

SYLLABUS
PART I
EDISON STATE COMMUNITY COLLEGE
CIS 131S SYSTEMS ANALYSIS AND DESIGN
3 CREDIT HOURS

COURSE DESCRIPTION

Comprehensive introduction to the principles and practices of systems analysis and design, essential for developing effective information systems. Students will learn how to identify business needs, analyze business problems and system requirements, design solutions that improve organizational efficiency and effectiveness, and manage the development and implementation of information systems. Prerequisite: Satisfactory assessment scores in reading and writing or ENG 092D.

COURSE GOALS

The student will:

Bloom's Level		Program Outcomes
2	1. Understand the types of business needs that can be addressed using information technology-based solutions.	5
3	2. Initiate, specify, and prioritize information systems projects and determine various aspects of the feasibility of these projects.	5
3	3. Clearly define problems, opportunities, or mandates that initiate projects.	5
3	4. Use at least one specific methodology for analyzing a business situation (a problem or opportunity), modeling it using a formal technique, and specifying requirements for a system that enables a productive change in the way a business is conducted.	5
5	5. Within the context of the methodologies learned, write clear and concise business requirements documents and convert them into technical specifications.	3
2	6. Communicate effectively with various stakeholders to collect information using a variety of techniques and to convey proposed solution characteristics.	3
3	7. Utilize project management methods to oversee systems projects.	5
4	8. Compare and articulate various systems acquisition alternatives, including the use of packaged systems (such as ERP, CRM, SCM, etc.) and outsourced design and development resources.	5
5	9. Design high-level logical system characteristics (user interface design, design of data, and information requirements).	5
3	10. Use contemporary tools for process and data modeling.	5
3	11. Incorporate principles leading to high levels of security and user experience from the beginning of the systems development process.	5
4	12. Analyze and articulate ethical, cultural, and legal issues and their feasibilities among alternative solutions.	1

CORE VALUES

The Core Values are a set of principles that guide in creating educational programs and environments at Edison State. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE

1. Introduction to Systems Analysis and Design
2. Business Case Analysis and Strategic Planning
3. System Project Management
4. Requirements Engineering
5. Data and Process Modeling
6. Object Modeling
7. Development Strategies
8. User Interface Design
9. Data Design
10. System Architecture
11. Systems Implementation Management
12. Systems Support and Security Management
13. Business Intelligence Software