Course Specification
— (Bachelor)

Course Title: :	**Senior Project for CS 2**
Course Code:	**CS1757**
Program:	**Computer Science**
Department:	**Computer Science and Engineering**
College:	**Computer Science and information technology**
Institution:	**Albaha University**
Version:	**TP153 – V1**
Last Revision Date:	**October 9, 2023**

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A. General information about the course:

1. Course Identification

1. Credit hours:
(3)

2. Course type

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

3. Level/year at which this course is offered: (8 / 4ᵗʰ year)

4. Course general Description:

Final Year Projects represent the culmination of study towards the Bachelor of Computer Science degree. This project serves as a capstone to the Computer Science Major. This course is a 2-semester sequence. Senior Project 1 can be used to find, research, and design the project. Senior Project 2 can be used to implement, document, and orally present the results of the project.

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

Senior Project for CS 1 (CS1754)

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

None

7. Course Main Objective(s):

The main purpose for this course is to teach students how to:
- Recall the results of requirements analysis.
- Recognize the design approach appropriate for the problem.
- Design a problem solution.
- Develop the system components.
- Evaluate the developed system.
- Write a project reports.
- Interact in groups collaboratively
- Communicate concepts and techniques in oral presentations.

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	33	100%
2	E-learning		
3	Hybrid • Traditional classroom		

No	Mode of Instruction	Contact Hours	Percentage
	● E-learning		
4	Distance learning		

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	33
2.	**Laboratory/Studio**	-
3.	**Field**	
4.	**Tutorial**	-
5.	**Others (specify)**	-
Total		33

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

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Recall the results of requirements analysis.	K1	-Case-based discussion (lecture)	-Midterm Evaluation -Final Evaluation
1.2	Describe the design approach appropriate for the problem.	K2	● Case-based discussion (lecture) ● Project assignment	-Midterm Evaluation -Final Evaluation
…				
2.0	**Skills**			
2.1	Analyze a problem solution.	S1	● Case-based discussion (lecture) ● Small Workshop	-Midterm Evaluation -Final Evaluation
2.2	Develop the system components.	S2	● Project assignment ● Group discussion	● Midterm Evaluation ● Final Evaluation

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.3	Evaluate the developed system.	S3	• Case-based discussion (lecture) • Project assignment • Group discussion	-Midterm Evaluation -Final Evaluation
2.4	Write a project report	S4	• Case study • Small Workshop	•Project Report •Final Evaluation
2.5	Prove ability to communicate with, and learn from, experts from different domains throughout the career.	S5	•Group discussion	•Oral Presentation (Rubric)
2.6	Evaluate in groups collaboratively	S6	Small Group	•Oral Presentation (Rubric)
3.0	**Values, autonomy, and responsibility**			
3.1	Participate concepts and techniques in oral presentations	V1	•Project presentations	•Oral presentations (rubric)
...				

C. Course Content

No	List of Topics	Contact Hours
1.	Recall the results of requirements analysis	2
2.	Recognize the design approach appropriate for the problem	2
3.	Design a problem solution	6
4.	Develop the system components	9
5.	System Integration	5
6.	System Testing and Verification	5
7.	Final preparation of Project Report	4

Total		**33**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Midterm Exam and oral presentation	6	30%
2.	Final Exam, Project Report and oral presentation	12/13	70%
...	**Total**		**100%**

*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	No specific textbook is required
Supportive References	ACM (Association for Computer Machinery) Curricula Recommendations - http://www.acm.org/education/curricula-recommendations
Electronic Materials	• Access to the Saudi Digital Library (SDL). Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/). ● Using the learning management system of the university – Rafid System (https://lms.bu.edu.sa/).
Other Learning Materials	• Project specific

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	• A classroom or lecture hall with whiteboard for 5 students or more. • A laboratory with 5 computers or more.
Technology equipment (projector, smart board, software)	• A digital image projection system with connection to desktop computer and laptop computer. • High speed Internet connection. • An instructor computer station.
Other equipment (depending on the nature of the specialty)	Project Specific

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	• Students • Faculty • Peer Reviewers • Program Leader • Course Coordinator	• Surveys (indirect). • Direct feedback from students (interview between Program leader and students). • Course evaluation by Peer Reviewers (indirect). • Class visit by Program Leader Comprehensive Course report (where we can find information about teaching difficulties and action plan, …)
Effectiveness of Students assessment	• Students • Faculty • Peer Reviewers • Course Coordinator • Exam Evaluation Committee Course Coordinator	• Surveys (indirect). • Direct feedback from students (interview between Program leader and students). • Assessment results (direct) • Course evaluation by Peer Reviewers (indirect). • Comprehensive Course report (where we can find information about assessment difficulties and action plan, …) Exam evaluation by the Exam Evaluation Committee (indirect)
Quality of learning resources	• Students • Faculty • Peer Reviewers Course Coordinator	• Surveys (indirect) • Course evaluation by Peer Reviewers (indirect). • Comprehensive Course report (where we can find information about difficulties and challenges about learning resources as well as consequences and action plan, …)
The extent to which CLOs have been achieved	• Faculty • Program Leader	• Student Results (direct)

Assessment Areas/Issues	Assessor	Assessment Methods
	• Course Coordinator	Comprehensive Course report (where we can find the CLO assessment results)
Other	**None**	**None**

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

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	
REFERENCE NO.	
DATE	