IT340: Introduction to System Administration

Description

This course will introduce the tasks and techniques required to perform as a system administrator of Linux 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.

Upon completion of this course, students will:

- Have a sound understanding of Linux administration
- Have hands on experience with Linux labs
- Understand the job market for system administration and be prepared for an potential interview

Prerequisites

- IT120: Introduction to Network Technology OR CS 356: Introduction to Computer Networks

Instructor Information

Instructor: Karl Giannoglou

Office Location & Hours:

GITC3902B Tuesday, Thursday :1pm-3pm (Or schedule time via email)

Email: karl.giannoglou@njit.edu

Responses to emails: Within 48 hours

Class Meetings

- The class will meet during the assigned time slots
- This class utilizes the Canvas learning management system.

Resources

- In the course, we will be reviewing information that can be found under the PluralSight: CompTIA Linux+: System Management
- Another resource I recommend is *The Linux Command Line A Complete Introduction 2nd Edition* by William Shotts
- This module and book are completely optional, but I highly recommend it.

Grading

I will deliver feedback on each forum post, homework, lab, midterm, and final within two weeks time. All assignments and assessments will be graded via SpeedGrader, comments, etc. within two weeks time.

Students are expected to complete all their assignments in their own words. TurnItIn is used for all my assignments.

Homework 25%

Labs   25%

Midterm   25%

Final   25%

Exams

The midterm will take place during a regular class period. The final is not cumulative and covers the material from the midterm until the end of the course, but some of the information from the first half of the semester will still be required.

Course Schedule

Each week, students will watch one lecture of class, and they will be expected to complete labs and homework assignments between each class session. All assignments are due at the end of the weekend.

Please note some of the order of material may change

Weeks and Material:

1. Class Orientation/Intro to Linux
2. Linux CLI tools
3. Managing Software
4. File System
5. File management
6. Midterm Review
7. Midterm
8. Cloud and Virtualization
9. Windows Administration
10. Administering Linux
11. Network Configuration
12. Scripts
13. Security
14. Final Review
15. Final

Policies

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 the [academic code of integrity policy](#)

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

Requesting Accommodations

If you are in need of accommodations due to a disability please contact the [Office of Accessibility Resources & Services (OARS)](#), Fenster Hall Room 260 to discuss your specific needs. A Letter of Accommodation Eligibility from the OARS authorizing your accommodations will be required.

Resources for NJIT Students

[NJIT Service for Students](#), including Technical Support

Class Etiquette

Students are expected to respect their classmates, stay quiet in class, and keep phone usage to a minimum.

Late Work/Makeups

Homework/Labs will be Sunday nights at 11:59 pm.

Late work will be accepted at half credit until the next exam.

- First half of the semester's homework/labs/forums will not be accepted after the Midterm.
- Second half of the semester's homework/labs/forums will not be accepted after the Final.