

Summary of the term

CS2023 Winter 2004

Final Exam

- You are responsible for all material covered in the assignments together with the underlying concepts (modules, storage class and lifetime of variables, etc...)
- Have a look at the “outcomes” slide, found at the beginning of most online notes, for a summary of what you should know, and what material (textbook, reserve books) to read

Course Topics

- Introduction to UNIX: shells, pipes, redirection, useful UNIX tools, compiling, linking, and executing programs.
 - Review: course notes and “useful documents” from course website, and *Your UNIX, The Ultimate Guide*, Sumitabha Das, McGraw-Hill, 2001, on reserve in Engineering Library

Course Topics

- Introduction to C: program structure, data types, control structures, functions, text files, C preprocessor.
 - Review: course notes and textbook Chapters 3-7
- Modular programming: motivation for modularity, scope, linkage, and multi-file programs.
 - Review: course notes and textbook Chapter 7

Course Topics

- Program management tools: makefiles and source control
 - Review: course notes and first three chapters of two books on reserve: *Managing Projects with Make*, Andrew Oram and Steve Talbott, O'Reilly, 1991, *Applying RCS and SCCS*, by Don Bolinger and Tan Bronson, O'Reilly, 1995

Course Topics

- Testing and debugging
 - Review: course notes and chapters 5-6 of a book on reserve: *The Practice of Programming*, Brian W. Kernighan and Rob Pike, Addison Wesley, 1999.
- Intermediate C: pointers and memory management, strings, arrays, structures
 - Review: course notes and Chapters 8-11 of textbook

Course Topics

- Design and implementation of C interfaces
 - Including Abstract Data Types
 - Review: course notes and Chapter 11 of textbook

Notes

- The textbook treats modular programming differently than we did in class. You don't need to learn Muldner's approach to modularity, only read the material relevant to what we did in class
- Study suggestions:
 - have a look at the textbook author's website (www3.ns.sympatico.ca/tmuldner/), where solutions to selected exercises are available
 - Look at previous exams, available online from Engineering & CS library