CS 201: Fundamental Structures of Computer Science I
Spring 2009

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Lectures: Tue 13:40-15:30, Thu 15:40-17:30, EB103

Course Websites: http://www.cs.bilkent.edu.tr/~gunduz/teaching/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,* 5th ed, Prentice Hall, 2005.

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 sorting algorithms.

Grading Policy

Quizzes: 15% (closed-book, closed-notes, no A4 sheet is allowed)
Homework: 15%
Midterms: 40% (closed-book, closed-notes, one A4 sheet is allowed)
Final: 30% (closed-book, closed-notes, one A4 sheet is allowed)

Quizzes

There will be five in-class quizzes. Quizzes will be given in class with advance notice; the topics covered by each quiz will also be announced in advance. The quizzes will be closed-book and closed-notes, and you may not bring an A4 sheet with you. There will be NO make-up quiz.

Homework Assignments and Late Policy

Homework assignments will be posted on the course web site. Assignments are expected to be turned in by 18:00 on the due date. For the late assignments, each student will be given a total of three 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 29 hours late, s/he will have used two late days and have only one day left. If Students 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.

You should submit your homework by emailing it to the course TA before the deadline. Your submission must include your source code; no hardcopy (printer output) will be required if it is not announced otherwise. Always make sure that the code you submit does compile and run correctly. Late submissions should also be done through email.

Academic Integrity

Copying or communicating during an exam is considered as cheating. Students caught cheating in an exam will be subject to disciplinary action, as explained in the "Student Disciplinary Rules and Regulation" (www.provost.bilkent.edu.tr/procedures/AcademicHonesty.htm).

Academic integrity is a problem on programming assignments. Please refer to the "Honor Code Statement" to understand which actions violate the academic integrity. Each student is expected to read and understand this "Honor Code Statement" and return a signed copy of this form to his/her instructor. For those who do not return the signed copy, the homework assignments will not be graded. Students caught cheating on assignments will also be subject to disciplinary action.

Schedule

Week	Subject	Reading	Assignments/Exams
1	Introduction	Ch.3, Ch.4, Ch.5 (Deitel)	
2	Functions	Ch.6 (Deitel)	Quiz 1 (Feb 19)
3	Arrays	Ch.7 (Deitel)	
4	Pointers	Ch.8 (Deitel)	Quiz 2 (Mar 5)
5	Pointers	Ch.8 (Deitel)	
6	Pointers	Ch.8 (Deitel)	Quiz 3 (Mar 19)
7	Case study	Ch.9, Ch.10 (Deitel)	HW 1 out (Mar 26)
8	Recursion	Ch.2 (Carrano)	Midterm 1 (Apr 2)
9	Algorithm analysis, lists	Handout will be available	
10	Lists	Ch.3, Ch. 4 (Carrano)	HW 1 in (Apr 14) HW 2 out (Apr 16) Quiz 4 (Apr 16)
11	Lists	Ch.4 (Carrano)	
12	Stacks	Ch.6, Ch.5.2 (Carrano)	Midterm 2 (Apr 30)
13	Queues	Ch.7 (Carrano)	HW 2 in (May 5) HW 3 out (May 7)
14	Sorting	Ch.9 (Carrano)	
			Quiz 5 (May 18) HW 3 in (May 26)