C S 30A Course Syllabus

What Is This Course All About?

This course is an introduction to the Linux operating system, primarily focused on command line usage. It covers the kernel, filesystems, shells and user utilities and introduces you to the fundamentals of shell programming, processes, communications, and basic security.

To view the Student Learning Outcomes for this and other Computer Science courses, go to

http://www.fgamedia.org/faculty/loceff/cs_courses/common/slos/cs_slos_1.html (Links to an external site.)Links to an external site.

How Do You Use This Site?

Each week you should login to this course site. There are three main areas in the site that you should visit regularly that can be accessed using the **menus on the left side** of the Canvas page:

- "Modules" Menu: *Required*. This is where you will find the weekly reading assignments, Lab Quizzes, Projects and exams.
- "Discussions" Menu: *Required*. This is where you will find discussions on topics that relate to the assignments, the project and exams. While daily participation in the discussions is not required, use them to get help. You will learn a lot more in the class if you frequently answering and post questions. You may find a few of the answers to the midterm as well as help with the lab assignments and final project in the discussions.

How Do You Contact Me:?

If you have a personal question that you want to ask me, go to your Inbox and send me a Canvas Message, send it to Mike Murphy.

If you have a question regarding an assignment, you need clarification regarding an assignment or any question or comment regarding a topic in the course, post it to the appropriate Discussion Forum.

What Will You Need to Buy, Borrow or Get for Free?

There is no required textbook. You can complete the course from the materials provided in the class site and by reading online resources hyperlinked on the assignment pages. If you prefer to use a traditional style book, I recommend this free online book:

Linux Fundamentals, Paul Cobbaut, 2013 Available for online viewing or download here:

http://linux-training.be/files/books/LinuxFun.pdf (Links to an external site.)Links to an external site.

You also need access to a computer with a Linux operating system of any distribution or access to Unix.

- Get access to a Linux or Unix system. There are many ways to do this (choose one).
 - 1. Install Linux on your own computer. Read the *Installing Linux* chapters in the online textbook (chapters 4, 5 or 6). These chapters suggest a few distributions. Note that you can select any distribution of your choosing.
 - o Many students like <u>Ubuntu (Links to an external site.)Links to an external site.</u> and <u>Mint (Links to an external site.)Links to an external site.</u>, but again, any distribution will work fine.

Installing Mint (Links to an external site.) Links to an external site.



- Install Linux on a flash drive: use this guide for installing on USB stick, Laptops,
 Notebooks, PDAs, Mobile Phones and Other Portable Devices:
 http://www.tldp.org/LDP/Mobile-Guide/html/index.html (Links to an external site.)Links
 to an external site.
- <u>Install Ubuntu on VirtualBox.</u> (<u>Links to an external site.</u>)Links to an external site. Note that you are not required to use Ubuntu with VirtualBox. Any Linux distribution will work fine. VirtualBox has versions to support Windows, Mac, and even Linux (You can run Linux as a virtual machine on Linux)

Students using Mac OS X or higher do not need to install Linux. You can do the assignments using your Mac terminal.

Is There A Lab Component To This Class?

Yes, but you can work on the lab remotely if you prefer using your own computer or any computer connected to the Internet. You are **not** required to go to our computer lab on campus, although it is available for you to use for free if you need it. The computer lab is located in the <u>STEM Center (Links to an external site.)Links to an external site.</u>, it has online and well as inperson tutors available as well as computers.

The lab component of this class consists of lab assignments that are due in addition to the requirements of the lecture component of the class.

What Do You Need To Do For a Grade?

You should plan to spend 8 hours per week on the lab assignments and another 8 hours per week on lecture reading assignments, term project and exam preparation. Here is how it breaks down:

- Lab Component: There will be 8 lab quizzes. The lab quizzes have simple to follow lab exercises and multiple choice or fill-in-the-blank questions about the exercises worth 10 points. Do not put them off until the due date. Start early! You will find the lab quiz descriptions under the Assignments menu.
- Lecture Component: There will be weekly reading assignments and three projects worth 25 points each. You will find the project description under the "Assignments, Tests and Surveys" menu. Additionally, there will be 3 exams: two open book exams and an open book final. You will find the exams under the "Quizzes" menu. The exams are open and can be accessed as many times as you need to prepare your answers, but you can only submit the exams once for a grade. You cannot retake an exam for a better grade after you turn it in.

