

JEFFERSON COLLEGE
COURSE SYLLABUS

CIS275

LINUX OS

3 Credit Hours

Prepared by:
Chris DeGeare

Revised:
December 4, 2012

Mary Beth Ottinger, Ph.D., Division Chair, Business & Technical Education
Dena McCaffrey, Ed.D., Interim Dean, Career & Technical Education

CIS275 Linux OS

I. CATALOGUE DESCRIPTION

- A. Pre-requisite and/or Co-requisite: CIS150 Introduction to Computer Support; Reading Proficiency
- B. 3 Credit Hours
- C. Students will be introduced to the Linux operating system and learn how to install, maintain, and troubleshoot Linux workstations and servers. (S)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

Identify the major components of the Linux Operating System	Quizzes Exams
Install and configure Linux as a client or server	Quizzes Exams Lab Exercises
Establish basic security	Quizzes Exams Lab Exercises
Use basic Linux commands	Quizzes Exams Lab Exercises
Describe and use the Linux file management system	Quizzes Exams Lab Exercises
Write Linux shell scripts	Quizzes Exams Lab Exercises
Configure and use X Windows	Quizzes Exams Lab Exercises
Describe and manage Linux processes	Quizzes Exams Lab Exercises
Use standard Linux toolset	Quizzes Exams Lab Exercises

Manage Linux printing and the spooler	Quizzes Exams Lab Exercises
Integrate Linux into a network with Microsoft Windows clients and servers	Quizzes Exams Lab Exercises
Explain and configure Linux network communications	Quizzes Exams Lab Exercises

III. OUTLINE OF TOPICS

- A. Introduction to the Linux Operating System
 - 1. Installation of Linux
 - 2. Linux work session
 - 3. Basic Linux commands
 - 4. Linux file management
 - 5. Linux directories and file systems

- B. Linux Security – Linux passwords and access permissions

- C. Linux Controls
 - 1. Commands, redirections, and pipes
 - 2. X Windows
 - 3. Linux processes
 - 4. Linux tools
 - 5. Linux printing and print management

- D. Advanced Linux Features
 - 1. Integration with other operating systems
 - 2. Shell programming
 - 3. Linux system commands
 - 4. Backup/restore and media under Linux
 - 5. Linux network communication
 - 6. Linux messages and e-mail

IV. METHOD(S) OF INSTRUCTION

- A. Lectures
- B. Group Collaboration
- C. Hands-On Lab Work

V. REQUIRED TEXTBOOK(S)

Labsim Linus+ Activation Code, TestOut Corporation, (Current Edition)

VI. REQUIRED MATERIALS

USB Storage Device (Flash Drive, External Hard Drive, Etc.)

VII. SUPPLEMENTAL REFERENCES

None

VIII. METHOD OF EVALUATION

- | | | |
|----|------------------------|-----|
| A. | Attendance | 5% |
| B. | Participation/Lab Work | 35% |
| C. | Quizzes | 20% |
| D. | Exams | 40% |

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Technology Center 101; phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College website, <http://www.jeffco.edu>).

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.