هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

2023
TP-153

Course Specification
(Bachelor)

Course Title:	Seminars in Software Engineering
Course Code:	SE1766
Program:	Bachelor of Software Engineering
Department:	Software Engineering
College:	Faculty of Computers and Informatics
Institution:	Al-Baha University
Version:	1.0
Last Revision Date:	23/4/2024

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: (11)					
4. Course general Description:					
This course provides software engineering students with the fundamental knowledge and practical understanding of methods, approaches, and tools for requirements engineering in different software paradigms. Topics include deriving and reasoning about the appropriate description of a desired system, modelling and analysis knowledge and skills, documenting and evaluating requirements, and conceptual design. The course will also focus on teamwork and communication skills, requirements prioritization and negotiation, and automated software engineering tools relevant to requirement and modelling phases of software engineering. The course will be delivered in seminar or workshop styles and a large number of assessment tasks will be project based in order to give the students skills and experience of working in a team environment.					
5. Pre-requirements for this course (if any)**:**					
Software Quality Assurance (SE1754)					
6. Pre-requirements for this course (if any)**:**					
7. Course Main Objective(s):					
This course consists of 10 weeks of different types of learning and teaching activities such as seminar style lectures, moderated discussions on the core topics with relevant industrial examples, guest lectures, students' presentations, and project work. There will be 8-10 seminar sessions led/moderated by the main teaching staff.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	3	100%
2	E-learning	0	0
3	Hybrid • Traditional classroom • E-learning	0	0
4	Distance learning	0	0

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	33
2.	**Laboratory/Studio**	0
3.	**Field**	0
4.	**Tutorial**	0
5.	**Others (specify)**	0
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	**Describe different phases of requirements engineering for software systems**	**K1**	**Lecture, Paper Moderations**	**Quiz, Exercise**
1.2	**Show different approaches to elicit, specify, document, and validate requirements**	**K2**	**Lecture, Paper Moderations**	**Quiz, Exercise**
2.0	**Skills**			

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
2.1	Critically articulate many and varied challenges involved and strategies available in requirements engineering phases	S1	Paper Moderations, Group discussion	Exercise, project
3.0	**Values, autonomy, and responsibility**			
3.1	Demonstrate abilities to use a small set of tools for supporting requirements engineering phases	V1	Project	Exercise, project
3.2	Demonstrate the ability to effectively work in small groups using physical and online facilities and social media technologies	V2	Project	Exercise, project

C. Course Content

No	List of Topics	Contact Hours
1.	Reviewing and discussing assigned article	33
Total		**33**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Reviewing and discussing assigned article	2,3,4,5,6, 7,8,9,10	15%
2.	Quizzes	2,5,8	15%
3.	Exercises	3,4,6,7	20%
4.	Software Requirements Project (Group)	10	30%

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
3.	Software Requirements Project (Individual)	10	20%

*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	Karl Wiegers and Joy Beatty, Software Requirements, Third Edition, 2014, Microsoft Press
Supportive References	N/A
Electronic Materials	N/A
Other Learning Materials	1. Hussain, Azham, and Emmanuel OC Mkpojiogu. "Requirements: Towards an understanding on why software projects fail." AIP Conference Proceedings. Vol. 1761. No. 1. AIP Publishing, 2016. 2. Liu, Lin, Tong Li, and Fei Peng. "Why requirements engineering fails: A survey report from china." 2010 18th IEEE International Requirements Engineering Conference. IEEE, 2010. 3. Calazans, Angelica Toffano Seidel, et al. "Software Requirements Analyst Profile: A Descriptive Study of Brazil and Mexico." Requirements Engineering Conference (RE), 2017 IEEE 25th International. IEEE, 2017. 4. Chen, Lianping, Muhammad Ali Babar, and Bashar Nuseibeh. "Characterizing architecturally significant requirements." IEEE software 30.2 (2013): 38-45. 5. Tiwari, Saurabh, Santosh Singh Rathore, and Atul Gupta. "Selecting requirement elicitation techniques for software 29 projects." 2012 CSI Sixth International Conference on Software Engineering (CONSEG). IEEE, 2012. 6. Noll, John, and Wei-Ming Liu. "Requirements elicitation in open-source software development: a case study." Proceedings of the 3rd International Workshop on Emerging Trends in Free/Libre/Open-Source Software Research and Development. ACM, 2010. 7. Burnay, Corentin, Jennifer Horkoff, and Neil Maiden. "Stimulating Stakeholders' Imagination: New Creativity Triggers for Eliciting Novel Requirements." 2016 IEEE 24th International Requirements Engineering Conference (RE). IEEE, 2016.

	8. Mylopoulos, John, et al. "Exploring alternatives during requirements analysis." IEEE Software 18.1 (2001): 92-96. **9. de Gea, Juan M. Carrillo, et al. "Requirements engineering tools." IEEE software 28.4 (2011): 86-91.** **10. Bhat, Jyoti M., Mayank Gupta, and Santhosh N. Murthy. "Overcoming requirements engineering challenges: Lessons from offshore outsourcing." IEEE software 23.5 (2006): 38-44.** **11. Konrad, Sascha, and Michael Gall. "Requirements engineering in the development of large-scale systems." 2008 16th IEEE International Requirements Engineering Conference. IEEE, 2008.** **12. De Lucia, Andrea, and Abdallah Qusef. "Requirements engineering in agile software development." Journal of emerging technologies in web intelligence 2.3 (2010): 212- 220.** **13. Cao, Lan, and Balasubramaniam Ramesh. "Agile requirements engineering practices: An empirical study." IEEE software 25.1 (2008): 60-67.**

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	**Classroom**
Technology equipment (projector, smart board, software)	**Software and Tools**
Other equipment (depending on the nature of the specialty)	

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Student	- Survey
Effectiveness of Students assessment	Lecturer	- Annual report
Quality of learning resources	Program Coordinator	- Survey - Evaluation of test Models - Standard sample
The extent to which CLOs have been achieved		

Assessment Areas/Issues	Assessor	Assessment Methods
Other		

Assessors (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**