CS260A POLICYSTATEMENT Fall 2017 Boyd

INSTRUCTOR

Greg Boyd email: gboyd@ccsf.edu BATL 462 *http://fog.ccsf.edu/~gboyd*

OFFICE HOURS

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

CLASS SECTION

CRN 72044 Section 501 6:10-10:00pm T BATL 413 (4 hours lecture & lab / week)
Google Group: *https://groups.google.com/d/forum/ccsf-cs260a*

TEXT BOOKS

A comprehensive set of course notes substitutes for a text book. If you want a text, get an RHCSA Study Guide. Reasonable ones are:
Van Vugt: RedHat RHCE/RHCSA 7 Cert Guide, Pearson
Ghori: RHCSA & RHCE RHEL7 Training and Exam Preparation Guide, Lightning Source
Jang: RHCSA/RHCE RedHat Linux Certification Study Guide, McGraw-Hill
The *Redhat documentation* is very good on Redhat 7.

COURSE DESCRIPTION

This course is intended to prepare you for the RedHat RHCSA exam. It covers such topics as startup/shutdown, standard daemons and their configuration, process control, the Unix file system, setting up users, archiving, automating processes, security issues, and doing installations. It also reviews and expands on basic Unix topics. Virtual machines are used. This semester the course will be taught mainly on Redhat 7. Some topics will also be taught on Redhat 6.

Although some configuration of standard network servers are practiced, this is not a course in networking.

Most of the lecture notes for this course are online. Students are expected to read the online notes *and* take a short quiz online *prior* to attending class. Class will consist of a review lecture, demonstrations, and required lab sessions. Online copies of the notes are available at *http://fog.ccsf.edu/~gboyd/cs260a/online*

This course is a significant commitment of time. You should plan to spend an average of 3-5 hours of study and lab time for every hour spent in class for the duration of this course.

WHO SHOULD TAKE THIS COURSE

The prerequisites for this course are CS160A and CS160B. You are also urged to have some additional programming experience, such as is provided in one of the first-semester Computer Science programming courses.
This course relies on a firm foundation in basic Unix skills. ***It also assumes some proficiency in writing Unix shell scripts, which are an integral part of this course.*** Those with limited programming experience must allocate additional time to this course.

GRADES

Grades will be awarded based *approximately* on the following breakdown:

Assignments	150 points	Midterms	70-105 points	Final Examination	70 points
		Lab	39 points	Reading Quizzes	90 points

Final grades will be awarded based on the percentage of this total (~450) received according to the following 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 agree with this method of identification, you must provide me with your own 5 digit number during the first week of class.

QUIZZES AND TESTS

There will be *two or three* midterms 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 may be brought to midterms. It may have notes on both sides. Four 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.

A required short (5-10 min, 5-10 multiple-choice questions) weekly online quiz must be completed prior to attending class each week for most weeks. The quiz is meant to ensure you have done the week's reading before class starts.

EXERCISE SETS AND LABS

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.

The exercise sets are to be started in the weekly lab session. I check your attendance at the end of the lab session. If you are present and have worked on the class material during lab, you receive lab points for the day. There is one more lab than counts in your grade. **You cannot make up lab sessions**.

ASSIGNMENTS

There will be 5 graded assignments over the course of the semester. They will be assigned 2-3 weeks prior to their due date. Assignments must be handed in in-class *at the beginning of class* on the due date. Late assignments are graded at the end of the semester for a maximum of half credit**.** Assignments MUST be done on the assigned CCSF system. Requirements for assignments are in the handouts entitled *AssignmentGuidelines* and *ShellScriptAssignments*. ***You may work on assignments with one other student if you wish.*** *(see AssignmentGuidelines).*

FORUMS AND GETTING HELP

The best way to get help is to use the Google Group for the course. Subscribing to the group is a requirement of the course. **Postings earn extra credit** - up to 5% of your grade over the course of the semester.
For extra help, I try to make myself as available as possible to my students in the linux classroom (L413), mainly before and after class and in the late afternoons on Tuesday, Wednesday and Thursday. You are welcome to stop by or to otherwise contact me for some help. I will try my best to accommodate you. This class does not have a tutor. The ACRC lab (3rd floor Batmale hall) has tutors who have are willing to help with Unix. Ask in the lab.

HILLS ACCOUNTS

Within a few days of completing your enrollment for this class, an account will be created for you on our Redhat 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. 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 at **`/pub/cs/gboyd/cs260a`**

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. 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 when necessary. *It is your responsibility to get these issues worked out in order to complete your assignments on time.*

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 soon after the semester begins 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.
For security reasons the linux machines are only accessible through **`hills`** or another local machine. They are not registered via DNS. To login remotely 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. You should visit it and make a note of them.
Some of your assignments will require **`root`** access to the linux machines. You will be given the **`root`** password when this is needed. Being the superuser is both a privilege and a responsibility. Abuse of this privilege may result both in failing the course and in disciplinary action.

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 Google Group.