Course Overview

This course is a continuation of CSE 142. While CSE 142 focused on control issues (loops, conditionals, methods, parameter passing, etc), CSE 143 focuses on data issues. Topics include: abstract data types (ADTs), lists, stacks, queues, linked lists, binary trees, recursion, interfaces, inheritance, and encapsulation. The course also introduces the notion of complexity and performance trade-offs in examining classic algorithms such as sorting and searching and classic data structures such as lists, sets, and maps. The course will include a mixture of data structure implementation and using components from the Java Collections Framework. The prerequisite is CSE 142 or equivalent.

Lecture Time

MWF 12:30 PM – 1:20 PM,  Guggenheim 220  (Lecture A – Allison)  
MWF  2:30 PM – 3:30 PM,  Kane 120  (Lecture B – Adam)  

Discussion Sections

You will be expected to participate in a discussion section, held on Tuesdays and Thursdays at various times (see course web site for details). The TA who runs your section will grade your homework assignments. In section we will answer questions, go over common errors in homework solutions, and discuss sample problems in more detail than in lecture. Short "pre-section problems" will be assigned on the course web site and will be due in section. You must attend section to turn these in; they cannot be made up, turned in late, or submitted online. You must complete at least one problem set per week to earn 3 points for that week for up to 20 points total. The quarter’s section points will make up 3% of your final grade.

Course Web Site

  All resources from class will be posted here. Check the web site daily for important announcements.

Textbook

- Reges/Stepp, *Building Java Programs: A Back to Basics Approach (3rd Edition)*. ISBN 978-0133360905. Required. *Can be purchased from UW Bookstore, online (e.g. Amazon.com), or as a download for lower cost*

UW instructors wrote the book specifically for this course to supplement lectures and clarify concepts. We will expect you to refer to the book when you miss lecture, don’t quite understand an idea or need extra practice problems. Textbook exercises will be due in your discussion sections each week.

Computer Access and Software

The department operates an Introductory Programming Lab (IPL) in room 334 of Mary Gates Hall. TAs and consultants will be available at the lab to help students with problems. The recommended software is the Java Development Kit (JDK) version 7 and the Eclipse and jGRASP editors, but you may use any editor you like. The course web site contains links to download this software free of charge if you want to work at home.
Grading

- 47% weekly homework assignments
- 3% section participation
- 20% midterm (Wednesday, February 11th, 5 – 6pm in Kane 120 and Kane 130)
- 30% final exam (Tuesday, March 17th, 12:30 – 2:30pm in Kane 120 and Kane 130)

This maps to the 4.0 scale roughly as follows. You will get at least the grade below for the percentage shown.

- 90%: at least 3.5
- 80%: at least 2.5
- 70%: at least 1.5
- 60%: at least 0.7

Exams

All exams will be closed-book and closed-note. You may not use the textbook, notes or any other written material during exams. No electronic devices may be used, including calculators.

Make-up exams will not be given except in case of a serious emergency. If you must miss an exam, even if you are sick or injured, you must contact Allison and Adam before the exam (or arrange for someone to do so). You must show evidence that you are physically unable to take the exam, such as a clear and specific doctor's note mentioning the date, exam, and reason. No make-ups will be granted for personal reasons such as travel, personal hardship, leisure, or to ease exam week schedules. No special accommodations will be made for students who arrive late to exams, regardless of the reason (missing a bus; overslept; sick; etc.). No student will be permitted to take an exam early for any reason.

Homework

Homework consists of weekly programming assignments done individually and submitted electronically from the course web site. Programs will be graded on "external correctness" (behavior) and "internal correctness" (style and design). Disputes about homework grading must be made to your TA within 2 weeks of receiving the grade.

Lateness

Each student receives 5 "late days" for use on homework assignments. A late day allows you to submit a program up to 24 hours late without penalty. For example, you could use 2 late days and submit a program due Tuesday 11:30pm on Thursday by 11:30pm with no penalty. Once a student has used up all the late days, each successive day that an assignment is late will result in a loss of 2 points on that assignment. Regardless of how many late days you have, you may not submit a program more than 3 days after it is due or after the last day of class. Students will not be given extensions unless they have extenuating circumstances as decided by the instructors.

Academic Integrity and Collaboration

Programming assignments must be completed individually; all code you submit must be your own work. You may discuss general ideas of how to approach an assignment, but never specific details about the code to write. Any help you receive from or provide to classmates should be limited and should never involve details of how to code a solution. You must abide by the following rules:

- You may not work as a partner with another student on an assignment.
- You may not show another student your solution to an assignment, nor look at his/her solution, for any reason.
- You may not have another person "walk you through" an assignment. describe in detail how to solve it, or sit with you as you write it. You also may not provide such help to another student. This includes current or former students, tutors, friends, TAs, paid consultants, people on the Internet, or anyone else.
- You may not post your homework solution code publicly online to ask others for help. This includes message boards, forums, file sharing sites and services, or any other online system.

Under our policy, a student who gives inappropriate help is equally guilty with one who receives it. Instead of providing such help to someone who does not understand an assignment, please point them to other class resources such as lecture examples, the textbook, the IPL, or a TA or instructor. You must not share your solution and ideas with others. You must also ensure that your work is not copied by others, such as making sure to log out of shared computers, not leaving printouts of your code in public places, and not emailing your code to other students or posting it on the web.

If you are retaking the course, you may resubmit a previous solution unless that program was involved in an academic misconduct case. If misconduct was found, you must write a new version of that program.

We enforce this policy vigorously by running similarity detection software a few times per quarter over all submitted student programs, including programs from past quarters. Students who violate the policy are offered reduced scores and sometimes sent to a University committee. This can lead to marks on permanent academic records. Generally several dozen students each quarter are given reduced scores for violating these policies. Please be careful, and contact the instructor if you are unsure whether a particular behavior falls within our policy.