North Central State College

MASTER SYLLABUS	2025-2026

A. Academic Division: Engineering Technology, Business & Criminal Justice Division

B. Discipline: Information Technology - Networking

C. Course Number and Title: ITEC1650 – Linux Fundamentals (Linux+)

D. Assistant Dean: Brooke Miller, M.B.A.

E. Credit Hours: 3
Lecture: 2 hours
Laboratory: 2 hours

F. Prerequisites: None

G. Last Course/Curriculum Revision Date: Fall 2025 Origin date: 02/17/2014

H. Textbook(s) Title:

- *Linux Fundamentals (Linux+) LabSim for TestOut Linux Pro Testout* Publisher: Test Out
- Copyright Year: 2010
- ISBN: 9781935080381

I. Workbook(s) and/or Lab Manual: None

J. Course Description: This course presents an overview of Linux operating systems and an introduction to data communication concepts in Linux environments. Architecture, package management, and GNU/Unix commands are discussed. Basic Linux shell and scripting tools are demonstrated. Students learn how to install and administer essential Linux system and networking services. This course prepares students for CompTIA's Linux+ certification.

K. College-Wide Learning Outcomes:

College-Wide Learning Outcome	Assessments - - How it is met & When it is met
Communication – Written	
Communication – Speech	
Intercultural Knowledge and Competence	
Critical Thinking	
Information Literacy	
Quantitative Literacy	

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

Outcomes	Assessments – How it is met & When it is met
1. Describe Linux system architecture.	Weeks 1-2 tests, labs, midterm/final exam, final project
2. Demonstrate Linux installation and package management.	Weeks 1-4, 15 tests, labs, midterm/final exam, final project
3. Demonstrate GNU and Unix commands for a given set of conditions.	Weeks 5-6 tests, labs, midterm/final exam, final project
4. Describe the Linux file structure and file system hierarchy.	Weeks 4,10,13-14 tests, labs, midterm/final exam, final project
5. Demonstrate appropriate use of shells and scripting tools for a given set of conditions.	Weeks 2,5-9 tests, labs, final exam, final project
6. Modify user interfaces and desktops.	Weeks 5-12 tests, labs, final exam, final project
7. Install and configure essential system and networking services.	Weeks 10-15 tests, labs, final exam, final project
8. Apply appropriate security measures for a given set of conditions.	Weeks 10-16 tests, labs, final exam, final project

M. Recommended Grading Scale:

NUMERIC	GRADE	POINTS	DEFINITION
93–100	A	4.00	Superior
90–92	A-	3.67	Superior
87–89	B+	3.33	Above Average
83–86	B	3.00	Above Average
80–82	B-	2.67	Above Average
77–79	C+	2.33	Average
73–76	C	2.00	Average
70-72	C-	1.67	Below Average
67–69	D+	1.33	Below Average
63-66	D	1.00	Below Average
60-62	D-	0.67	Poor
00-59	F	0.00	Failure

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

Important information regarding College Procedures and Policies can be found on the syllabus supplement located at https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/14-081b.pdf

North Central State College

SYLLABUS ADDENDUM

Academic Division:	Engineering Technology, Business & Criminal Justice Division	**Discipline:**	Information Technology - Networking
Course Coordinator:	Dr. Mohamed Ghonimy		
Course Number:	ITEC1650	**Course Title:**	Linux Fundamentals (Linux+)
Semester / Session:	Fall 2025 / Session B	**Start / End Date:**	10/13/2025 thru 12/12/2025

Instructor Information

Name:	Dr. Mohamed Ghonimy	**Credentials:**	PhD
Phone Number:	4197554528	**E-Mail Address:**	mghonimy@ncstatecollege.edu
Office Location:	ATC-136	**Office Hours:**	M 1-4 pm, W 4:7 PM

I. Topical Timeline / Course Calendar (Subject to Change):

Weeks	Topics	Assignment	Due Date
1	Linux Overview Using Linux	Chapter 1 Labs Chapter 1 Quizzes Chapter 2 Labs Chapter 2 Quizzes	Sunday 10-19- 2025
2	Installation and Localization Boot and Shutdown	Chapter 3 Labs Chapter 3 Quizzes Chapter 4 Labs Chapter 4 Quizzes	Sunday 10-26- 2025
3	Graphical User Interface Desktop Software Installation	Chapter 5 Labs Chapter 5 Quizzes Chapter 6 Labs Chapter 6 Quizzes	Sunday 11-2- 2025
4	Users and Groups Disk and File System Management	Chapter 7 Labs Chapter 7 Quizzes Chapter 8 Labs Chapter 8 Quizzes	Sunday 11-9- 2025
5	Hardware Installation Processes and System Services	Chapter 9 Labs Chapter 9 Quizzes Chapter 10 Labs Chapter 10 Quizzes	Sunday 11-16- 2025
6	System Monitoring Networking	Chapter 11 Labs Chapter 11 Quizzes Chapter 12 Labs Chapter 12 Quizzes	Sunday 11-23- 2025
7	Cloud. Containers, and virtualization Scripting and Automation Security	Chapter 13 Labs Chapter 13 Quizzes Chapter 14 Labs Chapter 14 Quizzes Chapter 15 Labs Chapter 15 Quizzes	Sunday 11-30- 2025
8	Final Exam		Sunday 12-7- 2025

II. Grading and Testing Guidelines:

Final Grade Calculation

Activity	Qty	Points	Percentage
Quizzes	15	100	40
Labs	15	100	40
Final Exam	1		100

III. Examination Policy:

1. The reasons for which a student will be excused from taking an examination.
   a. Hospitalization (with documented verification)
   b. Death in the immediate family (with documented verification)
   c. Personal illness or illness in immediate family - (doctor's excuse required).
2. A student who misses an examination for any reason is responsible for fulfilling all course requirements during this time
   a. Studying all the material that was covered during this time
   b. Contact the instructor to discuss rescheduling options if the provided documents were accepted.

3. No makeup opportunity will be given for absences of unscheduled quizzes.

IV. Class Attendance and Homework Make-Up Policy:

1. Class attendance is necessary to acquire the knowledge required to be successful in this course.
2. Assignments submitted late without prior communication and approval may receive a **penalty 10% per day**, or may not be accepted for credit. This will be handled on a case-by-case basis

3. Students are responsible for _____
   a. Study the course material every week as instructed in the syllabus.
   b. Submitting homework by the due dates.

V. Classroom Expectations:

1. All homework assignments, quizzes and labs are expected to be submitted by their due dates as indicated in Canvas.
2. communicate proactively with your instructor if you need assistance.
3. If you anticipate or experience an issue that prevents you from submitting an assignment on time, you **must contact me via email** at mghonimy@ncstatecollege.edu **as soon as possible**, preferably before the deadline.