

Computer Engineering 12

Abstract Data Types and Data Structures

Spring 2006

Mondays, Wednesdays, and Fridays

10:30 am – 11:35 am and 1:00 pm – 2:05 pm

Instructor

Instructor: Darren Atkinson
Office: ENGR 245
Office hours: Mondays, Wednesdays, and Fridays, 2:15 pm – 3:00 pm
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Web page: <http://www.cse.scu.edu/~atkinson/teaching/012>

Textbooks

Required: Gilberg and Forouzan, *Data Structures – A Pseudocode Approach with C*, Brooks/Cole.
Reference: Kernighan and Ritchie, *The C Programming Language*, 2nd edition, Prentice Hall.

Teaching Assistant

Teaching assistant: Sumit Naiksatam
Lab hours: Mondays, 2:15 pm – 5:00 pm and Tuesdays and Thursdays, 2:30 pm – 5:00 pm
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Grading

Lab attendance: 5% (each and every week)
Programming projects: 15% (4/20, 5/4, 5/18, 6/1, and 6/8)
Midterm exams: 40% (4/26 and 5/24)
Final exam: 40% (6/12 or 6/14)

Overview

1. Abstract Data Types, Algorithmic Complexity
2. Searching, Hashing
3. Stacks and Queues, Linked Lists, **project #1**
4. Linked Lists, **midterm exam**
5. Recursion and Trees, **project #2**
6. Trees and Search Trees
7. Search Trees, **project #3**
8. Heaps and Sorting, **midterm exam**
9. Sorting and Graphs, **project #4**
10. Classes in C++, **project #5**

Note: You are free to attend either class period for lectures, but you must take the exams in the class period for which you are registered. There will be no exceptions to this policy.