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 Computer and 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

Fall 2022 Sections

<table>
<thead>
<tr>
<th>CRN</th>
<th>Meeting Times</th>
<th>Room</th>
<th>Instructor</th>
<th>Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>40304</td>
<td>MW 12:00-1:15 PM</td>
<td>Smith 113</td>
<td>Jay Sneddon</td>
<td>Wed Dec 14 11:00am-12:50pm</td>
</tr>
<tr>
<td>41178</td>
<td>TR 12:00-1:15 PM</td>
<td>Smith 113</td>
<td>Tom Picklesimer</td>
<td>Thu Dec 15 11:00am-12:50pm</td>
</tr>
<tr>
<td>43851</td>
<td>MWF 11:00-11:50 AM</td>
<td>Smith 113</td>
<td>Bob Nielson</td>
<td>Mon Dec 12 11:00am-12:50pm</td>
</tr>
<tr>
<td>43590</td>
<td>Online</td>
<td></td>
<td>Carol Stander</td>
<td>by Wed Dec 14th</td>
</tr>
</tbody>
</table>

Instructor Information

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. (PLO 1,2,3,7)
- Demonstrate that they understand the Ubuntu filesystem hierarchy. (PLO 1,2,3,7)
- Manipulate files using a text editor from the command line. (PLO 1,2,3,7)
- Read log files and make informed decisions as to what log files are telling them. (PLO 1,2,3,6,7)
- Write basic shell scripts (PLO 1,2,3,6,7)
- Perform basic administration tasks like installing programs, adding users, connecting to the network, formatting a filesystem, etc… (PLO 1,2,3,6,7)

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

You may use departmental laptops and software in the Smith Computer Center. Lab assistants will be available for computer checkout.

Assignments and Exams

Schedule

<table>
<thead>
<tr>
<th>Module</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>History of Linux</td>
</tr>
<tr>
<td>2</td>
<td>Basic Linux Commands</td>
</tr>
<tr>
<td>3</td>
<td>Archiving, Redirection, and Find Basics</td>
</tr>
<tr>
<td></td>
<td>Exam 1</td>
</tr>
<tr>
<td>4</td>
<td>Text Editors and Shortcuts</td>
</tr>
<tr>
<td>5</td>
<td>Finding Help and GUI Install</td>
</tr>
<tr>
<td>6</td>
<td>Remote Connectivity</td>
</tr>
<tr>
<td></td>
<td>Exam 2</td>
</tr>
<tr>
<td>7</td>
<td>CLI Installation and GIT</td>
</tr>
</tbody>
</table>
Assignments are generally autograded. You can run the grader multiple times until you get it correct.

Exams

Periodic exams will be given per course schedule as outlined on Canvas. There will also be a final exam. Exams consist of two parts, multiple choice questions in canvas and a practical portion done on the class machine (scratch).

Grading

Your course point total will be calculated using:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Contributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>30%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Exams</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
</tbody>
</table>

Your final grade will be calculated using this scale:

<table>
<thead>
<tr>
<th>Minimum Percentage</th>
<th>Letter Grade</th>
<th>Minimum Percentage</th>
<th>Letter Grade</th>
<th>Minimum Percentage</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>A</td>
<td>84</td>
<td>B</td>
<td>74</td>
<td>C</td>
</tr>
<tr>
<td>90</td>
<td>A-</td>
<td>80</td>
<td>B-</td>
<td>70</td>
<td>C-</td>
</tr>
<tr>
<td>87</td>
<td>B+</td>
<td>77</td>
<td>C+</td>
<td>67</td>
<td>D+</td>
</tr>
</tbody>
</table>

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 instructor reserves the right to modify the schedule according to class needs. Changes will be announced in class and appropriately posted to canvas. Exams and quizzes cannot be made up unless arrangements are made prior to the scheduled time.

Late work

Assignments are due on the date specified in the schedule. Generally, a late penalty of 10% per day will be applied to late work. No exams will be accepted late without prior consent of the instructor.

Disruptive Behavior

DO NOT’s: Don’t do anything that would diminish the learning environment of another student. Don’t play computer games. Don’t browse the internet. Don’t talk on your cell phone. Don’t talk loudly or much at all while I’m lecturing. DO’s: Be Polite and courteous. Help the student next to you (quietly). Take a nap, if you need one. Read a book, if you are bored. Ask questions, if you are lost. Correct me, if I make mistakes. - Courtesy of Bart Stander

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

Utah Tech Student Policies

Disability/Accessibility Resources Utah Tech strives to make learning materials and experiences accessible for all students so if you are a student with a medical, psychological, or learning disability or anticipate physical or academic barriers based on disability, you are welcome to let me know so we can discuss options. Students with documented disabilities are required to contact the Disability Resource Center located in the North Plaza Building, next to the Testing Center (435-652-7516) to explore eligibility process and reasonable accommodations related to disability.

Title IX Statement Utah Tech seeks to provide an environment that is free of bias, discrimination, and harassment. If you have been the victim of sexual harassment/misconduct/assault we encourage you to report this to the university’s Title IX Director, Cindy Cole, (435) 652-7731, cindy.cole@utahtech.edu. If you report to a faculty member, she or he must notify the Title IX Director about the basic facts of the incident.

Email Disclaimer You are required to frequently check your campus email account. Important class and university information will be sent to your campus email account, including Utah Tech bills, financial aid/scholarship notices, notices of canceled classes, reminders of important dates and deadlines, and other information critical to your success at Utah Tech and in your courses. To access your campus email account, visit mail.utahtech.edu. Your username is your Digital ID (e.g. D00111111) If you have forgotten your PIN, visit my.utahtech.edu and click the “Forgot Pin” button.

Useful Resources

Disability Resource Center
IT Help Desk
Library
Testing Center
Tutoring Center
Writing Center

Important Dates Fall 2022

Click on this link for important dates: academic calendar Fall 2022

Aug 22 - Date classes begin
Aug 26 - Last day to add without instructor permission
Sep 2 - Last day for refund of 100% tuition and fees
Sep 6 - Late registration / payment fee - Purge date (students who have not paid tuition / fees IN FULL or made payment arrangements may be dropped from classes!)
Sep 12 - Pell Grant census date
Sep 12 - Last day for refund of 50% tuition and fees
Sep 19 - Last day to add or audit classes with instructor permission
Oct 12 - Midterm grades posted
Oct 18 - Last day to drop an individual class
Nov 11 - Last day for complete withdrawal from all classes
Dec 9 - Last day of classes
Dec 12-16 - Final Exam dates
Dec 20 - Final grades posted