Minnesota State University Moorhead

CSIS 360: Linux Programming and Development Tools

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites:
This course requires either of these prerequisites
CSIS 155 - Introduction to Computers & Programming I
CSIS 153 - Introduction to Computers and Programming I-b

Corequisites: None

MnTC Goals: None

An introduction to UNIX programming and program development tools. Considers the UNIX file system, shells, scripting languages, system calls, signal handling, interprocess communication, and tools for constructing, archiving, debugging, testing and installing software products.

B. COURSE EFFECTIVE DATES: 10/29/2012 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Linux fundimentals / review.
2. Administering your own linux system.
3. Scripting Languages.
4. Linux environment and environmental variables .
5. Linux file system and file handling at various levels (from low to high).
6. Data Management .
7. Linux development tools.
8. Processes and Signals.
9. Interprocess communication.
10. POSIX threads.
11. GUI Programming.

D. LEARNING OUTCOMES (General)

1. Install and configure a personal Linux system.
2. Demonstrate the use of a scripting language to perform management functions.
3. Apply version management software to project maintenance.
4. Use an IDE to develop a GUI program project.
5. Demonstrate the use of the make utility for building and installing a software package.
6. Demonstrate, via a programming project, inter-process communication using signals, pipes, and sockets.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted