

**Course Specifications** 

Kingdom of Saudi Arabia

The National Commission for Academic Accreditation & Assessment

### Computing Department, Community College Dammam University of Dammam

Course Specifications (CS)

System Analysis and Deisgn (1)

IS210





# System Analysis and Design (1)

## **Course Specifications**

**Institution : Dammam University** 

**Date of Report** 

College/Department : Dammam Community College / Information Systems

### A. Course Identification and General Information

1. Course title and code: System Analysis and Design(1) / IS210					
2. Credit hours: 3 (2 Theoretical + 2 Practical)					
<ul><li>3. Program(s) in which the course is offered.</li><li>(If general elective available in many programs indicate this rather than list programs)</li></ul>					
4. Name of faculty member responsible for the course					
5. Level/year at which this course is off	5. Level/year at which this course is offered : $2^{nd}$ Level - Year 1				
6. Pre-requisites for this course (if any) IS110					
7. Co-requisites for this course (if any)	7. Co-requisites for this course (if any)				
8. Location if not on main campus					
9. Mode of Instruction (mark all that ap	9. Mode of Instruction (mark all that apply)				
a. Traditional classroom	V	What percentage?	%70		
b. Blended (traditional and online)		What percentage?			
c. E-learning	V	What percentage?	%30		
d. Correspondence		What percentage?			
f. Other		What percentage?			
Comments:					





## A. Objectives

1. What is the main purpose for this course?

By the end of this course, the student should be able to:

- 1. Understand the concept of systems analysis and design
- 2. Recognition the properties and specifications of systems analysis and design specialist
- 3. Analysis and design stages from the identification of multi-system problem to the stage of evaluation and development
- 4. Use tools and methods in the analysis through the study of theory in the classroom and training applications on some systems.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

# **C.** Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

This course introduces the key themes relating to methods and skills needed by the systems analyst to analyze, design and programming information system.

1. Topics to be Covered			
List of Topics		Contact Hours	
1. Cycle life of the development of life systems	3	6 T + 6 P	
2. Documentation and analytical tools	3	6 T + 6 P	
3. Design and implementation	3	6 T + 6 P	
4. Practical training	3	6 T + 6 P	
5. Using CASE or VISIO tools	3	6 T + 6 P	

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30			30		60
Credit	30			15		45





3. Additional private study/learning hours expected for students per week.

4

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Understand the requirements and techniques used for System Analysis and Design	Lectures, Class discussions, presentations	Assignment, , Major Exam
1.2	Demonstrate an understanding of the principles and methodologies of systems analysis and design		
2.0	Cognitive Skills		
2.1	Apply appropriate systems methodology and techniques to analyze a client's information systems need	Lectures, Class discussions	- Case Study, , Major Exam
2.2	Use appropriate tools to model and design a system		
3.0	Interpersonal Skills & Responsibility		
3.1	Analyze system requirements using process and data modeling tools and techniques	Lectures, Class	
1		discussions,	Major Exam, Assignment, Project
3.2	Propose solution to wide range of problems related to the analysis, design and construction of information systems	,	Major Exam, Assignment, Project
3.2 4.0	problems related to the analysis, design	discussions, presentations	0
	problems related to the analysis, design and construction of information systems <b>Communication, Information Technolog</b> Communicate and present information effectively	discussions, presentations	0
4.0	problems related to the analysis, design and construction of information systems <b>Communication, Information Technolog</b> Communicate and present information	discussions, presentations <b>y, Numerical</b> Brainstorming , Question-and-	Assignment, Project Student presentation, Major Examination,
<b>4.0</b> 4.1	problems related to the analysis, design and construction of information systems <b>Communication, Information Technolog</b> Communicate and present information effectively	discussions, presentations <b>y, Numerical</b> Brainstorming , Question-and-	Assignment, Project Student presentation, Major Examination,





<b>5.Course Learning Outcomes Mapping Matrix</b> Identify on the table below the Course Outcomes and Relationship to PLOs			
Course Learning Outcomes	Program Learning Outcomes		
1. Knowledge			
1.1	1.1		
1.2	1.2		
2. Cognitive skills			
2.1	2.3		
2.2	2.1 , 2.2		
3. Interpersonal Skills and responsibility			
3.1	3.1, 3.2		
3.2	3.3		
4. Communication IT and Numeral Skills			
4.1	4.2, 4.3		
4.2	4.1		
5. Psychomotor Skills			
5.1	N/A		

6. Sc	6. Schedule of Assessment Tasks for Students During the Semester				
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment		
1	Mid-term	8	%20		
2	project	12	%10		
3	Lab	13	%20		
4	Attendance/Participation	All weeks	%10		
5	Final	17	%40		



### **D. Student Academic Counseling and Support**

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

• Each group of students is assigned to a member of staff who will be available for help and academic guidance office hours at specific 2 hours on daily basis.

### **E.** Learning Resources

1. List Required Textbooks

Jeffrey Whitten and Lonnie Bentley, Systems analysis and design methods", 2005.

2. List Essential References Materials (Journals, Reports, etc.)

Kenneth E. Kendall, julie E. Kendall, "System Analysis and Design", prentice-hall, 8<sup>th</sup> ed. 2008.

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

• Blackboard.

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

• CDs accompanied with the text book, power point lectures and essential references.

#### **F.** Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

Classrooms:

- Furnished with a large central table or multiple small tables that can be grouped into one central table.
- Designed for up to 25 students.
- Size the room allowing 1sq meter per seat.

Laboratories:

• 25 PC's, one for each student.





2. Computing resources (AV, data show, Smart Board, software, etc.)

• Smart Board, projector, internet, and whiteboard.

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

• None.

### **G** . Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Student questionnaires to be assessed by independent body.
- Assessment of course teaching strategies by independent body.

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

• Student questionnaires to be assessed by department.

3 Processes for Improvement of Teaching

• Revision of course contents, course specifications, and strategies every 5 years.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

- Check marking by an independent member of staff of a sample of student work.
- Periodic exchange and remarking of a sample of assignments with a member of staff in another institution.

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- Reviewing student's feedback.
- Update text books.
- Consulting other top universities course specifications and contents.

