

# UNIX System Administration

## Course Syllabus

<b>Description</b>	Introduction to basic system administration of networked UNIX systems. Overview of basic PC hardware, system boot process, administration utilities, and management of user accounts, file systems, and basic networking.
<b>Prerequisites</b>	CIS 68A. A good understanding of the basic use of Unix or Linux is essential. CIS 68B1 is very useful.
<b>Units</b>	5 Units. Two hours lecture, two hours lecture/laboratory with hands on work. Four hours terminal time per week.
<b>Instructor</b>	Mike Cappella      cis68c1@mikecappella.com      Available by appointment only
<b>Class Meetings</b>	Lecture                      Monday 6:00 – 7:50pm                      Room 5903 Lecture/Lab                Monday 8:00 – 9:40pm                      Room 4305
<b>Class Website</b>	The class website at <a href="http://cis68c1.mikecappella.com">http://cis68c1.mikecappella.com</a> contains all class material. Please use the website as the definitive source for information and class content. Updates to handouts will be available shortly after class.
<b>Textbooks</b>	Required <b><u>Unix® System Administration Handbook, Third Edition, Evi Nemeth, et al. Published by Prentice Hall, Inc. ISBN: 0-13-020601-6</u></b> Recommended <b><u>RedHat 7.2 or 7.3 Software</u></b>
<b>Supplies</b>	Several 3.5" HD floppy disks
<b>Course Objectives</b>	By the end of the course, you should have a good understanding of: <ul style="list-style-type: none"> <li>• Basic PC hardware</li> <li>• The system boot process</li> <li>• Various system administration utilities</li> <li>• Setup and manage user accounts and groups</li> <li>• Perform file system setup, maintenance, checks and repairs, backup/restore, and mount/un-mount</li> <li>• Configure basic networking</li> <li>• Basic security issues and procedures</li> </ul>
<b>Requirements &amp; Policies</b>	<ul style="list-style-type: none"> <li>• You are expected to attend all classes – notify instructor in advance if you cannot attend</li> <li>• Class attendance and participation is important and required – it <i>will</i> be a factor in your course grade</li> <li>• Be on time to class</li> <li>• Expect at least four hours of homework / terminal time per week</li> <li>• Turn off or quiet all cell phones, pagers, or other disruptive devices</li> <li>• No food or drink near computers or in the labs</li> <li>• No pornography or other possibly offensive or disruptive material on school computers</li> <li>• Keep track of and manage your own grades</li> </ul>
<b>Homework and Lab Work</b>	All assignments will be distributed in class and/or posted to a class website; you are responsible for ensuring that you have the homework for each lecture. Homework assignments are due by start of class on the due date, and all turned-in assignments (unless otherwise noted) must be type-written. The time of receipt for assignments turned in via email will be the e-mail's <i>received</i> time. Because the course will move quickly, late homework will generally <b>not</b> be accepted. Exceptions may be made on a case-by-case basis, but do <i>not</i> count on this, especially if you have not received prior approval.
<b>Drops and Withdrawals</b>	<ul style="list-style-type: none"> <li>• You may be dropped from the course if you miss two or more consecutive classes without my prior approval</li> <li>• You will receive a letter grade in the course, unless you file a Pass/No Pass form or drop/withdraw on time</li> <li>• It is your responsibility to notify me of your intention to drop the course, or file a Drop card with the Registrar. Otherwise, you <i>will</i> be receiving a letter grade in the course. See <b>Important Dates</b> below.</li> </ul>
<b>Important Dates</b>	<ul style="list-style-type: none"> <li>• Oct 18<sup>th</sup>                      Last day to drop with no grade or to file pass / no pass</li> <li>• Nov 15<sup>th</sup>                      Last day to drop with a "W" (withdraw)</li> <li>• Nov 11<sup>th</sup>                      Veterans Day - Campus closed</li> <li>• Dec 9<sup>th</sup>                        Final Exam</li> </ul>

**Grading**

Your grade will be primarily based on the total number of points you earn in the class. Class participation will also affect your final grade. Class points will be approximately distributed as follows:

Homework / Lab	20%
Exam(s)	35%
Final Exam	45%

The grading scale for the course is as described below, but may be modified as deemed appropriate by the instructor.

A	<i>Excellent</i>	90 – 100%
B	<i>Good</i>	80 – 89%
C	<i>Satisfactory</i>	70 – 79%
D	<i>Less than Satisfactory</i>	60 – 69%
F	<i>Failing</i>	0 – 59%
P	<i>Pass</i>	70 - 100%
NP	<i>No Pass</i>	0 - 69%

**Course Content**

The course topics to be covered are listed below; however, this list may change as necessary or appropriate. Consult the class website for the list of the weekly topics.

• Introduction to System Administration	• User Accounts
• Review of UNIX and PC Hardware	• File Systems and Disks
• Policy and Politics	• Kernel & Drivers
• Boot and Shutdown	• Installation and Configuration
• The Super User - root	• Networking Basics
• Variables and Quoting	• Daemons
• Processes	• Cron and Automation
• Accounting and Logs	• Sharing System Files
• Security	• Print Services
• Backup and Restores	• Review

**Academic Honor Code**

Read this section carefully and make sure you understand it! Foothill College and I expect that "students will pursue their studies with integrity and honesty". Cheating, copying any portions of another persons work, or any other form of academic dishonesty is taken very seriously. Any student caught or deemed to have engaged in such behavior will receive an F in the course. In addition, you may be reported to the Dean of Student Affairs, which may lead to expulsion. It is your responsibility to know the school's policy and my policy about what constitutes academic dishonesty (see <http://www.foothill.fhda.edu/services/honor.html>). Some students believe it is acceptable to work on assignments in pairs or teams, and then submit essentially the same collaboratively derived answers. To clarify my policy on this, you may discuss concepts with each other, but unless otherwise instructed, you must work-out solutions to problems on your own, and all submitted work must be entirely your own. If your work resembles other material or someone else's work, you and the other student(s) will fail the course. I will give no warnings or second chances. It is your responsibility to be sure you understand these policies. I am sorry to have to be so tough with this - the number of students who disregard such policies continues to bewilder me.