CPSC302A: Systems Administration II

Spring 2016

Class: T, 3:00-5:00pm in Trexler 363/173

Dr. Anil M. Shende
Trexler 365A
Email: shende at roanoke dot edu
Tel: 540-375-2341
Office Hours: TBA
and by appointment.

Syllabus

Course Description

In this course we will learn to network together a collection of computers and learn about installing, configuring and managing network applications such as the Network File System (NFS) and the Network Information System (NIS). We will also learn about packet filtering for various security and load sharing tasks such as creating a firewall and forwarding network requests for applications to an internal computer.

Prerequisites

CPSC 301.

Intended Learning Outcomes

By the end of the course, successful students will be able to:

1. set up a computer to be a part of a network,
2. troubleshoot network connectivity issues,
3. install, configure and manage various network applications, and
4. manage incoming and outgoing network traffic.

Class Attendance

Regular attendance in class is highly recommended. Regardless of attendance, students are responsible for all material covered or assigned in class.

Mechanics

The course will meet in class for 2 hours during the week. There will be one midterm (on **Thursday, February 25**) and a final exam (on **Thursday, April 21**).

Make-up tests will be available *by pre-arrangement only* in case of scheduling conflicts. After the test, make-ups will be available only in case of documented medical emergencies.

Besides the exams, there will be quizzes in class, regular homework assignments, and a co-curricular

requirement. You are expected to keep detailed notes from class.

Quizzes: There will be a short quiz every Thursday at the beginning of the class period. Make-ups will not be given for quizzes. *You will not be allowed to take the quiz if you are over 5 minutes late to class.*

Homework: Homework assignments will be posted at the course website. All homeworks are due electronically by the beginning of class on the posted due date.

Notes: You are expected to keep detailed notes on what is done in class, including the lecture portion and your activities. When recording your activities, note the goal of your activity, what you did and whether it was successful or not. