

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

Course Syllabus

Year: 2018-2019

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	aladdin.baarah@hu.edu.jo	246	4786	Sun, Tue, Thur (10-11)

Coordinator's Name:	Dr. Abdel-Rahman Falah Aqil Al-Ghuwairi
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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.
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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%	