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

Course Syllabus – Winter Semester 2018/2019
SWE763 Requirements Engineering

1. Course Information

Catalog Description	Requirements engineering is one of the least understood and hardest phases in the development of software products, mainly because requirements are often unclear in the minds of most stakeholders. This course presents the identification of stakeholders, the elicitation and verification of requirements from them, and translation into detailed requirements for a new software product, analysis and modeling of requirements, the first steps in the direction of software design and the quality assurance aspects of the software requirements phase of the software development process.
Credit Hours	3
Prerequisite	-
Course Type	Lecture
Required/Elective	Required
Textbook	* Elizabeth Hull, Ken Jackson, Jeremy Dick, "Requirements Engineering", Springer London Dordrecht Heidelberg New York, Fourth Edition, 2017. Additional References: * Roger Pressman, Software Engineering A Practitioner's Approach, 8th Edition – Mc Grow Hill, 2015.
Instructor	Dr. Khaled Almakadmeh Email: khaled.almakadmeh@hu.edu.jo Office: IT 321
Class Schedule	Tuesday: 01:00 – 04:00
Class Location	IT-302
Office Hours	Tuesday: 12:00 – 01:00
Teaching Assistant	No

2. Course Contents

Week(s)	Topic(s)	Chapter in Text
1	Introduction to Requirements Engineering	1
2	A Generic Process for Requirements Engineering	2
3	System Modelling for Requirements Engineering	3
4	Writing and Reviewing Requirements	4
5	Midterm Exam	-
6	Term paper: preliminary presentation	-
7	Requirements Engineering in the Problem Domain	5

8	Requirements Engineering in the Solution Domain	6
9	Case Studies	-
10	Advanced Traceability	7
11	Management Aspects of Requirements Engineering	8
12, 13	Term paper: final presentations	

3. Course Objectives

1. Provide comprehensive knowledge and understanding of requirements engineering.
2. Provide understanding of different software process models.
3. Provide understanding of agile development.
4. Provide understanding of requirements engineering principles.
5. Provide understanding of how to use specific methods to elicit requirements from stakeholders.
6. Provide understanding of several techniques of requirements modeling.

4. Course Outcomes

1. An ability to analyze a problem, and elicit software requirements from stakeholders.
2. An ability to analyze software requirements.
3. An ability to explain how to apply a software process to model the requirements for an identified problem.

5. Assessment Policy

Assessment Tool	Expected Due Date	Weight
Term paper	T.B.D.	30%
Midterm Exam	T.B.D.	30%
Final Exam	T.B.D.	40%