هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

2023
TP-153

Course Specification

(Bachelor)

Course Title:	**Foundations of Software Engineering**
Course Code:	**SE1001**
Program:	**Software Engineering**
Department:	**Software Engineering**
College:	**Computing and Information**
Institution:	**Al-Baha University**
Version:	**V1**
Last Revision Date:	24-4-2024

Table of Contents

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: (4th /2nd year)					
4. Course general Description:					
This course offers core and fundamental knowledge of software engineering concepts. It provides the required information and covers the important terminologies to allow obtaining abroad knowledge in the field of software engineering					
5. Pre-requirements for this course (if any): Computer Programming 1 CS1005					
6. Pre-requirements for this course (if any)**: None**					
7. Course Main Objective(s):					
The main objective of this course is to teach the students the basics terminologies in software engineering field. In addition, the course aims to provides the students with the essential skills to gather software requirements to detailed model and document the software concepts. Furthermore. It aims to allow students to broaden their knowledge of software evolution.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	3	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**	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	Identify the key terms and concepts of software engineering	K1, K2	Lecture, exercise	Quiz, exams, ,assignments
1.2	Distinguish between different types of software development models	K2	Lecture, exercise	Quiz, exams, ,assignments
1.3	Recognize the key software processes	K2	Lecture, exercise	Quiz, exams, ,assignments
1.4	Compare between various types of software requirements gathering techniques	K2	Lecture, exercise	Quiz, exams, ,assignments
1.5	Compare between various types of software modelling techniques	K2	Lecture, exercise	Quiz, exams, ,assignments
2.0	**Skills**			

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.1	Model software processes	**S1**	Lecture, Group discussion, tutorials	Exams, assignments, project
2.2	Design a software from gathered requirements	**S2**	Lecture, Group discussion, tutorials	Exams, assignments, project
...				
3.0	**Values, autonomy, and responsibility**			
3.1				
3.2				
...				

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction to Software Engineering	4
2.	Software processes	4
3	Agile software development	4
4	Requirements engineering	4
5	System modeling	4
6	Architectural design	4
7	Design and implementation	3
8	Software testing	3
9	Software evolution	3
Total		

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Assignments	4,6,9	10%
2.	Quizzes	6,10	10%
3.	Group Project	10	10%
4.	Midterm Exam	6	20%
4	Final Exam	12	50%

*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	**Software Engineering: A Practitioner's Approach , 7th Edition, Roger Pressman, 2017, ISBN-13: 978-9339212087..**
Supportive References	**Software Engineering, 10th Edition, Ian Sommerville, 2018, ISBN-13: 978-9332582699**
Electronic Materials	**N/A**
Other Learning Materials	**N/A**

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	Classroom and Blackboard
Technology equipment (projector, smart board, software)	Data show and software
Other equipment (depending on the nature of the specialty)	N/A

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. •Course evaluation by Peer Reviewers (indirect). •Class visit by Program Leader (indirect) Comprehensive Course report (where we can find information about teaching difficulties and action plan, …)
Effectiveness of Students assessment	• Students • Faculty • Peer Reviewers • Program Leader • Exam Evaluation Committee Course Coordinator	• Surveys (indirect). • Direct feedback from students. • Course evaluation by Peer Reviewers (indirect). • Class visit by Program Leader (indirect) Exam evaluation by the Exam Evaluation Committee (indirect)

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

Assessor♦ (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	**Curriculum Committee**
REFERENCE NO.	
DATE	**28 April 2024**