CS 201: Fundamental Structures of Computer Science I
Summer 2014

Instructor: **Selim Aksoy**
EA 422 (Engineering Building), x3405
saksoy@cs.bilkent.edu.tr
Office hours: Thu 13:40-15:30 or by appointment

TAs: Gökhan Akçay (EA 427, akcay@cs.bilkent.edu.tr)
Acar Erdinç (EA 427, caner.mercan@cs.bilkent.edu.tr)
Amir Rahimzadeh Ilkhechi (EA 407, amir.rahimzadeh@bilkent.edu.tr)
Ozan Karsavuran (EA 505, ozan.karsavuran@bilkent.edu.tr)
Caner Mercan (EA 427, acar.erdinc@cs.bilkent.edu.tr)

Lectures: Tue 10:40-12:30, Thu 08:40-10:30, Fri 15:40-17:30, B-Z08 (*Section 1*)
Tue 15:40-17:30, Thu 10:40-12:30, Fri 13:40-15:30, B-Z08 (*Section 2*)

Course Website: www.cs.bilkent.edu.tr/~saksoy/courses/cs201

Text Books: *(Required)* F.M. Carrano, *Data Abstraction and Problem Solving with C++,* 5th ed, Addison-Wesley, 2006.
(Recommended) H.M. Deitel and P.J. Deitel, *C++ How to Program, 8*[th] ed, Prentice Hall, 2008.

Course Emphasis and Goals

This course introduces the abstract data types of lists, stacks and queues, and shows how one can implement them in C++ using fundamental data structures. It also introduces recursion and algorithm analysis.

Grading Policy

Quizzes: 20% (closed-book, closed-notes)
Homework: 10%
Midterm: 35% (closed-book, closed-notes)
Final: 35% (closed-book, closed-notes)

In order to be able to take the final exam, one must obtain at least 22 points (40% of total 55) from the weighted sum of the quiz and midterm grades; otherwise, one will receive the FZ grade.

The instructor also reserves the right to set other thresholds for passing grades.

Quizzes

There will be four quizzes. Quizzes will be given with advance notice. The quizzes will be closed-book and closed-notes. There will be <u>NO make-up quiz</u>.

Homework Assignments and Late Policy

Homework assignments will be posted on the course web site. Assignments are to be turned in by 23:59 on the due date. For the late assignments, each student will be given a total of two grace days (whole or partial) for the whole semester. Once these late days have been exhausted, no late assignments will be accepted. As an example, if Student A submits her/his 1st assignment 23 hours late, s/he will have used one late day and have only one day left. If Student A then submits her/his 2nd assignment 5 hours late, s/he will have used her/his remaining late day. If Student A submits her/his 3rd assignment 1 minute late, this assignment will not be accepted.

Academic Integrity

Copying or communicating during an exam or quiz is considered as cheating.
Students caught cheating in an exam or quiz will be subject to disciplinary action, as explained in the
"Bilkent University Policy on Academic Honesty"
(http://www.bilkent.edu.tr/bilkent-tr/admin-unit/hukukm/lisans_yonetmelik.html#madde4.9)
and the "Rules and Regulations of the Higher Education Council (YOK)"
(http://www.resmigazete.gov.tr/eskiler/2012/08/20120818-12.htm).

Cheating and plagiarism in homework assignments are also prohibited. Students caught cheating in assignments will be subject to disciplinary action.

Schedule

Week	Mon	Tue	Wed	Thu	Fri
1		Introduction Ch.3 (Deitel)		Case study Ch.3-5 (Deitel)	Functions Ch.6 (Deitel)
2	*HW 0 out*	Arrays Ch.7 (Deitel)		*Recitation 1* **Quiz 1**	Pointers Ch.8 (Deitel)
3	*HW 1 out*	Pointers Ch.8 (Deitel)		*Recitation 2* **Quiz 2**	Pointers Ch.8 (Deitel)
4		Pointers Ch.8 (Deitel)		*Recitation 3* **Quiz 3**	Case study Ch.9-10 (Deitel)
5	*HW 1 in* *HW 2 out*	Algorithm analysis		Lists Ch.3 (Carrano)	Lists Ch. 4 (Carrano) **Midterm**
6	*HW 2 in* *HW 3 out*	Lists Ch. 4 (Carrano)		*Recitation 4* **Quiz 4**	Stacks Ch.6 (Carrano)
7		Queues Ch.7 (Carrano)		Review	Review *HW 3 in*