New Jersey Institute of Technology

Digital Commons @ NJIT

Spring 2024

IT 340-002-452: Introduction to System Administration

Stan Senesy

Follow this and additional works at: https://digitalcommons.njit.edu/info-syllabi

Introduction to System Administration

Syllabus

Instructor: Stan J. Senesy (senesy@njit.edu)

Office: NJIT Newark, GITC rm. 3803. (973)596-5288

Office hours: Posted in Canvas

Website: Canvas - https://canvas.njit.edu/

Text: Smith, CompTIA Linux+ Study Guide, Third Edition (Exam LX0-103 and LX0-104), Sybex, 2015 ISBN: 1119021219

Schedule: Section 002   Friday   1:00 – 3:50 pm   KUPF 106

Section 451   Online only – no scheduled class physical class meetings

Course Description

This course will introduce the tasks and techniques required to perform as a system administrator of modern operating systems. Topics to be covered include booting, process control, the file system, managing users and resources, backups, configuration management, networking, the network file system, email servers, security, hardware devices, interoperability, and daemons. Whenever possible, lectures will be augmented with hands-on exercises.

Prerequisites

IT 120 – It is critical that you have completed IT 120 or a similar networking course. This will not be immediately apparent; however, during the second half of the course you will have to setup and manage enterprise services that will require this networking knowledge.

Course Computing Requirements

To complete the homework for this course, you must have access to, and administrative rights on, a computer that meets the NJIT minimum baseline computer system standards. You can find a listing of the minimum computing requirements at https://ist.njit.edu/fall-2019-recommended-specs/

We will be using vCloud to create and administer virtual instances of the CentOS operating system. We will go over setting up your home PC during our first lab session.

Please note that students are responsible for the administration/maintenance of their own computer. This includes any software loaded onto it for this course. While I will provide help with problems when I have time available, responsibility for resolving problems remains with the student.

Grading:

Sections 001 & 003

Homework	20%
Quizzes	15%
Labs	10%
Midterm	20%
Final Exam	35%

Section 451

Homework	25%
Quizzes	20%
Midterm	20%
Final Exam	35%

Grades will generally be computed on a straight scale out of 100 possible points: 90-100=A, 87-89=B+, 80-86=B, etc. If a curve is statistically justified, it will be applied to all students equally at the END of the course.

Overall Course Administration
We will use Canvas for the administration of this course.

Canvas is a web site that facilitates asynchronous and synchronous communication between students and their instructor. We will use Canvas for all the interactive portions of the course. You may logon to Canvas at https://canvas.njit.edu/ with your UCID and password. For those with no Canvas experience, there are several tutorials available on the login screen.

If you have problems accessing any system during the course, please contact the Helpdesk at (973)596-2900 and send an e-mail to me at the address listed above. You should check for new postings/assignments on Canvas at least once a day.

Once the course has begun, all contact should be through Canvas. Post general questions in the appropriate forum, while private questions should be sent to your instructor through email. This will simplify my documentation requirements at the end of the course.

Face to Face Sections (001 & 003)
We will meet twice each week. In general, one session will be a lecture session while the other will be a lab. Attendance is expected and mandatory. While not a grade element, missing attendance will result in your failure in the course.

Lectures will consist of material from the current week's reading in the text. While I will cover the basics of the reading, it is important that you read and study the material in the text as well.

Labs will usually consist of the implementation of concepts that we cover in lecture. Labs must be completed during the lab session 'in class'. You cannot turn in a lab late or from home and receive credit. For it.

Each week you will have either a homework assignment or a quiz. Since they are every other week, each will cover 2 chapters in the text. The quizzes will be administered online through Canvas. You can take it at any time during the period that it is open, but it must be completed at one sitting. You may use your text and notes on the quizzes. Quizzes may not be turned in late. Homework is accepted late for reduced credit as explained below.

Exams will be given in-class using Canvas and Respondus. The exams will contain material from the text, lectures, labs and homework. The exams will be given closed book/notes. The midterm date is shown on the course schedule. The final exam date will be announced by the Registar.

If for some reason you have a conflict that will cause you to miss an exam, please inform me **before** the exam so that we can arrange an alternate date for you to complete the test. You can send email or leave a phone message on my answering machine at any hour of any day.

If you must miss a class, lab, or exam because of a religious observance, it is your responsibility to report to me within the first two weeks of classes which days you will be missing.

Online Sections (451)
There are no physical meetings for the course. Instead, I will post weekly podcasts that contain the same material that I would discuss in a face-to-face lecture. Watching the podcasts are considered your attendance for that week of the course. While not a graded element, you will not pass this course unless you watch the podcasts regularly.
Lectures will consist of material from the current week's reading in the text. While I will cover the basics of the reading, it is important that you read and study the material in the text as well.

Each week, I will post a lab that you should complete prior to attempting the homework for that week. There are no deliverables for the labs, however they will give you the skills necessary to be successful in the homework.

Each week you will have either a homework assignment or a quiz. Since they are every other week, each will cover 2 chapters in the text. The quizzes will be administered online through Canvas. You can take it at any time during the period that it is open, but it must be completed at one sitting. You may use your text and notes on the quizzes. Quizzes may not be turned in late. Homework is accepted late for reduced credit as explained below.

Exams will be given in-class using Canvas and Respondus. The exams will contain material from the text, lectures, labs and homework. The exams will be given closed book/notes. The midterm date is shown on the course schedule. The final exam date will be announced by the Registar.

If for some reason you have a conflict that will cause you to miss an exam, please inform me **before** the exam so that we can arrange an alternate date for you to complete the test. You can send email or leave a phone message on my answering machine at any hour of any day.

If you must miss a class, lab, or exam because of a religious observance, it is your responsibility to report to me within the first two weeks of classes which days you will be missing.

Academic Policies (All sections)
I will accept homework that is late, but the grade will be modified based on the following matrix:

> 0 to 24 hours = -10 points
> 1 to 2 days = -20 points
> 2 to 3 days = -30 points
> 3 to 4 days = -40 points

Work submitted more than 4 days late will not receive credit. The timestamp in Canvas determines when a work was uploaded. If you have an emergency that causes you to miss an assignment, please contact the Office of the Dean of Students. Quizzes may not be completed late.

I do not offer 'extra credit' assignments. Every student has an equal opportunity to earn the grade they'd like in the course. The overall point spread is broad enough that doing poorly on a single assignment or quiz should not significantly affect your grade.

I do not curve individual assignments. If, at the end of the course I determine that a curve is justified, then I will curve ALL final grades (either positively or negatively) equally. Grading scales are applied consistently across the entire class - no exceptions.

Academic Integrity
Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:

http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. **Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university.** If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu