# SYLLABUS PART I EDISON STATE COMMUNITY COLLEGE CIS 212S LINUX ADMINISTRATION 3 CREDIT HOURS

## COURSE DESCRIPTION

Study of the Linux operating system that guides the student through the basics of Linux concepts, architecture, and administration. Students will use a combination of text readings, lectures, hands-on lab problems, and practical exercises to practice and master skills which include using Linux commands, shell scripting, user management, text editing, and filesystem management. This course prepares students for the Linux Professional Institute's System Administrator exams. Prerequisite: CIS 211S with a grade of "C" or better. Lab fee.

### COURSE GOALS

The student will:

Bloom's		Program
Level		Outcomes
3	1. Continue to use and expand on commands and skills mastered in Operating	5, 8
	System Concepts as they relate to the Linux environment, as well as use	
	and master additional commands.	
5	2. Develop an in-depth working knowledge of the Linux operating system.	5
3	3. Explain and use shell scripting techniques.	5,7
3	4. Apply organization techniques to data on a Linux system using files,	4,7
	subdirectories, and directories.	
3	5. Apply Linux administration techniques to maintain and improve Linux	7, 8
	systems.	
5	6. Research, assess, and write a report on a Linux concept.	6, 8

## CORE VALUES

The Core Values are a set of principles that guide Edison State Community College in creating its educational programs and environment. They will be reflected in every aspect of the College. Students' educational experiences will incorporate the Core Values at all levels, so that a student who completes a degree program at Edison State Community College will not only have been introduced to each value, but will have had them reinforced and refined at every opportunity.

#### TOPIC OUTLINE

- 1. Introduction to Linux
- 2. Basic File Management
- 3. Regular Expressions, Text Streams, and Redirection
- 4. Advanced File Management
- 5. Hardware Configuration and the Boot Process
- 6. Partitions
- 7. Administration of Filesystems
- 8. System Software
- 9. Advanced Shell Features
- 10. Display Administration
- 11. User and System Administration
- 12. System Services
- 13. Networking
- 14. System Security