Course Specification
(Bachelor)

Course Title:	Requirements Analysis and Design
Course Code:	BIDA129
Program	Business Intelligence and Data Analysis
Department	**Computer Department**
College:	**Applied College**
Institution	:Najran University
Version	: 1
Last Revision Date:	7/12/1446

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: (3 hours)					
2. Course type					
A.	☐University	☐College	☒ Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (1st Year, Term 3)					
4. Course General Description:					
Explores the key tasks of requirements analysis and design that business analysts perform to structure and organize requirements discovered during the elicitation activity. Learners practice tasks including specifying and modeling requirements/designs, Verifying and validating information ,defining requirements architecture ,defining solution options that meet business needs and estimating potential value for those solution options. Introduces techniques of use-cases, prototyping, non-functional requirements analysis and acceptance and evaluation criteria.					
5. Pre-requirements for this course (if any):					
BIDA100					
6. Co-requisites for this course (if any):					
N/A					
7. Course Main Objective(s):					

- **Students perform the key tasks of requirements analysis and design used to structure and organize requirements discovered during elicitation.**
- **Prepares students to specify and verify requirements.**
- Student learn to create aproject management worklow

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	48	100%
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		

No	Mode of Instruction	Contact Hours	Percentage
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	24
2.	**Laboratory/Studio**	24
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		48

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	K1 Explain key concepts of systems analysis and design	K1**,k2**	• Lecture Individual and group discussions	Exams • Assignments
1.2				
…				
2.0	**Skills**			
2.1	**S1 create aproject management workflow**	S1, S2	• Lecture • Brainstorming • Small Group Work • Lab Demonstration • Project	• Exam • Group Reports • Lab Reports
2.2	**S2 specify requirement**	S1, S2	• Lecture • Brainstorming • Small Group Work	• Exam • Group Reports

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
			• Lab Demonstration • Project	• Lab Reports
...	S3 Verify requirements.	S1, S2	• LectureBrainstorming • Small Group Work • Lab Demonstration • Project	• Exam • Group Reports • Lab Reports
	S4 Choose solution options that meet business needs	S3	• LectureBrainstorming • Small Group Work • Lab Demonstration • Project	• Exam • Group Reports • Lab Reports
3.0	**Values, autonomy, and responsibility**			
3.1	V1 Communicate effectively with a range of audiences	V1,V2	• Lecture • Brainstorming • Small Group Work • Lab Demonstration • Project	• Exam • Group Reports • Lab Reports
3.2				
...				

C. Course Content

No	List of Topics	Contact Hours
1	Requirements Elicitation: Techniques for Gathering Business Requirements	5
2	Requirements Analysis and Prioritization: Understanding Stakeholder	5
3	Business Process Modeling: Designing and Documenting Business Processes	5
4	Use Case Modeling: Capturing Functional Requirements and Interactions	5
5	User Interface Design: Creating Intuitive and User-Friendly Interfaces	5
6	Data Modeling and Database Design: Structuring and Organizing Business Data	5

7	System architecture desingn : defining the overall and organizing and Components of the System	**5**
8	Prototyping and Wireframing: Visualizing and Validating Design Concepts	**5**
9	User Experience (UX) Design: Enhancing User Satisfaction and Engagement	**4**
10	**Design documentation and specification creating detailed design documents fot implementation**	**4**
Total		**45**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	First Monthly Exam	8	25%
2.	Year duties	continuously	15%
3.	Practical exam	14	20%
4.	Final exam	18	40%
5.			

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	Title : handbook of requirements and business analysis Publisher: Springer International Publishing Published year: 2022 Author: Bertrand Meyer (e-book) Title: The PMI Guide to Business Analysis Publisher: Project Management Institute Published year: 2018 Author: Project Management Institute ISBN: 1628251980
Supportive References	Title: DAMA-DMBOK: Data Management Body of Knowledge Publisher: Technics Publications Published year: 2017 Author: Dama International and Data Management Association ISBN:978-1-63462-234-9
Electronic Materials	
Other Learning Materials	

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom IT Lab

Items	Resources
Technology equipment (projector, smart board, software)	Smartboard Presentation Technology
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	**Student , external reviewers visit from accreditation agen cy**	Survey Formal Classroom Observation
Effectiveness of Students assessment	Quality and Development Unit, Curriculum Committee,	Teachers` feedback, Students` feedback, Course report, pro fissional cerifications achievement rate
Quality of learning resources	Quality and Development Unit	Course report, data analysis of achievement test
The extent to which CLOs have been achieved	Quality and Development Unit	Annual quality improvement program review
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewers, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**المجلس التنفيذي**
REFERENCE NO.	**4600081176**
DATE	**22/12/1446هـ**