Roosevelt University: CST 318 – Introduction to Unix

Michael E. Ruth, Ph.D.

Course Meetings: M/W, 2:00PM to 3:15PM @ Gage Bldg, Rm. 518Office: SCH 600WW / Gage, Rm. 502APhone: (312) 281-3303Office Hours: Gage: M/W 11:30 to 1:30pm or by appointment.Email (preferred): mruth@roosevelt.eduAIM: michaelruthphd

Course Description:

A hands-on introduction to the UNIX operating system family focused on learning important UNIX concepts, such as the shell, command line utilities, file system, access control/permissions, process management, and networking, as well as learning to automate system administration tasks through programming with the shell and in Perl.

Course Prerequisites:

CST 250 with a min grade of C- or CST 365 with a min grade of C-

Course Objectives:

- Develop an understanding of the UNIX operating system including the shell, the file system, access control model, process model, and networking in UNIX
- Demonstrate proficiency using basic UNIX command line utilities including those designed to work with files, the file system, permissions, and networking.
- Describe the administration of human-computer systems including user, host, and hardware management and the relationship between a single host and the enterprise.
- Demonstrate proficiency in the automation of system administration tasks using scripting languages including the shell and Perl.

Textbook:

<u>Unix: The Textbook, 2nd Ed.</u> by S.M. Sarwar, R. Koretsky, & S. A. Sarwar ISBN: 978-0321227317

Grading: (+/- grading is used):

- 2 Exams (15 % each)
- Final Exam (25%)
- Quizzes/Class Participation (10%)
- Assignments (35%)

Course Policies:

- You only have **three free** absences. After that, you will be penalized a letter grade for each additional absence. Make them count!
- You are responsible for all material covered and announcements regardless of delivery method.
- There will be no make-up examinations.
 - If you miss an exam *due to an emergency*, an exam of *my choice* will count for both!
- Late homework will **NOT** be accepted.
- Arrive in class on time and silence all noise-producing equipment!

Disabilities:

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact the Office of Disabled Student Services, 310 Herman Crown Center, 312-341-3810, or e-mail nlitke@roosevelt.edu as early as possible in the term.

Academic Honesty:

Any instance of cheating will result in a grade of 'F' on that assignment / exam. A second offense will result in an 'F' in the course. Each assignment must represent *your own work*. You may discuss the assignments with other students, but you cannot copy or share assignment artifacts. Grievance procedure is at: http://roosevelt.edu/current/judicial/

Date	Торіс	Reading
8/30	Introduction to Unix & 318/Overview of OS	Syllabus, 1
9/1	History of Unix	2
9/8	Getting Started With Unix	3
9/13	Unix Shell	4
9/15	Editing Text Files	5
9/20	The Unix File	7.1-7.3
9/22	The Unix File System	7.4-7.8
9/27	Unix Access Control & Permissions	8
9/29	Working with Files & Redirection/Piping	9, 12
10/4	Exam #1	
10/6	Searching/Compression & File Sharing	10, 11
10/11	Processes	13
10/13	Unix Networking Utilities	14
10/18	Introduction to System Administration (SA)	ТВА
10/20	SA: The UNIX Boot Process	TBA
10/25	SA: Disks & File Systems	ТВА
10/27	SA: Software Installation	TBA
11/1	Exam #2	
11/2	Last day to withdraw with a 'W'	
11/3	SA: Managing Users (Accounts)	TBA
11/8	SA: Limiting Users	TBA
11/10	SA: Maintenance/Automation	TBA
11/15	Introduction to Shell Programming	15
11/17	Shell Programming II	16
11/29	Introduction to Perl	ТВА
12/1	Programming in Perl	ТВА
12/6	Programming in Perl II	ТВА
12/8	Perl & Regular Expressions	ТВА
12/13	Final Exam	

<u>Very Tentative</u> Course Schedule: