



King Fahd University of Petroleum & Minerals
College of Computer Sciences and Engineering
Information and Computer Science Department

ICS 102: Introduction to Computing I (2-3-3)

Syllabus – Second Semester 2009-2010 (093)

Website: Blackboard (WebCT)

Class Time, Venue and Instructor Information:

Sec.	Time	Venue	Instructor	Office Hours *
01	SMUT 09:20-10:10 am	22-130	Dr. ADAM SALAHADIN Office: 22-102 Phone: 03-860- 1721 E-mail: adam@kfupm.edu.sa	SMUT 01:00 -02: pm
02	SMUT 10:30-11:20 am	22-130	Dr. EL-SAYED EL-ALFY (Coordinator) Office: 22-108 Phone: 03-860-1930, E-mail: alfy@kfupm.edu.sa	MT: 11:20 -11:59 am SU: 12:20 – 01:00 am
51	UT 02:10-05:10 pm	23-018	Mr. ADIL AL-SUHAIM Office: 23-081 Phone: 03-860-2279 E-mail: adilas@kfupm.edu.sa	SMUT 11:00am -02:00 pm
52	SM 02:10-05:10 pm			

* also by appointments

Course Catalog Description

Overview of computers and computing. Introduction to a typical programming language, such as Java. Basic data types and operators. Basic object-oriented concepts. Wrapper classes. Console input/output. Logical expressions and control structures. Memory models and methods. Arrays and strings. More object-oriented concepts.

Co-requisites: MATH 101 or MATH 132

Course Objectives

- Introduce students to the fundamentals of computing, problem solving and programming, and basic concepts of object-oriented languages

Course Learning Outcomes

Upon completion of the course, you should be able to:

1. Write programs using basic data types and strings [Program Outcome a]
2. Design and implement programming problems using selection [Program Outcome c]
3. Design and implement programming problems using loops [Program Outcome c]
4. Use and implement classes as data abstractions in an object-oriented approach [Program Outcome a]
5. Implement simple exception handling in programs [Program Outcome a]
6. Develop programs with input/output from text files [Program Outcome a]
7. Design and implement programming problems involving arrays [Program Outcome c]

Lab Learning Outcomes

Upon completion of the lab, you should be able to:

1. Use effectively software tools and program development platforms
2. Reinforce programming concepts through practical examples
3. Enhance programming skills through problem solving and code development of small-size software applications
4. Improve self-learning, teamwork and communication skills through project development practices
5. Engage in continuing professional development under minimal guidance

Required Material

- “**Absolute Java, 4th Edition**” by Walter Savitch, Addison Wesley, 2010.
- Lecture and Lab Handouts

Assessment Plan

Assessment Tool	Weight
Lab (4 Quizzes [10%] + Project [7%] + Lab Work [3%])	20%
Lecture quizzes	9 %
Homework assignments	10 %
Major Exam 1	18 %
Major Exam 2	18 %
Final	25 %

Course Policies

- **Labs:** Lectures and labs are integrated and they complement each other. To pass this course, the student must pass the lab-component of the course. The requirements for the lab project will be discussed in the lab.
- **Course Website & Participation:** Students are required to periodically check the course website and download course material as needed. Several resources will be posted through the website as well. Keys to quizzes and exams are generally discussed during class as time permits but solutions will not be posted. WebCT will be used for communication and interaction, posting and submitting assignments, posting grades, posting sample exams, etc. It is expected that you get benefit of the discussion board by raising questions or answering questions put by others.
- **Attendance:** Regular attendance is a university requirement; hence attendance will be checked at the beginning of each lecture and lab. Late arrivals will disrupt the class session. Hence, two late attendances (more than 10 minutes) will be considered as one absence. Missing more than 9 lectures or three or more unexcused labs will result in a DN grade without prior warning. To avoid being considered as absent, an official excuse must be shown no later than one week of returning to classes. Every unexcused absence leads to a loss of 0.5% of total grade.
- **No makeup of homework, quizzes or exams will be given.**
- **Re-grading policy:** If you have a complaint about any of your grades, discuss it with the instructor no later than a week of distributing the grades (except for the final). Only legitimate concerns on grading should be discussed.
- **Office Hours:** Students are encouraged to use the office hours to clarify any part of the material that is not clear; however the instructor will only provide hints if it is an assigned task but not solve it.
- **Academic honesty:** Students are expected to abide by all the university regulations on academic honesty. Cheating will be reported to the Department Chairman and will be severely penalized. Although collaboration and sharing knowledge is highly encouraged, copying others' work without proper citation, either in part or full, is considered plagiarism. Whenever in doubt, review the university guidelines or consult the instructor. Cheating in whatever form will result in F grade.
- **Courtesy:** Students are expected to be courteous toward the instructor and their classmates throughout the duration of this course. Talking while someone else is speaking will not be tolerated. Furthermore, all cell phones must be turned off during class and exams. In addition, students are expected to be in class on time. More importantly, you are not allowed to leave the class unless it is an urgent matter. To contact your instructor, please use email through WebCT whenever possible and avoid using phone calls or written notes. When necessary to send an email through the university email system,

please indicate ICS102-093 in the "Subject" field of your email, e.g. ICS102-093: Question about homework 1.

Tentative Lecture and Lab Schedule:

Lecture	Week	Topic	Book	Lab#	Lab Topic
1	1	Welcome and Course Overview	1.1	1	Introduction
2		Introduction	1.1		
3		Expressions and Assignment	1.2	2	Getting started
4		Math Class	1.2		
5	2	Strings	1.3	3	Expressions
6		Problem Solving 1	Ch 1		
7		Screen Output and Console Input; Quiz #1 (3%)	2.1, 2.2	4	Strings
8		File I/O			
9	3	Selection Structures	3.1	5	File I/O
10		Boolean Expressions	3.2		
11		Problem Solving 2	Ch3 (I)	6	Selection
12		While and do Loops (Major Exam #1: 5pm-6:30pm)	3.3		
13	4	For loops	3.3	7	Loops
14		Problem Solving 3	Ch3 (II)		
15		1-D Arrays	6.1	8	Problem Solving
16		1-D Arrays	6.2		
17	5	Problem Solving 4	6.1, 6.2	9	1-D Arrays
18		2-D arrays; (3%) Quiz #2	6.3,6.4		
19		Problem Solving 5	6.3,6.4	10	2-D Arrays
20		Static Methods			
21	6	Problem Solving 6 (Major Exam #2: 5pm-6:30pm)		11	Static Methods
22		Introduction to OO	4.1,4.2		
23		Classes	4.3,4.4	12	Classes I
24		Classes	5.1,5.2		
25	7	Classes	5.3,5.4	13	Classes II
26		Problem Solving 7	4,5		
27		Array of Objects ; (3%) Quiz #3		14	Array of Objects
28		Problem Solving			
29	8	Problem Solving 8		15	Project Discussion
30		Problem Solving 9			

☺☺☺ **Best of luck!!** ☺☺☺