



CSci 132 Practical UNIX and Programming Essentials: Course Communications, Content, and Structure

Communications

Class Meetings: Tuesday, Friday 9:45 - 11:00 A.M., HW 413
Office: HN 1090J
Office Hours: Tuesday, 11:30 A.M. - 12:30 P.M. and 2:30 - 4:30 P.M.
Email: stewart.weiss@hunter.cuny.edu
Telephone: (212) 772-5469 or (212) 772-5213 (department office)

Resources

Textbooks: Dave Taylor, *SAMS Teach Yourself Unix in 24 Hours*, Third Edition. Sams Publishing, 2001. ISBN 0-672-32127-0.
Andrew L. Johnson, *Elements of Programming with Perl*, Manning Publications, 1999, ISBN 1-884777-80-5.

Computing Facilities: Registered students will be given user accounts on the UNIX hosts in the 1000G lab of the Computer Science Department, located on the tenth floor of Hunter North. This lab is open 24 hours a day, 7 days a week and access to it is limited to students enrolled in certain courses. In addition, students will be able to use a secure remote login service such as *ssh* to access these accounts. See the section entitled **System Access** below for instructions on how to obtain an *ssh* client for a home computer.

Website: All course materials, including lecture notes, slides, assignments, syllabi, and other resources, including this document, are posted on my website, at http://www.compsci.hunter.cuny.edu/~sweiss/course_materials/csci132/csci132_f10.php

Discussion Board: This class will use a Google group as a discussion board. Please see the section below entitled "Course Materials, the Web, and Blackboard" for the details.

Prerequisites

None.

Course Content

This is an introduction to elementary computer programming and the UNIX operating system. It also serves as a gateway into the bioinformatics concentration/program. Students are taught fundamental programming principles that can be applied to any programming language, but Perl, which is a versatile and yet easy-to-learn language, is what is taught in this course. Students are given a conceptual overview of the UNIX operating system and programming environment, and a practical introduction to the use of various UNIX tools, such as filters and utilities. This is primarily a pragmatic course with an emphasis on skills acquisition; students will learn how to get things done quickly and easily in a UNIX environment.



Expectations, Tests, Assignments, and Grading

We will cover a lot of material. Students are expected to do all of the specified reading, complete all assignments *on time*, and work independently, unless stated otherwise. There will be many short programming exercises, a non-programming project, and a single, comprehensive final exam. Your final grade will be based on the weighted average of eight assignment grades and the final exam grade. ***The assignments are worth 10% each, and the final exam, 20%.***

Important Note: The final exam will be on **Monday**, December 20, from **9:00 to 11:00 A.M.** Note that this is a Monday and is **earlier** than the class time.

Scheduling

The last day to drop a class without a "W" is September 15. The last day to withdraw is November 17.

Make a note of the following scheduling changes. There are **no classes** on September 10 and 17, nor on November 26. The last day of class is Friday, December 10.

Programming and System Access

This is a "hands-on" course. One cannot learn UNIX or learn how to program without practical experience on a UNIX system or programming. Therefore, every student is given an account on the Computer Science Department's UNIX network, and has two different methods of accessing that account.

The first is to use the 1000G lab, which has workstations that run Red Hat Enterprise Linux 5, one version of UNIX. This lab is open "24/7" and has 24 workstations. The advantage of this is that you will be sitting in front of the monitor of the Linux host and will not be subject to potential disconnections that can take place when working remotely, nor the slowness of the network. The disadvantage is that it requires you to be in school.

The other choice is to work **remotely**. The Computer Science Department has a UNIX host, **eniaco.gso.hunter.cuny.edu**, available to students who have access to the lab. You will be able to access this host from any computer that has **ssh** client software. If you download the **ssh** client software to your home machine, you will be able to login from home.

You have the option to use both.

There are several versions of **ssh**. **OpenSSH** is an open source version developed for the OpenBSD project. It is available for many operating systems. The OpenSSH home page is at

<http://www.openssh.com>.

Alternatives for Windows are at <http://www.openssh.com/windows.html> and those for Mac are at <http://www.openssh.com/macos.html>.

PuTTY ssh is another free version for Windows operating systems, available at <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>. My preference for



Windows is the original SSH client, which is no longer supported. It can be downloaded from my website at <http://www.compsci.hunter.cuny.edu/~sweiss/resources.php#Applications>.

Course Materials, the Web, and Blackboard

As noted above, all lecture notes will be posted on my website, which, unlike *Blackboard*, does not require privilege to access. I rely on *Blackboard* only for communicating to all students and for posting grades. You should check *Blackboard* before each class in case there are announcements. Urgent announcements will always be sent by email to your Hunter email address, so you should make sure you read that email regularly.

Everyone in this class has been added to the Google group *hc_csci132*. The group's website is http://groups.google.com/group/hc_csci132. It will be the means by which general course-related questions will be addressed. (If you are not in the group, please send email to me to add you to it, or send a request to the group to join.) The procedure is different depending on whether you have a *gmail* account or not.

If you do not have a *gmail* account with Google, then in order to ask a question, first scan the emails you have received from the group hc_csci132@googlegroups.com. If you find that your question has been answered in one of these messages, your problem is solved. If not, then send the question in an email message to hc_csci132@googlegroups.com and when I answer it, you will receive email.

If you have a *gmail* account, then you may login to the group's website using your *gmail* username and password. Open the page http://groups.google.com/group/hc_csci132 in your web browser and login to the site. Then check the *Discussions* page on the website to see if your question has been asked and answered there. If it has not been asked yet, then post the question there. Everyone in the class, including your instructor (me), will see the question in email from the account hc_csci132@googlegroups.com. I will answer the question when I see it, and you will see the answer in your email.

Anyone is free to answer a question if he or she thinks they know the answer. If the answer needs a bit of help, it will be given.

Academic Honesty

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The college is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures. In this class, I will enforce the University's Policy on Academic Integrity and bring any violations that I discover to the attention of the Dean of Students' Office.