NET 3200	Linux Systems Administration Spring Semester 2019
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Instructor	AJ Hepler Office: D2 308D (Davis Campus) Phone: 801-395-3433 E-mail: ajhepler@weber.edu Office Hours: Davis Campus: Room D2 308D Tue, Thurs 5:30pm-7:00pm Ogden Campus: Room EH 311 Tue, Thurs 1:30pm-2:30pm Online: By appointment		
Classroom	WSU Davis Campus: D2 315		
Days	Tuesday, Thursday		
Time	4:00pm-5:15pm		
Textbook	CompTIA Linux+ Powered by Linux Professional Institute Study Guide (3 <sup>rd</sup> Edition) by Bresnahan and Blum. (ISBN: 978-1-119-02121-6)		
	In addition to the textbook above, you will also be using an online interactive textbook from NDG Labs. Your instructor will register you for this on the first day of class, and you will not be charged any additional fees to use this service.		
Course Description	This course gives students a solid foundation in the fundamentals of the Linux operating system. Students gain system-level experience through problem-solving exercises at the command line and in the graphical user interface (GUI). By the end of the course, students will have learned the major, essential, command-line commands necessary to be accomplished users of Linux.		
	Course Prerequisite: NET 2200		
Learning Outcomes	Upon successful completion of this course, students should be proficient in the following areas:		
	<ul> <li>Navigate Linux using the command line</li> <li>Effectively utilize built-in Linux utilities</li> <li>Manage hardware and software</li> <li>Configure and maintain networking features</li> <li>Write custom shell scripts</li> <li>Manage system services, permissions, files, and directories</li> <li>Implement security features and configure proper security measures</li> </ul>		
Class Information	Class will consist of lectures, discussions, assignments, interactive lab exercises, quizzes and exams. Questions and comments are encouraged. It is expected that students will read the material related to each week's coursework. It is also expected that students will read the discussion posts and pay attention to any announcements posted throughout the semester.		
Assignments, Quizzes, and Exercises	Assignments for the class will be accessible at the beginning of each week on Canvas. Assignments will consist of quizzes, lab exercises, and review questions. Due dates will be available inside each assignment's instructions on Canvas. Late assignments may be accepted with a 10% penalty for up to an additional week to provide for unforeseen circumstances. Assignments submitted beyond one week late will not be accepted.		

Exams	There will be two exams for the class; a midterm and a final. The exams will be administered via the Chi Tester and count for 30% of the final grade. Review sessions will be held during or prior to each exam week to help you prepare for the exams.		
Accommodations for disabilities	Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Service Center.		
Grading	Final grades will be weighted based on the following criteria:  Review Questions 10% Quizzes 10% Assignments and Labs 50% Exams 30%  The final grade will be given based on points accumulated through assignments, quizzes, exams and labs. Standard grading will apply:  94-100 A 74-76 C 70-73 C-87-89 B+67-69 D+84-86 B 64-66 D 80-83 B-60-63 D-77-79 C+ 0-59 E		
Allocated Time	You should anticipate spending two to three hours of study per week for each credit hour of a university course. Computer and programming classes typically require time in the upper range.		
Policies	Exams can only be taken on the dates given unless arrangements are made to take them ahead of time. If you know you are going to be absent at any point during the semester, notify your instructor so you can keep up with the material covered in class.		
Academic Integrity (Cheating)	Students are expected to maintain academic ethics and integrity in regards to performing their own work. The WSU Student Code states clarifies cheating.  Cheating, which includes but is not limited to:  1. Copying from another student's test paper  2. Using materials during a test not authorized by the person giving the test  3. Collaborating with any other person during a test without authority  4. Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of any test, without authorization of the appropriate official  5. Bribing any other person to obtain any test  6. Soliciting or receiving unauthorized information about any test  7. Substituting for another student or permitting any other person to substitute for oneself to take a test  8. Plagiarism, which is the unacknowledged (uncited) use of any other person or group's ideas or work. This includes purchased or borrowed papers.  9. Collusion, which is the unauthorized collaboration with another person in preparing work offered for credit  10. Falsification, which is the intentional and unauthorized altering or inventing of any information or citation in an academic exercise, activity, or record-keeping process		

## Academic Integrity (Cheating) Continued...

- 11. Giving, selling or receiving unauthorized course or test information
- 12. Using any unauthorized resource or aid in the preparation or completion of any course work, exercise or activity
- 13. Infringing on the copyright law of the United States which prohibits the making of reproductions of copyrighted material except under certain specified conditions

School of Computing policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor, will result in:

- 1. An automatic failing grade for the class
- 2. A report to the Dean of Students that will include the student's name and a description of the student's dishonest conduct

Further disciplinary action may be taken by the University as it deems appropriate. You can find more information about academic honesty in the Weber State Policies and Procedures Manual. <a href="http://www.weber.edu/ppm/Policies/6-22\_StudentCode.html">http://www.weber.edu/ppm/Policies/6-22\_StudentCode.html</a>

If you are not sure whether or not you might violate one of these stipulations, check with your instructor prior to submitting any assignments with questionable content. Refrain from the urge to copy and paste content from the web or anywhere else. A poor grade on a single assignment is much better than a failing grade for the course.

## Course Fees

Course fees for the NET major are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

## **Emergency Closure**

In the event of an emergency or campus closure, please check Canvas for more information. You may want to sign up for Weber State's Code Purple if you haven't done so already to be alerted when these things happen. (https://www.weber.edu/codepurple)

## Tentative Class Schedule and Course Outline (subject to change)

Week of	Topic	Coursework
January 7	Course Overview and Introduction to Linux	Lab Assignment 1
Week 1		
January 14	Using Linux	Chapters 2 and 3 Quizzes
Week 2		Lab Assignment 2
January 21 Week 3	Working with Linux Command Line Tools	Chapter 4 Quiz Lab Assignment 3
January 28	Getting Help and Using man	Textbook CH1 Review Questions
Week 4	Getting Fleip and Osing man	Chapter 5 Quiz Lab Assignment 4
February 4 Week 5	Working with Files, Directories, and Archives	Chapters 6 and 7 Quizzes Lab Assignment 5
February 11	Pipes, Redirection, and Regular Expressions	Chapter 8 Quiz Lab Assignment 6
Week 6 February 18	Midterm Review Adding and Configuring Virtual Machine Hardware	Midterm Exam (Available Feb 18 – Feb 22)
Week 7		Lab Assignment 7
February 25 Week 8	Developing and Working with Scripts	Textbook CH2 Review Questions Chapter 9 Quiz Lab Assignment 8
March 4	Spring Break – No Classes	Spring Break
Week 9		
March 11	Managing Hardware	Textbook CH3 Review Questions Chapter 10 Quiz
Week 10	N. II ID I W	Lab Assignment 9
March 18	Networking and Package Management	Chapters 11 and 12 Quizzes Lab Assignment 10
Week 11  March 25	Woulding with Hooms and Dommissions	Chapters 12 and 14 Ovigges
Week 12	Working with Users and Permissions	Chapters 13 and 14 Quizzes Lab Assignment 11
April 1	Working with Boot Files	Textbook CH4 and CH5 Review Questions
Week 13		Lab Assignment 12
April 8 Week 14	Ownership and Securing Permissions	Chapters 15 and 16 Quizzes Lab Assignment 13
April 15	Final Exam Review	Final Exam Review
Week 15		
April 22 Week 16	Finals Week – No Classes	Final Exam (Available Dec 03 – Dec 13)