

CS108: Course Information

Dr. Patrick Young

Winter 2016

Class Objectives

The course objectives are as follows:

- To substantially strengthen students' programming ability by requiring them to program a number of large, interesting projects.
- To teach students to find information on their own and solve problems on their own using available documentation; to give them the confidence in their own abilities they will need when programming in industry or as grad students.
- To solidify students understanding of object-oriented principles.
- To provide exposure to a broad range of programming areas including multi-threaded programs, communication between processes, and interacting with databases.
- To provide team programming experience.

Course Staff & Office Hours

Lecturer: Dr. Patrick Young
Gates 194
e-mail: patrick.young@
Please do **not** leave me voice mail—use e-mail instead.

General Help:

The fastest way to get help from any member of the teaching staff is to post to our Piazza board. The TAs and I will all be monitoring the board regularly. The main restrictions on Piazza are (1) to post publically whenever possible, but to post privately if you believe that your question gives too much information to other students on how to carry out the homework assignment (we'll let you know if we think you're posting too much information) and (2) do not expect us to hunt for bugs in your code outside of office hours (for example, don't post whole files up, tell us the program does not working, and then expect us to find your mistake for you).

Teaching Assistants: (all e-mail addresses are @stanford.edu)

Vivek Choksi, vhchoksi@
Kelvin Do, kelvindo@
Ifueko Igbinedion, ifueko@
Meredith Marks, mgmarks@
Karen Truong, truongk@
Zak Whittington, zakwhitt@

Office Hours may vary from week to week, changing depending on assignment due dates. Please check the website for the latest information.

Grading

Homework Assignments	66.6%
Class Project	33.3%

Your grade will be based two-thirds on individual assignments done during weeks 1-7 and a third on a group project at the end of the quarter. There is no midterm and no final for this class.

Note: In order to earn an A+, students will need strong performance on both their individual assignments and on the group project.

Course Assignments

There will be five homework assignments.

Late Policy

For assignments 1-4, assignments turned in late will be penalized 10% for each 24-hour period which has passed since the original due date and time. No assignment may be turned in more than a week after its original due date.

I realize that you do have other classes. You have a late allowance of three late days which can be used to excuse late assignments. This allowance may be used for a single assignment or it may be divided for use on multiple assignments. For example, if you turn in one assignment three days late, you've just used up your entire late allowance. However, if instead you turn in the assignment two days late you still have one additional late day which you can use for another assignment.

The fifth assignment must be turned in on time. You may not use any late days on it, and it will not be accepted late. This is to ensure that all students are ready to begin work on the team project at the end of the quarter, instead of having some members of the team working on the final project, while others are trying to finish up their late fifth assignments.

Collaboration Rules

You should not receive assistance on your assignments from anyone other than a member of the CS108 teaching staff. While I certainly expect students to discuss the class amongst themselves, please be very careful about providing assistance with the assignments. *For the purposes of this class, if someone looks at your code, or if you look at another student's code, you have received too much assistance.*

If you have concerns that you received too much help from another person or any other source, explicitly document the help received with your assignment. Any help that is explicitly documented will not be considered an Honor Code issue – although it may result in a grade reduction.

Please note that CS108 submissions may be run through automated plagiarism detection tools.

Final Project

In addition to the homework assignments, you will also have a large group project at the end of the quarter. While we will provide more information on the project much later in the

quarter, you will need to form 3-5 person teams. Make sure you get to know your fellow classmates now, so you'll be able to form a team with students you are comfortable with.

Software

We will be using the Eclipse IDE. If you don't already have it, get the Eclipse IDE for Java Developers (the regular Java version, not the Java EE Version):

<http://www.eclipse.org/downloads/>

Also if you don't already have it, download and install the latest copy of the Java JDK from Oracle. We're going to use Java SE 8 this quarter. You can find it here. Make sure you get the JDK (Java Development Kit) which includes developer tools, not the JRE (Java Runtime Environment) which is what customers, but not developers need:

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

Course Materials

There is no textbook for this class. All material will be provided on the course website:

<http://cs108.stanford.edu/>

Piazza

We will be using the Piazza discussion system. Please signup at:

<http://piazza.com/stanford/winter2016/cs108/>

Tentative Course Schedule

All due dates are subject to change. Check the individual assignment handouts for the actual due dates.

Week One (1/4)

- Java Review, Collections, Unit Testing

Week Two (1/11)

- Encapsulation and Inheritance
- HW1 due 11:59pm Wednesday Evening 1/13

Week Three (1/18)

- Swing GUI Programming
- HW2 due 11:59pm Sunday Evening 1/24

Week Four (1/25)

- Databases

Week Five (2/1)

- Programming with Threads
- HW3 due 11:59pm Wednesday Evening 2/3

Week Six (2/8)

- Web Development (Server Side)
- HW4 due 11:59pm Wednesday Evening 2/10

Week Seven (2/15)

- Software Development
- HW5 due 11:59pm Wednesday Evening 2/17

Week Eight (2/22)

- Web Development (Client Side)

Week Nine (2/29)

- Web Development (Client Side)

Week Ten (3/7)

- TBD
- Final Project due at 9pm Friday 3/11
- Final Project Grading Sessions Afternoon of 3/12

The Stanford Honor Code

The standard of academic conduct for Stanford students is as follows:

- A. The Honor Code is an undertaking of the students, individually and collectively:
 - (1) that they will not give or receive aid in examinations; that they will not give or receive unpermitted aid in class work, in the preparation of reports, or in any other work that is to be used by the instructor as the basis of grading;
 - (2) that they will do their share and take an active part in seeing to it that others as well as themselves uphold the spirit and letter of the Honor Code.
- B. The faculty on its part manifests its confidence in the honor of its students by refraining from proctoring examinations and from taking unusual and unreasonable precautions to prevent the forms of dishonesty mentioned above. The faculty will also avoid, as far as practicable, academic procedures that create temptations to violate Honor Code.
- C. While the faculty alone has the right and obligation to set academic requirements, the students and faculty will work together to establish optimal conditions for honorable academic work.