**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: NTWK 1030

Course Title: Linux I

Credit Hours: 3

Prerequisite: NTWK 1032 Introduction to Networking with a grade of “C” or better

Division/Discipline: Workforce Training and Community Education

Course Description: Linux I prepares students to administer a Linux network operating system. Students learn to install, configure, manage, monitor and troubleshoot a Linux server. Part one of a two course sequence which prepares students for Linux+ certification.

# **INSTRUCTOR INFORMATION**

# **COLLEGE POLICIES**

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The College assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. The student is responsible for learning the rules of, and avoiding instances of, intentional or unintentional plagiarism. Information about academic integrity is located in the Student Handbook.

The College reserves the right to suspend a student for conduct that is determined to be detrimental to the College educational endeavors as outlined in the College Catalog, Student Handbook, and College Policy & Procedure Manual. (Most up-to-date documents are available on the College webpage.)

Any student seeking an accommodation under the provisions of the Americans with Disability Act (ADA) is to notify Student Support Services via email at [disabilityservices@bartonccc.edu](mailto:disabilityservices@bartonccc.edu).

# **COURSE AS VIEWED IN THE TOTAL CURRICULUM**

Linux I is required for the A.A.S. Networking Specialist degree. Linux I is the first course in a two course sequence which prepares students for Linux+ certification.

Transferability varies among institutions and perhaps even among departments, colleges, or programs within an institution and may change from time to time without notification. Therefore, it is the student’s responsibility to obtain relevant information from intended transfer institutions during his/her tenure at Barton Community College to insure that he/she enrolls in the most appropriate set of courses for transferability. https://bartonccc.edu/transfer/schools.

# **ASSESSMENT OF STUDENT LEARNING**

Barton Community College is committed to the assessment of student learning and to quality education. Assessment activities provide a means to develop an understanding of how students learn, what they know, and what they can do with their knowledge. Results from these various activities guide Barton, as a learning college, in finding ways to improve student learning.

## Course Outcomes, Competencies, and Supplemental Competencies:

1. Apply System Architecture
   1. Determine and Configure hardware settings
   2. Boot the System
   3. Change runlevels and shutdown or reboot system
2. Install Linux and Manage Packages
   1. Design hard disk layout
   2. Install a boot manager
   3. Manage shared libraries
   4. Use Debian package management
   5. Use RPM and YUM package management
3. Use GNU and Unix Commands
   1. Work on the command line.
   2. Process text streams using filters
   3. Perform basic file management
   4. Use streams, pipes and redirects
   5. Create, monitor and kill processes
   6. Modify process execution priorities
   7. Search text files using regular expressions
   8. Perform basic file editing operations using vi.
4. Manage Devices, Linux Filesystems, Filesystem Hierarchy Standard
   1. Create partitions and filesystems
   2. Maintain the integrity of filesystems
   3. Control mounting and unmounting of filesystems
   4. Manage disk quotas
   5. Manage file permissions and ownership
   6. Create and change hard and symbolic links.
   7. Find system files and place files in the correct location.
5. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**