

Course Title: **Computer Programming - I**
Course number: **CSC111**
Academic Year: **1436/1437 (2015-2016)**
Semester: **Spring**

1- The Textbook

- **Java: An Introduction to Problem Solving and programming, 7E, W. Savitch, Pearson International (Textbook)**

- *Java How to program*
Deitel and Deitel (Seventh edition) Pearson International (reference)

- *Introduction to Java Programming, Comprehensive Version, 10E*
Y. Daniel Liang, Prentice Hall (reference)

2- Schedule plan

Units	Week #	Topic	Course Materials	Labs, Lab exams	Assignments
3	1 17/1	Administrivia Introduction to computers and Java: computer basics, Java, programming basics	Chapter 1 Introduction		
2 1	2 24/1	Variables, Data Types, Identifiers, Assignment Simple Input / Output	Ch 2.1 Ch 2.1	LAB-1 (Hello world, variables, assignment)	Assignment -1 OUT
2 1	3 31/1	Constants, Type Casting, Arithmetic Operators, Operator precedence Case study: vending machine change	Ch 2.1 Ch 2.1	LAB-2 (variables, IO, expressions)	Assignment -1 DUE Assignment -2 OUT
2 1	4 7/2	Increment and decrement, keyboard and screen I/O, documentation and Style Basic if-else statement, boolean expressions	Ch 2.1 2.3 Ch 3.1	EXAM-1 (simple program with variables, IO, expressions)	Assignment -2 DUE Assignment -3 OUT
1	5 14/2		Ch 3.1	LAB-3	Assignment -3 DUE

1		Nested if-else statement, multibranch if statement		(if statement, boolean expressions)	Assignment -4 OUT
1		Case Study, exit Method (conditional operator not included)	Ch 3.1		
		Comparing strings, The type boolean	Ch 3.1, 3.2		
1		Switch statement (enumeration not included)	Ch 3.3		
1	6	The while statement	Ch 4.1	LAB-4 (simple loops)	Assignment -4 DUE
1	21/2	do-while statement, programming example	Ch 4.1		Assignment -5 OUT
	6	Mid Term Exam – I –			
1		For statement (for-each not included)	Ch 4.1		
1	7	Nested loop	Ch 4.1	LAB-5 (Nested loops)	Assignment -5 DUE
1	28/2	Programming with loops, loop bugs, tracing variables (break and continue, assertion not included)	Ch 4.2		Assignment -6 OUT
1		Classes: Instance variable, UML	Ch 5.1		
1	8	Programming Example	Ch 5.1	EXAM-2 (conditional statement, loops)	Assignment -6 DUE
1	6/3	Methods, void Method, Method that return a value	Ch 5.1		Assignment -7 OUT
1		The keyword this, Local variables, blocks	Ch 5.1		
1	9	Parameters of a primitive type	Ch 5.1	LAB-6 (Objects)	Assignment -7 DUE
1	20/3	Information hiding, public and private modifiers	Ch 5.2		Assignment -8 OUT
2		Accessor(getters) and mutator methods(setters), Encapsulation, UML class diagram	Ch 5.2		
1	10	Methods calling methods	Ch 5.2	LAB-7 (objects and methods)	Assignment -8 DUE
	27/3				Assignment -9 OUT
1		Variable of class type (references)	Ch 5.3		
1	11	Defining and equals method for a class, Parameters of class type	Ch 5.3	LAB-8 (Information hiding, encapsulation)	Assignment -9 DUE
1	3/4	Constructors	Ch 6.1		Assignment -10 OUT
	11	Mid Term Exam – II –			

1		Static variables and methods	Ch 6.2	LAB-9 (Constructors, static variables & methods, overloading)	Assignment -10 DUE Assignment -11 OUT
1	12 10/4	Overloading	Ch 6.4		
1		Array basics	Ch 7.1		
1		Array basics programming example	Ch 7.1	LAB-10 (array processing)	Assignment -11 DUE Assignment -12 OUT
1	13 17/4	Arrays in classes and methods	Ch 7.2		
1		Array of objects	Ch 7.3		
3	14 24/4	Operations on array of objects (add, search, delete)	(Instructor Notes)	LAB-11 (Array of objects)	Assignment -12 DUE Project OUT
3	15 1/5	Revision		EXAM-3 (Everything)	
Final Exam					

4- Assessment Methods & Policy:

Homework, Quizzes and Attendance	16%	12%	<i>Homework Assignments (1/HW)</i>
		4%	<i>Class Project</i>
Lab.	24%		<i>3 Evaluation Exams In the Lab (6+8+10)</i>
Written Midterm Exams	20%	10%	<i>Midterm exam 1</i>
		10%	<i>Midterm exam 2</i>
Written Final Exam	40%		<i>scheduled according to University calendar</i>

Homework assignments:

Homework will be assigned and graded. All homework assignments will be given with a strict deadline, and students are required to submit their assignments on or before the deadline. ***Cheating will not be tolerated*** **لن يتم التسامح مع الغش مطلقا**.

Quizzes:

In-class quizzes will be given throughout the semester to assess the desired course outcomes.

Continuous Evaluation Exams:

There will be 3 exams each one conducted during a lab session for 2 hours under supervision of the lab instructor. Each exam will consist of a single programming problem. The student will be presented with a detailed problem statement and asked to write, compile and run a full java program to solve the problem. The answer-program should be written using Eclipse (or any other IDE available for students in the lab). Unlike during regular lab sessions, the ***student should not expect any help from the lab instructor.***

Midterm:

2 Midterms will be given. It will be a closed book and closed note exam and will cover the studied part of the course.

Mid Term 1: It covers: from the beginning up to the conditional statements (usually scheduled in the 6th week of the term)

Mid Term 2: It covers all studied concepts but the array structure (usually scheduled in the 11th week of the term).

Final:

A comprehensive final examination will be given. It will be a closed book and closed note exam and will cover all course material.

Deadline Policy:

All homework assignments will be given a strict deadline, and students are required to submit their assignments on or before the deadline. They will be collected at the start of the class on the due date, and late submissions will not be accepted. In case of extenuating circumstances, students are advised to contact the professor as soon as possible. You are encouraged to

discuss the course and the assignments with each other; however, your exams and homeworks should be your own work.

Attendance Policy: Attendance will be taken. Attendance will be graded as cited above, and may be used as a deciding factor when final average is between grades.

You will be denied final exams if they exceed **25%** absence rate (including the lectures, tutorials, and labs). Excuses of absence are accepted no later than one week of the absence.

Computer usage:

All homework assignments or project documents should be submitted using MS-Word and/or appropriate computer software. **No hand written submission will be accepted** **لن يقبل أي واجب**

مكتوب بخط اليد.