



Course Specifications

Course Title:	Graduation Project 1
Course Code:	571CCS-2
Program:	BSc in in Computer Science
Department:	Computer Science
College:	Computer Science and Information Systems
Institution:	Najran University

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A. Course Identification

1. Credit hours:
2. Course type
a. University <input type="checkbox"/> College <input 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: Year 5 / Level 14
4. Pre-requisites for this course (if any):
451CCS-3 (Software Engineering)
5. Co-requisites for this course (if any):

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom		
2	Blended	80	100%
3	E-learning		
4	Distance learning		
5	Other		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	Lecture	
2	Laboratory/Studio	80
3	Tutorial	
4	Others (specify)	
	Total	80

B. Course Objectives and Learning Outcomes

1. Course Description

Graduation project-1 will guide students to conduct a critical background study on their chosen topic. It will assist them on requirements gathering including analysis and synthesizes of gathered data and will aid students to perform feasibility study and functional and non-functional requirements to accumulate problems respective to their topic/environment. It will facilitate them to identify and apply appropriate methods/design to overcome those problems, identify the scope of their project in real world, will support students to critically evaluate proposed design using suitable methods and techniques. Student will develop communication skills through presentation and able to work individually as well as in a team. Students will be guided to maintain ethical issues, documentation formats, use of references and checking plagiarism. And finally, students will produce a formal report describing their findings, contributions, and future development/implementation.

2. Course Main Objective

Student will demonstrate his ability to design computer system based on his learning during the previous levels and write proper report.

3. Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge and Understanding	
2	Skills :	
2.1	Classify various information system related problems and project live cycle activities such as selecting, planning, analysis, design, implementation, testing, deployment, and maintenance	S1, S3
2.2	Conduct (Survey) an effective background study and be able to contrast and critique related work.	S4
2.3	Generate functional and non-functional requirements.	S1
2.4	Analyze the problem and develop an initial solution.	S3, S1
2.5	Apply a multi-disciplinary approach to designing the project.	S2
3	Values:	
3.1	Demonstrate the ability to work independently and in a team.	C1, C3
3.2	Demonstrate the ability to communicate effectively.	C1
3.3	Prepare report for the project	C2, C3

C. Course Content

No	List of Topics	Contact Hours
1	List of Topics	1
2	Class1: Review of graduation policy	1
3	Class 2: Project Proposal (Vision document/feature list)	1
4	Class 3: Basics of project management (Tasks, plan, scope)	1
5	Class 4: Presentation tools and techniques	2
6	Class5: Requirements / Requirements Validation / Functional Specification Document	2
7	Class 6: Use case Diagram, Use Case Description / Activity Diagram / Sequence Diagram	2
8	Class 7: Data Flow Diagram, System Architecture	2
9	Class 8: Database/ ER Diagram	1
10	Class 8: UML	1
11	INTRODUCTION Introduction; Problem Statement.; Purpose of this Document; Project Structure; Modules (users, database, ...); Scope; System Limitations; Objectives.	
12	BACKGROUND STUDY	17
13	METHOD OF INVESTIGATION AND ANALYSIS Functional and nonfunctional Requirements; Project Methodology.	20
14	SYSTEM DESIGN Use case Diagram; Activity Diagram; Sequence Diagrams; Database Entity Relationship Diagram; Class Diagram; database Tables Structure.	20
15	CONCLUSION AND FUTURE WORK	3

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		
2.0	Skills		
2.1	Classify various information system related problems and project live cycle activities such as selecting, planning, analysis, design, implementation, testing, deployment, and maintenance	Class lectures, working with the team, reading about topic	Presentations, Reports
2.2	Conduct (Survey) an effective background study and be able to contrast and critique related work.	Class lectures, working with the team, reading about topic	Presentations, Reports
2.3	Generate functional and non-functional requirements.	Class lectures, working with the team, reading about topic	Presentations, Reports
2.4	Analyze the problem and develop an initial solution.	Class lectures, working with the team, reading about topic	Presentations, Reports
2.5	Apply a multi-disciplinary approach to designing the project.	Class lectures, working with the team, reading about topic	Presentations, Reports
3.0	Values		
3.1	Demonstrate the ability to work independently and in a team.	Class lectures, working with the team, reading about topic	Presentations, Reports
3.2	Demonstrate the ability to communicate effectively.	Class lectures, working with the team, reading about topic	Presentations, Reports
3.3	Prepare report for the project.	Class lectures, working with the team, reading about topic, writing the report	Presentations, Reports

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Presentation 1 (By supervisor)	5	12
2	Presentation 2 (By supervisor)	8	12
3	Final Presentation (By Examiners)	11	25

#	Assessment task*	Week Due	Percentage of Total Assessment Score
4	Final Report (By Examiners)	11	25
5	Task assignments (By supervisor)	All	26
6	Total		100

*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:

Office hours for instructors. Also, every student has an academic advisor for counseling.

F. Learning Resources and Facilities

1. Learning Resources

Required Textbooks	To be determined by the instructor.
Essential References Materials	To be determined by the instructor.
Electronic Materials	To be determined by the instructor.
Other Learning Materials	To be determined by the instructor.

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom, and the instructor may ask for laboratory if needed.
Technology Resources (AV, data show, Smart Board, software, etc.)	Datashow, and the instructor may ask for software if needed.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Depends on the project requirements.

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Effectiveness of teaching and assessment	Students	Indirect
Extent of achievement of course learning outcomes	Students	Indirect
Extent of achievement of course learning outcomes	Instructor, Examiners	Direct

Evaluation Areas/Issues	Evaluators	Evaluation Methods
The topics covered	Course Coordinator	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