

# Computer Engineering 12

## Abstract Data Types and Data Structures

Spring 2007

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: MW 2:15 pm – 3:30 pm and F 9:15 am – 10:30 am  
E-mail: datkinson@scu.edu  
Web page: <http://www.cse.scu.edu/~atkinson/teaching/sp07/012>

### Textbooks

Gilberg and Forouzan, *Data Structures – A Pseudocode Approach with C*, Brooks/Cole.

### Teaching Assistant

Teaching assistant: Cesar Philippidis  
Lab hours: TR 2:30 pm – 5:00 pm and F 2:15 pm – 5:00 pm  
E-mail: cphilippidis@scu.edu

### Grading

Lab attendance:	5%	(each and every week)
Programming projects:	15%	(4/13, 4/27, 5/11, 5/25, and 6/8)
Midterm exams:	40%	(4/20 and 5/18)
Final exam:	40%	(6/12 or 6/13)

### Overview

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