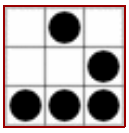


Software design & implementation*

CS 50: Spring 2014

Logistics

Instructors

Charles C. Palmer (adjunct professor)
Email: ccpalmer@dartmouth.edu
Office: Sudikoff 217
Office hours: Primarily via Piazza, but can be via Google+ hangout, iMessage, Facetime, email, or otherwise by arrangement.

Ira Ray Jenkins (Teaching Assistant - TA)
Email: jenkins@cs.dartmouth.edu
Office: Sudikoff 110
Office hours: Monday & Wednesday, 2:30-3:30PM, and also via Piazza or during lab periods, otherwise by arrangement.

Robin Wang and Randy Li will also be working with us this term, helping with grading, lab assistance, and Piazza.

Lectures

12: MWF 12:30-1:35 Location: Life Sciences 201
x-hour: Tu 1:00-1:50 Location: Varies, either regular classroom or the Sudikoff 001 Lab. See the summary schedule for more information, of the full detailed schedule in Canvas.

Lab access

The professor will arrange for all students to have access to the Sudikoff 001 lab.

You will also require a computer account on the CS Linux machines. Please complete Lab Assignment 0 to let us know what your account is, or what you would like it to be, along with some other stuff. Please do this *on or (preferably)* ***before*** *the first day of class!*

Please note that the exterior doors of Sudikoff are automatically locked after 6:00pm weekdays, and also every weekend and holiday. In addition, the laboratory doors are locked at all times. You will need your access card to pass through locked doors. Unless you can see someone inside the lab, there is no one you can contact to get after hours access to the lab.

Lecture notes

Each lecture topic will be supported by lecture notes. These should be available by class time each day of class and will complement what is presented in class. Given my writing disability, the notes are also there to help you interpret my poor handwriting! We try to include in the class notes everything we will discuss in class, however, there will likely be additional material that is included in class. In short: you should not miss class.

Inclement weather

On rare occasions, Dartmouth may cancel classes or even close the campus. If this occurs, general notice will be given in three ways:

- Local broadcast media;
- Campus-wide BlitzMail messages; and
- A recorded message at a College toll-free Inclement Weather Phone Line: 1-888-566-SNOW (1-888-566-7669).

Piazza and Canvas

This term we will be using Piazza for class discussion and Canvas for grades.

The Piazza system is highly focused on getting you help fast and efficiently from classmates and the instruction team. Rather than emailing questions to the teaching staff, I encourage you to post your questions on Piazza. If you have any problems or feedback for the Piazza developers, email them here.

Links to all class information and all announcements will be found on our class page at in the Piazza course management system. The Canvas system will also have links to these pages, along with a handy calendar and schedule where you can find the weekly lecture notes and reading assignments.

NOTE: the first time you access Piazza MUST BE VIA CANVAS to ensure that the two are properly connected. After that you can access Piazza directly via a Browser or the IOS and Android apps. See below.

Getting setup in Piazza

To get setup in Piazza, you need to connect to Canvas first! Once you get there, select this class ("Software Design&Implement'n-01 (SP14)"), and then click on Piazza on the left side. **Please do not register directly at Piazza's website as that will confuse Canvas ;-)**. If you have registered your full Dartmouth email address with Piazza before, you will be ready to go. If not, Piazza will register you and ask for a password. *THIS PASSWORD SHOULD NOT BE THE SAME AS YOUR NetID PASSWORD ! Dartmouth does NOT own the Piazza system so you shouldn't risk your NetID password there.*

All lab assignments will be announced in the Assignment section of the CS50 pages in the Dartmouth Canvas system. Students will submit some lab assignments via the CS50 assignments pages, and all students will receive all their lab assignment feedback and grades via the Canvas system.

Access to this information will be limited to those enrolled in the course.

Syllabus

Please see the schedule for the complete list of topics that we will cover. You may find the full detailed schedule in Canvas. This class is heavily based on the course as designed by Prof. Devin Balkcom and Prof. Andrew Campbell when they offered the course.

x-Hours

We will use most of the x-hour periods for additional lectures, discussions, lab and help time.

