



CS 497Q, Introduction to Linux; Fall 2024

- Instructor: Thomas “Tom” Enszt
- Department: School of Computing
- Office Location: Room B230, Beggs Hall
- Telephone: 316-978-7427
- Email: thomas.enszt@wichita.edu
- Preferred Method of Contact: Email
- Student Office Hours: Varied, Scheduled Visits Preferred
- Classroom Day/Time: Room 210, Engineering Building, F 2:00 - 3:00 (first class only)
- Prerequisites: None
- Teaching Assistant: N/A
- TA Contact: N/A

How to use this syllabus

This syllabus provides you with information specific to this course, and it also provides information about important university policies. This document should be viewed as a course overview; it is not a contract and is subject to change as the semester evolves. If changes are made, I will make an announcement in Blackboard.

Student Office Hours

My student office hours are varied, but I’ll be in my office most days during business hours when I’m not teaching. Please utilize this time to meet with me for course related discussions: asking for extra help, seeking further clarification of material presented in class, and following up on aspects of the class you are interested in. These hours are not required for the course, but are available to help support you on your path to success.

Course Description

Students learn basic Linux tools, Linux administration, Linux file and directory structure, and related concepts.

Definition of a Credit Hour

Success in this 1 credit-hour course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction and preparation/studying or course related activities for a total of 45 hours.

Go to [4.08 / Definition and Assignment of Credit Hours](#) for the policy and examples for different types of courses and credit hour offerings.

Measurable Student Learning Outcomes

At the end of this course, students will be expected to be able to:

1. Acquire a method (virtual machine, Windows Subsystem for Linux, direct installation) of accessing and using Linux.
2. Use Linux and its standard commands.
3. Find, install, and use additional Linux tools.
4. Create a basic script to automate repetitive tasks with Linux.

Required Texts/Readings Textbook

None.

Other Readings

None.

Other Equipment/Materials

Exercises can also be performed through the WSU Cyber Range provided by Dakota State University. This option is available upon request. Students who request this option will receive instructions for logging into the range and accessing these systems prior to the first lab.

Students should have complete access to a functioning laptop or PC with internet capabilities.

Before you begin your coursework, ensure that your computer meets technical standards (software, computer equipment, general skills, program management skills, communication skills, and managing your WSU e-mail) for use in online courses:

https://www.wichita.edu/services/mrc/elearning/online_orientation/ComputerSkillsPreparation.php

Class Protocol and Conduct

This is a university course with commensurate expectations. We expect professional conduct in the classroom. Unprofessional conduct, e.g. off topic activities, may affect your grade or even your academic career. Be respectful at all times. Students demonstrating confrontational, disruptive, or threatening behavior will be asked to leave the classroom immediately and will not be allowed to return to the classroom for the remainder of the class period. Consequences of this behavior may also include (and are not limited to): Suspension from class for a minimum of one additional class period and report or referral to the WSU police department, Student Conduct and the WSU Care Team.

Contact Policy

Although you may attempt to reach me by phone, email communication is always preferred. Feel free to email me any questions or concerns following these guidelines:

- Always use the course name in the subject line of the email
- Remember to sign your name.
- **Always** email me from your WSU email address. Email sent from personal email servers like Gmail, Yahoo, etc., have a tendency to end up in my spam folder, and I never see them. You may also email me through Blackboard via the Email My Instructor tab. I also offer an Ask My Instructor forum on Blackboard which allows common questions to be seen and responded to publicly.
- You should NOT contact me for tech support.
 - Any technical problems involving your computer, or issues regarding file uploading or sharing, should go through the Blackboard Support. You can contact them at 316-978-3909. You can also fill out a request for help form at their website: <https://wichita.edu/BbSupport>
 - However, if you have a problem with access or uploading assignments, you *should* let me know before your assignment is due. You will also have to accompany this notification with the file in question, so I can verify that it is completed by the due date/time.

Response Time

To Email and Ask My Instructor Questions:

I'll try to respond to email messages on the same day they were sent. Email messages sent after-hours will generally not receive a response until the following day.

Feedback on Assignments:

Feedback on Assignments: I'll provide feedback on class assignments and discussions as quickly as possible.

Academic Integrity

Students at Wichita State University are expected to uphold high academic standards. WSU will not tolerate a lack of academic integrity. Students are responsible for knowing and following the [Student Academic Integrity Policy 2.17](https://www.wichita.edu/about/policy/ch_02/ch2_17.php) (https://www.wichita.edu/about/policy/ch_02/ch2_17.php).

