

" حيث تصبح الرؤية واقعاً "
"When Vision Becomes
Reality"

" عراقة وجودة "
Tradition and Quality

Detailed Course Description - Course Plan Development and Updating Procedures/ Department of Software Engineering	QF01/0408-3.0E
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Faculty	Faculty Of Science & IT	Department	Software Engineering
Course number	0114222	Course title	Visual Programming
Number of credit hours	3	Pre-requisite/co-requisite	0114221

This course shows how to design different forms by using the different GUI controls in Java, design forms to be user friendly and clear using the Integrated Development Environment (IDE). It also solves the run time problem for a program with having "Exception Handling". In addition to know Files and streams, Multimedia, Multithreading.

Course goals and learning outcomes	
Goal 1	Having the ability to explain advance programming concepts used in computer science field using java programming language
Learning outcomes	1.1 Understand some advanced programming concepts 1.2 Deal with complex data objects as whole entities, rather than by twiddling with their elements
Goal 2	Having the knowledge to use the different swing controls to design forms and solving problems
Learning outcomes	2.1 Analyses problem and determine what problem elements to represent as functions or objects 2.2 Develop Swing-based GUI
Goal 3	Understand Graphics and Animation
Learning outcomes	3.1 Build application to solve graphics and animation problems 3.2 The ability to design and simulate real life applications
Goal 4	Understand the different types of Files

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Learning outcomes	4.1 Apple to create files, sequential file and database file
Textbook	- Java Programming 8th Edition, Jan 23, 2015, by Joyce Farrell, ISBN-10: 1285856910
Supplementary references	1- Java Methods: Object-Oriented Programming and Data, February 15, 2015, by Maria Litvin and Gary Litvin. 2- Java Programming, 7th Edition 7th Edition, Jan 31, 2013 by Joyce Farrell, ISBN-10: 1285081951 3- Learning Java Through Games 1st Edition, Dec 24, 2013 by Lubomir Stanchev, ISBN-10: 1466593318.

Course timeline				
Week	Number of hours	Course topics	Pages (textbook)	Notes
01	1	Revision Methods Class and objects Constructor Inheritance		
	1			
	1			
02	1	Introduction to swing package and GUI class Using JOptionPane Class to Accept GUI Input Using Input Dialog and Confirm dialog box	87 - 91	
	1			
	1			
03	1	Introduction to Swing Components	729 - 788	
	1			
	1			
04	1	Introduction to Swing Components Exception Handling	729 – 788 593 – 663	
	1			
	1			

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05	1	Advanced GUI Topic	792 – 795	
	1	Using the JPanel Class	813 - 821	
	1	Using the JPanel Class		
06	1	EXERCISES - Project discussion		
	1	Review of previous chapters		
	1	First Exam (20 %)		
07	1	Event Handling KeyListener,	824 – 837	
	1	Event Handling MouseListener	824 – 837	
	1	Using Menus	837 - 843	
08	1	Using Menus		
	1	Using Menu	837 - 843	
	1	Example		
09	1		861 - 918	
	1	Graphics		
	1			
10	1	Graphics	665 - 727	
	1	Apply Animation by Using Graphics		
	1	Apply Animation by Using Graphics		
11	1	EXERCISES		
	1	Review of previous chapters		
	1	Second Exam (20 %)		
12	1	File Input and Output	665 - 727	
	1			
	1			
13	1	File Input and Output	665 - 727	
	1	Examples on File		
	1			
14	1	Design and implementation 1		
	1	• Wordpad		
	1			
15	1	Design and implementation 2		
	1	• Paint brush		
	1			
16	1			
	1	Final Exam 50%		
	1			

Theoretical course evaluation methods and weight	Participation = 10% First exam 20% Second exam 20% Final exam 50%	Practical (clinical) course evaluation methods	Semester students' work = 50% (Reports, research, quizzes, etc.)
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			Final exam = 50%
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Approved by head of department		Date of approval	
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Extra information (to be updated every semester by corresponding faculty member)

Name of teacher	M. Rana Bader	Office Number	
Phone number (extension)		Email	_____@zug.edu.jo
Office hours			