

Computer Engineering 12

Abstract Data Types and Data Structures

Spring 2004
Mondays, Wednesdays, and Fridays
11:45 am – 12:50 pm
ENGR 105

Instructor

Instructor: Darren Atkinson
Office: ENGR 245
Office hours: Mondays, Wednesdays, and Fridays, 10:00 am – 11:00 am
E-mail: atkinson@engr.scu.edu
Web page: <http://www.cse.scu.edu/~atkinson/teaching/012>

Textbooks

Required: Gilberg and Forouzan, *Data Structures – A Pseudocode Approach with C*, Brooks/Cole, 1998.
Reference: Kernighan and Ritchie, *The C Programming Language*, 2nd edition, Prentice Hall, 1988.

Teaching Assistants

Teaching assistants: Nirupama Locanindi and Sumit Naiksatam
Lab hours: Thursdays, 11:50 am – 2:20 pm and 2:30 pm – 5:00 pm
E-mails: nlocanindi@scu.edu and snaiksatam@scu.edu

Grading

Programming projects: 20% (4/22, 5/6, 5/20, and 6/3)
Midterm exams: 40% (4/16 and 5/14)
Final exam: 40% (6/9)

Overview

1. Introduction (Chapter 1)
2. Searching (Chapter 2)
3. Linear lists (Chapter 3), **midterm exam**
4. Linear lists, stacks and queues (Chapters 3, 4 and 5) **project #1**
5. Recursion and trees (Chapters 6 and 7)
6. Trees and search trees (Chapters 7 and 8), **project #2**
7. Search trees (Chapter 8), **midterm exam**
8. Heaps and sorting (Chapters 9 and 11), **project #3**
9. Sorting and graphs (Chapters 11 and 12)
10. Classes in C++, **project #4**