

Spring 2020

## **IT 340-454: Introduction to System Administration**

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# Syllabus

## Course

This is the IT340 Intro to System Administration course. This course will introduce the tasks and techniques needed to become a system administrator of the Linux operating system. This course assumes no prior familiarity with Linux or the command-line interface.

## Instructor

Matthew Sanabria ([ms545@njit.edu](mailto:ms545@njit.edu))

Please contact the instructor to schedule office hours. There are no in-person office hours since this course is Distance Learning.

## Materials

### Websites

The following websites will be used for the course.

<https://canvas.njit.edu>

<https://lsa-i.sudomateo.com>

### Textbook (Optional)

The following textbook is optional for the course but it is great supplemental reading to enhance the course content.

CompTIA Linux+ Study Guide: Exam XK0-004 4th Edition

ISBN-13: 978-1119556039

ISBN-10: 1119556031

### Computing Requirements

It is required to have administrator access to a computer running either macOS or Windows 10. In the course, students will use Vagrant and VirtualBox to provision a CentOS 7 Linux virtual machine which will be used to complete the assignments for the course. Maintaining the CentOS 7 Linux instance is the responsibility of the student.

# Assignments

## Homework

There will be weekly homework assignments. These assignments consist of practical exercises that must be completed on your Linux instance. The homework assignments will be posted within Canvas. All submissions should be uploaded to Canvas.

## Quizzes

There will be quizzes throughout the course. These quizzes will contain ten multiple choice questions worth ten points each. The questions will be from the topics covered in the previous weeks. Each quiz will be open for one week and the student will have one forty-five minute attempt to complete it.

## Exams

There will be one midterm exam and one final exam for this course. Each exam will contain ten multiple choice questions worth five points each as well as five practical exercises worth ten points each. A Linux instance will be provided to each student. All practical exercises must be completed on the provided Linux instance. The date and time for the exams is to be decided each semester, but there will only be one three hour window to take the exam. If you cannot make the three hour window to take an exam due to a scheduling conflict, please contact the instructor to arrange a private exam session. The exam will be proctored.

# Grading

Each assignment falls into one of four categories; Homework, Quizzes, Midterm, Final. All of the grades in each category will be averaged. Then, the final grade for the course will be determined based on the weight of each category. The precision for the final grade is two decimal places and will be rounded to the nearest whole number. Any number ending in .49 or lower will be rounded down and any number ending in .50 or higher will be rounded up.

## Weights

Homework	35%
Quizzes	15%
Midterm	25%
Final	25%

## Grading Scheme

A	100.00	to 94.00
A-	< 94.00	to 90.00
B+	< 90.00	to 87.00
B	< 87.00	to 84.00
C+	< 84.00	to 77.00
C	< 77.00	to 74.00
D	< 74.00	to 64.00
F	< 63.00	to 0.00

## Grading Example

Assuming a fictional student has the following grades.

Homework 01: 90  
Homework 02: 80  
Homework 03: 70

Quiz 01: 100  
Quiz 02: 90  
Quiz 03: 80

Midterm: 87  
Final: 93

The final grade would be calculated like so.

$$(0.35 * ((90+80+70) / 3)) + (0.15 * ((100+90+80) / 3)) + (0.25 * 87) + (0.25 * 93) = 87.25$$

The 87.25 will be rounded down to 87.00 which will be a B+ letter grade.

## Academic Policies

Late work will not be accepted.

The due date for all assignments is final. If an emergency (hospitalization, jury duty, military service, etc.) causes a student to miss an assignment, please contact the instructor immediately to make other arrangements.

Partial credit will not be offered.

Linux is case-sensitive. There is a difference between "Student" and "student". Periods, commas, spaces, and other punctuation will affect configuration and scripts. If an assignment asks to place the text "Hello, World!" into a file called "file01.txt" then a file named "fileO1.txt" (letter "O") is incorrect and the text "hello,world" is also incorrect.

Extra credit will not be offered.

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 will not significantly affect your grade.

Grades will not be curved.

Grading scales are applied consistently across the entire class. No exceptions.

Cheating will not be tolerated.

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](mailto:dos@njit.edu).