What about late assignments?

• You must turn in all assignments by the due date in order to get full credit, you may turn in your assignments up to 3 days late but you will lose 10% of the total possible score if you do.

Do You Have To Do The Work Alone?

- The exams are open book, so you can consult any written source. However, you *must* work alone on the exams (Please refer to the Academic Honor Code excerpt below).
- You can (and should) work together on assignments. I encourage everyone to work in a group and even though it may seem difficult to participate in a virtual group, it really can help you stay on track in an online class. As a student, I personally hated working in a group in a traditional class environment, but I tried it in an online class and loved it (the group work). It made all the difference. You can sign up to work in a group by replying to the discussion (Discussions and Private Messages menu) "Group Signups". Once in a group, you will need to work out the best way to communicate among yourselves. For example, you might schedule online discussions at a specific time if that works for all group members, or by phone or email. If you need a conference call for your group, I can help. Just let me know. You have the "Discussions" area in Canvas available to you as well. When you submit your work, all group members must be identified on the submission. You must submit the assignments through the Canvas site (please no email or fax submissions).

How Do You Get Help?

If you need help at any time during the quarter, post your problem under the Discussions area. Other students may be having the same problem and need to hear the answer or they may already have the answer and can help. If you prefer, you can send me a private message or email. Please do *not* put questions in your assignment submissions--it isn't a good place to have a conversation and solving problems really does require a two-way discussion.

How You Will Be Graded:

Labs (8) 80 points

Exams (2) 48 points

Projects (3) 75 points

Final exam 50 points

Total 253 points

Tentative grade scale:

89%-100% A

87%-88% A-

85%-86% B+

80%-84% B

77%-79% B-

75%-76% C+

65%-74% C

62%-64% D+

55%-61% D

<55% F

Because the grade scale is tentative, the final grade distribution is subject to change in the students' favor. One more thing: I do **not** give W grades. If you wish to withdraw

from the course, you must contact the drop the class using MyPortal (Links to an external site.) Links to an external site. before the deadline.

What Is the Honor Code Policy?

Please refer to your schedule for College Policies concerning the Academic Honor Code found here: http://www.foothill.edu/services/honor.php (Links to an external site.)Links to an external site.

You will receive a failing grade for any work you submit in this class that meets the criteria for academic dishonesty and you will be reported to the Office of the Dean of Student Affairs and Activities.

What If You Need Disability Accommodations?

To obtain disability-related accommodations, students must contact the Disability Resource Center (DRC) as early as possible in the quarter. To contact DRC, students may:

- · Visit DRC (Links to an external site.) Links to an external site. in Room 5400
- Email DRC at adaptivelearningdrc@foothill.edu (Links to an external site.)Links to an external site.
- · Call DRC at 650-949-7017 to make an appointment

If you already have an accommodation notification from DRC, please contact me privately to discuss your needs.

Course Summary:

Date	Details	
Sun Sep 30, 2018	Lab Quiz 1 due by 11:59pm	
Sun Oct 7, 2018	Lab Quiz 2 due by 11:59pm	
Sun Oct 14, 2018	<u>Project 1 - Open Source Software (Start this week, due the end of week 3)</u>	due by 5pm
	<u>Lab Quiz 3</u>	due by 11:59pm
Fri Oct 19, 2018	Lab Quiz 3 (1 student) due by 11:59pm	
Sun Oct 21, 2018	Lab Quiz 4 due by 11:59pm	
Sun Oct 28, 2018	Lab Quiz 5 due by 11:59pm	
Sun Nov 4, 2018	<u>Exam 1</u> due by 11:59pm	

Date	Details	
Sun Nov 11, 2018	<u>Lab Quiz 6</u> due by 11:59pm	
Sun Nov 18, 2018	Lab Quiz 7	due by 11:59pm
	Project 2 - File Processing (Start this week, due the end of week 9)	due by 11:59pm
	Project 2 - File Processing (Due the end of this week)	due by 11:59pm
Sun Dec 2, 2018	<u>Exam 2</u> due by 11:59pm	
	Lab Quiz 8 due by 11:59pm	
Sun Dec 9, 2018	Project 3 - Shell Script due by 11:59pm	
Wed Dec 12, 2018	Final Exam due by 11:59pm	