



The University of Jordan
Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	Object Oriented Programming 2
2	Course number	1902213
3	Credit hours (theory, practical)	3
	Contact hours (theory, practical)	3
4	Prerequisites/co requisites	Object Oriented Programming 1 (1902211)
5	Program title	Computer Information Systems
6	Program code	2
7	Awarding institution	The University of Jordan
8	Faculty	King Abdullah II school for IT
9	Department	Computer Information Systems
10	Level of course	Second Year
11	Year of study and semester (s)	2014/2015 Second Semester
12	Final Qualification	B.Sc.
13	Other department (s) involved in teaching the course	-
14	Language of Instruction	English
15	Date of production/revision	5/2015
16	Required/ Elective	Required

17. Course Coordinator:

Loai Alnemer

Office Hours: Sun- Wed 9-10,

Phone Number: 22613

E-mail: l.nemer@ju.edu.jo

18. Other instructors:

None

19. Course Description:

the course will cover the following topics:

Graphics: Coordinate systems and drawing methods, Graphical User Interface and event handling,

Exception handing, Multithreading and Strings

20. Course aims and outcomes:

A- Aims:
B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to ...
A- Knowledge and Understanding: Students should ...
A1) Understand the concept of class String, String Buffer and String Tokenizer.
A2) Understand basic graphical methods to draw basic shapes and Java 2d API.
A3) Understand the design principles of graphical user interface (GUI) and its components.
A4) Understand event-driven objects and handling events.
A5) Understand exceptions and exception-handling.
A6) Understand the notation of multithreading and the advantages of multithreaded applications.
A7) Understand and manipulate files in Java.
B- Intellectual skills: with the ability to ...
B1) Distinguish between non-modifiable character string objects of class String and modifiable character string objects of class String Buffer.
B2) Draw basic Java shapes using different drawing methods
B3) Design a graphical user interface.
B4) Recognize and employ analytical skills to solve problems.
B5) Create and read sequential files and connect to a database.
C- Subject specific skills- with ability to ...
C1) Analyze a problem and write Java code to solve it.
C2) Evaluate different Java layout managers and propose a solution for designing a GUI.
C3) Discuss Java multithreading concepts.
D- Transferable skills – with ability to ...
D1) Work individually and within a group to design a graphical user interface for some selected systems
D2) Work effectively, to implement Java programs that implement the GUI under study.

D3) interact with the other study groups to make different implementation of the same project.
D4) Present the final project and make a demo.

21. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
INTRODUCTION: Data Hierarchy, Objects, Methods, Classes, Instantiation, Methods Call, Attributes, Encapsulation, Inheritance, Java Program	1	Loai Alnemer	C1,D1		Chapter 1,2
GRAPHICS Graphics Contexts And Graphics Objects, Drawing Strings, Lines, Rectangles, Ovals, Arcs, Polygons And Polylines ... Color Control, Font Control	2, 3	Loai Alnemer	A1,A2,B1, B2,C1,D1	Homework + Quiz	attendance, Discussion, Chapter 15
GRAPHICAL USER INTERFACE COMPONENTS Simple GUI-Based Input/Output With JOPTIONPANE , Overview Of Swing Components, Text Fields, Password Fields And An Introduction To Event Handling With Nested Classes	4	Loai Alnemer	A3,B3,C2, D2	Homework	attendance, discussion, Chapters 14
GRAPHICAL USER INTERFACE COMPONENTS Simple GUI-Based Input/Output With Joptionpane Overview Of Swing Components Text Fields, Password Fields.	5	Loai Alnemer	A3,B3,C2, D2	quiz	attendance, discussion, handout , Chapter 14

<p>GRAPHICAL USER INTERFACE COMPONENTS Simple GUI-Based Input/Output With Joptionpane Overview Of Swing Components Text Fields, Password Fields. Introduction To Event Handling Common GUI Event Types And Listener Interfaces How Event Handling Works</p>	6	Loai Alnemer	A4,D1,D2	homework	attendance, discussion, handout , Chapter 14
<p>GRAPHICAL USER INTERFACE COMPONENTS Jbutton Jcheckbox Jradiobutton Jcombobox And Using An Anonymous Inner Class For Event Handling Jlist , Multiple-Selection Lists Mouse Event Handling Adapter Classes Layout Managers (FlowLayout , BorderLayout, GridLayout) Jtextarea Using Menus With Frames</p>	7, 8	Loai Alnemer	A3,B3,C2, D2	homework	attendance, discussion, handout , Chapter 13
	9	Loai Alnemer		Practical Exam	
<p>EXCEPTION HANDLING: Exception-Handling Overview Example: Divide By Zero Without Exception Handling Example: Handling Arithmetic exceptions And Input mismatch exceptions When To Use Exception Handling Java Exception Hierarchy Finally Block</p>	10,11	Loai Alnemer	A5	quiz, homework on arrays	attendance, discussion, handout , Chapter 11

STRING, STRINGBUFFER AND STRINGTOKENIZER CLASSES Fundamentals Of Characters And Strings Class String String Constructors Concatenating Strings String Methods Class StringBuffer Class StringTokenizer	11, 12, 13	Loai Alnemer	A1,B1,C1, D1,D2	Homework	attendance, discussion, handout , Chapter 16
MULTITHREADING Thread States: Life Cycle Of A Thread.... Thread Priorities And Thread Scheduling Creating And Executing Threads	14, 15	Loai Alnemer	A6,D1,D2, D4	homework	attendance, discussion, handout , Chapter 16
FILES AND STREAMS (Self Learning) Class File Read From A File Write To A File	12	Loai Alnemer	A7,B5,D1, D2,D3,D4		attendance, discussion, handout , and Section 9.2 from scheider, Chapter 4 from Petroustos

22. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

23. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Quizzes and home works through the semester. Midterm exam , Practical Exam and Final exam

24. Course Policies:

A- Attendance policies:

Students are allowed up to 7 absences. If you exceed this number, you will fail the class.

B- Absences from exams and handing in assignments on time:

All projects and assignments are to be uploaded to the course website.

Upload assignments to elearning.ju.edu.jo (Moodle) by 11:55 PM on its due date.

Everyone should check their e-mail and Moodle regularly. Students are responsible for information posted there. If critical information is posted in Moodle that you must read today, an announcement to check e-learning will be sent to the mailing list.

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Discussion of the concepts and principles between students is fine and very welcomed. Also, students are allowed to debug each other's code. However, Student cooperation should not result in identical or near identical answers/code/documentation. **ALL THE MATERIAL SUBMITTED FOR GRADING MUST BE YOUR OWN EFFORT.**

If this policy is violated then the following steps may be taken: (1) reduction of points by dividing by the number of students involved in an incident, (2) assignment of a grade of ZERO for all students involved in an incident.

E- Grading policy:

Quizzes and assignments 20% Practical Exams 30% Final Exam 50%

F- Available university services that support achievement in the course:

25. Required equipment:

TextPad and Java SDK 1.6 are installed in all KASIT labs

26. References:

Required book (s), assigned reading and audio-visuals:

Java How to Program, Deitel and Deitel, 9th edition. Publisher: Prentice Hall, New Jersey 2012.

Recommended books, materials, and media:

Understanding Object Oriented Programming with Java

Author: T. Budd, Publisher: Addison Wesley.

Online References: <http://www.deitel.com> <http://java.sun.com>

27. Additional information:

None

Name of Course Coordinator: -----Signature: ----- Date: -----

----- Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:

Head of Department

Assistant Dean for Quality Assurance

Course File