Reading assignments

You are *encouraged* to read all the assigned readings listed in the detailed schedule (find it in Canvas) before class, but you are *expected* to have read these readings before the next class. You are also responsible for announcements made in Piazza.

Prerequisites

Successful completion of Computer Science **10**.

Course Announcements

The instructor will make announcements via Piazza. You may choose among several options for receiving announceents and other updates to our Piazza site. See the Piazza page for more information.

Help

There will be instructor and TA office hours for the course (TBD). However, time with the instructor or TA can be arranged in several ways. First, the majority of questions and problems can be resolved via posts to Piazza, including questions about lectures, homework, reading assignments, group discussions, and more will be best handled in Piazza.

Other options for help include hangout feature of Google+. Group or private discussions may be held amongst yourselves or with the instruction team in this way, including small video images. The hangout option does require you to be a member of Google+ and it helps if you have a webcam or Mac iSight.

Project

Students will work on projects in groups of two or three assigned by the instructor. Details will be announced later in the term via Piazza. After the project is submitted, each member of a group will submit a confidential assessment of themselves and the others in their group.

Grading

Lab assignments (6)	60%
Final project team grade: Final product quality: design, code style, demo, and documentation	30%
Individual contribution to the team project	5%
Class participation (in class and in Piazza)	5%

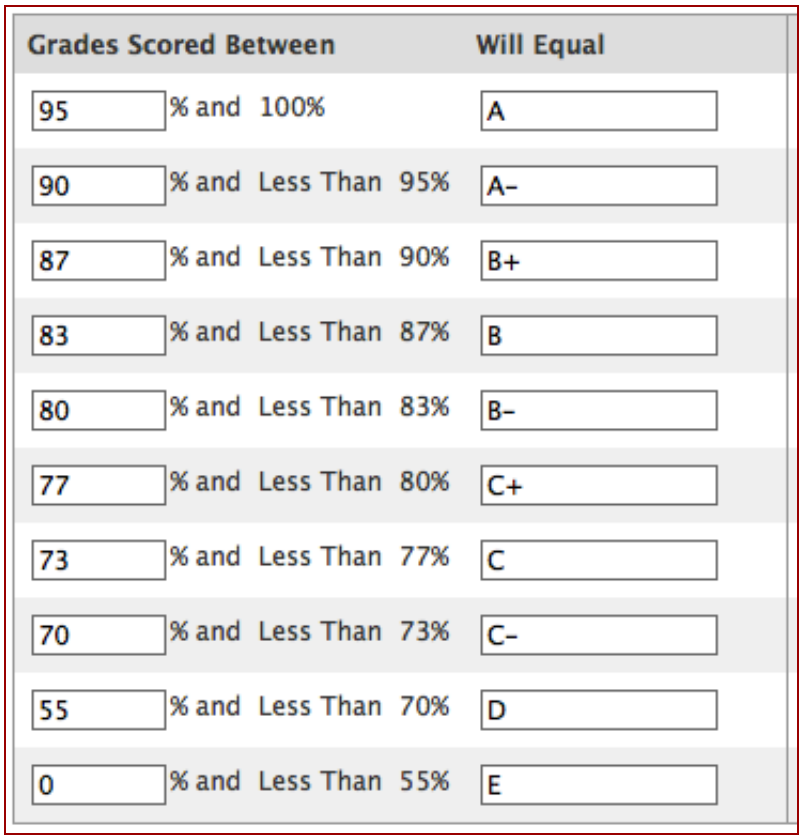
VERY IMPORTANT: Any C programming assignment (Labs 3-6 and the Project) that encounters a *segmentation fault* when we run it will NOT BE GRADED. It will be returned to you ASAP and you will need to resubmit it. You MUST really test your assignments before submitting them!

Class participation will be assessed based upon (a) actual participation discussions during lectures and (b) upon participation in Q & A and discussions in Piazza.

Lab assignment regrading requests must be submitted via email to the instruction team within one week of the original grade posting.

Your final grade will be based on the percentage of all available points that you earn through homework assignments, exams, and class participation, USING THE ABOVE WEIGHTS. To give you an idea of how final percentages might translate into letter grades, here is the grading schema I used last time.

Note: this is not necessarily the schema I will use this term it is an example of past grading schemas.



