Course Specification
(Bachelor)

Course Title: Graduation Project 2

Course Code: 572CCS-3

Program: Bachelor of Science in Computer Science

Department: Department of Computer Science

College: Computer Science and Information Systems

Institution: Najran University

Version: 2.0

Last Revision Date: August 2022

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A. General information about the course:

1. Course Identification

1. Credit hours: (3)

3 (0, 6, 0) [Theory, Lab, Tutorial]

2. Course type

A.	☐University	☐College	☒ Department	☐Track	☐Others
B.	☒ Required			☐Elective	

3. Level/year at which this course is offered: (Level 10/Year 5)

4. Course General Description:

Graduation Project 2 will allow the students to use their acquired knowledge throughout the program to implement the design proposed in Graduation Project 1. It will also assist students to perform testing, apply appropriate error detection and correction 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, and documentation formats, develop presentation and communication skills, use references and check plagiarism. Finally, students will produce a runnable software/developed system in real time along with the final version of the project report.

5. Pre-requirements for this course (if any):

571CCS-2 (Graduation Project 1)

6. Co-requisites for this course (if any):

None

7. Course Main Objective(s):

Student will demonstrate his ability to implement the computer system designed in Project 1 based on his learning during the previous levels and write proper reports.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	90	100%
2	E-learning		
3	Hybrid • Traditional classroom • E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	
2.	**Laboratory/Studio**	90
3.	**Field**	
4.	**Tutorial**	
5.	**Others (specify)**	
Total		**90**

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				
1.2				
1.3				
2.0	**Skills**			
2.1	Apply core knowledge areas of computer science and information systems to implement the project	S_1, S_3, S_5	Class Lectures, working with the team, reading about topic	Presentations, Reports
2.2	Use modern tools and technologies to implement the project	S_2, S_4	Class Lectures, working with the team, reading about topic	Presentations, Reports

Code	Course Learning Outcomes	Code of PLOs aligned with the program	Teaching Strategies	Assessment Methods
2.3	Evaluate the system using testing concepts and techniques	S_2	Class Lectures, working with the team, reading about topic	Presentations, Reports
2.4				
3.0	**Values, autonomy, and responsibility**			
3.1	Plan the development, testing and maintenance activities	V_3	Class Lectures, working with the team, reading about the topic	Presentations, Reports
3.2	Demonstrate the ability to work independently and in a team	V_1	Class Lectures, working with the team, reading about the topic	Presentations, Reports
3.3	Demonstrate the ability to communicate effectively	V_2	Class Lectures, working with the team, reading about the topic	Presentations, Reports
3.4	Produce a complete report of the project work.	V_1, V_3	Reviews, Feedback	Final Report
3.5	Commit to professional, ethical, legal, security and social issues and responsibilities	V_3	Class Lectures, working with the team, reading about the topic	Presentations, Reports

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, time table, 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 Back-end implementation; Testing; documentation	20
7.	IMPLEMENTATION Front-end implementation; Testing; documentation	15
8.	IMPLEMENTATION Middle-tier implementation; Testing; documentation	20
9.	CHAPTER TWO: Testing Function and system testing; documentation	10
10.	CONCLUSION AND FUTURE WORK	2

11.	Prepare final report (Including Graduation Project 1)	5
Total		**90**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Presentation 1(By supervisor)	9th week	12
2.	Presentation 2(By supervisor)	12th week	12
3.	Final Presentation (By Examiners)	14th week	25
4.	Final Report (By Examiners)	14th week	25
5.	Task assignments (By supervisor)	all	26

*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	To be determined by the project supervisor
Supportive References	To be determined by the project supervisor
Electronic Materials	To be determined by the project supervisor
Other Learning Materials	To be determined by the project supervisor

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	• Classroom • The project supervisor may ask for a laboratory if needed.
Technology equipment (projector, smart board, software)	• Data show and the instructor may ask for software if needed.
Other equipment (depending on the nature of the specialty)	• Depends on the project requirements

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Collecting students' suggestions to facilitate more during the class.	Students	Verbal discussion

Assessment Areas/Issues	Assessor	Assessment Methods
Student's questionnaire once during the semester about course learning outcomes.	Students	Indirect Survey
Achievement percentage of course learning outcomes, direct evaluation using CLO assessment sheet	Course Instructor	Direct evaluation using CLO achievement calculation
Teaching strategies	Quality unit	Indirect
Assessment methods	Quality unit	Indirect
Instructor performance	Quality unit	Indirect
Course content	Quality unit	Indirect

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

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Computer Science Departmental Council
REFERENCE NO.	14440203-0185-00002
DATE	1st Sep, 2022