Student Learning Outcomes Committee Department/Program Assessment Results Report

Department/Program___<u>IDS / IS</u>_____

Degree BSBA (Info Systems)

Date Submitted 3/23/2007

The purpose of this report is to communicate the assessment activities that have taken place during the last academic year, as well as to convey how the results are being used *to improve student learning at the program level*. The report should be kept as succinct as is possible, while answering the following questions clearly and conscientiously:

- I. Drawing upon the goals and objectives contained in the department/program student learning assessment plan, what was the focus of the department's student learning assessment for the past academic year?
 - A. Please ATTACH a complete set of department/program objectives to the back of the report, as an Appendix.
 - B. This section should list the student learning goals and objectives that were the focus for the report year (selected from the complete set of goals and objectives).
 - C. It would also be helpful to provide a time line indicating when each goal and objective will be assessed, with an understanding that the aim is to "cycle through" all goals and objectives in no more than 5 years (or 7 years, for programs who adhere to an accreditation cycle of that time period).

II. What information was collected, how much, and by whom?

- A. This section should briefly describe the methodology used to examine the targeted goals and objectives. Please attach relevant scoring rubrics, surveys, or other materials used to examine student learning to the back of the report, as Appendices.
- B. Please note that the expectation here is that programs will make use of both *direct* and *indirect* methods of assessment, a distinction that should be addressed explicitly.

III. What conclusions were drawn on the basis of the information collected?

- A. This section should briefly describe the results (in summary form) in regard to how well students have met the targeted goals and objectives. For example, what percentage of students met the objectives? What areas need improvement?
- B. Also, please describe the implications of the results to the department or program. If data have been collected over multiple years, provide a trend analysis.
- C. Whenever it is possible to do so, please organize and present collected data by way of tables and/or graphs. [Note: the committee expects and welcomes both quantitative and qualitative data, so this request should not be construed as seeking quantitative data only.]

IV. How will the information be used to inform decision-making, planning, and improvement?

- A. This section should describe the strategies that will be implemented for program improvement as a result of the conclusions drawn from the assessment activities. The program change may pertain to curricular revision, faculty development, student services, and/or resource management.
- B. Whenever possible, the committee also requests some discussion of strategies implemented the prior year, in response to that year's report. Did the program follow through with what they said would be done?

Report completed by Theo Addo

Date 3/23/07

Annual Assessment Report Information Systems Program (BS in IS) Information & Decision Systems Department

March 23, 2007

I. Program Focus

- A. <u>Program goals and objectives</u>. The information systems (IS) faculty met several times from summer 2006 through spring 2007 to discuss, design, and develop an assessment document for the undergraduate program. This document specified the program's goals as well as student learning outcomes (see Appendix A).
- B. <u>Specific goals and objectives of focus</u>. The specific student learning outcomes (SLOs) focused on during the time frame in question were: SLO #1—Demonstrate a good understanding of database concepts and be able to design and develop relational databases with minimal modification anomalies; SLO #5—Demonstrate a good understanding of IS management issues within the organizational context, including enterprise information systems and the use of information technology for competitive advantage; and SLO #6— Demonstrate competence in communicating technical information effectively to both technical and non-technical audiences.
- C. <u>Time line for goal assessment</u>. This has not been developed yet. The expectation is to use the experiences of this more-or-less experimental year to guide the development of a comprehensive time line for the accomplishment of each learning outcome.

II. Information/Data Collection

- A. <u>Methodology and measurement</u>. The assessment for SLO #1 will be conducted later this semester (spring 2007) by Dr. Alexis Koster. With respect to SLO #5, the assessment was done using a specific question on an *IDS 492: Management of Information Systems* test administered by Dr. Murray Jennex during summer 2006. This particular question measured students' understanding of the strategic impact of an organization's current information systems portfolio vis-à-vis the information systems under development (see Appendix B). SLO #6 was assessed from student presentations on various information systems topics in the *IDS 492: Management of Information Systems* 2007 semester. Students' presentation skills were assessed using a rubric developed by Dr. Addo (see Appendix C).
- B. <u>Indirect measures</u>. So far, we have not developed any indirect measures for assessment. We expect to do so at a future date.

III. Results and conclusions

- A. <u>General results</u>. Results from the two SLOs assessed indicate that the students have, for the most part, met the targeted performance goals. On SLO #5, where the maximum possible score on the test question was 10, nine out of eleven students (82%) scored in the "satisfactory" range of 7-10; two students (18%) scored in the "marginal" range of 5-6; and nobody received an "unsatisfactory" score. On SLO #6, where the maximum possible score was 100%, 28 out of 36 students (78%) received a "satisfactory" score (75%-100%); six students (17%) received "marginal" scores (70%-74%); and two students (5%) received a score of "unsatisfactory" (see Appendix D).
- B. <u>Implications</u>. The IS program's goals and objectives are largely being met, at least as indicated by the results from the particular areas investigated. The vast majority of the information systems students have demonstrated good command of the subject matter in these areas. SLO #5 satisfies the programmatic goal of demonstrating a "good understanding of the strategic use of information systems for organizational competitive advantage" while SLO #6 meets the programmatic goal of developing "the ability to effectively communicate technical information." However, the fact that we still have a few students performing below expectation means that there is room for improvement.

