



# Course Syllabus

### IS641 –Advance Analysis, Modeling and Design

#### Catalog Description:

The analysis of an organization — its users, data, and business processes — and the subsequent design of computer systems to meet business requirements is at the heart of the information systems field. Understanding the processes and techniques used to design and implement information systems is fundamental to managing — identifying, analyzing, designing, implementing, operating, and evolving — technical resources within an organization. This course provides conceptual understanding of "where systems come from" and practical knowledge for managing the system development process. At the same time, the course should acknowledge the practical importance of relational technologies in data management and deliver a solid introduction to conceptual data modeling, logical data modeling including normalization, and database implementation and manipulation using SQL.

The course covers a variety of advanced systems analysis and design methods, techniques, and tools, including object-oriented and soft systems. The key focus in the course, however, is on object-oriented methods and techniques. You will apply the methods and techniques presented in the course to the analysis and design of a real-world project. The scope of the project is managed through on-going consultation with the instructor.

Credit Hours:

3 Credit hours:

3 Lectures per week

0 Labs. per week

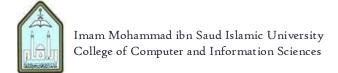
0 Recitation per week

Prerequisites:

#### None

# Course Learning Outcomes:

- 1. Understand the context of system analysis and design
- 2. Understand the processes information system development
- 3. Understand the different fact-finding techniques for requirements
- 4. Understand the principles of system design
- 5. Understand the principles of input and output design
- 6. Ability to perform a basic evaluation of different inputs and outputs design.
- 7. Ability to critically read and analyze any report related to system analysis and design news and reports





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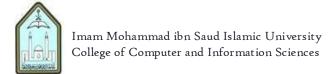
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#### Major Topics:

- Topic 1: The context of system analysis and design
- Topic 2: Information system development
- Topic 3: Fact-finding techniques for requirements
- Topic 4: System design
- Topic 5 : Output design and prototyping
- Topic 6: Input design and prototyping
- Topic 7: How to read and summarize research paper

Text Books:

Whitten Jeffrey and Bentley Lonnie. Systems Analysis and Design Methods – 7th Edition. McGraw-Hill, 2007.





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#### Grading:

The grading scale for this course is:

95 - 100 A+ Passing

90 - 94 A Passing

85 - 89 B+ Passing

80 - 84 B Passing

75 - 79 C+ Passing

70 - 74 C Passing

0 - 69 F Failing

Final grades will be determined based on the following components:

- . 60% Semester Work
- . 40% Final Exam
- Students may not do any additional work for extra credit nor resubmit any graded activity to raise a final grade.
- © Late submissions will not be accepted for any graded activity for any reason.
- Students have one week to request the re-grading of any semester work.

Students should attend 80% of the overall course hours taught in the semester as per the University regulations.

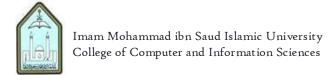
#### Attendance Policy:

If a student fails to achieve this portion, he/she shall not be allowed to appear in the final exam and shall be awarded "DN" grade and repeat the course.

The instructor will use several manual and automated means to detect cheating and/or plagiarism in any work submitted by students for this course.

# Cheating and Plagiarism Policy:

When a student is suspected of cheating or plagiarism, the instructor raises the issue to the disciplinary committee.





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#### Communications:

Registered students will be given access to a section of the Learning Management System (LMS) for this course. LMS will used as the primary mechanism to disseminate course information, including announcements, lecture slides, assignments, and grades.

Communication with the instructor on issues relating to the individual student should be conducted using CIS email, via telephone, or in person.