When the faculty member determines sanctions are warranted for violations of academic integrity, regardless of severity, the faculty member must report the infraction to the Office of Student Conduct and Community Standards. If you need more information about the process or wish to appeal a decision, please visit https://www.wichita.edu/about/student_conduct/ai.php

Please note in particular that *Unauthorized Use or Possession of Materials or Resources* (Policy item IV.B.2) includes unauthorized use of generative AI like ChatGPT or GPT4. In this course, all use of generative AI is prohibited except as may be specified in assignment instructions. Any student suspected of unauthorized use of generative AI may be asked to demonstrate their mastery of the assignment learning outcomes in an alternate format, such as a verbal interview or an additional problem set, before a determination is made as to whether an academic integrity violation report is warranted.

Sexual Harassment, Discrimination and Retaliation

Wichita State University is committed to creating a safe and healthy environment for all of our community members. To that end, we are partnering with Everfi to provide sexual assault prevention trainings that will help us all be informed on topics vital to achieving our goal. These trainings, in addition to being highly interactive and engaging, are based in research around the best practices for healthy communities. All students, staff and faculty are required to complete these trainings annually. Students will need to [complete Everfi training](#) in the fall semester before being able to enroll for the spring.

We are committed to the elimination of sexual misconduct, relationship violence, and stalking within the University community. These incidents may interfere with or limit an individual's ability to benefit from or fully participate in the University's educational programs. Students are asked to immediately report incidents to the University Police Department, (316) 978-3450 or students may contact the Title IX Coordinator at (316) 978-5177 or submit a report to the Office of Civil Rights, Title IX & ADA Compliance at [Office of Civil Rights, Title IX & ADA Compliance \(CTAC\) Report Form \(maxient.com\)](#).

Students may also report incidents to an instructor, faculty or staff member, who are required by law to notify the Title IX Coordinator. If a student wishes to keep the information confidential, the student may speak with staff members of the Counseling and Psychological Services (316) 978-3440 or Student Health Services (316) 978-3620. For more information please refer to policy [3.06 / Sexual Harassment, Discrimination and Retaliation for Employees, Students and Visitors](#).

Students with Disabilities

A disability is something that affects a major life activity. These life activities include but are not limited to, learning, walking, breathing, hearing, and seeing, in addition to many other physical, sensory functions, and psychological disabilities.

If you are a student with a disability or believe you might have a disability, which requires accommodations, please contact the Office of Disability Services (ODS) at www.wichita.edu/ods to discuss reasonable and appropriate accommodations and eligibility requirements. It is the University's goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability ODS will review your concerns and determine, with you, what academic accommodations are necessary and appropriate for you. For example,

adaptions of teaching methods, class materials or testing may be made on a case-by-case basis if warranted, as required by the Americans with Disabilities Act (ADA). All information and documentation of your disability is confidential and will not be released by ODS without your written permission.

The Office of Disability Services (DS) is located in Grace Wilkie, room 203, (316) 978-3309 (voice/tty) (316-854-3032 videophone). DS will review your concerns and determine, with you, what academic accommodations are necessary and appropriate for you. All information and documentation of your disability is confidential and will not be released by DS without your written permission.

Respect for Diversity

Wichita State University is committed to being an inclusive campus that reflects the evolving diversity of society. To further that goal, Wichita State University does not discriminate in its employment practices, educational programs, or activities on the basis of age (40 years or older), ancestry, color, disability, gender, gender expression, gender identity, genetic information, marital status, national origin, political affiliation, pregnancy, race, religion, sex, sexual orientation, or status as a veteran. Retaliation against an individual filing or cooperating in a complaint process is also prohibited.

Students from all diverse backgrounds and perspectives are welcome in this course and the diversity that students bring to this course should be viewed as a resource, strength, and benefit. All materials and activities are presented with the intent to be respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Complaints or concerns related to alleged discrimination may be directed to the Office of Civil Rights, Title IX & ADA Compliance (CTAC), Wichita State University, telephone 316-978-3187.

Names & Pronouns

Everyone has the right to be addressed as and referred to by the name and pronouns (including non-binary pronouns) that they choose and that correspond to their gender identity. A student's chosen name and pronouns are to be respected at all times in the classroom.

For information about chosen name, students should visit www.wichita.edu/name. To provide preferred pronouns, click on "View and Update Personal Information" link in the Student Tools channel on the myWSU Home tab. Use the "Edit" buttons to update information.

