اعتماد
NCAAA

T4

2020

Course Specifications

Course Title:	Graduation Project 2
Course Code:	572CCS-3
Program:	BSc in in Computer Science
Department:	Computer Science
College:	Computer Science and Information Systems
Institution:	Najran University

Table of Contents

A. Course Identification

1. Credit hours:	

2. Course type

a. University ☐   College ☐   Department ☑   Others ☐

b. Required ☑   Elective ☐

3. Level/year at which this course is offered: Year 5 / Level 15

4. Pre-requisites for this course (if any)**:**

571CCS-2 (Project 1)

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-2 will allow the students to use their acquired knowledge throughout the program to implement the design that proposed in graduation project-1. It will also assist students to perform testing, to apply appropriate error detection and corrections techniques and help students to evaluate their system/software. Students will be able to work individually as well as in a team. Students will be guided to maintain ethical issues, documentation formats, develop presentation and communication skills, use of references and checking plagiarism. Finally, students will produce a runnable software/developed system in real time along with the final version of project report.

2. Course Main Objective

Student will demonstrate his ability to implement computer system designed in project 1 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	Apply core knowledge areas of computer science and information systems to implement the project.	S1, S3, S5
2.2	Use modern tools and technologies to implement the project.	S2, S4
2.3	Evaluate the system using testing concepts and techniques.	S2
3	**Values:**	
3.1	Plan the development, testing and maintenance activities.	C3
3.2	Demonstrate the ability to work independently and in a team.	C1
3.3	Demonstrate the ability to communicate effectively.	C2
3.4	Produce a complete report of the project work.	C1, C3
3.5	Commit to professional, ethical, legal, security and social issues and responsibilities.	C3

C. Course Content

No	List of Topics	Contact Hours
1	Review of Project 1 design; Review P2 sample work.	1
2	Project 2 planning and schedule (break down work, phases, timetable, etc..).	2
3	Programming language review, UI coding review.	5
4	Coding (implementation) best practices (Database, middle tier, UI, etc..).	5
5	**INTRODUCTION** Introduction; P2 planning, link to P1 design; documentation	5
6	**IMPLEMENTATION** Backend implementation; Testing; documentation	20
7	**IMPLEMENTATION** Frontend implementation; Testing; documentation	15
8	**IMPLEMENTATION** Middle tier implementation; Testing; documentation	15
9	**CHAPTER TWO: Testing** Function and system testing; documentation	5
10	**CONCLUSION AND FUTURE WORK**	2
11	Prepare final report (Including Graduation Project 1)	5
Total		**80**

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	Apply core knowledge areas of computer science and information systems to implement the project.	Class Lectures, working with the	Presentations, Reports

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
		team, reading about topic	
2.2	Use modern tools and technologies to implement the project.	Class Lectures, working with the team, reading about topic	Presentations, Reports
2.3	Evaluate the system using testing concepts and techniques.	Class Lectures, working with the team, reading about topic	Presentations, Reports
3.0	**Values**		
3.1	Plan the development, testing and maintenance activities.	Class Lectures, working with the team, reading about topic	Presentations, Reports
3.2	Demonstrate his/her ability to work independently and in a team.	Class Lectures, working with the team, reading about topic	Presentations, Reports
3.3	Demonstrate his/her ability to communicate effectively.	Class Lectures, working with the team, reading about topic	Presentations, Reports
3.4	Produce a complete report of the project work.	Reviews, Feedback	Final Report
3.5	Commit to professional, ethical, legal, security and social issues and responsibilities.	Class Lectures, working with the team, reading about topic	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
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
Focus group discussion with small groups of students.	Instructor	Direct
Extent of achievement of course learning outcomes.	Instructor, Examiners	Direct
Extent of achievement of course learning outcomes.	Students	Indirect
The topics covered.	Instructor, Examiners	Direct
The free approach the of the course.	Instructor, Examiners, Program leader, and department council	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