



# CSE 326

## Data Structures

### Winter 2008

**Instructor:** Hal Perkins  
**Email:** perkins@cs.washington.edu  
**Office Location:** Allen Center (CSE) 548  
**Office Hours:** CSE006 lab: M 4-5, W 4:30-5:30  
**Lecture:** MWF 2:30-3:20 EE 037

**TAs:** Kathleen Tuite, Ray Smith

#### Sections:

BA Th 1:30-2:20 pm EE 037 (One or both locations subject to change)  
BB Th 2:30-3:20 pm MEB 237

**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, balanced 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):

- 20% - Written Homework Assignments
- 25% - Programming Projects
- 20% - Midterm Exam
- 25% - Final Exam
- 10% - Best of the four items above

## CS 326 – First Day Assignments

1) **Project #1** – Your first programming assignment will be posted shortly. Please come to section Thursday with questions.

2) **Information Sheet:** Please bring a sheet of paper with the following information with you to lecture on Wednesday, January 9:

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 winter/spring break.

4) **Reading** in *Data Structures and Algorithm Analysis in Java*, 2<sup>nd</sup> 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 Wednesday) Algorithm Analysis (pp. 29-50)