# Vanier College Faculty of Continuing Education

Course Title: Introduction to LinuxTeacher: Samir ChebbineCourse #: 420-995-VAE-mail: Through OmnivoxSection: 05103Semester: Feb 23- Apr 10, 2015

**Schedule** : Monday 13:00 – 18:00 **Room** : E120

Wednesday 8:00 - 11:30

No Linux classes Mar 16-20, 2015

#### **Course Objectives**

It is assumed that students have previous experience with the use of a microcomputer and some prior knowledge of a Windows operating system. The main objective of this course is to give a consistent introduction to the Linux operating system, allowing the student to become familiar with the most used Linux commands and to create and run some shell scripts.

# **Statement of Competencies:** To use the web-server operating system

| Specific        | 1. To use an operating system for the Internet web-server |
|-----------------|---|
| elements of the | 2. To explore the UNIX/LINUX file system                  |
| competency      | 3. To perform UNIX/LINUX file processing                  |
|                 | 4. To perform shell programming                           |

#### **Course Structure and Content**

- Introduction to operating systems and UNIX, including their history and basic concepts.
- Exploring the file system. Files and directories, hierarchical tree structure of the UNIX system directories. Creating directories and file. Navigating the file system.
- UNIX editors: vi
- UNIX/LINUX file processing and file structures, I/O redirection, cut, paste, sort, script files, join. Using **awk**.
- Advanced file processing. Using the selects commands (**pipe**, **grep**, **uniq**, **comm**, **diff**, **wc**). Manipulating and formatting with **sed**, **tr**, **pr**. Creating an application with the file processing.
- Shell programming.
- UNIX utilities. File processing utilities. System status utilities. (time permitting)

#### **Teaching Methodology**

- <u>Lectures:</u> Important material from the text and outside sources will be covered in class. Students should plan to take careful notes as not all material can be found in the texts or readings.
- <u>Lab time</u>: Lab time will be held in order to allow the students to explore the course material first hand. During these labs, the students will explore the material through exercises, examples and the execution of their assignments. Lab periods allow students to get direct help from the teacher while practicing hands-on skills.
- Assignments and labs: End of chapter activities and online activities will be assigned daily to reinforce material in the text. These assignments may require the application of various software packages.

#### **Evaluation Procedures and Marks Distribution**

| Lab Exercises, and Assignments | 40% |
|--------------------------------|-----|
| Midterm exam                   | 30% |
| Final Exam                     | 30% |

#### **Tentative Schedule of Exams**

Midterm exam is tentatively scheduled on Week 4 of the class, and the final exam is on Week 7. Lab Exercises and Assignments will be given/submitted according to established deadline.

## **Attendance Requirement**

Attendance is strongly recommended for both lecture and lab classes. Each student is expected to observe assignment deadlines and exam times announced in class. Students are responsible for all course material, including information covered during the theory and laboratory classes, whether or not they attend. To pass the course, students must obtain an average of 60% both overall and on the exams, and the final mark for the course will be the average shown in the above distribution. As a rule, no make-up exams will be given except in the case of a medically necessary absence supported by a doctor's certificate clearly stating that the student was too ill to write the exam. 10% per day will be deducted from late assignments.

#### **Textbook**

Guide to UNIX using Linux, 4th edition. Michael Palmer. Course Technology (2008). ISBN 1-4188-3723-7.

The textbook will be followed closely. Each student must bring a copy to class.

## **College policies & Procedures**

There is a set of College policies and procedures covering the rights and responsibilities of both faculty and students. These cover grade review, student-faculty mediation, sexual harassment, standing and advancement, cheating and plagiarism, absences for religious holidays, etc.

Note that students who observe religious holidays during the semester must inform the instructor, in writing, before the end of the first day of class.

It is your responsibility to be aware of the various policies and procedures governing your rights and obligations while you are attending Vanier College.

#### **Cheating & Plagiarism**

Any form of cheating or plagiarism will result in a grade zero for that exam or assignment, and a letter from the course teacher will be placed in your file. A repeated offence may lead to more serious consequences. Consult *The Vanier Student Writing Guide, the Vanier Catalogue, The Student Handbook* and your teacher for more information.