1	**Course title**	Object Oriented Programming 2
2	**Course number**	
3	**Credit hours (theory, practical)**	3
	Contact hours (theory, practical)	3
4	**Prerequisites/corequisites**	Object Oriented Programming 1
5	**Program title**	Computer Information Systems
6	**Program code**	2
7	**Awarding institution**	The University of Jordan, Aqaba
8	**School**	Information Technology and Systems
9	**Department**	Computer Information Systems
10	**Level of course**	Second Year
11	**Year of study and semester (s)**	2019/2020 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**	16 January 2020

16. Course Coordinator:

dimaalrawashdeh88@gmail.com
dimaalrawashdeh@yahoo.com
office number:
office hour: sun,,tue,thu 10-11
phone number:36085

17. Other instructors:

None

18. Course Description:

As stated in the approved study plan.

19. 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.

20. 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		C1,D1	Homework + Quiz,	Chapter 1,2
GRAPHICS Graphics Contexts And Graphics Objects, Drawing Strings, Lines, Rectangles, Ovals, Arcs, Polygons And Polylines ... Color Control, Font Contro	2, 3		A1,A2,B1, B2,C1,D1	Homework	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 Class	4		A3,B3,C2, D2		attendance, discussion, Chapters 14
GRAPHICAL USER INTERFACE COMPONENTS Simple GUI-Based Input/Output With Joptionpane Overview Of Swing Components Text Fields, Password Fields.	5		A3,B3,C2, D2	Homework + Quiz,	ttendance, discussion, handout , Chapter 14
GRAPHICAL USER INTERFACE COMPONENTS Simple GUI-Based	6		A4, D1, D 2	Home wor k	Cha p t e r 14

Input/Output With Jopt ion pane Overview O f s wing Components T ext Fields, Password Fields. Introduction To Event Handling Common GUI Event Types And Listener Interfaces How Event Handling Works						
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	7,8		A3, B3, C2, D2	Home wor k	Cha p t e r 13	
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	10,11		A5	qu i z , homework	Cha p t e r 11	
STRING, STRINGBUFFER AND STRINGTOKENIZER CLASSES Fundamentals Of Characters And Strings Class String Constructors Concatenating Strings String Methods Class String buffer Class String to Keizer	11, 12, 13		A1,B1,C1, D1,D2	Homework	Chapter 16	
MULTITHREADING	14, 15		A6,D1,D2, D4	homework	Chapter 16	

Thread States: Life Cycle Of A Thread.... Thread Priorities And Thread Scheduling Creating And Executing Threads						
FILES AND STREAMS (Self Learning) Class File Read From A File Write To A File	12		A6,D1,D2, D4	homework	Chapter 4	

21. Teaching Methods and Assignments:

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

22. 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

23. Course Policies:

A- Attendance policies: Students are expected to attend class; there is no system of permitted absences. The instructor in each class determines the effect of absences on a student's grade in that class." Students may not normally receive credit for a course if they do not attend 15% of the class meetings

B- absences from exams and handing in assignments on time: Makeup exam should not be given unless there is a valid excuse. Arrangements to take an exam at a time different than the one scheduled MUST be made prior to the scheduled exam time.

C- Health and safety procedures:

D- Honesty policy regarding cheating, plagiarism, misbehaviour:

E- Grading policy:

F- colleagues while talking or discussing an issue is prohibited and will result in an expel and a penalty. Late homework and assignments delivery may result in having ZERO grade for that particular

24. Required equipment: (Facilities, Tools, Labs, Training….)

TextPad and Java SDK 1.6 are installed in all KASIT labs

25. References:

Required book (s), assigned reading and audio-visuals:
Java How to Program, Deitel and Deitel, 9 th edition. Publisher: Prentice Hall, New Jersey 2012.

Recommended books, materials, and media:
Understanding Object Oriented Programming with Java Author: T. Budd, Publisher: Addison Wesley.

26. 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: ----------