# FALL 2011 CSC 221 : Data Structures & Algorithms I

#### **Course Information**

Location and Time: Manchester 241, MWF 11:00-11:50a (Aug 31 Dec 9)

#### Instructor

Prof. Samuel (Sam) Cho Office Location: Olin 301B

Office Hours: M 2:00p-2:50p or by appointment

Email: choss@wfu.edu

### Course Overview

Study, analysis, and implementation of abstract data structures such as stacks, queues, trees, and graphs. Complexity analysis of algorithms that operate upon these structures. Prerequisites: CSC 112 and MTH 117.

### **Textbook**

Data Structures and Algorithm Analysis in C++, Third Edition, Mark Allen Weiss (required); ISBN: 0-321-44146X

# **Grading Scheme**

40%	Projects (4)
30%	Tests (2)
30%	Final Exam

## **Projects**

All assigned projects will be submitted via the course's Sakai Drop Box, and they are due at 12:00 pm EST on the day that it is due. *Discussing* your design and implementation with others is encouraged, but each student must turn in their own individual work and is responsible for its contents. No late work will be accepted.

#### Academic Misconduct

Any form of academic misconduct, as specified in the Honor Code at Wake Forest University and described in the Student Handbook will be reported to the Judicial Council and the Dean of Colleges for appropriate action. Assignments in Computer Science courses may be specified as "pledged work" assignments by the professor of the course. When an assignment is specified as "pledged work" the only aid that the student may seek is from either the course professor or an assistant that the professor has explicitly specified. On "pledged work" assignments the student may not use the services of a tutor.

# **Disability Notice**

If you have a disability that may require an accommodation for taking this course, then please contact the Learning Assistance Center (758-5929) within the first two weeks of the semester.

# **Tentative Schedule**

Note: subject to change, see website for latest version

Date	Торіс	Reading
8/31-9/7	Algorithm Analysis: Complexity and Asymptotics	Chapter 2
9/9-9/23	Lists, Stacks, and Queues	Chapter 3
9/28	Project 1 Due (Released 9/21)	
9/26-10/14	Trees	Chapter 4
10/26	Project 2 Due (Released 10/12)	
10/17	Test 1 Chapters 2-4	
10/19-11/2	Hashing Techniques	Chapter 5
11/16	Project 3 Due (Released 10/31)	
11/4-11/11	Priority Queues (Heaps)	Chapter 6
11/30	Test 2 Chapters 5-6	
11/16-12/5	Sorting	Chapter 7
12/9	Project 4 Due (Released 11/28)	
12/7-12/9	Graphs	Chapter 8
12/13 @ 2:00p	Comprehensive Final Exam NOTE SPECIAL DATE AND TIME	