



KINGDOM OF SAUDI ARABIA  
 IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY  
 COLLEGE OF COMPUTER AND INFORMATION SCIENCES  
 INFORMATION SYSTEMS DEPARTMENT  
 BACHELOR ON INFORMATION SYSTEMS

المملكة العربية السعودية  
 جامعة الإمام محمد بن سعود الإسلامية  
 كلية علوم الحاسب والمعلومات  
 قسم نظم المعلومات  
 بكالوريوس نظم المعلومات

## SYLLABUS

### IS 1130: Requirements Engineering

PREREQUISITE	IS1100	CREDIT HOURS	3
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<b>Instructor:</b>	
<b>Contact information and office hours</b>	
<b>Office No:</b>	2088
<b>Office Hours:</b>	Monday & Wednesday (12:30-14:10)
<b>E-mail:</b>	aaalsahli@imamu.edu.sa

COURSE DESCRIPTION
<p><i>This course discusses the processes, methods, techniques and tools that organizations use to manage their information systems requirement engineering. This course assumes that this topic within the broader information Systems context in the modern organization is a complex team-based activity, where various types of technologies (including software as well as complete systems) are an inherent part of the field. This course also acknowledges that this area involves both the use of resources from within the firm, as well as contracted from outside the organization.</i></p>

COURSE LEARNING OUTCOMES (CLOs)		Aligned SOs
<b>1</b>	<b>Knowledge and Understanding</b>	
1.1	<i>Describe the fundamental systems development life cycle.</i>	1(I)
1.2	<i>Demonstrate knowledge and understanding of issues related to requirements analysis.</i>	1(I)
1.3	<i>Describe methods for requirement elicitation and investigation.</i>	1(I)
<b>2</b>	<b>Skills :</b>	
2.1	<i>Model business requirements along with documentation.</i>	2(I)
2.2	<i>Validate the requirements using different techniques along with managing them.</i>	2(I)
<b>3</b>	<b>Values:</b>	
3.1	<i>Function effectively on teams to accomplish a common goal.</i>	5(A)



3.2	<i>Present a topic in a compelling manner.</i>	3(P)
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TEACHING Strategies
Lectures Self-learning

No	List of Topics	Contact Hours
1	<i>System Development Life Cycle</i>	6
2	<i>The essentials of requirements and analyst</i>	3
3	<i>Requirements elicitation and investigation</i>	3
4	<i>Analyzing the requirements</i>	6
5	<i>Documenting the requirements</i>	6
6	<i>Modeling the requirements</i>	3
7	<i>Validating the requirements</i>	3+3
8	<i>Requirements Management</i>	3+3
9	<i>Project Discussions</i>	3
<b>Total</b>		<b>36+6(SL)</b>

TEXT BOOK
<i>Karl Wiegers and Joy Beatty: Software Requirements (3rd Edition) (Developer Best Practices) Microsoft Press, 2013.</i>

REFERENCES
<ol style="list-style-type: none"> <li>1. <i>Dick, Jeremy, Hull, Elizabeth, Jackson, Ken. Requirements Engineering, Springer, 2017.</i></li> <li>2. <i>Koelsch, George. Requirements Writing for System Engineering, 2016</i></li> <li>3. <i>Axel van Lamsweerde: Requirements Engineering, from System Goals to UML Models to Software Specifications. John Wiley, 2007.</i></li> </ol>

Course Assessment Methods			
No	Assessment Method	Due Week	% Total Assessment
1	<b>Quiz</b>	4	10
2	<b>Midterm</b>	7	20
3	<b>Assignment</b>	9	10
4	<b>Group Project</b>	11	20
5	<b>Final Exam</b>	13	40