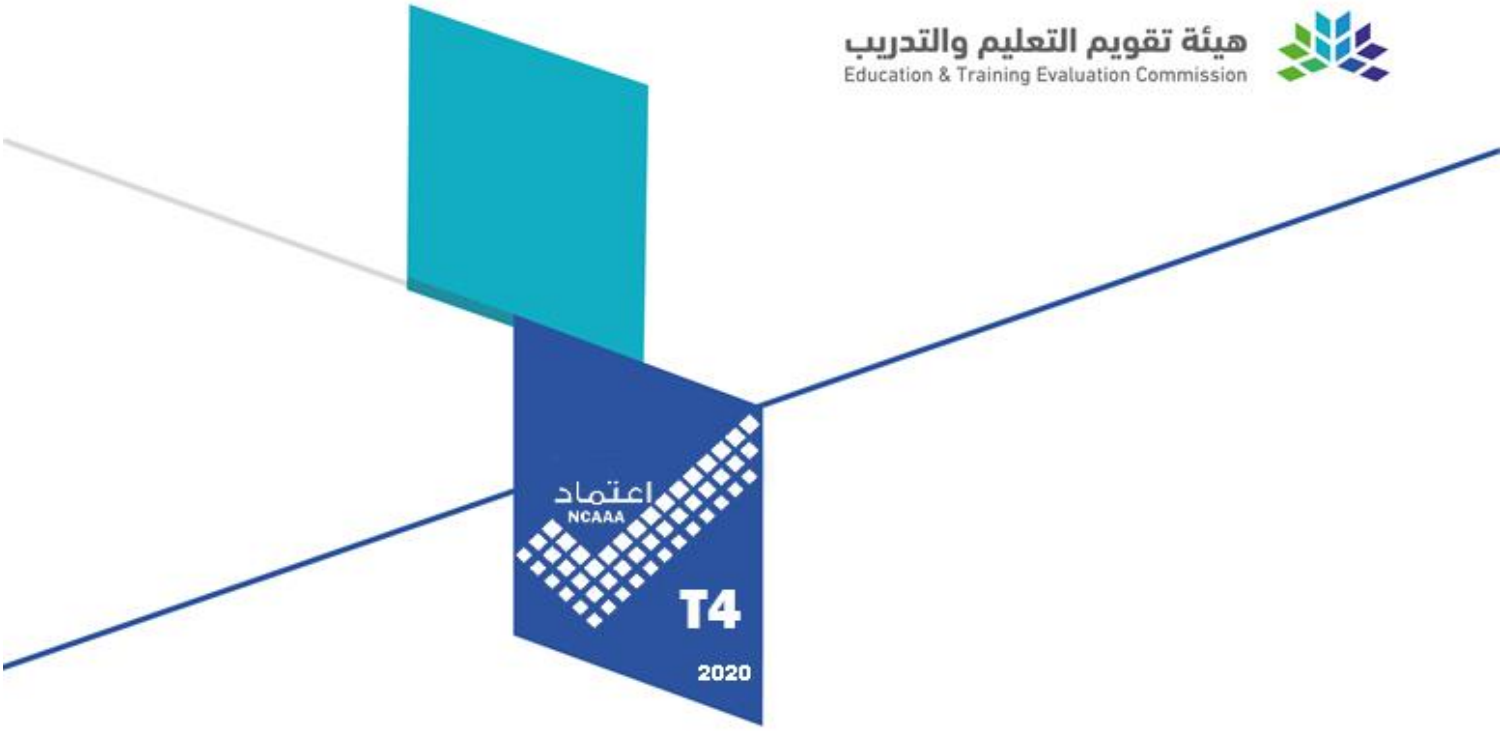
هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission



Course Specifications

Course Title:	Information Systems Analysis and Design
Course Code:	251CIS-3
Program:	Bachelor's degree in information systems
Department:	Department of Information systems
College:	College of Computer Science and Information systems
Institution:	Najran University

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A. Course Identification

1. Credit hours: (30, 0, 0)
2. Course type **a.** University ☐ College ☐ Department ☑ Others ☐ **b.** Required ☑ Elective ☐
3. Level/year at which this course is offered: Level 5/Year 2
4. Pre-requisites for this course (if any)**:** None
5. Co-requisites for this course (if any)**:** None

