



**Palestine Technical University-Kadoorie**  
**College of Engineering and Technology**  
**Course Syllabus**



<b>Course Title:</b>	Object Oriented Programming	<b>Course Number:</b>	12140102
<b>Year:</b>	2017/2018	<b>Semester:</b>	2 <sup>nd</sup>
<b>Specialization:</b>	Computer Systems Engineering	<b>Designation:</b>	Compulsory
<b>Prerequisite(s):</b>	Computer Programming		
<b>Instructor:</b>	Dr. Nael Salman		
<b>Instructor's e-mail:</b>	n.salman@ptuk.edu.ps		
<b>Office Hours:</b>	Sun, Tue, Thu : 11:00 – 12:00		
<b>Class Time:</b>	Sec1: Sun, Tue, Thu: 9:00-10:00 (Room : H120) Sec2: Mon, Wed : 09:30 – 11:00 (Room : H014)		
<b>Course description:</b>	Abstraction, approaches to modular program design, principles of abstract data type, basic concept of objects: local variables and methods. Inheritance. Polymorphism. Overview of object oriented programming environments using Java through programming assignments. GUI and java applets.		
<b>Textbook(s):</b> Daniel Liang, "Introduction to Java Programming", 9th ed. Prentice Hall, 2012			
<b>Other material (References):</b> <b>Very Useful Websites:</b> Java API's, JDK, Tutorials, ... <a href="http://www.oracle.com/technetwork/java/index.html">http://www.oracle.com/technetwork/java/index.html</a>			
<b>Course objectives:</b>	<ol style="list-style-type: none"> <li>1. Familiarize students with the essentials of Java programming language.</li> <li>2. Understand the principles of OOP and applying them in different areas.</li> <li>3. Apply the different OOP principles in solving real life problems</li> <li>4. Understand the fundamentals of GUI programming</li> <li>5. Developing GUI and applying Event-Driven Programming techniques.</li> <li>6. Understanding and using Exception handling in programming.</li> </ol>		
<b>Topics covered and Calendar:</b>	<b>Topics</b>		<b>Weeks</b>
	1. Introduction		1
	2. Elementary Programming: I/O, data types, arithmetic, relational and logical operators		1
	3. Control Structures: Selections and Loops (if, if .. else, switch..case, for, while, do..while).		1
	4. Methods, recursion.		2
	5. Arrays (one-dimensional and multidimensional arrays)		1
	6. Objects and Classes		2
	7. Strings		1
	8. Inheritance and Polymorphism, interfaces		2
	9. GUI Basics		1
	10.Exception handling and Text I/O		1
	11.Event Driven Programming		2
12.Applets			

<b>Grading Plan:</b>	<b>First Midterm</b>	<b>15%</b>
	<b>Second Midterm</b>	<b>15%</b>
	<b>Lab. Work + homeworks</b>	<b>30%</b>
	<b>Final Exam</b>	<b>40%</b>
<b>General Notes: Class policies</b>	<ol style="list-style-type: none"> <li>1. University regulations regarding students' attendance will be applied.</li> <li>2. Names will be read in the first 10 minutes anyone coming after that will be marked absent.</li> <li>3. Mobile phones must be switched off during lectures.</li> </ol>	
<b>Prepared by: Dr. Nael Salman</b>		<b>Date: 20/01/2018</b>