IT1100 - Introduction to Linux/Unix

Description

Introduces operating system concepts, including file systems, process management, user management, and security. Students will install and configure Linux based systems. This course is required of all Information Technology majors, and open to students with a general interest in computer operating systems.

Prerequisites: none

Course fee:

$20 which covers computer administration and maintenance

Summer 2023 Sections

1. This is an online course, which runs from Monday June 26 - Friday August 4

Instructors

Jay Sneddon (http://computing.utahtech.edu/faculty/sneddon.php) Faculty Pages

Objectives

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

- Use basic Linux commands to interact with directories, files, processes, and the system. (IT PLO 1,2,3)
- Demonstrate that they understand the Ubuntu filesystem hierarchy. (IT PLO 1,2,3)
- Manipulate files using a text editor from the command line. (IT PLO 1,2,3)
- Read log files and make informed decisions as to what log files are telling them. (IT PLO 1,2,3,4)
- Write basic shell scripts (IT PLO 1,2,3)
- Perform basic administration tasks like installing programs, adding users, connecting to the network, formatting a filesystem, etc... (IT PLO 1,2,3)

Resources

Texts

The free text by William Shotts for this course is found online here The text is free to view or print as preferred. Weekly reading assignments will refer to this text.

Computer Resources

A personal computer is required for this course. Both PCs and MacBooks work well but Chomebooks are discouraged. Most of the hands on work will be completed remotely on specialized Linux servers. Students are expected to become proficient in accessing those servers.

Course Website

This course has an accompanying website. You are responsible for announcements, the schedule, and other resources posted on both the website and in Canvas. The course website is accessible at http://computing.utahtech.edu/it/1100/. Grading and assignments are managed at the course site on https://utahtech.instructure.com.

Assignments and Exams

Assignments

Assignments generally have 10 points possible. Assignments and quizzes are due on the date specified in the schedule. Late work is accepted but deducted points. Unless arranged in advance, late work will be docked 10% each day (including weekends and holidays) down to 50%. Exams will NOT be accepted late.

Exams

Periodic exams will be given per course schedule as outlined on Canvas. There will also be a final exam.

Practical exams will also be given for students to demonstrate proficiency with the course subjects.

Grading

The grade for the course will be calculated as follows:

- Assignments = 30%
- Quizzes = 10%
- Exams = 30%
- Final Exam = 30%

Tentative Schedule

Week 1 - Monday June 26

- Introduction
- Modules 1, 2, 3

Week 2 - Monday July 3

- Modules 4, 5, Review
- Exam 1, Practical 1 (covers Modules 1-3)

Week 3 - Monday July 10

- Modules 6, 7, 8, Review
- Exam 2, Practical 2 (covers Modules 4-6)

Week 4 - Monday July 17

- Modules 9, 10, 11, Review
- Exam 3, Practical 3 (covers Modules 7-9)

Week 5 - Monday July 24

- Modules 12, 13 Review
- Exam 4, Practical 4 (covers Modules 10-12)

Week 6 - Monday July 31

- Review
- Final Exam, Final Practical

Absences

Students are responsible for material covered and announcements made in class. School-related absences may be made up only if prior arrangements are made. The class schedule presented is approximate. The instructor reserves the right to modify the schedule according to class needs. Changes will be announced in class and appropriately posted to canvas or the website. Exams and quizzes cannot be made up unless arrangements are made *prior* to the scheduled time.

Late work

Assignments and quizzes are due on the date specified in the schedule. Unless arranged in advance, late work will be docked 10% each day (including weekends and holidays) down to 50%. Exams will NOT be accepted late.

Cheating and Collaboration

Limited collaboration with other students in the course is permitted and encouraged. Students may seek help learning concepts and developing programming skills from whatever sources they have available, and are encouraged to do so. Collaboration on assignments, however, must be confined to course instructors, lab assistants, and other students in the course. Students are free to discuss strategies for solving programming assignments with each other, but this must not extend to the level of programming code. Each student must code his/her own solution to each assignment. See the section on cheating.

Cheating will not be tolerated, and will result in a failing grade for the students involved as well as possible disciplinary action from the college. Cheating includes, but is not limited to, turning in homework assignments that are not the student's own work. It is okay to seek help from others and from reference materials, but only if you learn the material. As a general rule, if you cannot delete your assignment, start over, and re-create it successfully without further help, then your homework is not considered your own work.

You are encouraged to work in groups while studying for tests, discussing class lectures, discussing algorithms for homework solutions, and helping each other identify errors in your homework solutions. If you are unsure if collaboration is appropriate, contact the instructor. Also, note exactly what you did. If your actions are determined to be inappropriate, the response will be much more favorable if you are honest and complete in your disclosure.

Where collaboration is permitted, each student must still create and type in his/her own solution. Any kind of copying and pasting is *not* okay. If you need help understanding concepts, get it from the instructor or fellow classmates, but never copy another's code or written work, either electronically or visually. The line between collaborating and cheating is generally one of language: talking about solutions in English or other natural languages is usually okay, while discussions that take place in programming languages are usually not okay. It is a good idea to wait at least 30 minutes after any discussion to start your independent write-up. This will help you commit what you have learned to long-term memory as well as help to avoid crossing the line to cheating.

