

COURSE # IT 1510

Introduction to System Administration – Linux/UNIX

*2024*

**Instructor**

**Instructor:**

**Phone:**

**Email:**

**Office Hours:**

**Course**

## Course Description

***This is a Concurrent Enrollment Course, offering both high school credit through \_\_\_\_\_\_\_\_\_\_\_\_\_\_ High School and college credit through Utah Valley University. Credit from this course is transferable to all colleges and universities. Contact the receiving institution for how the credits will be applied.***

**Catalog Description**

Introduces the UNIX Operating System using the popular Linux OS. Explores the Linux file system, Linux administration, OS utilities, and program features and uses. Aids the student in the development, understanding, and working knowledge of the details of the Linux Operating System, memory organization, disk architectures, and demand paged virtual memory. Includes OS installation, user creation, rights management, loading daemons, and server best practices.

**Course Prerequisites**

This class is available to all high school students in good academic standing. High school prerequisites apply.

## Course Objectives or Learning Outcomes

Upon successful completion, students should be able to:

1. Describe the relationship between UNIX, Linux, BSD and OSX
2. Perform administrative tasks including writing basic shell scripts
3. Configure system security via users, groups and permissions
4. Configure, manage, backup and restore file systems
5. Install, update and remove software
6. Configure system boot and initialization
7. Manage and schedule processes

**Required Text and Materials**

## CompTIA Linux+ Certification All-in-One Exam Guide, Second Edition (Exam XK0-005), 2nd Edition

by Ted Jordan (Author), Sandor Strohmayer (Author)

ISBN-10

1264798962

ISBN-13

978-1264798964

You can find a free electronic version of the book through the UVU Library Resources (found in the course left navigation bar) following this link O'Reilly Safari Learning Platform (Finding Books)

You need to login in with your UVU credentials.

**Lab**

There will be “Hands on” (lab) homework projects throughout the semester.To complete the labs, you will need to have access to a computer capable of running VMWare Player with 40GB of disk space.

**Lab Facilities**

UVU provides College of T&C course computer facilities between 8 AM and 9 PM Mon through Thurs; 8 AM to 5 PM Fri; and between 8 AM and Noon Sat.  The labs are closed Sunday and holidays. These facilities are available for your use during scheduled open times, unless there is a class in session in the room. The schedule for each room is posted online.

**Department Policies**

**ABET Accreditation**

The Information Systems and the Information Technology programs at UVU are accredited by the Computing Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). According to ABET, “accreditation is proof that a collegiate program has met certain standards necessary to produce graduates who are ready to enter their professions”  ([http://www.abet.org/why-accreditation-matters/ (Links to an external site.)](http://www.abet.org/why-accreditation-matters/)).

The IS&T Department follows strict data collection, curriculum, and assessment standards to maintain ABET accreditation. To ensure both Information Systems and Information Technology programs strive to meet the standardized outcomes, the following outcome will be addressed but not assessed in this course:

(a)        An ability to apply knowledge of computing and mathematics appropriate to the discipline. [IT]

(h)        Recognition of the need for and an ability to engage in continuing professional development. [IT]

(j)         An ability to use and apply current technical concepts and practices in the core information technologies. [IT]

**Grading Scale**

 A = 100-93 B - = 82-80 D+ = 69-67

 A - = 92-90 C+ = 79-77 D = 66-63

 B+ = 89-87 C = 76-73 D - = 62-60

 B = 86-83 C - = 72-70 F = 59-0

**Grades and Credit**

Your grade for this class will become part of your permanent college transcript and will affect your GPA. A low grade in this course can affect college acceptance and scholarship eligibility.

Grades are determined by instructors, based upon measures determined by the instructor and department and may include: evaluation of responses, written exercises and examinations, performance exercises and examinations, classroom/laboratory contributions, mastery of pertinent skills, etc. The letter grade “A” is an exceptional grade indicating superior achievement; “B” is a grade indicating commendable mastery; “C” indicates satisfactory mastery and is considered an average grade; “D” indicates substandard progress and insufficient evidence of ability to succeed in sequential courses; “E” (failing) indicates inadequate mastery of pertinent skills or repeated absences from class.

**University Policies**

#### **Accommodations/Students with disabilities**

Students needing accommodations due to a disability including temporary and pregnancy accommodations may contact the UVU [Accessibility Services](https://www.uvu.edu/accessibility-services/) at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in LC 312.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers should contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in LC 312.

