

STANDARDIZED COURSE OUTLINE

SECTION I

SUBJECT AREA AND COURSE NUMBER: CSC 250

COURSE TITLE: Systems Analysis And Design

COURSE CATALOG DESCRIPTION:

This course is structured on the system development life cycle. Students will consider the nature of systems and will work on projects based on gathering data, and determining feasibility. Other projects will involve creating documentation and tools for data flows and structures, data dictionaries, file design, input and output design, prototyping and software engineering.

Formerly listed as CIS 285, not open to students who have successfully completed CIS 285.

LECTURE HOURS PER WEEK: 3

CREDIT HOURS: 3

LAB HOURS PER WEEK (if applicable): n/a

PREREQUISITE(S): CSC 101

SECTION II

A. SCOPE:

This course provides an introduction to Systems Analysis and Design. Topics include analyzing the business case, requirements modeling, data and process modeling, and development strategies. Students also learn about output and user interface design, data design, systems architecture and implementation, and systems operation, support and security.

This course fulfills an Embedded Core Competency in the areas of: “Critical Analysis and Logical Thinking (CA)” and “Appreciation of the Ethical Dimensions of Humankind (ED)”

B. REQUIRED WORK:

Will vary by instructor. Students will be expected to do all required readings, assignments, tests, and quizzes as outlined by their instructor.

C. ATTENDANCE AND PARTICIPATION:

Regular attendance, assignment submission timeliness, promptness and class/lab participation will be expected. Instructors will include specific attendance and participation policies requirements in their class syllabi.

D. METHODS OF INSTRUCTION:

Methods may include any of the following: lecture, lecture/discussion, small group, collaborative learning, experimental/exploration, distance learning, student presentations, computer demonstrations, or use of technologies such as audio-visual materials, and computer laboratory equipment. Emphasis will be on hands-on computer exercises and problems.

E. OBJECTIVES, OUTCOMES, and ASSESSMENT

Students’ grades will be based on achievement of learning the objectives and outcomes listed below as measured by the instructor’s methods of assessment:

LEARNING OBJECTIVES	LEARNING OUTCOMES	ASSESSMENT METHODS
To demonstrate an understanding of:	Student will:	As measured by:
Introductory System Analysis and Design	<ul style="list-style-type: none"> a) Identify and discuss major IT issues and trends (CA 1) b) Explain the systems development life cycle (SDLC) (CA 2) c) Analyze the role of systems analysis and design in supporting business objectives (CA 3) 	Homework/Lab assignments; Written and Oral activities; Quizzes/Exams
Systems Planning	<ul style="list-style-type: none"> a) Explain how a systems analyst evaluates a proposed project and determines its feasibility (CA 1) b) Describe and interpret strategic planning, systems requests, feasibility studies, and the steps in a preliminary investigation (CA 2) 	Homework/Lab assignments; Written and Oral activities; Quizzes/Exams; Case Studies
Systems Analysis	<ul style="list-style-type: none"> a) Identify and describe requirements modeling, data and process modeling (CA 1) b) Use requirements modeling and data and process modeling to represent a new system (CA 2) c) Evaluate and compare various system development strategies in order to solve problems(ED 4) d) Analyze a business case study and develop viable solution models (CA 3) 	Homework/Lab assignments; Written and Oral activities; Quizzes/Exams; Online Computer Exercises; Projects/Presentations
Systems Design	<ul style="list-style-type: none"> a) Identify and explain output design, user interface design, data design, and system architecture b) Develop a physical model that includes the systems design components 	Homework/Lab assignments; Written and Oral activities; Quizzes and Exams; Online Computer Exercises; Projects/Presentations
Systems Implementation	<ul style="list-style-type: none"> a) Identify, explain and perform various systems implementation tasks 	Homework/Lab assignments; Written and Oral activities; Online Computer Exercises; Quizzes and Exams
Systems Operation and Support and Security	<ul style="list-style-type: none"> a) Describe systems operation, support and security b) Identify, analyze, and explain network security, ethics, and privacy issues (ED 1) 	Homework/Lab assignments; Written and Oral activities; Quizzes and Exams

Core Competency Assessment Artifact

Assignments from this course that address all of the competencies noted above may be collected to assess student learning across the school.

F. TEXT(S) AND MATERIALS:

An appropriate Systems Analysis and Design Text, such as:

Text: *Systems Analysis and Design (current edition)*

Author: Shelly, Cashman, and Rosenblatt

Publisher: Thompson – Course Technology

G. INFORMATION TECHNOLOGY:

This course is an information technology course and will require extensive computer lab time both for teaching and performing assignments. Students will require network accounts with access to the Internet and a current version of Microsoft Access as well as file storage space.