University Policies

OTHER UNIVERSITY SUPPORT SERVICES

NAME	SERVICE
Utah Tech Resources Overview	Visit this site to see many student resources in one place.
Academic Advisement	Helps students make decisions about their courses and degree path.
Academic Performance and Tutoring Center	Offers one-on-one tutoring, study hall, and online tutoring to help students in many subjects ranging from Math to Foreign Language.
Booth Wellness Center	Provides acute health care, referral services, health education, and brief mental health services.
Campus Life	The Utah Tech University Student Association offers a variety of ways to get involved socially at the university.
Career Services	Assists students with career exploration, choosing a major, writing a resume, and getting a job.
Center for Inclusion & Belonging	Increases diversity through scholarship opportunities, community outreach, academic advisement, and diversity club participation.
Dean of Students Office	Serves as a primary advocate and support network for students. Assists students who are facing personal challenges, including financial, food, and housing concerns.
Disability Resource Center	Serves students with disabilities by providing equal access to academic programs, non-academic activities, and campus facilities
DRC Accessibility	A list of DRC services including exam accommodations, ASL interpreting, materials in alternative format, and more.
Help Desk	Provides assistance for Canvas, Student Email, Student Services, Trailblazers wireless configuration, laptop assistance, and any other technical troubleshooting you may need help with.
Library	Provides the resources necessary to facilitate research and enhance university curriculum and programs.
Math Tutoring Center	Students can drop in to work on homework, take tests, and receive individualized or group tutoring. Online tutoring is also available.
Student Support Services	Provides a variety of free services to help first-generation, low-income, or students with disabilities to complete an associate degree and move on to a bachelor degree.
Testing Center	Provides all proctored exams on campus and can make accommodations for remotely proctored exams.
Utah Health Scholars	Provides tutors for upper-division, health-related courses. Students must register into the UHP program to qualify for this free tutoring.
Veterans Services	Offers tutoring for some classes and arranges tutoring in other centers for other classes. Must have VA benefits to qualify.

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Writing Center	Offers students personalized attention from tutors for writing.

UTAH TECH POLICIES & STATEMENTS

PRIVACY

It is your responsibility to protect your data and privacy online. Be careful and use discretion when using any of the course technologies to complete required learning activities. If you are unsure about how to protect your data and privacy online, please use the resources provided to understand your responsibility.

101 Data Protection Tips: How To Keep Your Passwords, Financial, and Personal Information Safe

Harper, E. (2018). 9 Simple Ways To Protect Your Privacy

Canvas Privacy Policy

Google Privacy Policy

YouTube Policies

Vimeo Privacy Policy

Utah Tech Policy Links

Code of Student Rights and Responsibilities (Academic dishonesty / academic integrity policy, student academic conduct policy)

Financial Aid

Registration

Student Association

Student absence related to college function

Sexual Harassment

DISABILITY/ACCESSIBILITY RESOURCES

UT welcomes all students and strives to make the learning experience accessible. If you are a student with a medical, psychological, or learning disability that may require accommodations for this course, you are encouraged to contact the Disability Resource Center (DRC) as soon as possible. You may request reasonable accommodations at any time during the semester; however, they are not retroactive. The DRC is located next door to the Testing Center in the North Plaza Building (435-652-7516, drc@utahtech.edu).

TITLE IX STATEMENT

Utah Tech University affirms its commitment to the promotion of fairness and equity in all aspects of the educational institution. Harassment and discrimination—including sex/gender discrimination, gender identity, gender expression, sexual harassment, sexual misconduct, gender-based violence, dating violence, domestic violence, stalking, pregnancy or parental , family or marital status and or retaliation—not only disrupts our commitment to maintaining an environment in which every member of the University community is treated with respect and dignity, but may also violate University policy and federal, state, and/or local law.

Should you or someone you know experience behavior that is coercive, discriminatory, harassing, and or sexually violent in nature, or if you or someone you know has questions about their rights and options regarding such behavior, you are encouraged to contact:

Title IX Coordinator 435.652.7747 (ext. 7747)

Incidents may also be reported directly to law enforcement, either separately or in conjunction with any report made to the University's Title IX Coordinator, and the University will aid in making contact if requested.

Utah Tech University Police 435.275.4300 or by calling 9-1-1

Maintaining a safe and inclusive University community is a shared responsibility. For more information on how Title IX protections can benefit you and help us keep a productive campus environment,

visit titleix.utahtech.edu to learn more.

STUDENT EMAIL

You are required to frequently check your university email account. Important class and university information will be sent to your university account, including Utah Tech bills, financial aid/scholarship notices, notices of cancelled classes, reminders of important dates and deadlines, and other information critical to your success at Utah Tech and in your courses. To access your university-sponsored account, visit helpdesk.utahtech.edu/about-dmail. Your username is your digital ID (e.g. D00111111).

NON-STUDENT

Non-student in the classroom and other designated study areas: It is expected that only bona fide students as defined and classified by the Utah Tech University catalog, will attend classes, unless specific prior permission for guests has been obtained from the instructor.

ACADEMIC GUIDELINES REGARDING COVID-19

For Utah Tech's up-to-date COVID-19 Emergency Response Plan, please visit the university website.