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

Communications

Class Meetings: Tuesday, Friday 9:45 - 11:00 A.M., HW 207
Office: HN 1090J
Office Hours: Tuesday 11:30 A.M. - 12:30 P.M., Thursday 12:45 - 1:45 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 Registered students will be given user accounts on the UNIX hosts in the 1000G
Facilities: 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_f09.php

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 21, from ***9:00 to 11:00 A.M.*** Note that this is *earlier* than the class time.

Scheduling

The last day to drop a class is September 17. The last day to withdraw is October 26.

Make a note of the following scheduling changes. There are ***no classes*** on September 18 and 29 (since Sept. 29 follows a Monday schedule), nor on November 26 and November 27. The last day of this class is Friday, December 11.

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, ***eniac.geo.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, for posting grades and for the use of the *Discussion Board*, which is enabled so that students can have a free exchange of ideas. Therefore, you should check *Blackboard* before each class in case there are announcements.

I require that you use the following protocol if you have a question:
1. Check whether the question you want to ask has been asked and answered in the *Discussion Board*.
2. If it has been answered, you are finished. If not, post the question in the *Discussion Board* and ...
3. Send an email message to me asking me to look at the question on the *Discussion Board* and answer it there.
4. I will answer the question and send you an email message when I have answered it, so that you do not have to "poll" it waiting for an answer.

If you do not post your question, I will ignore it. I do this to save time for all of us.

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.