

Curriculum Committee – Approved: September 2023 CSCI 1155 – LINUX Page 1 of 4

- 1. COURSE TITLE*: LINUX
- 2. CATALOG PREFIX/COURSE NUMBER/COURSE SECTION*: CSCI 1155
- 3. PREREQUISITE(S)*: COREQUISITE(S)*:
- 4. COURSE TIME/LOCATION/MODALITY: (<u>Course Syllabus Individual Instructor Specific</u>)
- 5. CREDIT HOURS*: 3.0 LECTURE HOURS*: 3.0 LABORATORY HOURS*: (contact hours) OBSERVATION HOURS*:
- 6. FACULTY CONTACT INFORMATION: (Course Syllabus Individual Instructor Specific)

7. COURSE DESCRIPTION*:

This course is intended for students who want to learn about the Linux operating system and prepare to pass the Linux+ certification exam from CompTIA (Powered by LPI). It does not assume any prior knowledge of Linux and is geared toward those interested in systems administration as well as those who will use or develop programs for Linux systems. The course provides comprehensive coverage of topics related to Linux certification, including Linux distributions, installation, administration, X-Windows, networking, and security.

8. LEARNING OUTCOMES*:

- 1. List the major strengths of Linux
- 2. Understand the fundamentals of a Linux installation and usage
- 3. Understand Linux filesystem management and administration
- 4. Deploy a Linux server environment
- 5. Understand the basic concepts of BASH Shell
- 6. Understanding and utilization of Linux processes
- 7. Identify and demonstrate the common Linux administrative tasks
- 8. Configure compression, system backup, network services and software installation
- 9. Identify and demonstrate Linux troubleshooting, performance, and security

9. **ADOPTED TEXT(S)*:**

No textbook required

9a: SUPPLEMENTAL TEXTS APPROVED BY FULL TIME DEPARTMENTAL FACULTY (INSTRUCTOR MUST NOTIFY THE BOOKSTORE BEFORE THE TEXTBOOK ORDERING DEADLINE DATE PRIOR TO ADOPTION) ***.

10. OTHER REQUIRED MATERIALS: (SEE APPENDIX C FOR TECHNOLOGY REQUEST FORM.)**

- 1 Raspberry Pi 3 or 4
- 1 16GB Micro SD Card or Higher
- 1 HDMI Cable
- 1 2.5A Power Supply with Micro USB Cable
- 1 Copy of Raspbian or Ubuntu Mate Operating Systems (Latest Version)

11. GRADING SCALE***:

Grading will follow the policy in the catalog. The scale is as follows:

A: 90 - 100

B: 80 - 89

C: 70 - 79

D: 60 – 69

F: 0 - 59

12. GRADING PROCEDURES OR ASSESSMENTS: (<u>Course Syllabus – Individual</u> Instructor Specific)

Category	EXAMPLE ONLY Total Points	% of Grade
Chapter Assignments (10x30)	300	30%
Quizzes (10x20)	200	20%
Unit Exams (3x100)	300	30%
Assignments (5x10)	50	5%
Annual Report Project (100)	100	10%
Attendance	50	5%
Total	1000	100%

13. COURSE METHODOLOGY: (Course Syllabus – Individual Instructor Specific)

May include but not limited to: Lectures, independent and group projects, in-class and home assignments, tests, quizzes and lab exercises. This course must be offered on campus. Attendance is required.

14. COURSE OUTLINE: (Course Syllabus – Individual Instructor Specific) (Insert sample course outline with learning objectives tied to assignments / topics.)

Week	Topics	Chapter Readings	Learning Outcomes
1	Introduction to Linux	Chapter 1	1
2	Linux Installation and Usage	Chapter 2	1
3	Exploring Linux Filesystems	Chapter 3	2
4	Linux Filesystem Management	Chapter 4	2
5	Linux Filesystem Administration	Chapter 5	2
6	Linux Server Deployment	Chapter 6	3
7	Working with the BASH Shell	Chapter 7	5
8	Mid-Term		
9	System Initialization and X Windows	Chapter 8	4
10	Managing Linux Processes	Chapter 9	6
11	Common Administrative Tasks	Chapter 10	7
12	Compression, System Backup, and Software Installation	Chapter 11	8
13	Network Configuration	Chapter 12	8
14	Configuring Network Services	Chapter 13	8
15	Troubleshooting, Performance, and Security	Chapter 14	9
16	Finals		

14. SPECIFIC MANAGEMENT REQUIREMENTS***:

Assignments will be evaluated according to instructor directives.

16. **FERPA:***

Students need to understand that your work may be seen by others. Others may see your work when being distributed, during group project work, or if it is chosen for demonstration purposes. Students also need to know that there is a strong possibility that your work may be submitted to other entities for the purpose of plagiarism checks.

17. ACCOMMODATIONS: *

Students requesting accommodations may contact Ryan Hall, Accessibility Coordinator at rhall21@sscc.edu or 937-393-3431, X 2604.

Students seeking a religious accommodation for absences permitted under Ohio's Testing Your Faith Act must provide the instructor and the Academic Affairs office with written notice of the specific dates for which the student requires an accommodation and must do so no later than fourteen (14) days after the first day of instruction or fourteen (14) days before the dates of absence, whichever comes first. For more information about Religious Accommodations, contact Ryan Hall, Accessibility Coordinator at rhall21@sscc.edu or 937-393-3431 X 2604.

18. OTHER INFORMATION***:

SYLLABUS TEMPLATE KEY

- * Item cannot be altered from that which is included in the master syllabus approved by the Curriculum Committee.
- ** Any alteration or addition <u>must be approved by the Curriculum Committee</u>
- *** Item should begin with language as approved in the master syllabus but may be added to at the discretion of the faculty member.