CIS-208   Intermediate Linux/UNIX System Administration   Course Syllabus

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

Course Overview:
This course in an extension of the CIS-206 UNIX/Linux Basic System Administration class. This course expands upon the skills you have already learned and goes more in-depth into the planning, considerations, and decision making process with regard to Network Servers, culminating in the final installation and configuration of these servers. Maintenance, backups and operational monitoring of these servers will be covered. This course is designed around starting with nothing, planning a design, then implementing it "Hands On" until all the desired servers and services are operational. Students will work individually as well learn about "collaboration" and working in teams.

Course Objectives:
As a result of this course, the student will be able to:

1) Design the proper network topology his/her servers attach to
2) Pick the appropriate server software packages for the task at hand
3) Know how to install and configure such packages and programs
4) Know how to maintain these servers
5) Know how to upgrade, modify/re-configure and enhance these servers
6) Learn how to research solutions via various Internet tools, lists and resources

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

COURSE PREREQUISITES:
Students are expected to have completed CIS-121 and CIS-206 before entering this class. This class will require an understanding of all basic SysAdmin skills and commands, an ability to write and debug shell scripts, and a clear understanding of the UNIX/Linux Operating Systems and their features.

Time Commitment:
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:
Since announcements and other communications will be sent by email, it is expected that you will be regularly checking your W.C.C. 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. Each quiz is worth 100 points towards the final grade.

Homework Assignments: Hand written homework will not be accepted. All assignments must be submitted electronically using Blackboard. All 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. Each assignment is worth 100 points towards the final grade.

Two Exams: Exams are cumulative. 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. Each exam is worth 300 points toward the final grade.

Participation: The student is expected to attend all sessions and participate in the class discussions and labs. Participation in the course is worth 300 points toward the final grade.

Discussion Board Participation: You are responsible for adding a main post to each discussion topic and a reply to another student's main post. 50 total points are possible for each discussion topic (25 points for your main post, 25 points for your reply to

another student's post).

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 Assignments	100 points each
All Quizzes	100 points each
Both Exams	300 points each
Participation	300 points
All Discussion Board Participation	50 points each
(25 pts for main posts, 25 pts reply to another student's post)	

This formula will be used to count points to determine a percentage of the total available points. 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: The schedule for the class including due dates is available in Blackboard and is subject to update. You are responsible for being aware of which modules will be covered and when assignments are due.

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 the results being posted in Blackboard. 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.

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 students' success as a plus for me as well.