

Information Systems and Technology B.S.B.A.

Expanded Statement of Institutional Purpose

Institutional Mission Reference

The University's mission states: The University has a special mission for the Commonwealth in commerce, and international affairs and cultures. It has a significant commitment in science, engineering and technology, particularly in fields of major importance to the region. The Information Systems is in line with this mission. The Commonwealth has established technology scholarships to assist students in obtaining a degree in selected technological fields. The Information Systems and Technology major was designated as one of those prominent programs. (Old Dominion University Catalog 2000-2002, p. 2).

Institutional Goal(s) Supported

The Information Systems and Technology Program supports the University goals of (a) quality undergraduate academic programs, (b) quality teaching, (c) research, scholarship and creativity, (d) community service, and (e) distance education (Old Dominion University Catalog 2000-2002, pp. 3-4).

The Information Systems and Technology Program also supports Strategic Initiative 1 (High Quality, Distinctive Undergraduate Programs) and Strategic Initiative 5 (Distance Education) (Old Dominion University Strategic Plan).

The goals established for the undergraduate Information Systems and Technology Major are intended to compliment and reinforce those that have been developed for the undergraduate Business Administration Program. They are consistent and in accordance with the curriculum goals prescribed in the IS '97 – Model Curriculum and Guidelines for Undergraduate Programs in Information Systems (Association of Computing Machinery, Association of Information Systems, and Association of Information Technology Professionals, 1997).

Intended Educational (Student) Outcomes, Methods for Assessment, Criteria for Success, Assessment Results, and Use of Results

Intended Outcome 1

Foster an understanding of computer architecture. This includes internal representation of data, processor design, memory and communication management, as well as software interfaces and architecture.

Method for Assessing Outcome 1 and Criterion for Success: All students will earn a score of at least 70% on the Comprehensive Examination for IT 217, Principles of Technology Architecture. This examination will be developed, and student performance

evaluated, by a panel of at least three undergraduate faculty in Information Systems. The questions comprising this examination will be designed to measure the learning objectives prescribed in Appendix 8, IS '97 -- Model Curriculum and Guidelines for Undergraduate Programs in Information Systems. (Comparisons will be made among traditional on-campus students and Weekend College students.)

Summary of Assessment Data Collected for Outcome 1: For the students completing IT 217, Principles of Technology and Architecture, 15% did not score at least 70% on the Comprehensive Examination. Because this course was not offered on the weekend or TELETECHNET for the semester under consideration, comparisons between on-campus, Weekend College and TELETECHNET students were not possible.

Use of Assessment Results from Intended Outcome 1 to Improve Academic Program: The assessment results indicate that a significant number of students were not successful in meeting the criteria specified for Outcome 1. Upon further examination it was determined that the majority of the students who failed to meet the criteria had not completed the required prerequisite courses. Increased emphasis will be given to enforcement of the prescribed prerequisite structure.

Intended Outcome 2

Develop an understanding of information systems concepts and the role of the information systems professional in business organizations.

Method for Assessing Outcome 2 and Criterion for Success: All students will earn a score of at least 70% on the Comprehensive Examination for IT 361, Information Systems Planning and Analysis. This examination will be developed and student performance evaluated by a panel of at least three undergraduate faculty in Information Systems. The questions comprising this examination will be designed to measure the learning objectives prescribed in Appendix 8, IS '97 -- Model Curriculum and Guidelines for Undergraduate Programs in Information Systems. (Comparisons will be made among traditional on-campus students, Weekend College students, and TELETECHNET students.)?

Summary of Assessment Data Collected for Outcome 2: Well over 96% of the students taking the final exam in IT 361, Information Systems Planning and Analysis scored at least a 70. Because this course was not offered on the weekend or TELETECHNET for the semester under consideration, comparisons between on-campus, Weekend College and TELETECHNET students were not possible.

Use of Assessment Results from Intended Outcome 2 to Improve Academic Program: The assessment results suggest that students understand the fundamentals of

systems analysis, although improvements will be made in that portion of the course that covers systems planning.

Intended Outcome 3

Utilize formal software engineering methodologies and techniques to develop business applications that are typically found in the commercial environment.

Method for Assessing Outcome 3 and Criterion for Success: All students will earn a score of at least Satisfactory on the Software Engineering Project with at least 85% evaluated as Good or Excellent. A panel of at least three undergraduate faculty in Information Systems will specify the project requirements and evaluate student performance. The project will reflect the learning objectives prescribed in Appendix 8, IS '97 -- Model Curriculum and Guidelines for Undergraduate Programs in Information Systems. (Comparisons will be made among traditional on-campus students, Weekend College students and TELETECHNET students.)?

Summary of Assessment Data Collected for Outcome 3: For the Spring Semester 2001, 115 of 122 enrolled in IT 370, Enterprise Solutions with C++ received an evaluation of Good or Excellent on the final comprehensive project submitted at the end of the course. As such, 94% of the students met the criteria for success specified for Outcome 3. Because this course was not offered on the weekend or TELETECHNET for the semester under consideration, comparisons between on-campus, Weekend College and TELETECHNET students were not possible.

Alternate Method for Assessing Outcome 3 and Criterion for Success: All students participating in an internship that involves software design, development, and implementation will be rated as Satisfactory or higher by the site supervisor, and 85% will be rated as Good to Excellent.

Summary of Assessment Data Collected, Alternate Method for Outcome 3: There were only six student doing significant software design, development and implementation as part of their internship experience. In all cases they were successful in completing the software engineering task that were assigned to them.

Use of Assessment Results from Intended Outcome 3 to Improve Academic Program: These data suggest that changes are not warranted for the software engineering sequence of courses.

