# AN-Najah N. University

# Faculty of Information Technology.

Management information systems Department

SUMMER, 2025

Course Outline for: System Analysis and Design (SAD)

*Instructor: Kamal Irshaid*

Office # 2380

*Text Books :the text book the students should possess is taken from the following textbooks:*

1. Software Engineering, IAN Sommerville, 9th edition, 2011 (chapters 1,2,3,4,5 and 8)
2. Modern system analysis and design by Jeffery A. Hoffer and others (chapters 9,15,16)

*Course Description*

Modern system analysis and design covers the concepts, skills, methodologies, techniques, tools, and perspectives essential for system analysts to successfully develop information systems.

Course Benefits

In today's business environment, competitive advantage is achieved through the delivery of fast, responsive software that can adapt to constantly evolving technology and user expectations. Controlling and managing software depends on three critical elements: standards, architecture and process.

**Course objectives:**   
This course will introduce major concepts of information system analysis and design. Various information system development methodologies will be discussed. Students will apply the acquired knowledge using real case studies.

Intended Learning Outcomes of the Course:

At the end of this course student will be able to

* Explain the key roles of system analyst in business
* Describe the various type of systems
* Recognize basic concepts of system analysis methodologies
* Analyze user requirements using different data gathering techniques
* Design robust and change-tolerant information systems
* Produce a written specification for the designed information system using modern tools and techniques
* Apply the acquired system analysis knowledge using real case problem

Major topic that will be covered are:

|  |  |
| --- | --- |
| WEEK # | CHAPTER - SUBJECT |
| 1 | Intro to information systems development |
| 2 | Chap-1:Introduction to Software Engineering |
| 3 to 5 | Chap-2: Software Process + chap3 Agile Software development |
| 6 | Chap-4:Requirements Engineering |
| 6 | Chap-4:Requirements Engineering  Introduction to system design and user interface |
| 7 | Chap-4:Requirements Engineering |
| 8 | Chap-5: System modeling |
| 9 | Chap-9:Conceptual Data Modeling |
| 10 |  |
| 11 | Designing form and reports |
| 12 | Chap-15:System implementation |
| 13 | Chap-15:System implementation  Chap-8: Software Testing |
| 14 | Chap-16:Maintaining information system |
| 15 | Chap-16:Maintaining information system |

Grading:

midterm exam 35%

Project 15% \*\*\*\*

Final exam 50%

\*\*\*\*Class project: students will be asked to form groups of 2-3 students in order to analyze, design, and develop an existing system of their own choice. The project points will be given according to group adherence to project home works and class presentation.

Class Participation:

There will be a subjective evaluation of your contribution in class. The quality of your contribution

is more important than the quantity.

Missing Exams:

University regulations state that NO MAKE UP EXAMS WILL BE MADE unless a student has a well documented excuse such as personal injuries or death of a first degree relative, OTHERWISE a student gets ZERO in the missed exam. In case of an accepted excuse, student must setup a makeup exam date which must be within at most one week from the original exam date.

*الحضور والغياب*

تؤكد سياسة الجامعة على التزام الطالب بحضور المحاضرات في بداية موعدها ومن اجل ذلك أضافت برنامج مراقبة الحضور والغياب إلى برنامج الزاجل وبطريقة الكترونية يتم فصل الطالب من المساق الذي يتجاوز عدد غيابا ته بدون عذر خطي موقع من الجهات الرسمية عن(6) ستة غيابات.

في حالة غياب مبرر على الطالب إحضار تقرير مكتوب ورسمي وتسليم نسخة منه لمدرس المساق في موعد لا يتجاوز اليوم الأول من الأسبوع الذي يلي الأسبوع الذي تغيب به الطالب.

الطالب هو وحده الذي يتحمل مسؤولية حرمانه من المساق في حال تجاهله لهذه القوانين.