IV. Use of the information

A. <u>Strategies for improvement</u>. The results reported in this document have not yet been shared with the full IS faculty (some of these results were obtained as recently as last week). At a future date, we will hold a meeting to discuss these results and formulate strategies for future direction.

APPENDIX A

Information Systems Program Goals and Student Learning Outcomes (BS in Information Systems)

Assessment of the Information Systems Major (Undergraduate) Information & Decision Systems Department College of Business Administration – SDSU

Program Goal

To produce students who understand fundamental systems analysis and design principles and methodologies, and can apply them to the design and development of organizational information systems, including databases, networks, and applications programs. Students will also have a good understanding of the strategic use of information systems for organizational competitive advantage, and will develop the ability to effectively communicate technical information to non-technical audiences.

Student Learning Outcomes

To attain the above goal, the IS program has a number of learning outcomes for its majors. These learning outcomes are outlined below, together with measures for assessing their achievement:

1. Demonstrate a good understanding of database concepts and be able to design and develop relational databases with minimal modification anomalies.

Assessment measures:

- Test/exam/exercise on relational database concepts, including normalization.
- Project/exercise involving the design, development, and querying of a database with at least two tables.
- Test/exercise in SQL
- 2. Demonstrate a good understanding of systems analysis and design principles and methodologies, including SDLC and prototyping, as well as the ability to analyze business information requirements.

Assessment measures:

- Exercise/project/test to demonstrate ability to complete Use-Case analyses.
- Exercise/project/test to demonstrate ability to map functional and non-functional requirements onto appropriate system architectures and physical processes.
- Successful completion of a comprehensive systems analysis and design project.
- Exercise/project/test involving documentation to accompany the SDLC.
- Exercise/project/test requiring the use of DFDs, ERDs, etc., to represent business rules in logical models.

3. Demonstrate fundamental knowledge of a business applications programming language (currently Visual Basic .NET).

Assessment measures:

- Exercise/project/test on fundamental programming concepts.
- Exercise/project/test to demonstrate ability to represent program logic as a flowchart or pseudocode.
- Successful completion of a comprehensive business application programming project.

4. Demonstrate fundamental knowledge of data communications, computer networking, and related hardware concepts.

Assessment measure:

• Exercise/project/test on fundamental data communications and networking concepts.

5. Demonstrate a good understanding of IS management issues within the organizational context, including enterprise information systems and the use of information technology for competitive advantage.

Assessment measures:

- Essay/research paper on contemporary IS management topics
- Analysis of case studies on IS management issues
- Test/exam on IS management issues

6. Demonstrate competence in communicating technical information effectively to both technical and non-technical audiences.

Assessment measures:

- Evaluation of verbal communication and explication of technical information in class presentations.
- Evaluation of effective use of technical aids (e.g., ERDs, DFDs, systems flowcharts) to represent relevant information.

APPENDIX B

Student Learning Outcome #5 Test Question

How is the below IS Strategic Grid used in IS organizations, include a description of what IT means to organizations in each quadrant.

		ANNING GRID		
STRATEGIC IMPACT OF CURRENT SYSTEMS	High	Factory	Strategic	
	Low	Support	Turnaround	
		Low	High	
	STRATEGIC IMPACT OF A SYSTEMS DEVELOPMENT PORTFOLIO			

APPENDIX C

Student Presentation Grading Rubric

Group No:_____ Topic:_____

Student Name	Command of Topic	Volume	Pace	Eye contact with audience	General presentation style, presence (including outfit), and attitude	Score	Group Comments: Chemistry:
						Avg: %: Wt	Energy:
						Avg: %: Wt	Transition:
						Avg: %: Wt	Other:
						Avg: %: Wt	Gp grade: Wt.grade:

APPENDIX D

Assessment Scores

SLO #5: Management of Information Systems

Assessment	Score Range	No. of Students (N = 11)
Satisfactory	7-10	9 (82%)
Marginal	5-6	2 (18%)
Unsatisfactory	< 5	0 (0%)

SLO #6: Oral Presentation of Technical Information

Assessment	Score Range	No. of Students (N = 36)
Satisfactory	75 - 100	28 (78%)
Marginal	70 - 74	6 (17%)
Unsatisfactory	< 70	2 (5%)