

Year: 2018-2019

Hashemite University Prince Al-Hussein bin Abdullah II Faculty for Information Technology Department of Software Engineering



Course Syllabus

Semester: (2)

Course No.	Course Title	Designation	Prerequisite	Co-requisite	Credit Hours Lectures /Lab.
111003260	Fundamentals of Software Engineering	Compulsory	111001110	-	3 / 0

Instructor Name	E-mail	Office No.	Office ext.	Office Hours	
Dr. Abdel-Rahman Al- Ghuwairi	ghuwairi@hu.edu.jo		4591	Sun, Tue, Thur (10-11)	
Dr. Aladdin Baarah	<u>aladdin.baarah@hu.edu.jo</u>	246	4786	Sun, Tue, Thur (10-11)	

Coordinator's Name:	Dr. Abdel-Rahman Falah Aqil Al-Ghuwairi		
Course Description	This course covers the software development process, from requirements elicitation and analysis, through specification and design, to implementation, integration, testing, and maintenance (evolution). A variety of concepts, principles, techniques, and tools are presented, encompassing topics such as software processes software requirements system models architectural design		
	user interface design, verification and validation, and software evolution.		

Learning References:

a- Textbook:			
1. Software Engineering (10 th Edition). Ian Sommerville, Addison Wesley, 2015			
b- Additional References:			
1. Software Engineering: A Practitioner's Approach (8 th Edition), Roger PressMan and Bruce Maxim,			
McGraw-Hill Education, 2014			
2. Software Engineering: Principles and Practice (3 rd Edition). Hans van Vliet, Wiley, 2008			

Course Learning Outcomes (CLOs)

Upon successful completion of this course, students are expected to achieve the following learning outcomes:

	Course Learning Outcomes (CLOs)			
1-	Understand essential concepts in software engineering. (1)			
2-	Explain the major concepts of requirement engineering process. (1,3)			
3-	Be able to apply (UML) as a modeling technique in software engineering to design and develop			
	object oriented software. (2,3)			
4-	Distinguish stages of testing from testing, during software development to acceptance testing by			
	system customers. (2)			
5-	Demonstrate software evolution processes as an important part of software engineering.(2)			
6-	Prepare coherent and structured technical report in a group and deliver oral presentation. (3)			
Addressed Student Learning Outcomes (SLOs)				
	(1.2.3)			

Topic Details	CLO number	Reference	No. of Weeks	Contact hours*
Introduction	1	Ch1	1	3
Software processes	1	Ch2	1	3
Requirements Engineering	2	Ch4	3	9
System Modeling	3	Ch5	3	9
Design and Implementation	3	Ch7	2	6
Software Testing	4	Ch8	2	6
Software Evolution	5	Ch9	2	6
Project Presentations	6	_	1	3
Total			15	45

Assessment Methods and Grading System:

Assessment method	Grade	Comments
First Exam	25%	Covers Chapters 1, 2, 4
Second Exam	20%	Covers Chapters 5 and 7
Project	15%	TBA
Final Exam	40%	Covers all topics that were discussed during the semester
Total	100%	