

Computer Engineering 12

Abstract Data Types and Data Structures

Spring 2005
Mondays, Wednesdays, and Fridays
10:30 am – 11:35 am
ENGR 106

Instructor

Instructor: Darren Atkinson
Office: ENGR 245
Office hours: Mondays, Wednesdays, and Fridays, 12:30 pm – 1:30 pm
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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 Assistants

Teaching assistants: Bill Yi and Xiang Li
Lab hours: Wednesdays, 2:15 pm – 5:00 pm and Thursdays, 2:30 pm – 5:00 pm
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Grading

Lab attendance:	5%	(each and every week)
Programming projects:	15%	(4/14, 4/28, 5/12, 5/26, and 6/2)
Midterm exams:	40%	(4/18 and 5/16)
Final exam:	40%	(6/8)

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**