



CSE 326

Data Structures

Winter 2007

Instructors:	Dave Bacon	Ruth Anderson
Email:	dabacon@cs.washington.edu	rea@cs.washington.edu
Office Location:	Allen Center 460	Allen Center 360
Office Hours:	Tuesday 4:00-5:00 pm, or by appointment	Monday 3:30-4:30 pm or by appointment
Lecture:	A MWF 12:30-1:20 MGH 231	B MWF 2:30-3:20 EEB 045

TAs: Jonah Cohen, Ethan Phelps-Goodman, David Wu

Note: Sections **will** meet the first week (January 4th)

Sections:

AA	Ethan Phelps-Goodman	Th 9:30-10:20 am	MGH 251
AB	Ethan Phelps-Goodman	Th 12:30- 1:20 pm	MEB 246
BA	Jonah Cohen	Th 1:30- 2:20 pm	MGH 254
BB	Jonah Cohen	Th 2:30- 3:20 pm	MGH 241

Course Description: In this course, we will explore several fundamental algorithms and data structures in computer science, and learn to implement them. Some of the data structures we will encounter include linked lists, stacks, queues, trees, heaps, hash tables, and graphs. We will study and analyze algorithms for searching, traversing trees, hashing, manipulating priority queues, sorting, finding shortest paths in graphs, and much more. Note: You may have seen some of this material before. However, the treatment of algorithms and data structures in this course will be much more rigorous and in-depth compared to CSE 143.

Prerequisites: CSE 321

Course Text: Weiss, Mark Allen. **Data Structures and Algorithm Analysis in Java** 2nd Ed., Addison Wesley: 2007, ISBN: 0-321-37013-9

Grading and Evaluation: Grades will be computed *approximately* as follows (weights may be modified):

- 25% - Written Homework Assignments
- 25% - Programming Projects
- 20% - Midterm Exam
- 25% - Final Exam
- 5% - Best of the four items above

CS 326 – First Day Assignments

- 1) **Sign up for the mailing list** (see course home page for more info on this) (immediately)
- 2) **Project #1** – Your first programming assignment will be posted later on today (Jan 3th). Please come to section tomorrow (Thursday) with questions.
- 3) **Preliminary Survey**: Please fill out the preliminary survey posted on our course web page by the evening of Friday January 5th. (Course home page = <http://www.cs.washington.edu/326/>)
- 4) **Information Sheet**: Please bring a sheet of paper with the following information with you to lecture on Friday January 5th :

A Picture of you!
Student ID is o.k. but something more
interesting or readable is nice too.

Name (and what you like to be called)
Email address
Year (1,2,3,4 i.e. freshman, sophomore, etc.)
Major
Hometown
Interesting Fact about yourself and/or what you did over summer/winter break.

- 5) **Reading** in *Data Structures and Algorithm Analysis in Java*, 2nd Ed., 2007, by Weiss
 - For this week:
 - › Chapter 1 – (review) Mathematics and Java (pp. 1-25)
 - › Chapter 3 – (Project #1) Lists, Stacks, & Queues
 - Lists (pp. 57-81, heavy on Java, much of this should be review)
 - Stacks (pp. 82-83)
 - Applications of Stacks (pp. 83-91, sections on “Postfix Expressions” and “Infix to Postfix Conversion” can be skipped, but read “Method Calls”)
 - Queues (pp. 91-95)
 - › Chapter 2 – (Topic for Friday) Algorithm Analysis (pp. 29-50)