COURSE SYLLABUS

Tunxis Community College

Education That Works For a Lifetime

Course Title:	Unix/Linux System Administration	**Date submitted:**	Spring 2014 (AAC: 14-28)
Department:	Business and Technology		
Curriculum:	Computer Information Systems		

Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.

Course Code: (eg. ACC 101)	CST*264
Course Type:	X

A: Clinical B: Lab D: Distance Learning
I: Individual/Independent L: Lecture N: M: Seminar Internship
P: Practicum U: Studio
X: Combined Lecture/Lab Y: Combined Lecture/Clinical/Lab Z: Combined Lecture/Studio

Elective Type:	G

E: English FA: Fine Arts FL: Foreign Language G: General
HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math
S: Science SS: Social Science

Credit Hours:	3
Developmental: (yes/no)	No
Contact Hours: Lecture:	3
Clinical:	0
Lab:	0
Studio	0
Other:	0
TOTAL:	3
Class Maximum:	24
Semesters Offered:	F/S

Prerequisites:

Network Essentials I (CST*130)

Corequisites:

None

Other Requirements:

None

Catalog Course Description:

Students will be introduced to the Unix/Linux environment and its history. Students will learn the basics of installing, administrating and maintaining a Linux implementation. Topics such as the shell, fault tolerance, managing system resources, backup and recovery will be presented.

Topical Outline: List course content in outline format.

1. History of Unix/Linux
2. Installation of Linux
3. Running a Linux System
4. Using graphical systems with Linux
5. Working with the Shell
6. System administration using Linux
7. Backup and restoration of data. Implementation of a disaster recovery plan
8. Monitoring and optimizing performance of a Linux implementation

Outcomes: Describe measurable skills or knowledge that students should be able

Upon successful completion of this course, the student will be able to do the following:

COURSE:

1. Install, administer and maintain a Unix/Linux network;

to demonstrate as evidence that they have mastered the course content.	2. Create user and group accounts in Unix/Linux; 3. Implement a backup, recovery and disaster recovery plan in a Unix/Linux environment; 4. Work with shells, scripts and graphical systems with Unix/Linux.
	PROGRAM: *(Numbering reflects Program Outcomes as they appear in the college catalog)* CIS: Network Administration Option 2. Install, administer and maintain a Linux network 7. Develop and implement a backup, recovery and disaster recovery plan for a network
	GENERAL EDUCATION: *(Numbering reflects General Education Outcomes as they appear in the college catalog)* 2. **Critical Analysis/ Logical Thinking -** Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes. **Demonstrates**: Identifies the issue(s); formulates an argument; explains and analyzes relationships clearly; draws reasonable inferences and conclusions that are logical and defensible; provides support by evaluating credible sources of evidence necessary to justify conclusions. **Does Not Demonstrate:** Identifies few or no issues; formulates an argument without significant focus; provides an unclear explanation of analysis and relationships; drawing few reasonable inferences and conclusions that are illogical and indefensible; provides little to no support using credible sources of evidence necessary to justify conclusions.
Evaluation: List how the above outcomes will be assessed.	**Assessment will be based on the following criteria:** 1. Hands-on assignments, project, and case studies will deomonstrate a student's ability to install, administer and maintain a Linux network. 2. Written examinations will demonstrate an understanding of major facts, procedures and theories. At least one assignment or project will be designated as an electronic portfolio piece for uploading to ePortfolio.org.
Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.	Required: Computer lab with the Linux operating system installed. Desired: None
Textbook(s)	Refer to current academic year printout.