Syllabus Policies and Student Resources

All students should familiarize themselves with the course-related policies and student

resources that can be found at: www.wichita.edu/syllabuspolicies

These include, but may not be limited to:

- Important Academic Dates
- Proctoring exam options: For more information and requirements for using proctoring, please see <https://wichita.edu/onlineproctoring>
- Video and Audio recording
- Shocker Alert System
- Intellectual Property
- CARE Team
- Counseling and Prevention Services
- Student Health Services
- Heskett Center and Campus Recreation
- First Generation Students

Grading Scale

WSU uses a +/- grading scale for final grades and to calculate grade point averages. In this class, grades are assigned according to the following chart. (Other classes might assign grades differently: Be sure to understand the different grading scales in all your classes.)

Points/Percentage	Letter Grade	Grade Points	Interpretation
	A	4.00	A range denotes excellent performance
	A-	3.70	
	B+	3.30	
	B	3.00	B range denotes good performance
	B-	2.70	
	C+	2.30	
	C	2.00	C range denotes satisfactory performance
	C-	1.70	
	D+	1.30	
	D	1.00	D range denotes unsatisfactory performance
	D-	0.70	
	F	0.00	

Assignments

Assignments are given by the instructor and are listed on Blackboard with due dates. Unless otherwise stated, all assignments are due on the Sunday at 11:59PM of the

week in which they are assigned.

Late Assignments

All assignments are due as listed on Blackboard. Late Assignments will be accepted. Imposing a penalty for late assignments is solely at my discretion, however the later the assignment – the more significant the penalty. As a rule of thumb, assignments that are more than 48 hours late may be penalized up to 50%, assignments that are more than one week late will not be graded and will receive a zero. Please contact me as soon as possible if you know an assignment will be late to make arrangements for turning in the assignment for maximum points.

Missed Assignments and Exams

Any planned or unplanned emergency that prevents a student from submitting an assessment or exam must have prior permission where possible and must include documented evidence for reason (e.g. signed medical doctor's note) for any extended absences.

Undergraduate vs. Graduate Credit

Undergraduate students enrolled in 700 level courses will receive undergraduate credit (not graduate credit) unless they have a previously approved senior rule application or dual/accelerated enrollment form on file in the Graduate School. Undergraduate credit earned in 700 level courses cannot later be counted toward a graduate degree.

Extra Credit

Extra Credit options may be assigned at the discretion of the instructor. These extra credit assignments may include additional labs, research papers and reports, or other opportunities.

Tentative Schedule

Week	Topics, Readings, Assignments, Deadlines
1	Course Introduction
2	Linux "Help" Commands (help, info, man, apropos, "-h")
3	Linux File System Commands (pwd, ls, file, cd)
4	Linux File Processing Commands (cat, less, more, cp, mv)
5	Linux Search Commands (grep, find)
6	Linux File Permission Commands (chown, chmod, chgrp, sudo)
7	Linux Process Commands (ps, top, jobs, kill)
8	Linux Network Commands (ip, ping, ss)
9	OzSEC Conference - No Class
10	Linux DNS Commands (host, dig, nslookup, whois)
11	Interacting with the Internet (wget, curl, jq)

Week	Topics, Readings, Assignments, Deadlines
12	Linux Commands to Open Network Sockets (nc, /dev/tcp)
13	Connecting to Hosts (telnet, ssh)
14	Basic Bash Scripting
15	Thanksgiving Break - No Class

Concealed Carry Policy

The Kansas Legislature has legalized concealed carry on public university campuses. Guns must be out of view, concealed either on the body of the carrier, or backpack, purse or bag that remains under the immediate control of the carrier.

Gun owners must familiarize themselves with WSU policy [11.19 / Weapons on University Property](#) and the [Kansas Board of Regent's weapons policy](#). If you believe that there has been a violation of these policies, please contact the University Police Department at (316) 978-3450.

Concealed Carry for lab courses or other courses where student belongings are unattended and out of immediate control: Under the Concealed Carry Policy, a backpack or other bag used to carry a handgun must be within the immediate control of the individual. This course requires students to leave belongings such as backpacks or other bags out of reach and unattended for the duration of class time. Students who choose to carry a concealed handgun in a backpack or other bag must plan each day accordingly and are responsible for making alternate arrangements as necessary. Wichita State does not provide publicly available secure storage for concealed handguns.