## **CS465 Challenge Exam Preparation Notes**

Textbook (available in the Regis bookstore):

Glass, Graham. (2003). *UNIX for Programmers & Users*. (3rd edition) Prentice Hall/Pearson; ISBN: 0-13-046553-4.

Course covers chapters 1-5, 7-9, 11 and 14 of the text.

The exam consists of four sections, as follows:

#### 1. UNIX User Commands/Utilities

List the exact commands needed to perform the given actions on the exam.

### 2. UNIX Shell Scripts (using Bourne/Korn shell)

Write shell scripts to perform tasks specified on the exam, using Unix commands, shell control structures and command line arguments.

Read and understand shell scripts and describe what they do. Given specific scripts and data files on the exam, determine the output of the scripts. Scripts include use of grep, awk and various other Unix commands, as well as shell script control structures.

#### 3. Software Development and Support Tools under UNIX

Know which commands to are used to invoke the C compiler to compile mulitple file C programs. Also know the commands and purpose for the associated utilities (touch, debugger, etc), along with the make utility, source code management utilities (SCCS), and archive utility (ar).

# 4. General UNIX Concepts/System Administration

Understand general UNIX concepts including how open operating systems came about, redirection, piping, variable usage, paths, and the vi editor.

Understand what files/processes are used by UNIX to start up the system and to log on users.

Be able to describe what system administration is and the basics of the concepts and commands necessary to do system administration tasks.

You will have 3 hours to complete the test. There are 88 points on the test, and a passing grade is 62 or more points.