

**Mesa Community College Network Academy
CIS126DL – Linux Operating System**

Course Syllabus

Section 0001 (16814)

18:00 – 21:40 Monday and Friday

Aug 25, 08 – Oct 15, 08

Instructor: Dennis Kibbe

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Office hours: By appointment

Class website: <http://dennisk.freeshell.org>

File repository: <http://dennisk.freeshell.org>

Class Forum: sdf.lonestar.org

Required Textbook:

A Practical Guide to Red Hat Linux: Fedora Core and Red Hat Enterprise Linux

Mark G. Sobell, Prentice Hall

(ISBN-0-13-228027-2)

Prerequisites:

none

Course Description:

Introduction to the Linux Operating system. Develop knowledge and skills required to install, configure and troubleshoot a Linux-based workstation including basic network functions. Learn basic command line and Graphical User Interface (GUI) desktop environment utilities and applications. Fundamental abilities to achieve the entry-level industry certification covered.

Additional Information:

Because the computer industry is constantly changing and vendor certification requirements are becoming more comprehensive, the official MCCC CD course description and prerequisites (available at www.maricopa.edu) may not accurately reflect all of the topics covered in this class. Students should be aware that certification requirements change periodically. There are several different certifications for the GNU/Linux Operating system. It is the students responsibility to be certain that this course maps to the GNU/Linux certification that they desire.

Course Competencies:

1. Understand the history and nature of Open Source software (I)
2. Demonstrate ability to install a variety of Linux distributions. (II)
3. Compare and contrast variety of Linux distributions (II)
4. Navigate the Linux file system hierarchy (II)
5. Create, manage, and delete user accounts, groups and permissions. (II)
6. Demonstrate basic Linux shell commands including file and directory commands, archiving and compression. (III)
7. Use the Visual Editor (vi) to edit and create text documents. (III)
8. Configure printers for use on a workstation or network. (IV)
9. Understand X Window system architecture. (IV)
10. Use graphic utility to configure graphic display. (IV)
11. Research shell commands using the –help option and Manual (Man) pages. (V)
12. Install applications using Red Hat Package Manager (RPMs) and compression utilities such as Tape Archive (tar) and gzip. (V)
13. Use network-based applications such as browsers, telnet, file transfer protocol (FTP) and email. (V)
14. Demonstrate knowledge of a variety of GNU Object Model Environment (GNOME) and K Desktop Environment (KDE) applications. (V)
15. Troubleshoot problems related to operating system installation and configuration. (VI)

Method of Instruction:

- Hands on lecture
- In-class labs with the instructor's guidance and assistance
- Demonstrations

Student Responsibilities:

You are expected to spend at least 3 to 5 hours per class period outside of class on homework, reading assignments, and review materials via the Internet; attend all class meetings; seek clarification to understand the concepts presented by completing all the course modules; ask questions; participate in class discussions and activities; and utilize available resources. Participation in and completion of all labs is necessary for learning. Absolutely no soft drinks or food are allowed in the classroom. Audio tape recording is allowed as an accommodation with prior instructor approval as long as it's not disruptive.

Attendance:

Due to the nature of this course, attendance at all class meetings is required and will directly affect your grade. Attendance records will be maintained. If you are late to class or must leave early it is your responsibility to make sure you are marked present for that date and obtain lecture notes/handouts! Classes begin promptly at the scheduled time. Breaks will be scheduled and classes will resume promptly after the break. If a situation arises where the student cannot attend class it is the student's responsibility to meet with the instructor regarding any makeup work. It is also the

student's responsibility to determine what class content was missed. The instructor may withdraw a student from a class if they have accumulated unofficial absences in excess of the number of times a class meets per week as per College policy cited in the MCC catalog. Official absences are defined as those in which you are involved in an official activity of the college, or could also mean prior approval obtained from the Instructor.

Withdrawal:

For your own protection, do not stop attending this or any other course you might enroll in and PRESUME that your Instructor will discover this fact and withdraw you. If you wish to withdraw from this course, it is your responsibility to contact the Instructor and fill out the appropriate paperwork. Obtain forms for an official withdraw from the Records/ Registration Office and follow the procedure in the catalog. Failure to officially withdraw can cause the loss of all fees and result in failing grades for all courses registered. Enrolled students who are not present for the first class will be dropped as having "never attended" (unless prior approval was received from the instructor).

Class Policies:

Class policies will be posted to the class web page and updated throughout the semester. It is the student's responsibility to be aware of class policies and follow them for any work to be turned in, including exams.

Grading:

A large percentage of this course is computer-based training and therefore attendance and completion of all modules is the key to obtaining a good grade. There will be labs/activities, various assignments, unit exams and a final exam. Final grades will be submitted no later than ten working days from completion of last class.

Exams:

Exams can include any material covered up to and including the class period before the exam. Exams may include hands on labs. Takehome exams can cover materials from the night they're handed out.

