CIS 206 Basic Linux/Unix System Admin, Networking and Security   Course Syllabus

Instructor:　　　Carl Miller
Office hours:　　by appointment only per email
Email:　　　　　catmiller@wccnet.edu

Course Overview:

In this second of four courses on the Linux operating system, Linux System Administration tasks are discussed and practiced. This course is designed to help prepare students for Linux Certification Exams. To succeed in this class, students should be familiar with common Linux distributions and should be comfortable with basic installation and configuration. WARNING – Students generally regard this class as challenging and somewhat time consuming.

Course Objectives:

As a result of taking this course the student will be able to:
1. Recognize computer terminology and define or describe the words/acronyms.
2. Explain the functions or processes that are represented by computer terminology.
3. Set up system logging and analyze log output.
4. Manage and use X Window services.
5. Design a hard disk partitioning scheme.
6. Define sources of security threats.
7. Configure system in a way that protects against security threats.
8. Identify and install software programs that aid in securing the system.
9. Recognize the steps in the standard boot process.
10. Recognize TC/PIP network fundamentals.
11. Install OS using automated processes.
12. Configure and maintain services such as DNS, email and NFS.

Course Materials: Required Textbooks

Unix and Linux System Administration Handbook by Nemeth et al.
Prentice Hall
ISBN: 978-0-13-148005-6

LPIC-1/CompTIA Linux+TM Certification by Robb H. Tracy
McGraw Hill
ISBN: 978-0-07-177158-0

Time Committment:

This is a four credit course in an abbreviated (12 week) format.   This course may require 10-15 hours per week, including the time spent in class. If you are not able to commit this much time to the class, I suggest that you withdraw and take it in a later semester.

Expectations and Availability of Instructor:

I expect that you will be regularly checking your email during the week. I will generally respond

to email in a timely fashion. If you do not receive a reply after 48 hours, feel free to resend your email.

Email Communication Guidelines:
• Use only your WCC email account when communicating with me.
• Always provide a clear subject line that includes your course, section number, and any other relevant information such as assignment name or number.
• Always sign with your full name.

Grading: The following activities are the means by which the above skills and proficiencies will be demonstrated:

Class attendance and participation: This area is graded on whether you are present, attentive, non-disruptive, and fully engaged in the class. Playing computer games, browsing the web, emailing, text messaging, etc. are not to be done in class. Behavior in class which the instructor regards as being very disruptive may result in a failing course grade. Any student may be called on at any time by the instructor to answer a question, explain a concept, etc.   Students are not required to ask questions, but certainly are encouraged to do so during the appropriate class times. I reserve the right to assign seating in our class. Students who are disruptive will be asked to leave. Students who are not present cannot receive credit for class participation.

Quizzes: Generally given for each module except when there is an exam. There will be no grade assigned to quizzes and they will not count toward the final grade.

Lab Assignments & Homework Assignments: Hand written lab assignments and homework will not be accepted. All assignments must be submitted electronically using Blackboard.   All lab assignments, homework, quizzes and exams are to be done individually. Although general discussion among students is encouraged, students who rely upon the work of others or who share their work with others will be subject to consequences ranging from loss of points to expulsion from the class or college.

Three Exams: Exams are cumulative. One hour each. Exams are not "open book" and class notes may not be used during the exam. Details will be discussed in class. There are no "make-up exams" except under very special circumstances which generally must include the student contacting the instructor defined BEFORE the exam. The decision on whether to allow a "make-up exam" rests with the instructor.   The Final Exam: is cumulative and will have a two hour maximum.

It is the student's responsibility to be present for quizzes and exams and to be aware of any changes in the schedule.   "But the schedule said…" is not a valid excuse for missing an exam or an assignment.

Lab exercises and homework assignments will be considered on time only if they are

submitted **PRIOR to the start of class** on the date they are due. The tardy penalty is 100%. The instructor may (but is not required to) waive the tardy penalty for specific cases provided that the student notify the instructor of extenuating circumstances prior to the due date.

Expected Formula for the Final Grade for Course:

All Homework for Each Module	100 points
All Labs for Each Module	100 points
Each of Three Exams	300 points

This formula will be used to count points for to determine a percentage of the total available points. In addition, up to 300 extra credit points may be assigned at the instructor's discretion for participation in the Discussion Board in Blackboard. The grades for this class will range from A and A- through F. B, C, and D will have both plus(+) and minus(-) modifiers. In general, grading ranges follow the pattern: >92.9% = A, >89.9% = A-, >86.9% = B+, etc. However, there may be curving of the ranges depending upon exam difficulty. The instructor reserves the option of issuing "AU", "W", or "N" grades as seems appropriate given a specific student's circumstances.   WARNING: If you disappear during the semester, you will receive an "F".

Students are expected to be familiar with and follow WCC policies and guidelines including the WCC Students Rights and Responsibilities Policy (http://www.wccnet.edu/trustees/policies/index.php?policy=4095) and the WCC Computing Resources Usage Policy (http://www.wccnet.edu/trustees/policies/index.php?policy=8022). Failure to do so may result in expulsion from class, a failing grade and other consequences.

If you need an academic accommodation because of a disability or need other academic assistance, please make an appointment with a counselor in Learning Support Services (LA-104, 973-3342) to verify the disability and arrange accommodations. (http://www4.wccnet.edu/resources/learningassistance/learningsupport)

Please Note: Expect changes in the content and the timing during the course. Remember, you are responsible for knowing of any modifications to the schedule. "But the schedule said…" is not a valid excuse.

Getting Help:

For Blackboard problems, check out the Resources & Help tab in Blackboard. You can also email blackboard@wccnet.edu or call 734-477-8724.

I try to be very available although I am not a full time instructor. Please send email with questions or to make special arrangements, if needed. I generally am in the classroom up to an hour prior to the start of class.

If you have questions or concerns about an exam, quiz or graded assignment, you must talk with me about it within a week of it being handed back to you. After that, I am willing to discuss

things with you, but grades will not be changed.

If you ever have questions about your grade, please contact me.

Additional books may be borrowed from the lab. See me for details.

Final Thoughts

This is a challenging class. You need to try to have all of your work done well and in on time. Print out the schedule and plan ahead. If you fall behind, catching up is very hard to do. Do not expect that you can do everything the night before. If you are taking a vacation sometime during the next 12 weeks, you may want to drop this class and take it next semester.

It is good to be a bit of a "geek". Go beyond the basic exercises and learn more about the UNIX/Linux environment. That attitude will help you be successful in this field.

I will try to get your work back to you within a week. Together we can be successful and move you forward in your career. Never hesitate to contact me with concerns or questions. I teach because I like to and I regard my student's success as a plus for me as well.