Syllabus

CSC 210
Data Structures & Algorithms
Spring 2006 term

Class meets Saturday mornings from 8:00 am to 12:15 pm at Carnegie Hall, room 113.

Our first class meeting is Saturday April 1, 2006.

Description

CSC 210 introduces structures for organizing and storing data in computer programs and the algorithms for manipulating these structures. Major data structures covered will include: lists, stacks, queues, trees, heaps, and graphs. We will study algorithms that can be used in conjunction with these data structures and learn how to analyze their efficiency. Some of these algorithms include: sorting, searching, recursive techniques, and backtracking.

CSC 161 is a prerequisite for this class, and we will use Java to implement our ideas. I recommend use of the Java textbook, "Java Software Solutions" by Lewis and Loftus that is used in CSC 161.

Textbook

The required text for CSC 210 is:

- *"Objects, Abstraction, Data Structures, and Design Using Java, Version 5.0"* by Elliot B. Koffman & Paul A.T. Wolfgang

You will also probably want a Java book for reference. I recommend the CSC 161 text:

- *"Java Software Solutions, 4th edition"* by Lewis and Loftus

Instructor

My name is Bill Krieger. I am a part-time professor in the Computer Science department at North Central College.

My email is wtkrieger@noctrl.edu and my North Central site is william.krieger.faculty.noctrl.edu.

My office is located at 310D Carnegie. We will negotiate office hours in our first class meeting. In any case, you can always email me, and we will work out a convenient time for us to meet.

Grades

Your final grade will be comprised of:

- Class work (quizzes, etc) – 10%
- Homework (programming, etc)– 20%
- Midterm exam – 30%
- Final exam – 40%

Late work will generally not be accepted.

The college rules on academic integrity will be strictly enforced... **plagiarism is a severe offense and will not be tolerated**. It is considered plagiarism if any part of the work you submit has been written by another person. Please see the North Central College's policy regarding plagiarism if you have any further questions.

The standard North Central grading scale is:

A 93-100%	B+ 87-89%	C+ 77-79%	D 60-69%
A- 90-92%	B 83-86%	C 73-76%	F 0-59%
	B- 80-82%	C- 70-72%	

The Plan

Well, here's the *very* tentative plan:

Week	Description
1	Recursion, ADT's, Java review
2	Algorithm analysis, lists
3	Stacks, Queues
4	More recursion, more Java
5	Midterm Exam
6	Trees, balanced trees
7	Sets, maps hash tables
8	Sorting
9	Graphs
10	Final Exam