

# **Course Specifications**

<b>Course Title:</b>	Systems Analysis and Design
Course Code:	MIS 313
Program:	Management Information Systems
Department:	Management Information Systems
College:	College of Business Administration, Alkharj
Institution:	Prince Sattam Bin Abdulaziz University







# **Table of Contents**

A. Course Identification	
6. Mode of Instruction (mark all that apply)	3
B. Course Objectives and Learning Outcomes	
1. Course Description	3
2. Course Main Objective	3
3. Course Learning Outcomes	4
C. Course Content	
D. Teaching and Assessment4	
1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods	4
2. Assessment Tasks for Students	5
E. Student Academic Counseling and Support6	
F. Learning Resources and Facilities	
1.Learning Resources	6
2. Facilities Required	6
G. Course Quality Evaluation7	
H. Specification Approval Data8	

# A. Course Identification

1. Credit hours: 5	
2. Course type	
<b>a.</b> University College Department $$ Others	
<b>b.</b> Required $$ Elective	
<b>3. Level/year at which this course is offered:</b> 9 <sup>th</sup> level/ Third year	
<ul> <li><b>4. Pre-requisites for this course</b> (if any):</li> <li>MIS 201 – Management Information Systems</li> </ul>	
5. Co-requisites for this course (if any): N/A	

#### 6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	<b>Contact Hours</b>	Percentage
1	Traditional classroom	60	100%
2	Blended		
3	E-learning		
4	Distance learning		
5	Other		

#### 7. Contact Hours (based on academic semester)

No	Activity	<b>Contact Hours</b>
1	Lecture	48
2	Laboratory/Studio	12
3	Tutorial	
4	Others (specify)	
	Total	60

# **B.** Course Objectives and Learning Outcomes

#### **1.** Course Description

-This course introduces the students to the concepts and skills of system analysis and design. It includes expanded coverage of data flow diagrams, data dictionary, and process specifications.

-This course, as well as, presents a comprehensive introduction to the systems design skills in information management that students, as future users and/ or system analysts, will need to deal with in the computer-integrated business environment. The course provides the students with the skills to identify business problems which may be solved by technology-based solutions, determine requirements for information systems, as well as a strong foundation in systems analysis and design concepts, methodologies.

#### 2. Course Main Objective

This course provides the student with a practical approach to systems analysis and design using a blend of traditional developments and current technologies. The student will learn how to apply the six phases of the systems development life cycle.

# **3.** Course Learning Outcomes

	CLOs	Aligned PLOs
1	Knowledge and Understanding	
1.1	Outline the methods to objectively identify and select information systems development projects	PLO 1.1
1.2	Describe how to be able to conduct feasibility studies, create plans and schedules for information systems and projects	PLO 1.1
13	Describe the different software development methodologies	PLO 1.2 &
1.5		PLO 1.4
1.4	Summarize the methods of gathering, analyzing, retrieving, and evaluating data	PLO 1.2
2	Skills :	
2.1	Use computational tools in developing information systems	PLO 2.2 &
2.1		PLO 2.3
2.2	Create the components of information systems, including forms and reports, in a	PLO 2.2 &
2.2	great way	<b>PLO 2.4</b>
3	Values:	
2 1	Demonstrate the ability to relate to, and collaborate effectively with peer groups	PLO 3.1 &
5.1		PLO 3.2
3.2	Show the self-management to meet deadlines	PLO 3.1

# **C. Course Content**

No	List of Topics	Contact Hours
1	The System Development Environment	7
2	The Origin of Software	6
3	Managing the Information Systems	6
4	Identifying and Selecting Systems Development Projects	6
5	Initiating and Planning Systems Development Projects	6
6	Determining Systems Requirements	6
7	Structuring System Process Requirements	6
8	Structuring System Logic Requirements	6
9	Designing Forms and Reports	7
10	Course Revision	4
	Total	60

# **D.** Teaching and Assessment

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

Code	Course Learning Outcomes	<b>Teaching Strategies</b>	Assessment Methods
1.0	Knowledge and Understanding		
1.1	Outline the methods to objectively identify and select information systems development projects	<ul> <li>Lectures</li> <li>Active &amp; Collaborative Learning</li> <li>Group Work</li> <li>Case-based Teaching</li> <li>Discussion-Based Teaching</li> <li>Field Work</li> </ul>	<ul> <li>Homework assignments</li> <li>Presentation by students</li> <li>In class short MCQs quizzes</li> <li>Two Mid Terms and one Final Examination</li> </ul>

