

SCHOOL NAME HERE

CISXXX: Linux Administration
TERM YEAR

Instructor Information

Instructor: YOURNAME

Email: email@email.com

Office: OFFICE

Phone: PHONE

Available by appointment online on request and office hours listed in Blackboard

Course Information

Meeting time: Online

Prerequisites: None

1 credits

Course Satisfies: Computer, Open/Free, Technical, Technology

General Course Description

This is a project based course to introduce students to a Linux/Unix type environment. This course will cover system navigation, file manipulation, text processing utilities and shell scripting. This course will primarily be done using a CLI, with a focus on Bash.

General Course Objectives

The purpose of this course is to gain an understanding of Linux/Unix type environments and be comfortable in them

Upon successful completion of this course the student will:

- Comfortable using basic commands from the command line
 - Organize and manage files within the system
 - Edit files using editors such as VI and/or Emacs
 - Usefully combine tools and features such as filters, pipes, appends and redirections
 - Know how to do some basic shell scripting, and successfully read, write and debug basic bash scripts
 - Know how to use resources online and off to find additional information about the commands and system
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Extra Course Material



Linux Pocket Guide

By Barrett



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Paperback: 272 pages

Publisher: O'Reilly Media; 3 edition (June 23, 2016)

Language: English

ISBN-10: 1491927577

ISBN-13: 978-1491927571



Check Blackboard at least once a day for assignments and announcements.

Course Structure and Requirements

Assessment in science is about documenting and providing feedback to you about whether you:

- try things,
- ask questions,
- consider and test alternative ideas,
- explain how you are thinking,
- respond to feedback and critique,
- persevere even when things aren't working,
- communicate regularly so you can benefit from others' thinking and they can benefit from yours.

Method of instruction

Each week has a module, each module has a video called TL;DR(Too long, didn't read) that gives you an overview of the week's objectives, quick run through of a lecture, and information on the lab assignment.

This is an online course. You need to be responsible for your email and Blackboard. It is important that you are checking in on this class multiple times per week to make sure you are on top of all your work.

Email

You should check your student email AT LEAST TWICE a week. If you do not like the student email interface, it is easy to set up on your desktop client or mobile device. You can also forward your student mail to any other email account.

Email is the best way to contact me. Make sure to use the school email NOT blackboard. I do not respond to messages on Blackboard.

When you send an email to a professor, always include the following:

A subject line that says why you are emailing

Your name

What class you are in (either course number or title, day, and time)

Attendance Policy

[School attendance policy HERE](#)



Basis for Grading



Blackboard is where you can track what assignments, quizzes and exams you have completed. The quizzes and exams have specific due dates, no late work will be accepted for any quizzes or exams. You are considered as not participating in the course if you miss an exam, miss 2 quizzes or have not logged into blackboard for more than 1 week.

If you earn a 75 or less on a lab you may redo the lab and I will regrade it. Labs have due dates, any labs turned in after the due date will be marked late and lose a few points (For example, an A lab on time earns an A, an A lab late earns an A-)

If you fail a lab for plagiarism you are not allowed to resubmit, it stays a 0.

Final course grades will be determined as follows:

Percentage	Task
25	Exams
25	Quizzes
50	Lab Assignments

Accessibility/Learning Differences



University Access Support
Email: [redacted]

Everyone learns differently, and in this classroom, those differences are not only seen, but valued, and I will strive to make this classroom welcoming and supportive for everyone. If you need specific accommodations, for a documented disability, please contact the Learning Accommodations Center at the beginning of the semester so I can be certain to support you fully.

I will work to ensure that all students have multiple means of accessing class information, multiple ways to take part in class activities, and multiple avenues for being assessed on class work.

School policy and resources for accommodations can go here

Laptop Requirement

School policy on laptops.

Statement on Plagiarism and Cheating

Ever taken an art class? Were you ever tempted to look over at someone else's artwork and copy down their correct answer? Doesn't even make sense, does it?



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That's because art is creative, and individual, and there's no right answer. You might think science is none of those things, but in fact, it is.

I won't be marking your work right or wrong. Think of the feedback as either complete or needs more thought and research to become complete.

If you DO try to pass someone else's work or writing off as your own, however, the assignment will not count and you will not be able to revise it. If you plagiarize, you'll run the risk of failing the course, so you're much better off just thinking your own thoughts and doing your own work.

Food, Health, Housing



If you have difficulty affording groceries or accessing sufficient food to eat every day, if you lack a safe and stable place to live, or if mental or physical health issues are making it hard for you to succeed in college, do not feel embarrassed or ashamed.

These challenges are common, and there are undoubtedly other people in this class who are dealing with similar issues. If you feel comfortable, please talk to me about it. Even if you don't feel comfortable, know that this college wants to support you. Here are some of the resources we have to offer you:

Community Resources

[Community resources go here](#)

Mental Health



Whether you have an ongoing mental health challenge, or a new issue or mental health crisis emerges during the semester, know that you are not alone, and there is help for you. You can see a counselor on NECC's campus for free, and if you need further help, our counselors can refer to a community provider.

