CSCI 274 - Course Syllabus
Sections A, B, C

Fall 2018

Instructor Kellyn Larson

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Lecture Times
> Section A - M at 2-2:50 PM MST
> Section B - W at 1-1:50 PM MST
> Section C - F at 12-12:50 PM MST

Classrooms
> Section A - CT B60
> Section B - BB 253
> Section C - BB 253

Office Hours BB 280K Monday 12-2:00 PM MST

Course Webpage https://kellyn-larson.github.io

1   Course Description

Introduction to the Linux Operating System will teach students how to become proficient with using a Linux operating system from the command line.

Topics   remote login (ssh), file system navigation, file manipulation commands, editors, i/o redirection, searching, search and replace, processes, pipelines, file system interrogation commands, authentication, permissions, compression, privacy, and bash scripting

Prerequisites: CSCI 261. 1 hour lecture; 1 semester hour.

2 Learning Goals

The objective of this course are to introduce students to the GNU/Linux operating system:

1. The command-line interface to essential utilities

2. Editing text files

3. Shell scripting environment (bash)

4. Utilizing other system utilities for efficient programming and administration tasks

5. Basic authentication, integrity, and privacy commands

Upon completion of this course, you should know:

- How to navigate the filesystem, invoke applications with i/o redirection, and connect applications with pipelines.

- Efficiently use a text editor for many various tasks, including the authoring of shell scripts.

- How to connect to remote machines through TCP/IP based networks.

- Author basic Bourne shell scripts (bash).

3 Computer Facilities and Assistance

You need an ADIT account to use the lab machines in the Computer Commons, library, and CTLM, which most students create during EPICS. If you do not have an ADIT account, you need to know your eKey (personal identification code used to create your webmail account) and visit prior to the first lab. If you do not know your eKey, contact the Computer Commons Help Desk in room 156A of CTLM.

4 Grading Policy

30% Assignments

25% Midterm Exam

45% Final Exam

Late Policy Late Policy: 10% off for first 24 hours, 15% off for second 24 hours, 40% of for the third 24 hours (3 days late). Assignments posted 4 days or more after the due date are not graded. Weekends count as late days, all work must be turned in by midnight on the day of the final exam.

Pass the Exams to Pass the Course Students must have a midterm quiz and final exam weighted average $\geq 60\%$ to pass. This weighting is based on the point value of the two assessments, not the course grade weights in the table above!

5 Assignments

Scripting and written assignments may we worth different numbers of points, but their percentile grades are all weighted the same when calculating the "Assignment" portion of your course grade.

Written assignments include Google Forms distributed periodically throughout the course.

5.1 Reading Assignments

Unix and Unix-like operating systems (Linux, FreeBSD, . . .) have a long history of providing both development tools (compilers, editors, software management tools) as well as complete documentation for free and online. In this sense, online does not mean the Internet; rather it means documentation in an electronic form installed along side the system applications.

As such, we won't need a textbook for this course.

Reading assignments will be collectively graded as a writting assignment at the end of the course based on the quality of the `CHEATSHEET.LNX` file created. As discussed at the beginning of the course, this file is a running set of notes for your reference and you should format/add to it as you see fit.

5.2   Scripting Assignments

For Scripting Assignments, any malicious commands will be considered a form of academic misconduct (e.g., don't try to exploit the fact that I might blindly run your scripts sometimes).

No partial credit will be given to scripts that do not have sufficient comments (remember: `#` is the comment character in `bash`).

6   Exams

"No Show" Policy   Failure to sit for a scheduled exam (without a really good explanation) incurs the same "late penalty" as for late assignments in the course. The "lateness" is measured between the scheduled exam time and when your instructor or course coordinator is informed of your absence. Beyond this (again, without an incredibly good explanation) a zero will very likely be recorded for the exam grade.

Students are not guaranteed the opportunity to take a make-up exam; leniency in these matters is at the discretion of the course instructor(s).

7   Collaboration Policy

The following policy exists for all CS courses in the EECS department. This policy is a minimum standard; your instructor may decide to augment this policy.

1. If the project is an individual effort project, you are not allowed to give code you have developed to another student or use code provided by another student. If the project is a group project, you are only allowed to share code with your group members.

2. You are encouraged to discuss programming projects with other students in the class, as long as the following rules are followed:

   (a) You view another student's code only for the purpose of offering/receiving debugging assistance. Students can only give advice on what problems to

   (b) look for; they cannot debug your code for you. All changes to your code must be made by you.

(c) Your discussion is subject to the empty hands policy, which means you leave the discussion without any record [electronic, mechanical or otherwise] of the discussion.

3. Any material from any outside source such as books, projects, and in particular, from the Web, should be properly referenced and should only be used if specifically allowed for the assignment.

8   Disability Services

Students with disabilities should contact the Disability Services to become aware of their rights and responsibilities.
http://disabilities.mines.edu/

9   Military and Veterans Services

Military students and veterans should contact the Veterans Services to become aware of their benefits and responsibilities.
http://inside.mines.edu/Veterans-Services