

**Description:** An introduction to the systems development life cycle. Documentation and communications tools are introduced, as well as interpersonal approaches and techniques used in analysis. Structured diagramming tools, Object Oriented Design, Project evaluation and TQM will be presented.

**Required Text:**        **Systems Analysis & Design**, Kendall & Kendall,  
Prentice-Hall Inc., 9th Edition 2014

**Supplementary:**    **Software Engineering**, Pressman  
(Suggested)        **MS PowerPoint** any edition  
                         **MS Project Manager** any edition

**Materials:**            Programming Paper or Graph Paper, Template,  
Memory Stick

**Grading Policy:**     Your grade will be determined by the combined  
average of your tests, homework, papers, programs,  
class participation and other assignments.

- 1) Tests are scheduled for the 7th and 15th weeks.
- 2) There will be homework and other assignments.
- 3) A class project will consist of assigned tasks and activities from the group. Plus Evaluations from your team  
This will be the equivalent of 1 test grade.

**Academic Integrity:** See your handbook for the policy.

**Attendance:** You are expected to attend all classes. Unexcused absences result in a lower grade

**General Objectives:**

1. To be able to evaluate and use Analysis and Design methods to solve Business Problems.
2. To be able to Work through the System Development Life Cycle to solve Business Problems.
3. To be able to complete a Project Evaluation Study.

**Specific Objectives:** Students will be able to:

1. name the critical success factors in a given situation.
2. define the business techniques that are needed to solve a given problem.
3. develop a plan to solve a problem using the SDLC

4. explain feasibility concerns for systems solutions.
5. diagram a system using standard Data Flow Diagrams.
6. demonstrate the principles of data gathering
7. formulate a payoff diagram for a given solution set
8. diagram a system solution using Entity-Relational Techniques
9. develop decision trees or decision tables to evaluate a problem
- 10 explain different reporting techniques and their uses.

Course Content	Pages	Week
1. Systems, Roles and Development Methods	1-19	1
2. Understanding Organizational Systems	19-47	1 & 2
3. Project Management	47-102	2 & 3
4. Information Gathering: Interactive Methods	103-129	3 & 4
5. Information Gathering: Interactive Methods	129-150	4 & 5
6. Agile Modeling and Prototyping	150-179	5 & 6
7. Using Data Flow Diagrams	179-209	6 & 7
***** Mid Term *****	Chapters 1-7 plus	
8. Analyzing Systems Using Data Dictionaries	209-234	8 & 9
9. Process Specifications and Structured Decisions	234-253	9 & 10
10 Designing Effective Output	293-334	10 & 11
11 Designing Effective Input	334-361	11 & 12
12 Human-Computer Interaction	398-433	12 & 13
13 Project Work		
**** Final ***** & Project Presentation		.

**Students are expected to:**

1. Read the Chapters before each class.
2. Have their homework ready for discussion on the due date. Late assignments will result in a drop in grade.
3. Spend additional time in the computer lab in order to complete their assignments.
4. If you are thinking of asking, YES it will be on the test.

**Homework:** (All Homework should be typed)