

# **Undergraduate Course Syllabus**

IT 251: Intro to UNIX/LINUX Operating System

Center: Online

### **Course Prerequisites**

IT 201 (UC students in CSC major take CS 113)

#### **Course Description**

This course provides an introduction to the structure and functioning of the UNIX operating system. It is designed to give students a solid foundation in the design and organization of the operating system and to teach the basic set of UNIX commands. Offered as needed.

#### **Course Outcomes**

- Utilize console commands to successfully navigate and function within the UNIX/Linux operating system environment
- Utilize text editing tools for creating and manipulating text in configuration files, scripts, and logs within the UNIX/Linux operating system
- Analyze system logs, file permissions, and security configurations to locate, troubleshoot, and resolve errors within the UNIX/Linux operating system
- Develop basic functional shell scripts within the UNIX/Linux operating system to perform required tasks

#### **Required Materials**

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, <u>MBS Direct</u>, rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

This course uses <u>TestOut</u>, a digital teaching and learning environment. You will use TestOut to learn how to build, configure, and maintain a PC as well as learn the basics of networking and security. TestOut contains video tutorials, demonstrations, and hands-on lab simulations. TestOut is required for this course. Follow <u>these instructions</u> to register for TestOut. For additional support, refer to the following:

- Student How-To Tutorials
- System Requirements

#### Additional Materials (free of charge)

Website: JavaScript PC Emulator\_

Website: Webminal

## **Instructor Availability and Response Time**

Your class interaction with the instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions forum in Blackboard so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours.

#### **Grade Distribution**

Assignment Category	Number of	Point Value	Total Points	
Assignment Category	Graded Items	per Item		
Discussions	2	15	30	
TestOut Assignments	8	35	280	
Assignment: Set Up Webmail Account	1	10	10	
Application Activity (Module Two)	1	25	25	
Application Activities (Modules Three–Six)	4	30	120	
Final Project				
Milestones	4	75	300	
Final Project	1	235	235	
		Total Course Points:	1,000	

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

#### **University Grading System: Undergraduate**

	7	Total Points.	1,000	
<u>Grade</u>	Numerical Equivalent	<u>Points</u>	Points Equivalent	
			Lower	Upper
Α	93-100	4	930	1000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
В	83-86	3	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
С	73-76	2	730	769
C-	70-72	1.67	700	729
D+	67-69	1.33	670	699
D	60-66	1	600	669
F	0-59	0	0	599
I	Incomplete			
IF	Incomplete/Failure*			
IP	In Progress (past end of term)			
W	Withdrawn			

<sup>\*</sup>Please refer to the <u>policy page</u> for information on the incomplete grade process.

# **Grading Guides**

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

#### **Weekly Assignment Schedule**

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. Assignments and discussion board posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Foundations of UNIX and Linux
	1-1 Discussion: Introduction
	1-2 Assignment: Set Up Webminal Account
	1-3 Getting Started With TestOut
	1-4 Review Final Project
	1-5 TestOut Assignment
2	Text Editors (vi) and Intro to the Shell
	2-1 TestOut Assignment
	2-2 Application Activity: Vim Tutorial and Vimtutor
	2-3 Final Project Milestone One: Navigating
	2-4 Optional Discussion: Tech Support

3	The Shell, Users, Groups, and Permissions
	3-1 TestOut Assignment
	3-2 Application Activity: The Shell, Users, Groups, and Permissions
	3-3 Final Project Milestone Two: Using vi
4	Intermediate Shell and Basic Shell Scripting
	4-1 TestOut Assignment
	4-2 Optional Discussion: Pros and Cons of Shells
	4-3 Application Activity: Intermediate Shell and Basic Shell Scripting
	4-4 Final Project Milestone Three: File Permissions, Security, and Logs
5	Booting, Advanced Shell, and Linux Processes
	5-1 TestOut Assignment
	5-2 Application Activity: Booting, Advanced Shell, and Linux Processes
	5-3 Final Project Milestone Four: Scripting
	5-4 Optional Discussion: Tech Support
6	Networking and Security
	6-1 TestOut Assignment
	6-2 Application Activity: Networking and Security
	6-3 Final Project Reminder
7	File Systems and Software Installation
	7-1 TestOut Assignment
	7-2 Final Project Submission: UNIX/Linux Task Training Aid
8	File System Maintenance and Looking Onward With *NIX
	8-1 Discussion: Reflection
	8-2 TestOut Assignment
	8-3 TestOut Certification Reminder

## **Attendance Policy**

Online students are required to submit a graded assignment/discussion to Blackboard during the first week of class. If a student does not submit a posting to the graded assignment/discussion during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the <u>full attendance policy</u>.

# **Late Assignments Policy**

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the <u>full late assignment policy</u>.

## **SNHU College of Online and Continuing Education Student Handbook**

Review the student handbook.

## **Diversity and Disability Statement**

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as

possible. We will work with you and your instructor to address needs and concerns. We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services.

SNHU does not discriminate on the basis of race, color, national origin, sex, disability, age, religion, citizenship, marital status, gender identity or expression, sexual orientation, veteran/military status, or genetic information in its programs and activities. Requests for disabilities accommodations within COCE should be directed to:

Disability Resource Center (DRC) (866) 305-9430 (877) 520-8916 (fax) drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns. We look forward to hearing from you.

Complaints regarding discrimination and accommodations should be directed to:

(603) 645-9664 (603) 645-9717 (fax) adacompliance@snhu.edu

## **Academic Honesty Policy**

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the <u>full academic honesty policy</u>.

#### **Copyright Policy**

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the <u>full copyright policy</u>.

#### **SNHU College of Online and Continuing Education Withdrawal Policy**

Review the full withdrawal policy.

#### **Southern New Hampshire University Policies**

More information about SNHU policies can be found on the policy page.

## **Assessment Calibration and Student Work Samples**

For the purpose of continuous improvement of our educational training, Southern New Hampshire University's College of Online and Continuing Education may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you have any questions or concerns, contact your advisor. If you would like to withdraw permission for use of your work, please contact the assessment calibration administrator at assessmentcalibration@snhu.edu. See this document for more information.