

Syllabus - CS160A Mon-Weds Day Spring 2017

Weeks indicated below are approximate, and will probably vary somewhat during the semester.

The readings refer to **the printed version** of Shotts *The Linux Command Line*, 2013 (chapters are similar but page numbers are different in the PDF version)

The data area for this class is on hills at [/pub/cs/gboyd/cs160a](http://pub/cs/gboyd/cs160a)

Underlined handouts are PDF links in the web version of this syllabus. See <http://fog.ccsf.edu/~gboyd/>

Week	Key (for Greg)	Topics	Reading/Assignment/Quiz
1a 1/16		No class - Martin Luther King's Birthday - School Holiday	
1b 1/18	policies intro shellintro	Class Introduction Logging in: console and ssh Introduction to commands and redirection Simple commands: cp, mv, cat, less, file, ls (with options -F, -l, -a) Creating files using redirection	Chapters 1-3 <u>PolicyStatement</u> <u>AssignmentGuidelines</u> <u>BasicCommands</u>
2a 1/23	FSIntro	Displaying, copying, renaming, and removing files. Creating and renaming directories Doing assignments and script Navigating directory structures Absolute and relative paths	<u>Lab1 Exercise Exercises-Paths</u> <u>Start Asmt 1</u> (you can do the second part - all parts are due on 3B)
2b 1/25	FSIntro wi	More using paths and simple commands Wildcards	Chapter 4 through page 31 (rm) (You can do the third part of asmt 1) <u>Exercises-Wildcards</u> Rest of <u>Asmt 1</u>
3a 1/30	sftp	Transferring files between systems	Read <u>this page</u> on scp/sftp (You can do all parts of asmt 1) <u>Exercises-sftp</u> <u>Lab2 Exercise</u>
3b 2/1	varsintro FS	Important system variables Recursive cp, mv, and rm More standard I/O	Chapter 6 thru pg 54 (pipelines) <u>Exercises-FileUtils1</u> <u>Exercises-FileUtils2</u>
4a 2/6	cmdline ???	Commandline editing help: man, alias, type/which/whatis finding files with find and locate Introduction to permissions	Asmt 1 due Chapter 5 and 8 <u>ToolsCommands pg1</u> <u>Exercises-Find</u> <u>Lab3 Exercise</u> <u>Practice-Permissions</u>
4b 2/8	perms	Permissions	Quiz01. Covers thru 3b Chapter 9 to pg. 86 (Spec Perms) Read <u>this page</u> on permissions
5a 2/13	perms	Permissions	Asmt 2 <u>Lab4 Exercise</u> (finish for Weds) <u>Exercises-Permissions</u>
5b 2/15	FSInt Tools-1 Tools-2	Links simple filters More file utilities (head, tail, etc)	Read the rest of chapter 6 (54-end) Rest of Chapter 4 (32-end) and do <i>Let's Build a Playground</i> exercise <u>Exercises-FileUtils3</u> <u>ToolsCommands pg2</u>

Week	Key(for Greg)	Topics	Reading/Assignment/Quiz
6a		<i>Holiday Feb 20 Washington's Birthday</i>	
6b 2/22	Filters	sort (sorting) uniq (finding duplicates)	Read Chapter 20 on sort and uniq (p236-243) <u>Exercises-Filters1</u> <u>Lab5 Exercise</u>
7a 2/27	Filters	Filters: selecting (grep) slicing (cut, paste) tr	Quiz02. Covers through 5b Chapter 19 Chapter 20 thru p. 247 (paste). Also read 254-255 (tr) Asmt 2 due Asmt 3 <u>Filters handout</u>
7b 3/1	regex	Regular Expressions with grep	Read <u>this page</u> on regular expressions <u>Lab6 Exercise (finish for Monday)</u> <u>Exercises-BasicRegularExpressions</u> <u>Exercises-Filters2</u> <u>Sample Quiz03</u>
8a 3/6	regex	Extended regular expressions	<u>Exercises-ExtendedRegularExpressions</u> (this is complicated - do lightly)
8b 3/8	sed	substitutions (sed) Using regular expressions with sed	Chapter 20 p. 256-263 (sed) Read <u>this page</u> on sed <u>Exercises-Sed</u> <u>Lab7 Exercise</u>
9a 3/13		<i>Review for the final</i>	
9b 3/15		<i>Final Examination (comprehensive)</i> Wednesday March 15: in-class	<u>Asmt 3 due (filters)</u> Final Exam today

Student Learning Outcomes

Upon completion of this course, a student will be able to:

- A. Create and use Unix file management utilities to manipulate files and directories.
- B. Write and predict the effects of commands that manipulate file and directory permissions.
- C. Employ text file utilities to display, sort, replace and edit text.
- D. Write and predict the results of Unix commands that use regular expressions to search for patterns in files.

(You will actually be able to do much more than this - but these are some of the major skills you will gain from CS160A)