ALLEN COMMUNITY COLLEGE
COMMON COURSE OUTLINE
CIS 113 LINUX ESSENTIALS

Allen COMMUNITY COLLEGE
www.allencc.edu

I. COURSE INFORMATION

A. Computer Science 113 Linux Essentials
B. 3 credit hours
C. Online textbook
D. Prerequisites: None

II. COURSE DESCRIPTION

This introductory level course covers the fundamentals of the Linux operating system and command line, and basic open source concepts. The course is designed for students who want a comprehensive introduction to the Linux operating system. The Linux Essentials curriculum helps students prepare for the LPI Linux Essentials Professional Development Certificate.

III. LEARNING OUTCOMES

A. Reviewing the Linux evolution and popular operating systems
B. Choosing an operating system
C. Reviewing major open source applications
D. Understanding open source software and licensing
E. Developing ICT skills and working in Linux
F. Reviewing command line basics
G. Using the command line to get help
H. Creating, moving and deleting files
I. Using directories and listing files
J. Archiving files on the command line
K. Searching and extracting data from files
L. Turning commands into a script
M. Understanding computer hardware
N. Understanding where data is stored
O. Configuring your computer on the network
P. Identifying user types and basic Security
Q. Creating users and groups
R. Managing file permissions and ownership
S. Special directories and files

IV. MAJOR CONTENT AREAS

A. Open source applications and licenses
B. Using Linux
C. Command line skills
D. Getting help
E. Working with files and directories
F. Archiving and compression
G. Pipes, redirection, and REGEX
H. Basic scripting
I. Understanding computer hardware
J. Managing packages and processes
K. Network configuration
L. System and user security
M. Managing users and groups
N. Ownership and permissions
O. Special permissions, links and file locations

V. ASSIGNMENTS (may include but are not limited to)

A. Chapter and final exams

B. Lab assignments - each student will have hands-on access to a Linux virtual machine for lab work
C. Lab application projects
D. Student interaction activities such as troubleshooting problems and errors

VI. EVALUATION METHODS (may include but are not limited to)

A. Written objective and/or subjective exams
B. Practical laboratory assignments and exams
C. Evaluation of troubleshooting skills