Code	<b>Course Learning Outcomes</b>	Teaching Strategies	Assessment Methods
1.2	Describe how to be able to conduct feasibility studies, create plans and schedules for information systems and projects	<ul> <li>Lectures</li> <li>Active &amp; Collaborative Learning</li> <li>Discussion-Based Teaching</li> <li>Field Work</li> </ul>	<ul> <li>Homework assignments</li> <li>Presentation by the students</li> <li>In class short MCQs quizzes</li> <li>Two Mid Terms and one Final Examination</li> </ul>
1.3	Describe the different software development methodologies	<ul> <li>Lectures</li> <li>Active &amp; Collaborative Learning</li> <li>Discussion-Based Teaching</li> </ul>	<ul> <li>Homework assignments</li> <li>Presentation by the students</li> <li>In class short MCQs quizzes</li> <li>Two Mid Terms and one Final Examination</li> </ul>
1.4	Summarize the methods of gathering, analyzing, retrieving, and evaluating data	<ul> <li>Lectures</li> <li>Active &amp; Collaborative Learning</li> </ul>	<ul> <li>Quizzes, Assignments, Midterms, &amp; Final Exam</li> </ul>
2.0	Skills		
2.1	Use computational tools in developing information systems	<ul> <li>Lectures</li> <li>Utilization of the essential tools, including CASE tools and UML.</li> </ul>	<ul> <li>Quizzes, Assignments, Midterms, &amp; Final Exam</li> <li>Projects evaluation</li> </ul>
2.2	Create the components of information systems, including forms and reports, in a great way	<ul><li>Lectures</li><li>Projects</li></ul>	<ul><li>Assignments</li><li>Projects evaluation</li></ul>
3.0	Values	-	
3.1	Demonstrate the ability to relate to, and collaborate effectively with peer groups	<ul> <li>Solving problems in groups</li> <li>Writing reports</li> </ul>	<ul> <li>Evaluation of Group work</li> <li>Reports assessment</li> <li>Presentations evaluation</li> </ul>
3.2	Show the self-management to meet deadlines	<ul><li>Projects</li><li>Writing reports</li></ul>	<ul> <li>Evaluation of students' submissions</li> </ul>

#### 2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Midterm exam1	5 <sup>th</sup>	15%
2	Midterm exam 2	$10^{\text{th}}$	15%
3	Quizzes	$4^{\text{th}}, 8^{\text{th}}, \text{and}$	10%

14

#	Assessment task*	Week Due	Percentage of Total Assessment Score
		10 <sup>th</sup>	
4	Assignments	$4^{\text{th}}$ , $7^{\text{th}}$ , and $9^{\text{th}}$	10%
5	Mini Projects	11 <sup>th</sup>	10%
6	Final Exam		40%

\*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:

10:00 AM – 12:00 PM (Sunday, Tuesday & Thursday)

# **F. Learning Resources and Facilities**

#### **1.Learning Resources**

Tilleur ning Resources	
<b>Required Textbooks</b>	Joseph S. Valacich and Joey F. George, Modern Systems Analysis and Design, 9th edition, Pearson, 2020
Essential References Materials	Kenneth E. Kendall and Julie E. Kendall, Systems Analysis and Design, 9th Edition, Pearson, 2013
Electronic Materials       The Unified Modeling Language: http://www- 306.ibm.com/software/rational/uml/?SMSESSION=NO Outsourcing: http://www.outsourcing-journal.com/         Financial Analysis Tools: http://www.toolkit.cch.com/text/p06_6500.asp Unified Modeling Language: http://www.uml.org/         Use Case Modeling: http://www.objectworkshop.com/index.html         Use Case Diagrams: http://www.andrew.cmu.edu/course/90- 754/umlucdfaq.html	
Other Learning Materials	N/A

#### 2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	• Lecture room with 20 seats
<b>Technology Resources</b> (AV, data show, Smart Board, software, etc.)	<ul><li>Data Show</li><li>Microsoft Project or Microsoft Visio</li></ul>
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	N/A

G. Course Quality Evaluatio
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Evaluation Areas/Issues	Evaluators	<b>Evaluation Methods</b>
Students Feedback through survey	students'	At the end of each academic semester, students' feedback is taken. A survey form entitled, <i>Course Evaluation Survey</i> (CES) provided by NCAAA is administered by Quality & Development Unit regularly using the Survey Monkey portal. In the CES, Q.No.5 to Q.No.9 reflects the students' opinion on the effectiveness of teaching. Further, students can also provide their feedback on the effectiveness of teaching using the open-ended questions given at the end of CES.
Peer-Observation	senior faculty member	A senior faculty from the college/department nominated by DC visits the class and observes at least 2-3 classes during the entire semester. Peer observer provides his feedback on a template provided by Deanship of Development & Quality viz. class observation form for developing the teaching learning process.
Self-Assessment	Course lecturer	At the end of each semester, the course instructor self-reflects his experiences during the semester and prepares the <i>course report</i> , which is discussed at the DC/CC for further improvement.
Periodical Review of the Teaching Strategies	Head of department	The Department council periodically reviews the teaching strategies of individual faculty members mentioned in course specifications and suggest measures for Improvement of Teaching.
In-house check marking of final assessment sheets	Department member	Check marking by an independent member of teaching staff of a sample of student work
External Experts Independent verification and opinion	Faculty member, not department member	Department randomly select the samples of students' work (Exam answer sheets, home assignments etc.) from the faculty course portfolio and send it to the external evaluators already identified by each department.

**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.	2
Date	SEP 2022