How Grades are Determined:

Your grade is determined by a point value system. Points may be earned via the following:

Exams	300 points - 3 exams @ 100 pts each
Final exam	100 points - 1 exam @ 100 pts
Total points	400 points

360 - 400 pts = A

320 - 259 ps = B

280 - 319 pts = C

240 - 279 pts = D

239 – below = F

Community Participation Points:

An important part of GNU/Linux, especially for system administrators, is community support and community development. Students who participate in the GNU/Linux community should be recognized and rewarded for the donation of their time and efforts.

Community participation can be rewarded in class by up to 50 extra credit points.

In order to get the community participation points the student must inform the instructor via email of the particular participation and summarize the activity. All credit must be acknowledged before the end of the second to last class in order to count towards the student's grade.

Free Software events include LUG meetings, InstallFests, Free Software Stammtische and meetings for other Free Software groups such as *BSD, PHP, Perl and Ruby user groups.

- Attendance of a Free Software event: 2 points.
- Presentation at a Free Software event: 5 points.
- Participation in developing a Free Software project: 5 points.
- Belonging to a professional system administration or Free Software organization such as LOPSA, IEEE or the FSF: 5 points.
- Participating in a standards committee: 8 points.

GENERAL POLICY:

"If any of you has a disability, including a learning disability, please see me as soon as possible to discuss your accommodation needs."

Let it be known that I am willing to make any reasonable accommodations for any limitations due to disability, including learning disabilities. You are welcome to see me at the conclusion of class or make a special appointment to discuss any special needs you might have. It is your responsibility to identify yourself and utilize the available support services offered by Mesa Community College's Disability Resources and Services 480 461 7447 in order that appropriate academic teaching and learning adjustments required by law may be utilized to best fit your situation/need.

STATE LAW AND DISTRICT POLICY PROHIBIT SMOKING, FOOD, OR DRINK IN THE CLASSROOM.

YOU ARE ENCOURAGED TO READ AND FULLY FAMILIARIZE YOURSELF WITH THE MESA COMMUNITY COLLEGE CATALOG. YOU ARE TO PAY CLOSE ATTENTION TO THE REQUIREMENTS AND POLICIES OF THE CATALOG, EITHER STATED OR IMPLIED, AS THEY RELATE TO THIS CAMPUS AND THIS COURSE AS THE OPERATIONS OF BOTH ARE COMPLETELY GOVERNED BY ALL STATEMENTS THEREIN.

THE MARICOPA COMMUNITY COLLEGE DISTRICT AND THIS INSTRUCTOR DO NOT DISCRIMINATE ON THE BASIS OF RACE, COLOR, NATIONAL ORIGIN, SEX, HANDICAP, OR AGE IN APPLICATION, ADMISSION, PARTICIPATION, ACCESS AND TREATMENT OF PERSONS IN INSTRUCTIONAL OR EMPLOYMENT PROGRAMS AND ACTIVITIES. THIS SYLLABUS/OUTLINE MAY BE SUBJECT TO ADDITIONS, DELETIONS, AND/OR CHANGES AT THE DISCRETION OF THE INSTRUCTOR OR MARICOPA COMMUNITY COLLEGE DISTRICT.

THE COURSE CONTENT MAY VARY FROM THIS OUTLINE TO MEET THE NEEDS OF THIS PARTICULAR GROUP. ADVANCE NOTICE OF SUCH CHANGE SHALL BE GIVEN.

NOTICE/WARNING: It is against Federal copyright law to make copies of textbooks and software without specific permission of the copyright holder. We are required by law to report all violations, and we will.

Tentative Class Schedule:

CIS126DL – Linux Operating System
 Class Schedule for Section 0001 (36467)
 18:00 – 21:40 Monday and Wednesday
 Mon, Aug 25, 08 – Wed, Oct 15, 08

Date	Topic
Mon, Aug 25, 08	Class Introduction, History and Nature of Free Software
Wed, Aug 27, 08	Introduction to the GNU/Linux Desktop (Ch. 4 & 8)
Mon, Sep 1, 08	No Class
Wed, Sep 3, 08	Introduction to the Shell, File system (Ch. 6 & 7)
Mon, Sep 8, 08	Accounts, Permissions and File Manipulation (Ch. 12)
Wed, Sep 10, 08	Managing Software (Ch. 13), *Exam 1
Mon, Sep 15, 08	Partitioning, System Initialization (Ch. 2 & 3)
Wed, Sep 17, 08	Installation Lab (Ch. 2 & 3)
Mon, Sep 22, 08	Installation Lab Continued, X Window System (Ch. 2 & 3)
Wed, Sep 24, 08	Managing System Processes, Networking (Ch. 10)
Mon, Sep 29, 08	Logs, *Exam 2 (Installation Lab)
Wed, Oct 1, 08	GNU/Linux Utilities (Ch. 5)
Mon, Oct 6, 08	Piping and Redirecting, *Exam 3 (Take home Exam Handed Out)
Wed, Oct 8, 08	Free Software Applications
Mon, Oct 13, 08	*Take home Exam Due, Globs and Regular Expressions (Appendix A)
Wed, Oct 15, 08	Giving Back, *Final Exam