

## CS 215 - Fundamentals of Programming II

### Spring 2008 - Exam 1 Review Sheet

#### Notes and Reminders:

- Homework 3 is due at the beginning of class on Wednesday, February 6. **NO LATE SUBMISSIONS** will be accepted. Programming Project 2 is due at regular time, 4:30pm.
- Wednesday, February 6, has been set aside as a review for the exam. We will go over Homework 3 and answer any questions you have about the material.

Exam 1 will be on Friday, February 8. You may bring one 8.5inx11in size sheet of paper with notes on **one** side to the exam. You may print out the sheet, but it must be in a 9-point font or larger. E.g., please do not photoreduce or print 4 pages on a side. If you handwrite your notes, they may be as small as you like. You may handwrite notes in the margins of a printout.

The exam will be cumulative and comprehensive with respect to basic programming constructs in the sense that you are expected to be able to read and write code or analyses and designs using concepts such as selection, repetition, and functions. Emphasis will on the material in Chapters 1-3, and covered in lectures, and homework and projects assigned through Friday, February 1. The exam will consist of questions similar to the homework problems, programming projects, and exercises in the textbook.

The following is a list of topics that will be emphasized, but it is in no way to be construed as an exclusive list.

1. Makefiles, command line argument processing, and file stream processing
2. Error checking and exception handling
3. Classes - design, implementation, and use, including overloaded operators
4. Algorithm analysis including determining the ``Big-O'' running time of code fragments and functions, and comparison of various time complexities.
5. Recursion - what is it and how to use it to solve problems.
6. Sequential and binary search algorithms
7. Selection sort algorithm