Grades Scored Between			Will Equal
95	% and	100%	A
90	% and	Less Than 95%	A-
87	% and	Less Than 90%	B+
83	% and	Less Than 87%	B
80	% and	Less Than 83%	B-
77	% and	Less Than 80%	C+
73	% and	Less Than 77%	C
70	% and	Less Than 73%	C-
55	% and	Less Than 70%	D
0	% and	Less Than 55%	E

Late assignments

This is a challenging course, so self-discipline and planning will be key to your success. In short, *Start Early*!

Late assignments will be penalized on a 10% for each 24 period (or fraction thereof) late. So if it's due at 11:50PM on 25-April and you submit it at 1:00AM on 26-April, 10% will be deducted from the final score.

To address unavoidable circumstances, all students are allowed two free 48 hour extensions on *lab assignments* with no penalty. Be careful how you use them since the assignments get progressively more difficult as the term proceeds, and you never know when you might fall ill or have an interview. Be sure you identify to the instructor and TA if you need to use one of these extensions. Note that these extensions are *not* applicable to the term Project assignment.

Honor code

Dartmouth's Honor Code and policies apply to your conduct in this course.

First, you may discuss and help each other (e.g., help in debugging, sharing knowledge, giving moral support, getting coffee, etc.) - I promote that as the type of team spirit and joint problem solving skills that is the essence of the course and necessary to do a great project. However, you cannot work jointly on coding up (i.e., writing) your programming assignments. You can talk, discuss solutions, even show snippets of code on the white board (not the computer) to solve a problem but you cannot jointly work on the code development and writing. Submitted code for the labs has to be yours and

yours alone.

The project phase is different. You can work jointly on writing code. But you cannot take code from anywhere (e.g., the web or any other source). It has to be the joint product of the team. One caveat: no sharing of code between teams. As above, teams can discuss code, show each other snippets on the white board, but not share source code. The project phase of the course is a friendly competition so there isn't a lot of incentive to share code.

In either ase, should not read and directly incorporate solutions for assignments found on the Web (including websites for previous terms, inside or outside of Dartmouth).

The following is repetitive since you all know it but it is necessary to be explicit here (This is Prof. Campbell's version, "culled and extended from CS8 Policy on joint work"):

> *You would be amazed at how easy it is to tell when people work together on problem sets, particularly coding exercises. Think about the simple shell commands we run against your source code from labs and projects to compare your lab assignments and projects against every other assignment and project ever submitted since this revision of course started in 2008 - it takes less that a millisecond to run these checks - no effort on our behalf. Similarly, we know how to use google too. You should not under any circumstance look at or use code from students that have previously taken CS23. The message is simple - please don't make life unpleasant for all of us by breaking these rules. The penalties for cheating at Dartmouth are severe, starting with suspension and including expulsion. If you are unsure about anything, please ask.*

We can assure you that violations of the Honor Code will be treated **seriously**.

Please let me know if you have any questions—better to be safe than sorry!

Credit your sources

Any ideas you get from other teams or any other source should be carefully cited both in the code and in the documentation.

- In your assignments, list all your collaborators (e.g., "I discussed this homework with Alice, Bob, ...") and credit any sources (including code) used.
- You must also credit specific sources that are provided by the instructor. For example, you must credit code that we give you if it helps you with your work (either by direct use of the code, or by simply enhancing your understanding by reading the code).
- References for any non-trivial algorithms you employ should be included

in the code and document to ensure others will know where to learn more about it.

Special accomodations

Please let me know before the end of the second week of the term if you have any disabilities and would like me to make appropriate accommodations. All discussions will remain confidential, although the Student Accessibility Services office may be consulted to discuss appropriate implementation of any accommodation requested.

Religious observations

I realize that some students may wish to take part in religious observances that fall during this academic term. Should you have a religious observance that conflicts with your participation in the course, please come speak with me before the end of the second week of the term to discuss appropriate accommodations.

*** - This course is based upon the course designed by Prof. Devin Balkcom and Prof. Andrew Campbell. This instructor is deeply indebted to these two outstanding educators.**


Back to CS50 Home Page
Adjunct Professor Charles C. Palmer
ccpalmer <at> dartmouth.edu

Document last modified: 27 March, 2014