IT 340-005: Introduction to System Administration

Stan J. Senesy

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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 Moodle

Website: Moodle - http://njit2.mrooms.net


Schedule: Lecture (common) - Monday 1:00 pm - 2:20 pm GITC 1100
Lab (section 001) - Tuesday 10:00 am - 11:20 am Location GITC 2400
Lab (section 003) - Wednesday 10:00 am - 11:20 am Location GITC 2400
Lab (section 005) - Wednesday 11:30 am - 12:50 pm Location GITC 2400

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 absolutely 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:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>35%</td>
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</tbody>
</table>

Grades will be computed on a straight scale out of 100 possible points: 90-100=A, 87-89=B+, 80-86=B, etc.
Course Administration
We will use Moodle for the administration of this course.

Moodle is a web site that facilitates asynchronous and synchronous communication between students and their instructor. We will use Moodle for all the interactive portions of the course. You may logon to Moodle at http://njit2/mrooms.net with your UCID and password. For those with no Moodle experience, there are a number of 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 Moodle at least once a day.

Once the course has begun, all contact should be through Moodle. 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.

Homework
I will generally assign homework each week. These assignments consist of lab type activities conducted on Linux in vCloud. Instructions and a link to upload your work will be posted in Moodle. I consider homework participation as a critical element that leads to mastery of the techniques that we discuss in lecture.

Quizzes
Quizzes will be assigned weekly and completed through Moodle. You will be able to take the quiz at any time during week the quiz is open, however the quiz must be completed in one sitting. Questions in the quiz are presented sequentially and must be answered in order. Once you’ve submitted an answer, you cannot revisit a question.

Assessment
The midterm and final will constitute a significant portion of your overall grade. The final exam will be cumulative. The exams will be practical exams that test your ability to administer the Linux OS. The material for the exams will come from the reading, homework and labs. They will be administered in the lab. You must have access to vCloud to take the exam.

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
I will accept work that is late, but the grade will be modified based on the following matrix:

<table>
<thead>
<tr>
<th>Time Late</th>
<th>Points deducted</th>
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</thead>
<tbody>
<tr>
<td>0 to 24 hours</td>
<td>-10 points</td>
</tr>
<tr>
<td>1 to 2 days</td>
<td>-20 points</td>
</tr>
<tr>
<td>2 to 3 days</td>
<td>-30 points</td>
</tr>
<tr>
<td>3 to 4 days</td>
<td>-40 points</td>
</tr>
</tbody>
</table>

Work submitted more than 4 days late will not receive credit. The timestamp in Moodle 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.

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:


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