

COCONINO COMMUNITY COLLEGE
COURSE OUTLINE

Prepared by: Dr. Gonzalo Perez
Status: Permanent
Effective: Fall 2017

July 18, 2017

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:

1. Introduce project management concepts early in the systems development process, with various project management tools and techniques
2. Provide multi-method coverage, including a comparison of structured, object-oriented, and agile systems development methods
3. Explain how IT supports business requirements in today's intensely competitive environment, and describe major IT developments and trends
4. Understand the importance of practicing sound soft-skills in a project management context
5. Appreciate the bigger picture in the students' computer science studies by tying the various concepts that were previously covered and applied into a full-scale system project

C. Course Outcomes:

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

1. demonstrate familiarity with 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. develop a project feasibility report and a systems requirements document which strengthens students technical writing acumen;
5. and present an oral technical report in a clear and concise manner.

D. Course Outcomes Assessment will include:

1. lectures;
2. assignments: Two term papers will be assigned which will require students to apply the concepts covered in class into a full-scale technical report;
3. exams: Three exams will be given. The exams will test assigned readings and material discussed in class. The final exam will not be comprehensive in nature;
4. and participation: Student participation will be graded by the level of class participation and attendance during class time.

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. Data and Processing Modeling;
7. System Architecture;
8. Managing Systems Implementation;
9. Managing Systems Support and Security.