

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

(FORM VERSION 5/95)
(DATE REVISED 3/11/2000)

TRANSFER COURSE

A.A. DEGREE APPLICABLE COURSE

(CHECK ALL THAT APPLY)

COURSE NUMBER AND TITLE: CSIS 245 SYSTEMS ANALYSIS & DESIGN

UNIT VALUE: 4

MINIMUM NUMBER OF SEMESTER HOURS: 80

BASIC SKILLS REQUIREMENTS: Appropriate language skills

ENTRANCE REQUIREMENTS:

PREREQUISITE:	CSIS 117 or CSIS 220 or CSIS 235
COREQUISITE:	None
RECOMMENDED PREPARATION:	None

SCOPE OF COURSE:

Specific projects, problems, and systems. Applications of appropriate programming languages and the use of analytical tools in solving case studies and problems.

SPECIFIC COURSE OBJECTIVES: The successful student will be able to:

1. Describe the need for an orderly approach to systems analysis.
2. Describe the need for a structured life cycle, methodology for systems analysis.
3. Identify and explain the phases of the life cycle.
4. Describe the role of & interaction with users that takes place during systems analysis.
5. Demonstrate understanding of data gathering instruments and questionnaires, and develop data gathering interviews with user personnel.
6. Identify and explain computer aided systems engineering concepts (CASE).

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

- I. Historical definition and development of Systems Analysis in computer applications
- II. The life cycle of computer systems applications
 - a. Performance
 - b. Management
 - c. Documentation

- d. The systems analyst's role
 - 1. Systems and procedures
 - 2. Automation of systems
 - 3. Systems analysis
- III. Systems Concepts
 - a. A system of systems
 - b. Organization charts
 - c. Information structures
- IV. Coding
 - a. Definition
 - b. Organization charts
 - c. Prevalent types of coding
- V. Forms Design
 - a. Functional responsibility
 - b. Basic parts of a form
 - c. Styles and types of forms
- VI. Charting Techniques
 - a. Basic charts
 - b. Tables
 - c. Project management charts
 - d. Flowcharting
 - 1. Systems
 - 2. Computer program flowcharts
 - 3. Procedure analysis flowcharts
- VII. Communications
 - a. Technical writing
 - b. Presentations
- VIII. Study Phase
 - a. Overview
 - b. Project control
 - c. Problem identification
 - d. Initial investigation-user review
 - e. System performance definition
 - f. Feasibility analysis
 - g. Report and review
- IX. The Design Phase
 - a. Design phase overview
 - b. System design
 - c. Input design
 - d. Output design
 - e. File design
 - f. Report and review
- X. The Development Phase
 - a. Development phase overview
 - b. Preparing for implementation
 - c. Computer program development
 - d. Report and review
- XI. Metzger Programming Project Management Life Cycle
 - a. Bell curve characteristic

- b. Definition phase
 - c. Design phase
 - d. Implementation phase
 - e. Installation and review phase
- XII. Computer Aided Software Engineering
- a. Developmental milestones
 - b. Key methods and strategies
 - c. Software developmental economics
 - d. Evaluative techniques

REQUIRED READING:

Whitten, Jeffrey, Bentley, Lonnie. Systems Analysis & Design Methods 4th Edition. Boston:Irwin/McGraw Hill. 1998.

SUGGESTED READING:

Current periodicals related to Systems Analysis & Design, selections from handouts of current texts on the subject. Various computer vendor reference manuals.

REQUIRED WRITING:

Weekly workbook assignments and project status reports that are two to three word-processed pages in length.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments. Outside assignments will include programming exercises, assigned readings, and homework.

Students are required to complete an outside assignment involving critical thinking. This will consist of the various phases of the Systems Development Life Cycle. The student will interview users, design specifications and complete required documentation. Problem solving and critical thinking will be involved in completing the above.

INSTRUCTIONAL METHODOLOGY: Check the following that apply:

- lecture
- laboratory
- lecture/laboratory combination
- directed study

This course may be offered as a distance education course and meets Title 5 regulations 55370, 55372, 55374, 55376, and 55378. Yes No

If yes, check all that apply.

- telecourse
- mediated instruction
- computer assisted instruction

GRADING POLICY AND STANDARDS: (include methods for determining whether the stated objectives have been met by students):

Grades for courses are based upon final examinations, mid-term examinations, other tests, assignments, projects, and participation. Faculty will inform students of their grading policy at the beginning of each semester.

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE? YES__ NO
Number of times course may be taken for credit 0.

If yes, identify specific provision of Division 2 section(s) 55761-55763 and 58161 which qualifies course as repeatable.

Contact Person: Mike Michaelson x 2503

SIGNATURES ON FILE
