

Overview

This sheet summarizes information for the course CSC 190 H1S (“Computer Algorithms and Data Structures”) during the Winter term of 2012 at the University of Toronto. Please consult the course website for full versions of all of the information, rules and policies summarized here.

Website

The course website is available at <http://www.cs.toronto.edu/~patitsas/cs190/>. Grades will be posted on MarkUs at <https://stanley.cdf.toronto.edu/markus/csc190-2013-01>, and the course discussion forum is on Piazza at <https://piazza.com/utoronto.ca/winter2013/csc190/home>. Piazza will be used to post announcements, tips, clarifications and other important information. The announcements are required reading. To login to Piazza, please use your UTOR email address.

Instructor

Elizabeth Patitsas

**Email:** [cs190toronto@gmail.com](mailto:cs190toronto@gmail.com)

**Office hours:** Monday 12-1 in BA 4237, Wednesday 12-1 in BA 3289, and Friday 1-2 in BA 4237, and by appointment. Marek Janicki, one of the TAs, holds office hours on Thursdays 6-7pm in BA 4237.

**Email hours:** Monday 2-3pm, Tuesday 2-4pm and Friday 11-4pm (these are the times when I respond to 190-related email; I am also available on gchat at these times.)

Lecture Times

**Section 1:** Monday 11-12, Tuesday 11-12, Thursday 14-15 in SF 1101 - Labs: Monday 16-19 in SF 1013

**Section 2:** Monday 17-18, Tuesday 12-13, Thursday 13-14 in SF 1101 - Labs: Tuesday 16-19 in SF 1013

Textbook

K. N. King, *C Programming, A Modern Approach*, 2nd edition, 2008. ISBN: 978-0-393-97950-3. (See the course website for additional references.)

There will be a reading posted on the website for each lecture, at <http://www.cs.toronto.edu/~patitsas/cs190/schedule.html>. It is your responsibility to do the reading **before** coming to lecture. Lectures will assume you are familiar with the reading.

Grading scheme

- 25% for labs and assignments. There will be five assignments (5% each) and lab time will be used to mark your progress on the assignments.
- 25% for in-class quizzes, done at the start of each lecture.
  - Only the best 25 quizzes will be counted towards your grade. Each quiz has four questions:
    1. one on material from that day’s readings,
    2. one on the material from the last class,
    3. one on material from the previous week,
    4. and one on material from three weeks ago. (*Quizzes at the start of term will refer to material from CS 180.*)
- 10% for the midterm exam
- 40% for the final exam

Email policy

Please use email for personal matters only; post all other questions/comments on the course discussion board on Piazza. Please use a descriptive subject line for all of your electronic correspondence – for email, always include the course number.

**Beware of posting anything on a public forum that might give away any part of your solution – this could be misinterpreted as an attempt to commit plagiarism!**

To help prevent your messages being incorrectly tagged as spam, please email only from your UTOR-mail account (see [www.utorid.utoronto.ca](http://www.utorid.utoronto.ca)). I will generally *only* answer emails during my posted email hours. For your own sake, please do not rely on getting same-day answers (which we can not guarantee, unfortunately).

Classroom Behaviour

We ask that you respect each other’s right to learn and fully engage in this course. The Engineering Science program is intensive and stressful, so please remember:

- Silence your cell phones!
- Come to class on time. If you cannot avoid being late, enter quietly and sit near the back.
- Be respectful of the pacing of the class.
- Wait until the end of class before packing your things.
- Do not eat or drink in the labs. You may in lectures only if it is clean, quiet, and odourless.
- Keep the lecture room aisles clear and allow others easy access to seating.
- Do not engage in distracting activities during class – e.g. loud conversation or playing video games.
- We know that you are all very busy, but please do NOT neglect your personal hygiene!

Please refer to the University of Toronto Code of Student Conduct (<http://www.governingcouncil.utoronto.ca/policies/studentc.htm>) for more information.

Academic  
Offenses

All of the work you submit must be done by you and (if applicable) your partner only, and your work must not be submitted by someone else. Plagiarism is academic fraud and is taken very seriously. The department uses software that compares programs for evidence of similar code. Please read the Rules and Regulations from the U of T Calendar:

[http://www.apsc.utoronto.ca/Calendars/2012-2013/Academic\\_Regulations.html](http://www.apsc.utoronto.ca/Calendars/2012-2013/Academic_Regulations.html)

Please don't cheat. I want you to succeed and am here to help if you are having difficulty. Here are a couple of general guidelines to help you avoid plagiarism:

- Never look at another student's assignment solution, whether it is on paper or on the computer screen. Never show another student your assignment solution. This applies to all drafts of a solution and to incomplete solutions.
- The easiest way to avoid plagiarism is to only discuss the piece of work with your partner, the CSC190H TAs, and Elizabeth.

Code Style

All code submitted for assignments, quizzes, and other assessments, is expected to comply with the CS 190 C Style Specifications. See <http://www.cs.toronto.edu/~patitsas/cs190/style.html> for the details.

Schedule

A detailed schedule of lecture topics and readings is available at <http://www.cs.toronto.edu/~patitsas/cs190/schedule.html>. As an overview of the course (lecture topics are subject to change):

Jan 8/10	Introduction to C and the command-line.		
Jan 14/15/17	Pointers, arrays, and functions.	Lab 1 (A1P1)	
Jan 21/22/24	Structs, linked lists.	Lab 2 (A1P2)	Assignment 1 due.
Jan 28/29/31	File I/O, rand, assert, gdb.	Lab 3 (A2P1)	
Feb 4/5/7	Stacks and queues, recursion.	Lab 4 (A2P1)	Assignment 2 due.
Feb 11/12/14	Binary search, function pointers.		
Feb 25/26/28	Binary trees.		Midterm
Mar 4/5/7	Binary search trees, command-line arguments.	Lab 5 (A3P1)	
Mar 11/12/14	Sorting algorithms.	Lab 6 (A3P2)	Assignment 3 due.
Mar 18/19/21	Hash tables, strings.	Lab 7 (A4P1)	
Mar 25/26/28	Graphs.	Lab 8 (A4P2)	Assignment 4 due.
Apr 1/2/4	Make, gprof and valgrind.	Lab 9 (A5P1)	
Apr 6/9/11	Security issues.	Lab 10 (A5P2)	Assignment 5 due.
Apr 15/16	Students' choice of topic, review		

Labs

There are ten labs in the term, which act as milestones to the five assignments. Each assignment will have two such milestones, where you will demonstrate a subset of the corresponding assignment to your TA. (For example, Labs 3 and 4 will be used to demonstrate the first and second parts of Assignment 2.) Your TA will give you face-to-face feedback on code quality and mark your progress on the assignment.

Consider the code you demonstrate in lab as a "first draft" of your code for the assignments. You are encouraged to revise your code from the labs before handing it in for the assignment.

You are to work on labs and assignments **in pairs**. You may not change partners within the two-lab timeframe corresponding to an assignment, and your partner must be enrolled in the same lab section as yourself.

Assignments

Each assignment has three parts: two labs, and a short essay/report pertaining to the two labs. You will have two weeks to work on each assignment.

The assignment will be due on the Thursday of the second week, at noon. The next assignment will be released promptly after the current assignment is due.

The code portions of your assignments will be automarked. As such, **it is vital that your code compiles and works on the ECF machines, and complies with the CS 190 Code Style Specifications** – otherwise you are likely to be given a zero on the code portions of the assignment!

**No late assignments will be accepted.**