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	50	100%
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	50
2	**Laboratory/Studio**	
3	**Tutorial**	
4	**Others** (specify)	
	Total	50

B. Course Objectives and Learning Outcomes

1. Course Description

The course includes the fundamental concepts of information system analysis and design. The methods and skills needed for a system analyst to analyze, design, implement and documents computer-based systems. It addresses the main role of the systems analyst, and the techniques and technologies used in analysis, design and managing information system project. The structured software development life cycle approach, modeling techniques and development phases are comprehensively discussed and reviewed. The course covers also, how to collect system requirements using different methods. The Object-Oriented Approach to Design, Use Case Realization, and Developing class Diagram, Developing Sequence Diagram, developing activity Diagram and Designing user Interface. A project is given to all students that should cover analysis and design phases of a relatively data-oriented business case; with emphasis on data modeling (ER diagrams), process modeling (DFDs), and architectural system design issues (DD, HIPO, IPO).

2. Course Main Objective

To help students understand how system analysts solve business problems through analyzing the requirements of information systems and designing such systems by applying analysis and design techniques.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding:**	
1.1	Define fundamental concepts of information systems analysis and design.	K2, K3
1.2	Describe the role of system analysts in the information system development.	K2, K3
1.3		
1...		
2	**Skills:**	
2.1	Manage the information system project	S1
2.2	Collect system requirements using different methods	S4
2.3	Analysis system using different implementation methods	S3, S4
2.4		
3	**Values:**	
3.1	Work as teamwork in the implementation of designing information systems.	V1
3.2		
3...		

C. Course Content

No	List of Topics	Contact Hours
1	Introduction	3
2	System Development in an Organizational Context	3
3	Managing the Information System Projects	3
4	Determining System Requirements	3
5	Analyzing System Process Requirements	3
6	Critical Path management ,PERT diagram ,Gantt Chart	4
7	Entity relationship diagram (ERD)	4
8	Use cases :Object Oriented Analysis and Design	4
9	Activity Diagrams :Object Oriented Analysis and Design	4
10	Sequence Diagrams :Object Oriented Analysis and Design	4
11	Class Diagrams :Object Modeling	3
12	Forms & Reports Design ,Database	3
13	Interface & Dialogue Design	3
14	Implementing and Maintaining the System	3
15	Review	3
Total		50

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Define the fundamental concepts of information systems analysis and design.	Lectures, Group discussion.	Quiz, Midterm, Final Exam.
1.2	Describe the role of system analysts in the Information system development.	Lectures.	Midterm, Final Exam.
…			
2.0	**Skills**		
2.1	Manage the information system project.	Cooperative and reciprocal learning Lectures, Group discussion.	Assignment, mini project, Midterm exam, Final Exam.
2.2	Collect system requirements using different methods.	Group discussion, cooperative and reciprocal learning, Lectures.	Midterm exam, Final Exam
2.3	Analysis system using different implementation methods.	Case study, Group discussion, cooperative and reciprocal learning.	Assignment, mini project, Midterm exam, Final Exam
…			
3.0	**Values**		
3.1	Develop teamwork in the implementation of designing databases.	Group discussion, cooperative and reciprocal learning, Case study.	Mini projects.
…			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Midterm Exams	6	30%
2	Participation/Assignment/Homework	3, 7	10%
3	Quizzes	4, 8	10%
4	Final Theory Exam	12	50%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

10 weekly office hours + appointments
4 weekly academic advising hours
Extra weekly 2 office hours prior to exams.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Essentials of Systems Analysis & Design - 7th Edition -Joseph S. Valacich-2
Essential References Materials	• Systems Analysis and Design, (latest edition), Kendall & Kendall, Prentice-Hall • Modern Systems Analysis & Design- Jeffrey Hpffer, Joey George, Joseph Valacich, 6th edition, Pearson, (Available inPrince Mishal Library)
Electronic Materials	
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Lecture Room with PC, Auto Projector and a white board.
Technology Resources (AV, data show, Smart Board, software, etc.)	Data Show
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	Direct
Focus group discussion with small groups of students.	Instructor	Direct
Extent of achievement of course learning outcomes	Instructor	Direct
The quality of learning resources	Program Leaders	Direct

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	Department Council
Reference No.	14440729-0182-00018
Date	01/08/1444