



Course Specifications

Course Title:	Research Project
Course Code:	599PMIS-4
Program:	Professional Master of Data science
Department:	Information Systems
College:	Computer Science and information systems
Institution:	Najran University

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A. Course Identification

1. Credit hours: 4
2. Course type
a. University <input type="checkbox"/> College <input checked="" type="checkbox"/> Department <input checked="" type="checkbox"/> Others <input type="checkbox"/>
b. Required <input checked="" type="checkbox"/> Elective <input type="checkbox"/>
3. Level/year at which this course is offered: 6 th level/ 2 th year
4. Pre-requisites for this course (if any):
Department approval
5. Co-requisites for this course (if any): NA

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	40	100%
2	Blended		
3	E-learning		
4	Distance learning		
5	Other		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	40
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	40

B. Course Objectives and Learning Outcomes

<p>1. Course Description</p> <p>After the project proposal is approved, the student will work on implementing proposed research project and finishing the research. The students will review the design specification and make any necessary enhancements. The students will identify and use programming techniques and tools to implement user interface and complete functionality of the proposed project. The students will develop the necessary test cases of the critical components of the system and perform complete testing to the project. At the end of their research project, the students will present their complete projects to their supervisor(s) and their peers.</p>
<p>2. Course Main Objective</p> <p>After successful completion of this course students should be able to:</p> <p>Developing a hypothesis, a research problem and related questions Framing the problem with the correct research methodology Collecting data that accurately addresses the research problem</p>

Evaluating feasibility of research proposals
 Using data to make decisions
 Presenting data to support programs to decision makers

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge and Understanding	
1.1		
1.2		
1.3		
1...		
2	Skills	
2.1	Developing a hypothesis, a research problem and related questions	S3
2.2	Framing the problem with the correct research methodology	S1,S2
2.3	Collecting data that accurately addresses the research problem	S1,
2.4	Evaluating feasibility of research proposals	S3
2.5	Using data to make decisions	S3
3	Competences:	
3.1	Presenting data to support programs to decision makers	C1, C2
3.2		
3.3		
3...		

C. Course Content

No	List of Topics	Contact Hours
1	Topic Paper	2.5
2	Research Project Outline	2.5
3	Literature review reading	2.5
4	Literature review draft	2.5
5	1st Draft Research Paper	2.5
6	1st Draft Research Paper corrections	2.5
7	1st Draft Research Paper review	2.5
8	2nd Draft Research Paper	2.5
9	2nd Draft Research Paper corrections	2.5
10	2nd Draft Research Paper review	2.5
11	3rd Draft Research Paper	2.5
12	3rd Draft Research Paper corrections	2.5
13	3rd Draft Research Paper review	2.5
14	Final Draft	2.5
15	Presentation	2.5
Total		40

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			
1.2			
...			
2.0	Skills		
2.1	Developing a hypothesis, a research problem and related questions	TS-1: Relate Course Learning Outcomes (CLOs) to the topics TS-2: Giving Lectures in PPT, recalling the lecture through asking Questions. Clarifying doubts on Lecture. TS-3: Conducting a discussion of real life problems, among teacher, students TS-4: Cooperative learning among the students. Encourage students to browse different journals, seminars or websites at their leisure time to have a better understanding about the course	Written Report
2.2	Framing the problem with the correct research methodology		Written Report
2.3	Collecting data that accurately addresses the research problem		Written Report
2.4	Evaluating feasibility of research proposals		Written Report
2.5	Using data to make decisions		Written Report
3.0	Competences		
3.1	Presenting data to support programs to decision makers	TS-2: Giving Lectures in PPT, recalling the lecture through asking Questions. Clarifying doubts on Lecture. TS-3: Conducting a discussion of real life problems, among teacher, students	Final oral Examination
3.2			
...			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Final Oral Exam	11 th week	50%
2	Project Report	12 th or 13 th week	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 :

- Weekly office hours + Appointments
- Weekly academic advising hours
- Extra weekly 2 office hours prior to exams.
- Tutorials are also provided to the students

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	No specific textbook is required. Papers and reading materials will be provided.
Essential References Materials	
Electronic Materials	
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Room B-58 Laboratory A-16L
Technology Resources (AV, data show, Smart Board, software, etc.)	Data show, PCs.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	<ul style="list-style-type: none"> • Printer is important in the lab to print reports and some snapshots. • Projector and PC for the lab instructor is required

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Online course survey	Students	Indirect
Focus group discussion with small groups of students.	Instructor	Direct
Extent of achievement of course learning outcomes	instructor	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	Computer Science Departmental Council
Reference No.	14440203-0185-00002
Date	1st Sep, 2022