NET 2210	Linux Systems Administration Summer Semester 2021
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Instructor	AJ Hepler Office: D2 308N (Davis Campus) Phone: 801-395-3433 E-mail: ajhepler@weber.edu Virtual Office Hours: Tuesday, Wednesday 2:30pm-5:00pm (Please email me for a Zoom link)
Classroom	Online
Textbook	NDG Introduction to Linux 1 (1st Edition). (ISBN: 978-1946780041)
	The textbook for this course is a digital service that can be purchased directly from the publisher's website. You will be prompted to pay for the text when you first try to access the curriculum on the <a href="https://www.netacad.com">https://www.netacad.com</a> website. You may also purchase an access code at the following address: <a href="https://content.netdevgroup.com/buy/60434/">https://content.netdevgroup.com/buy/60434/</a> , or make arrangements to purchase the code through the Weber State bookstore.
COVID-19	Although this is an online class, it is important that you are aware of on-campus requirements should you need to visit any of the Weber State campuses or facilities. This will help ensure that we all do our part to minimize the potential impact of COVID-19 this semester.
	Information about COVID-19 response plans, student expectations, and other pertinent information can be found at <a href="https://www.weber.edu/coronavirus/default.html">https://www.weber.edu/coronavirus/default.html</a> . This page is frequently updating, so you should try to check it often. Communications about any University updates will be sent out as applicable.
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
<b>Learning Outcomes</b>	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> </ul>
Class Information	Students are expected to watch the videos and read the materials associated with each week located in Canvas. Questions and comments are strongly encouraged. It is expected that students will read the material related to each week's coursework 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 review quizzes and lab exercises. 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.

You will be required to complete quizzes inside of the Cisco Networking Academy online system located at <a href="https://www.netacad.com/">https://www.netacad.com/</a>, and you will submit your scores in Canvas through Weber State. The scores and grade book you see on the Cisco Networking Academy do not accurately reflect your grade in the Weber State course as you will be completing additional exercises outside of the Networking Academy. Your grade will be tracked on Canvas instead.

#### **Exams**

The course will consist of two exams; a midterm and a final. The exams will be administered via the Chi Tester and will be proctored by the Weber State testing center. Exams must be taken during the exam period provided and cannot be taken late.

Two options currently exist for taking exams that are administered on the Chi tester. You may use one of the authorized Weber State testing centers, or you may use an online service called Proctorio. Proctorio is free to you and does not require an appointment. The testing center recommends that you take a practice exam prior to attempting an actual exam in the course to familiarize yourself with the process. Details about Proctorio can be found at the following link: <a href="https://www.weber.edu/testingcenter/online-testing.html">https://www.weber.edu/testingcenter/online-testing.html</a>

As Proctorio has gained popularity, so have the number of exam attempts that have been flagged for not following the proper procedures when taking tests. If you opt to use Proctorio for taking exams, make sure you pay close attention to each of the requirements when setting up your exam environment. The most commonly flagged issue has been students not completing a 360-degree scan of the room they are taking tests in. This includes a scan of the keyboard. Be sure to comply with the rules outlined on the site above to avoid risking your exam results being invalidated.

# 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:

Quizzes	10%
Assignments and Labs	40%
Exams	50%

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
90-93	A-	70-73	C-
87-89	B+	67-69	D+
84-86	В	64-66	D
80-83	B-	60-63	D-
77-79	C+	0-59	Е

## 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
- 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.
<b>Emergency Closure</b>	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.  ( <a href="https://www.weber.edu/codepurple">https://www.weber.edu/codepurple</a> )

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

Week of	Topic	Coursework
May 10	Accessing the Linux Environment	Lab Assignment 1
Week 1		
<b>May 17</b>	Configuring the Linux Shell	Chapters 1, 2. and 3 Quizzes
Week 2		Lab Assignment 2
May 24	Working with Files	Chapters 4 and 5 Quizzes
Week 3		Lab Assignment 3
May 31	Using Text Utilities	Chapters 6, 7, and 9 Quizzes
Week 4		Lab Assignment 4
June 7	Regular Expressions, Streams, and Redirection	Chapters 8 and 10 Quizzes
Week 5		Lab Assignment 5
June 14	Archiving and Managing Processes	Chapters 11 and 12 Quizzes
Week 6		Lab Assignment 6
June 21	File Permissions and Links	Chapters 13 and 14 Quizzes
Week 7	Midterm Exam Review	Lab Assignment 7
June 28	Introduction to Bash Scripting	Midterm Exam Due
	and out of a sum sumpany	Lab Assignment 8
Week 8  July 5	Hardware, Booting, and Runlevels	Chapters 15-18 Quizzes
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Week 9 July 12	Partitions and File Systems	Chapters 19-23 Quizzes
_	radions and rife Systems	Lab Assignment 10
Week 10	Managina Harman I Curren	Lab Assissment 11
July 19	Managing Users and Groups	Lab Assignment 11
Week 11		G1
July 26	Package Management and Special Permissions	Chapters 24, and 25 Quizzes Lab Assignment 12
Week 12		
August 2	Virtualization	Chapter 26 Quiz Creating a Virtual Machine
Week 13		Creating a virtual Macinile
August 9	Final Exam Review	
Week 14		
August 16	Finals Week	Final Exam
Week 15		