[School mental health resources go here](#)

Additional Resources

National 24 hour support services

Crisis text line – text, START, to 741-741



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Samaritans – 877-870-4673, call or text

National Suicide Prevention Lifeline – 1800-273-8255

United Way Emergency Community Social Services 877-211-6277

Lifeline Chat – Anyone who is depressed, going through a hard time, needs to talk, or is thinking about suicide can use the chat. The chat counselors are available to listen and support you through whatever difficult times you may be facing.

Topical Syllabus

Week	Topic	Objectives
Week 1	Introduction, History, Philosophy, and Community	Describe the origins of linux operating systems State several differences from Windows OS List characteristics of open source software
Week 2	Distros, file/directory structure (basics), ssh, scp, logging on, man pages working in lab, common dir like /etc, . & ..	List several distros and explain some differences Demonstrate logging on the server, the local lab and transfer files to and from the server Describe File structure basics and some common directories Demonstrate getting help (man pages, web resources, blackboard) and how the text is structured



Week 3	Common commands (and basic switches) Absolute and relative path names, : ls (-a, -l, -R), cd, cat, mkdir, pwd, passwd, cp, mv, rm, rmdir	Explain the differences of Absolute vs relative paths and why it matters Demonstrate the use of Basic commands Show how to use some common switches for the ls command
Week 4	More commands and switches: find (locate), touch, wc, sudo, man, ps, kill, shells (bash, sh, csh, zsh), reg exp (glob), (-R), date, who	Demonstrate finding files with several criteria Show the use of ls with wildcards and recursive searches Explain how to locate running processes and kill a process.
Week 5	Environmental variables, PATH. vi (vim), nano/gedit	Show the use of vi to create, edit and save a text file Explain how the environmental variable PATH is displayed and why it is important Describe two environmental variables other than PATH
Week 6	Network mgt, installing software, Accounts and groups, file permissions (chmod) (ifconfig, if, netstat)	Demonstrate how to display network information such as IP address Explain how file permissions work and how to change them Describe the uses of accounts and groups to control usage on the system

Week 7	Compression, archive, and other useful tidbits	
Week 8	Basic shellscripts (shebang, comments), echo (opaque, semi-opaque, cleartext0	Create and use a basic shellscript that includes a shebang line, comment and echo Explain the different quotes and their uses Modify a script using a text editor
Week 9	Shellscripts with variables, set with backtick, positional parameters, input (read)	Use a script to demonstrate the use of a positional parameter. Show how to get user input for a script using read Explain the use of set with backticks
Week 10	Grep (-i,-r,-v), pipes, filters (more/less), top, redirection (append), head/tail, diff	Demonstrate the use of grep to filter a text file Use redirection (or append) in a command and explain what is happening Show the use of head, tail and diff.
Week 11	Scripts with conditionals	Write and test a script with a conditional and explain the use of conditionals Demonstrate how to debug a script with conditionals
Week 12	Scripts with loops, tar	Use a script with a loop to explain

		how loops work Show how to use tar to pack an unpack files in a directory Demonstrate how to debug a script with a loop
Week 13	Alias, history, _bash, prompts	Show how to use alias to substitute for a command string Describe the _bash files and their uses Show how to modify the user prompt
Week 14 + 15		

Distance Education Course Interaction Plan

Distance Education Course Interaction Plan

Form DE-2

This form is to be completed by the faculty of record. Students enrolled in this distance education course shall receive a copy of this completed form.

Course Title: CIS XXX Intro to Linux	Faculty:
Telephone Number:	Office Hours (if any): Posted in Blackboard

Mailing and/or Email Address: aholdengouveia@necc.mass.edu



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Asynchronous Course YES Yes or No (select one only) Asynchronous: This form of distance education is characterized by an emphasis on “learning on demand” or “as needed communication” between students and faculty from multiple locations at times convenient to participants.	Synchronous Course Yes or No (select one only) Synchronous: This form of distance education entails the use of live, two-way communication among and/or between students and faculty in a scheduled or “fixed” point(s) of time(s), much like classroom-based instruction.
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This course may include, but not be restricted to, the following interactions. (Type Yes or No next the items that apply.)

1. in person meetings No
2. telephone interactions No
3. electronic interactions(email, internet...) yes

If yes, dates, times, places are to be specified:

Students are required to engage in the following interaction(s) for successful completion of this course:

Assignment Due Dates and Topical Syllabus

The school calendar for the semester can be found at [Link here](#) if you would like to check any posted information shared officially by the school.

Assignment Due dates (please refer to the grading and late work policy)

Due Date	Assignment	Quizzes/Exams
Week 1		Week 1 Practice Quiz
Week 2	Week 2 - Research	Week 2 Quiz
Week 3	Week 3 - Common Commands	Week 3 Quiz



Week 4	Week 4 - More Common Commands	Week 4 Quiz
Week 5	Week 5 - Editor	Week 5 Quiz
Week 6	Week 6 - Networking	Week 6 Quiz
Week 7		Exam 1
Midterms		
Week 8	Week 8 - Basic Shells scripting	Week 8 Quiz
Week 9	Week 9 - Shells scripting	Week 9 Quiz
Week 10	Week 10 - Grep head and tail	Week 10 Quiz
Week 11	Week 11 - Scripts with Conditionals	
Week 12	Week 12 - Scripts with loops	Exam 2
Week 13	Week 13 - Alias and prompts	
End of term	All labs must be in by XXXX at 11:59 pm NO EXCEPTIONS!	Exam 3 due XXXX