

COCONINO COMMUNITY COLLEGE  
COURSE OUTLINE

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Status: Permanent  
Effective: Fall 2018

March 12, 2018

A. Identification:

1. Subject Area: Computer Information System (CIS)
2. Course Number: 202
3. Course Title: Systems Analysis and Design
4. Credit Hours: 3
5. Course Description: Introduces the design and analysis process of computer based information systems. Topics include feasibility studies, System Development Life Cycle (SDLC) methodology, forms design, data structure, manual interfaces, hardware and software selection, program specifications, project scheduling and management, and communications systems. Case-study methods are used for oral and written presentations. Students design the specifications and documentation for a complete system. Prerequisite: CIS 120 or Consent of Instructor. Three lecture. Fall, Spring.

B. Course Goals:

To provide students an introduction to project management concepts early in a systems development process, with various project management tools and techniques. Students will be exposed multiple system development techniques including comparing structured, object-oriented, and agile systems development methods.

C. Course Outcomes:

Upon successful completion of this course, students will be able to:

1. Define business requirements, key technical terms, features, and functions used to design, develop and maintain an Information System.
2. Demonstrate working knowledge of the SDLC (System Development Life Cycle) methodology.
3. Utilize standard system analyst software tools e.g. Project Management, Report Writers, System Analyst visual drawing tools, Word, Excel and PowerPoint.
4. Create a project feasibility report and a systems requirements document.
5. Compose technical reports which include data modeling, software alternative comparisons and evaluation as well as a strong business case for upper management approval of the project.
6. Present an oral technical report in a clear and concise manner.

D. Course Outcomes Assessment will include:

1. Two term papers
  - a. Full-scale feasibility report
  - b. Systems requirement technical report
2. Oral Report: Present findings from the systems requirement technical report
3. Exams
4. Group Project

E. Content will include:

1. Introduction to Systems Analysis and Design
2. Analyzing the Business Case
3. Managing Systems Project
4. Requirements modeling
5. Data and Process Modeling
6. Development Strategies

7. System Architecture
8. Managing Systems Implementation
9. Managing Systems Support and Security
10. Soft Skills for Business
11. Uncovering the secrets of clear writing
12. Planning and managing your career