

INSTRUCTOR

Greg Boyd gboyd@ccsf.edu https://fog.ccsf.edu/~gboyd BATL 462

OFFICE HOURS

Tues, Thurs 5:00-6:00 *in BATL 413* or by appointment

CLASS SECTIONS

CRN 76716 Section 591 6:10-10:00pm R Aug 24 - Oct 19 BATL 413

TEXT BOOKS

assigned: William Shotts, *The Linux Command-Line*, No Starch Press, 2012 (or the open-source PDF [here](#))

CLASS GOOGLE GROUP

<https://groups.google.com/d/forum/cs160a>

COURSE DESCRIPTION

This is a course in basic Linux. As such, the skills learned in this course will be applicable to any Linux or Unix system or variant. The primary shell we use is the bash shell. The shell constructs taught, however, are applicable to any POSIX-compliant shell. Major topics covered include navigating, the command-line structure of Linux, Linux text processing tools, regular expressions, use of the shell, file manipulation commands and permissions.

This course is a significant commitment of time. You should plan to spend an average of 2-5 hours of study and lab time for every hour spent in class for the duration of this course.

WHO SHOULD TAKE THIS COURSE

If you are planning on doing any work on a Linux or Unix system, you should take this course.

GRADES

Grades will be as will be awarded based on the following approximate breakdown (subject to *some* change):

| | | | | | | | |
|-------------|--------|------|--------|---------|--------|-------------------|--------|
| Assignments | 90 pts | Labs | 20 pts | Quizzes | 70 pts | Final Examination | 70 pts |
|-------------|--------|------|--------|---------|--------|-------------------|--------|

Grades will be determined on the basis of total possible points of ~250. Final grades are based on the scale:

| | | | |
|-------|-------|-------|-------|
| A 90% | B 80% | C 70% | D 60% |
|-------|-------|-------|-------|

I will pass around a list from time to time showing the grades I have recorded. When grades are passed around they are, by default, identified by the last 4 digits of your student id. If you do not accept this method of identification, you must provide me with your own 4 digit number during the first week of class.

Please keep your graded papers until you are satisfied they have been recorded correctly. You should also keep any computer files of a homework assignment until the homework is returned to you.

QUIZZES AND TESTS

There will be *two* midterms (quizzes) during the semester, focusing on recent material. You may miss one midterm, but if you do, to make up for it, the next midterm counts double or the weight of the final is increased proportionally. There will also be a **required** cumulative final examination. One standard sheet of paper containing notes on both sides may be brought to midterms. Three standard sheets of paper containing notes may be brought to the final exam. No electronic devices are allowed and **no mechanical pencils** may be used during tests.

EXERCISE SETS

A significant number of required additional ungraded exercise sets will be assigned during this course. Although you do not hand these in, they are very important and comprise the meat of the course. Some will have solutions, others are meant for you to do on the machine and test for yourself. Do them! The ungraded exercise sets are the primary source of questions for tests. The web-version of the class syllabus has links to PDFs of the exercise sets.

TAKING NOTES

As with a standard college course, you are expected to take notes in class. I do not give out notes on lectures. If you are not in class it is your responsibility to get the information from a classmate.

ASSIGNMENTS AND LABS

There will be 3 graded assignments during the course. They will be assigned 1-2 weeks prior to their due date. Assignments must be handed in in-class *at the beginning of class* on the due date. **Assignments are not accepted late for full credit. If you turn in an assignment late, it is kept until the end of the semester. At that time it will be considered for a maximum of 50% credit.** Assignments MUST be done on the assigned CCSF system. Specific requirements for assignments are covered in the handout entitled *Assignment Guidelines*.

There will also be 7 lab exercises. Five of them are in-class. They count 2 pts each. Four count in your grade, The remaining one is extra-credit. The other two labs are take-home labs. They must be turned in at the next class and count 5 points each. Labs cannot be made up.

GROUP WORK

You may work together with one other student as a 'group'. If you work on an assignment as a group, hand in a single copy of the assignment with both contributors' names, **login**, day and time of class on the front. Both contributors will receive the same grade. If you want to work together, hand in a single copy as described above. Otherwise, if I receive two identical assignments I cannot grade them.

GETTING HELP

This course has a [Google Group](#) that you must join. Postings to the group earn extra-credit points at the end of the semester. Email the list with questions that come up between class sessions. The ACRC lab (3rd floor Batmale hall) also has tutors who have are willing to help with basic Linux. Ask in the lab. I try to make myself as available as possible to my students. When I am available, I am usually in the linux classroom (L413), mainly before and after class (unless there is a class in session). You are welcome to stop by or to otherwise contact me for some help. I will try my best to accommodate you.

HILLS ACCOUNTS

Within a few days of completing your enrollment for this class, an account will be created for you on our school Linux server (*hills*). If you are adding, it is important that you complete your add as soon as possible. Delaying your add to the class will not be considered an excuse for turning in assignments late. If you had a hills account last semester, your account and password will remain the same. If you are getting a new hills account, your account name will be the same as your CCSF gmail account (if you did not "opt-out"). Your initial password is formed from your birth date - combining the first three letters of the month (*lowercase*) with the two-digit day and the two-digit year followed by a period and the first two characters of your login; e.g., if your gmail account is `scharo11@mail.ccsf.edu`, and your birthday is *Apr 14 1986* your hills login would be **scharo11** and your initial password would be **apr1486.sc** You should immediately change your initial password.

Class data files are on hills in the public work area at `/pub/cs/gboyd/cs160a`

ACCESS TO HILLS

You can access hills either from a computer in the ACRC in Batmale Hall or remotely using ssh. If you access hills from the ACRC you should use the linux machines near the rear exit (see the next section). You may also login from a Windows system, but you must first login to the ACRC Windows network. If you wish to do this, you should take an orientation during the first week of class.

You can access hills remotely using ssh. Do not use telnet. The particulars of remote access are your responsibility. The server is `hills.ccsf.edu`. You are also responsible for figuring out how to print your assignments. *It is your responsibility to get these issues worked out in order to complete your assignments on time.*

The ACRC holds a series of three orientation classes on hills and on their Windows network. A schedule is posted in the ACRC. If you are new to hills or the ACRC you should consider attending these sessions.

ACCESS TO LINUX MACHINES (SPRINGFIELD CLUSTER)

By enrolling in this course you will have an account on the linux machines. These accounts will be created a week or so into the semester as announced in class. The account name and initial password follow the same pattern as your hills account. The linux machines are divided between those in the ACRC and those in the linux classroom. They all share a common set of logins and a common exported file system for home directories. Once on linux, you can use ssh at the command-line to log in to *hills* to access the class public data files.

For security reasons the linux machines are only accessible through **hills** or another local machine. They are not registered via DNS. If you want to reach a linux system from off-campus, you must login to **hills** and ssh using the IP address of a linux machine. These IP addresses are taped to the linux machines in the linux area of the ACRC. You should visit it and make a note of them.

ADDS DROPS AND ATTENDANCE

You must be present and answer the roll on the first day of class or you will be dropped from this course. **I also may drop (or withdraw) you from the class if you fail to attend two labs in succession without contacting me.**

You should not, however, rely on me to drop you from the course. **Dropping is your responsibility.**

You will be graded on attendance only for lab credit. Other than the rule above, I will not drop you due to lack of attendance. However, you are responsible for everything that happens in class, whether you are present or not.

FINAL EXAM

You must take the final exam. Failure to do so will result in an F for the course.

I reserve the right to change any of these policies at any time during the semester. Any changes will be announced in class or on the class mailing list or Google Group.