Intended Outcome 4

Graduates should demonstrate knowledge of systems development methodologies. Such knowledge of systems analysis and design principles should enable them to solve enterprise-wide managerial and organizational problems.?

Method for Assessing Outcome 4 and Criterion for Success: All students will earn a score of at least 70% on the Comprehensive Examination for IT 473, Information Systems Design, Development, and Implementation. This examination will be developed and student performance evaluated by a panel of at least three undergraduate faculty in Information Systems. The questions comprising this examination will be designed to measure the learning objectives prescribed in Appendix 8, IS '97 -- Model Curriculum and Guidelines for Undergraduate Programs in Information Systems. (Comparisons will be made among traditional on-campus students, Weekend College students, and TELETECHNET students.)

Summary of Assessment Data Collected for Outcome 4: Nearly 30% of the students enrolled in IT 473, Information systems Design, Development and Implementation, did not earn at least a 70 on the Comprehensive Final Exam. Because this course was not offered on the weekend or TELETECHNET for the semester under consideration, comparisons between on-campus, Weekend College and TELETECHNET students were not possible.

Alternate Method for Assessing Outcome 4 and Criterion for Success: All students participating in an internship that involves systems analysis and design will be rated as Satisfactory or higher by the site supervisor, and 85% will be rated as Good to Excellent.

Summary of Assessment Data Collected, Alternate Method for Outcome 4: The two students who indicated that a significant component of their internship or cooperative education experience involved systems design, development and implementation. In both cases they were rated as Excellent by the site supervisor.

Use of Assessment Results from Intended Outcome 4 to Improve Academic Program: The assessment data indicate that the students did not perform as well as expected with regard to systems design, development and implementation. In most cases the lack of success can be attributed to inadequate preparation in IT 361. The rigor of this prerequisite course will significantly be increased.

Intended Outcome 5

Provide a conceptual framework for database design and implementation. Included are modeling of data relationships, and the security and protection of information in a shared environment.?

Method for Assessing Outcome 5 and Criterion for Success: All students will earn a score of at least 70% on the Comprehensive Examination for IT 450, Database Concepts. This examination will be developed and student performance evaluated by a panel of at least three undergraduate faculty in Information Systems. The questions comprising this examination will be designed to measure the learning objectives prescribed in Appendix 8, IS '97 -- Model Curriculum and Guidelines for Undergraduate Programs in Information Systems. (Comparisons will be made among traditional on-campus students, Weekend College students, and TELETECHNET students.)?

Summary of Assessment Data Collected for Outcome 5: For the Spring Semester 2001, 5% of the students enrolled in IT 450, Database Concepts did not receive at least a 70 on the Comprehensive Examination. Because this course was not offered on the weekend or TELETECHNET for the semester under consideration, comparisons between on-campus, Weekend College and TELETECHNET students were not possible.

Alternate Method for Assessing Outcome 5 and Criterion for Success: All students participating in an internship that involves database design, development, and implementation will be rated as Satisfactory or higher by the site supervisor, and 85% will be rated as Good to Excellent.

Summary of Assessment Data Collected, Alternate Method for Outcome 5: The three students completing an internship or cooperative education experience with a significant Database component received an evaluation of Excellent by the site supervisor.

Alternate Method for Assessing Outcome 5 and Criterion for Success: 80% of those taking the Oracle Certification Exam should earn a passing score.?

Summary of Assessment Data Collected, Alternate Method for Outcome 5: There are no graduates who have completed the sequence of course that prepare the student to sit for the Oracle Database Administrator Examination.

Use of Assessment Results from Intended Outcome 5 to Improve Academic Program: Examination of the results suggest that the majority of the students who failed to meet the criteria had not completed the required prerequisite courses. Increased emphasis will be given to enforcement of the prescribed prerequisite structure.

Intended Outcome 6: Provide in-depth knowledge of data communications and networking requirements, including networking and telecommunications methods, technologies, hardware, and software.

Method for Assessing Outcome 6 and Criterion for Success: All students will earn a

score of at least 70% on the Comprehensive Examination for IT 415, Business Telecommunications and Networks. This examination will be developed and student performance evaluated by a panel of at least three undergraduate faculty in Information Systems. The questions comprising this examination will be designed to measure the learning objectives prescribed in Appendix 8, IS '97 -- Model Curriculum and Guidelines for Undergraduate Programs in Information Systems. (Comparisons will be made among traditional on-campus students, Weekend College students, and TELETECHNET students.)?

Summary of Assessment Data Collected for Outcome 6: Over 95% of students completing IT 415, Business Telecommunications and Networks received at least a 70 on the Comprehensive Examination. There were no appreciable differences between on-campus, Weekend College and TELETECHNET students.

Alternate Method for Assessing Outcome 6 and Criterion for Success: All students participating in an internship that involves network design, implementation, and maintenance will be rated as Satisfactory or higher by the site supervisor, and 85% will be rated as Good to Excellent.?

Summary of Assessment Data Collected, Alternate Method for Outcome 6: For the semester under review, there were no students participating in an internship of cooperative education experience that involved a significant telecommunications component.

Alternate Method for Assessing Outcome 6 and Criterion for Success: 80% of those taking the Microsoft Certified Systems Engineer (Windows 2000) Exam should earn a passing score.?

Summary of Assessment Data Collected, Alternate Method for Outcome 6: There are no graduates who have completed the sequence of course that prepare the student to sit for the Microsoft Certified Systems Engineer (Windows 2000) Exam.

Use of Assessment Results from Intended Outcome 6 to Improve Academic Program: These assessment results suggest the the material and the method of presentation are effective.