



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.
151003221	Object Oriented Software Development	Compulsory	151003260	-	3 / 0

Instructor Name	E-mail	Office No.	Office ext.	Office Hours
Dr. Aladdin Baarah	<a href="mailto:aladdin.baarah@hu.edu.jo">aladdin.baarah@hu.edu.jo</a>	246	4471	Sun, Tue, Thur (11-12) Monday, Wednesday (11-12:30)

<b>Coordinator's Name:</b>	Dr. Aladdin Hussein Baarah
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<b>Course Description</b>	The course provides students with knowledge and practice in object oriented thinking approach in software development process and object oriented modeling using UML. The course aimed to familiarize student with object oriented analysis, design, implementation, and testing
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#### Learning References:

<b>1- Textbook (s):</b>
1. Object Oriented Software Engineering, Using UML, Patterns, and Java. 3 <sup>rd</sup> edition, Bernd Bruegge and Allen H. Dutiot, Pearson, 2009
<b>2- References:</b>
1. UML @ Classroom: An Introduction to Object-Oriented Modeling, Martina Seidl, Springer, 2015
2. UML Distilled: A Brief Guide to the Standard Object Modeling Language. 3 <sup>rd</sup> Edition by Martin Fowler, 2003

## Course Intended Learning Outcomes (ILOs)

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

Course ILOs	Program ILOs	Teaching and Learning Method	Assessment Method
1- Recognize important concepts in object oriented software engineering.	CIS-A	Lectures	Exam
2- Apply (UML) as a modeling technique in software engineering to analyze, design and develop object oriented software.	CIS-B	Lectures	Exam and Project
3- Recognize how to design a system	CIS-B	Lectures	Exam
4- Recognize how to convert models to code	CIS-B	Lectures	Exam
5- Employ one of the modeling tools such as Microsoft VISIO to draw UML models such as use case diagram, sequence diagram, activity diagram and class diagram.	CIS-B, CIS-E	Project	Project
6- Use Java programming language and MS Access to develop a software	CIS-B, CIS-E	Project	Project

## Course Schedule:

Topic Details	Course ILO number	Reference	No. of Weeks	Contact hours*
<b>Introduction to software engineering</b>	1	Ch1	1	3
<b>Project Description and Tutorial (Java + DB)</b>			1	3
<b>Modeling with UML</b>	2	Ch4	2	6
<b>Requirements Elicitation</b>	2	Ch5	2	6
<b>Analysis</b>	2	Ch7	2	6
<b>System Design: decomposing the system</b>	3	Ch8	2	6
<b>Object Design: specifying interfaces</b>	2	Ch9	1	3
<b>Mapping models to Code</b>	4		1	3
<b>Projects presentations</b>	5,6		2	6
<b>Total</b>			<b>14</b>	<b>42</b>

## Assessment Methods and Grading System:

Assessment method	Grade	Comments
<b>First Exam</b>	20%	Covers Chapters 1, 2, 4
<b>Second Exam</b>	20%	Covers Chapters 5 and 6
<b>Project</b>	20	TBA
<b>Final Exam</b>	40%	Covers all topics that were discussed during the semester
<b>Total</b>	100%	

## Course Relationship to Key Student Outcomes:

#	Student Outcome Description	Contribution
<b>General and Computer Information System Student Outcomes</b>		
CIS-A	An ability to analyze a problem, and to identify and define the computing requirements appropriate to its solution.	<b>H</b>
CIS-B	An ability to design, implement, and evaluate a computer-based solution to meet a given set of computing requirements in the context of the discipline.	<b>H</b>
CIS-C	An ability to communicate effectively with a range of audiences about technical information.	
CIS-D	An ability to make informed judgments in computing practice based on legal and ethical principles.	
CIS-E	An ability to function effectively on teams to establish goals, plan tasks, meet deadlines, manage risk, and produce deliverables.	
CIS-F	An ability to support the delivery, use, and management of information systems within an information systems environment.	
<b>H=High, M= Medium, L=Low</b>		