Çankaya University

Computer Engineering Department

CENG 162 - (Introduction to Computer Programming, 324)   2017-2018 Spring

Instructor: Asst. Prof. Sibel Tarıyan Özyer

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Office hours: Monday 13.20 - 15.10

Lecture hours:

Lecture: Section 1-2-3: Monday 9:20-11:10 KA06 and Thursday 11.20 HA05

          Section 4-5-6: Tuesday 09:20-11:10 KA06 and Friday 13.20 HA02

Laboratory:

          Lab 1-2 Monday 11:20-13:10 H312, Lab 4-5 Tuesday 11:20-13:10 H313, Lab 3-6 Tuesday 15:20-17:10 H313

Prerequisite: Ceng161

Description:

Programming in C language, Structure problem solving, Algorithm design concept, Pointers and pointer arithmetic, Dynamic memory allocation, Sorting algorithms, Basic data structures.

Textbooks: C How to Program, 7/E. Deitel & Deitel. 2012, Prentice Hall.

Reference book(s): Problem Solving and Program Design in C, J.R. Hanly and E.B. Koffman, 6th Edition.

What you will learn:

- pointer and pointer arithmetic
- sorting algorithms
- pointer and arrays
- strings
- structures (struct)
- file I/O
- dynamic memory allocation

Lectures:

Course Outline	
List the topics covered within each week.	
Week	**Topic(s)**	
1	Overview of the C programming basics	
2	Pointers and pointer arithmetic, Parameter passing (call by value, call by reference)	Chapter 7.1, 7.2, 7.3, 7.4
3	Const Qualifier with pointers ,Sorting algorithms (Bubble sort)	Chapter 7.5, 7.6
4	Sizeof operator, Pointer arithmetics, Pointers and arrays	Chapter 7.7 , 7.8, 7.9
5	C characters and strings	Chapter 8.1, 8.2, 8.3
6	Formatted input/output	Chapter 9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 9.8
7	Review and examples	
8	Structures (Struct)	Chapter 10.1, 10.2, 10.3
9	Array of struct, Struct within struct, Pointer to struct	Chapter 10.4, 10.5, 10.6
10	File IO (Text files)	Chapter 11.1, 11.2, 11.3
11	File IO (Text files)	Chapter 11.4, 11.5, 11.6
12	C data structures, Dynamic memory allocation: malloc,	Chapter 12.1, 12.2, 12.3,12.4
13	Dynamic memory allocation: calloc,realloc	Chapter 14.9
14	Review and examples	

Evaluation: Lab Work (% 30), Midterm Exam (%30), Final Exam (%40).

Web site: http://ceng162.cankaya.edu.tr and http://webonline.cankaya.edu.tr

Academic honesty:
- ◦ All course work you submit (assignments, exams, programs, papers, etc.) must be done on your own. Note that academic dishonesty includes not only cheating, fabrication, and plagiarism, but also includes helping other students commit acts of academic dishonesty by allowing them to obtain copies of your work. You are allowed to use the web for reference purposes, but you may not copy code or other written materials from any website or any other source as your own work.
- ◦ Cases of academic dishonesty will be dealt harshly. Each such case will be referred to the university administration. If the student is found to be responsible of academic dishonesty, he/she can get suspension from the university for a semester and even expelled from the university in repeating cases.