#### **Academic Integrity**

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](https://policy.uvu.edu/getDisplayFile/5bedd0ef7b23736d542192e3). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in[UVU Policy 541: Student Code of Conduct](https://policy.uvu.edu/getDisplayFile/5bedd0ef7b23736d542192e3).

**Definitions and Examples:**

**Academic Integrity**

**Definition**: Academic integrity is a basic principle which requires that students take credit only for ideas and efforts that are their own. Cheating, plagiarism, fabrication, and other forms of academic dishonesty are often defined as the submission of materials in assignments, exams, or other academic work that is based on sources that are prohibited by the faculty member or in ways that do not properly cite the source of a student's ideas and content. Further information on what constitutes academic dishonesty is detailed in UVU Policy 541: Student Code of Conduct.

**Cheating**

**Definition:** the act of using or attempting to use or providing others with unauthorized information, materials or study aids in academic work. Cheating includes, but is not limited to, passing examination answers to or taking examinations for someone else, or preparing or copying others’ academic work.

**Examples include but are not limited to:**

* Submission of work that is not the student's own for papers, assignments or exams.
* Submission or use of falsified data.
* Theft of or unauthorized access to an exam.
* Use of an alternate, stand-in or proxy during an examination.
* Use of unauthorized material including textbooks, notes or computer programs in the preparation of an assignment or during an examination.
* Supplying or communicating in any way unauthorized information to a “homework help site” such as Course Hero or to another student in the preparation of an assignment or during an examination.
* Collaboration in the preparation of an assignment. Unless specifically permitted or required by the instructor, collaboration will usually be viewed by the university as cheating. Each student, therefore, is responsible for understanding the policies of the department offering any course as they refer to the amount of help and collaboration permitted in preparation of assignments.
* Submission of the same work for credit in two courses without obtaining the permission of the instructors beforehand.

**Plagiarism**

**Definition:**Plagiarism is the act of presenting another person’s ideas, research or writing as your own.

**Examples include but are not limited to:**

* Using another person’s exact language without the use of quotation marks and proper citation.
* Rearranging another’s ideas or material and presenting them as original work without providing proper citation.
* Submitting another’s work as one’s own; this includes purchasing work from sources such as the internet.
* Submitting a translation of someone else’s words claiming them as one’s own
* Failing to acknowledge collaborators on homework and laboratory assignments.
* Duplicating or submitting work that was originally prepared for another class without the explicit permission of the instructor; or knowingly aiding another student who is engaged in plagiarism.

**Fabrication**

**Definition:** the use of invented information or the falsification of research or other findings.

**Examples include but are not limited to:**

* Citation of information not taken from the source indicated. This may include the incorrect documentation of secondary source materials.
* Listing sources in a bibliography not used in the academic exercise.
* Submission in a paper, thesis, lab report or other academic exercise of falsified, invented, or fictitious data or evidence, or deliberate and knowing concealment or distortion of the true nature, origin, or function of such data or evidence.
* Submitting as your own any academic exercise, (e.g., written work, printing, sculpture, etc.) prepared totally or in part by another.

#### **Equity and Title IX**

Title IX states that no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.  Students who believe they have been excluded from participation in, denied the benefits of, or discriminated against because of their sex may contact the EO/AA office to make a report, ask questions, or share concerns by email at: titleix@uvu.edu, in-person at BA-203, or by phone at: (801) 863-7999. To learn more about the Equity and Title IX office please visit us online at: <https://www.uvu.edu/equityandtitleix/>.

#### **Religious accommodation**

UVU values and acknowledges a wide range of faiths and religions as part of our student body, and as such provides accommodations for students. Religious belief includes the student's faith or conscience as well as the student's participation in an organized activity conducted under the auspices of the student's religious tradition or religious organization. The accommodations include reasonable student absences from scheduled examinations or academic requirements if they create an undue hardship for sincerely held religious beliefs. For this to occur, the student must provide a written notice to the instructor of the course for which the student seeks said accommodation prior to the event.

The UVU campus has [a place for meditation, prayer, reflection, or other forms of individual religious expression](https://www.uvu.edu/interfaith/reflectioncenter/index.html) as is described on their website.

#### **Using Remote Testing Software**

This course may use remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers’ immediate surroundings, may require use of a webcam while taking an exam, may require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

### **Dropping the Class**

### \_\_\_\_\_\_\_\_\_ is the last day to drop the course without it showing on your transcript.

\_\_\_\_\_\_\_\_\_ is the last day to withdraw from the class.
If you drop the high school class, you must also withdraw from the UVU class to avoid receiving a failing grade.

Due dates and this syllabus may change at the instructor’s discretion due to the needs of the class members.