Computer Science & Engineering 143 Computer Programming II

Instructor	benson limketkai
e-mail	bensonl@cs.washington.edu
phone	616-1843
office	Paul G. Allen Center, room 386
office hours	Th 12:00 - 1:00 (CRC), M/Th 2:00 - 3:00 (Allen 386)

1 Lecture and Section Times

Lecture: MWF 12:00-1:00, EE1 125

Sections: Various times and locations on Tuesdays and Thursdays

2 Textbook

None. I'll have some combination of lecture notes and links to good reads on the course calendar located on the course web page.

3 Course Overview

This course is a continuation of CSE142. While CSE142 focused on control issues (loops, conditionals, methods, parameter passing, etc), CSE143 focuses on data issues. Topics include: ADTs (abstract data types), stacks, queues, linked lists, binary trees, recursion, interfaces, inheritance and encapsulation. The course also introduces the notion of complexity and performance tradeoffs 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 as well as using off-the-shelf components from the Java Collections Framework. The prerequisite is CSE142 or equivalent.

4 Discussion Sections

You are encouraged to participate in two weekly 60-minute discussion sections. The TA who runs your discussion 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 we can in lecture.

5 Course Web Page

The class web page is located at http://www.cs.washington.edu/143. Links to course handouts will be kept on this page along with useful links to other class resources.

6 Course Administrator

Pim Lustig (pl@cs.washington.edu, 616-3225) is the course administrator and will handle many details including registration and switching sections.

7 Computer Access / Software

From the course web page, under "Software & Computing" in the navigation bar on the left, click on "Programming Lab Info" for information about the labs available to you. Consultants will be available at the lab to help students with problems. The recommended editor for the course is the TextPad editor for Windows. It is only "recommended"—use whatever editor suits you best. I personally use Emacs on Linux (available on Windows as XEmacs). Additionally, you are required to use Sun's SDK 1.4.2 compiler for Java. More information can be found on the class web page. You are responsible for keeping backup copies of your work, either on your Dante account, floppy disks, or other media. Your files are not retained on the lab machines. When you use a public machine, be sure to log out when finished.

8 Resources

In addition to the instructor and the TAs, your best resources are each other. I encourage you to discuss concepts with each other when you are finding difficulty with the material. Take advantage of the message board (follow the link on the top right of the home page). If you have a question about the course material, post it on the message board. More likely than not, someone else has the same question. Also feel free to answer other students' questions. Being able to coherently explain a topic to someone shows true mastery of the subject matter and can help reveal flaws in your understanding. The key to understanding is asking yourself "WHY" every step along the way.

9 Student Survey

To better run the course, i created a survey to gather information about your computing background, establishing study groups, and when the exams should be (see next section). I'll also e-mail the link to the class if you don't want to type it all in. The link is:

https://catalysttools.washington.edu/tools/webq3/?sid=5440&owner=bensonl

10 Grading

You will be expected to complete a variety of programming assignments for this course and to take two open-note, open-book exams:

170 points	8 weekly homework assignments ($7x20$ points, $1x30$ points)
150 points	midterm, Wednesday, $7/20/05$ (Time and location TBD)
180 points	final exam, Friday, $8/19/05$ (Time and location TBD)

There are a total of 500 points. Your grade will be determined by the following Java function:

```
public float computeGrade(int points)
{
    float grade = (Math.rnd((points / 500.0) * 100) - 56) / 10.0;
    if (grade > 4.0) {
        grade = 4.0;
    } else if (grade < 0.7) {
        grade = 0.0;
    }
    return grade;
}</pre>
```

In plain English, your grade will be determined as follows:

96% - $100%$	4.0
95%	3.9
94%	3.8
93%	3.7
92%	3.6
91%	3.5
and so on	

A word about the grading: If you notice, this class is **NOT** graded on a curve. Your grade depends only on how well you do. This is not a competition. I encourage you to help each other understand the course content. (If I feel that everyone does particularly poorly on an exam, I may blame the exam and lower the cutoffs. However, I will NEVER adjust the cutoffs in the other direction. If everyone gets a 4.0, then great!) If you need to miss an exam, you must contact me prior to the exam to get permission. Even if you are sick at home, you should be able to call my office phone number to leave a message that you need to be contacted.

11 Late Policy

Each assignment will list its due date. Most will be due on Thursdays at 9 PM. Each student in the class will have a total of four "free" late days (a late day is 24 hours of lateness). There are no partial days, so assignments are either on time, 1 day late, 2 days late, etc. Because of this generous late policy, students will not be granted extensions for assignments unless they have some highly extenuating circumstances. Once a student has used up all of his or her late days, each successive late day will result in a loss of 5 points. No assignment will be accepted more than 4 days after its due-date. All assignments must be submitted by 5 PM on August 19 regardless of how many late days a student has left.

12 Regrade Policy

Grading complaints on homeworks are to be filed no more than 2 weeks after the homework is returned to the respective discussion sections, and no later than 5 PM on the last day of class. Midterm grading complaints are also to be filed no more than 2 weeks after the exam is returned. We also take the liberty of regrading the whole exam, in case we missed something the first time around.

13 Policy on Collaboration

From the class webpage you will find a link to the department policy on collaboration which will be applied in this course. You should familiarize yourself with this policy. You are to complete programming assignments individually. You may discuss the assignment in general terms with other students including a discussion of how to approach the problem, but the code you write must be your own. In other words, you may communicate in English with other students, but you are not to share your code with another student. Under no circumstances are you to write code with another student on a programming assignment or to show another student your solution to a programming assignment (including posting code on the message board).