grading rubrics (e.g., for written work and presentations) at the start of the semester so they understood what was expected.</p> <p><u>MKT 304</u>: (spring only) Students' writing skills were assessed with a situation audit.</p> <p><u>SOM 306</u>: Essay exam questions were used to assess students' ability to clearly communicate and interpret results from operations management problems.</p>	<p><u>BUS 302</u>: Roughly 93% of students' written work was deemed good or very good. And 99% of students' oral presentations were good or very good.</p> <p><u>MKT 304</u>: Some 85% of the students' writing was deemed acceptable or good, and 15% was deemed unacceptable.</p> <p><u>SOM 306</u>: In fall (spring), some 67% (91%) of students demonstrated good or very good writing skills; while 32% (9%) demonstrated writing skills that were considered not good enough.</p>	<p><u>MKT 304</u>: Despite the use of turn-it-in, instructors continue to have an unacceptable problem with plagiarism. Consequently, students are now asked to perform various citation exercises and their work is returned until it is done correctly.</p> <p><u>SOM 306</u>: Given college-wide concerns about students' writing skills, all instructors will now require a written case in addition to regular homework and exams.</p>
Apply critical thinking and problem solving skills  (Continued on page 3)	Fall 2006 and Spring 2007	<p><u>BUS 302</u>: (fall only) Students' ability to think critically was assessed with written case analysis. Students must clearly state the problem; clarify key ideas; use a strategic perspective; separate advocacy statements from fact; and make a clear decision.</p> <p><u>MKT 304</u>: (spring only) Students' critical thinking and problem solving skills were assessed within a situation audit.</p>	<p><u>BUS 302</u>: Almost all students (98%) demonstrated good or very good critical thinking skills when writing up their case analysis.</p> <p><u>MKT 304</u>: Scores for critical thinking show 48% of the students' work was deemed good; 42% was acceptable; and 10% was unacceptable. Additionally, separate scores for problem solving show 27% of the students' work was good; 63% was acceptable, and 10% was unacceptable.</p>	<p>Faculty were becoming increasingly concerned with students' lackluster quantitative (and thereby problem solving) skills. This led to a change in the program's required mathematics course. In Spring 2007, Math 103 (Mathematical Methods for Business) has replaced Math 102 (College Algebra) for the entire business college. The economics department chair was instrumental in the 103 course design and faculty are confident that the material covered in Math 103 is a much better fit for business and IS majors.</p>

Student Learning Outcomes	Assessment Dates	Assessment Procedures	Summary of Findings	Use of Findings for Program Improvement
<p>Apply critical thinking and problem solving skills</p> <p>(Continued from page 2)</p>	<p>Fall 2006 and Spring 2007</p>	<p><u>FIN 303</u>: (fall only) Multiple-choice exam questions were used to assess students' knowledge of investment decisions, finance decisions, and the use of financial data. All questions require students to have strong problem solving skills.</p> <p><u>Math 103</u>: (spring only) Students' mathematical skills were assessed within 10 final exam questions. All questions require students to have strong problem solving skills.</p> <p><u>SOM 306</u>: Students' problem solving skills were assessed with multiple-choice exam questions which require careful analysis of operations management problems.</p>	<p><u>FIN 303</u>: Roughly 81% of students correctly answered questions covering investment decisions; 71% answered questions covering financing decisions; and 77% answered questions covering the use of financial data.</p> <p><u>Math 103</u>: Frequency analysis suggests that students have the greatest difficulty with derivatives, continuity, and graphs. Additionally, students in sections with supplemental instruction performed significantly better.</p> <p><u>SOM 306</u>: Students' success in solving operations problems varies from 23% deemed not good enough in fall to 30% deemed not good enough in spring.</p>	<p><u>Math 103</u>: The math department recommends an increase in the proportion of sections with supplemental instruction; improved homework problems for the class; and a need to revise topics that lack relevance to business.</p>
<p>Understand individual and group dynamics of project teams</p>	<p>Spring 2007</p>	<p>Teamwork skills were assessed in BUS 302. Every student filled out an online team evaluation form for each teammate for every assignment that required group work. The online form contains 10 attributes that characterize good teamwork (e.g., attended meetings; came prepared; completed tasks on time; improved final product, etc.) The ten attributes are scored from 0 (strongly disagree) to 10 (strongly agree).</p>	<p>Students cannot determine how an individual teammate rated their performance. However, they are allowed to view their own average scores. Despite this anonymity, students are often reluctant to give teammates low scores. Mean scores on all 10 attributes ranged from a low of only 8.7 (encouraged innovation) to a high of 9.1 (listened and showed respect). Moreover, the overall mean total score (out of 100 points) was 89.1.</p>	<p>No course or program changes are associated with these findings.</p>
<p>Knowledge of IS technology components and their interrelations</p>	<p>Fall 2006</p>	<p><u>IS 312</u>: Students' knowledge of IS technology components and their interrelations were assessed with 14 multiple-choice exam questions; 7 covered knowledge of systems and application software and 7 covered telecommunications components and networking.</p>	<p>Some 82% of students correctly answered 6 or 7 questions (out of 7) covering computer software and this was considered very good performance. Alternatively, 63% of the students correctly answered 6 or 7 questions covering telecommunications and networking.</p>	<p>No course or program changes are associated with these findings.</p>
<p>Knowledge to implement information systems</p>	<p>Fall 2006</p>	<p><u>IS 312</u>: Student's knowledge of systems development activities was assessed by 7 multiple-choice exam questions.</p>	<p>Roughly 32% of the students correctly answered 6 or 7 questions (out of 7) which was considered very good; and 46% correctly answered 4 or 5 questions which was considered good enough.</p>	<p>No course or program changes are associated with these findings.</p>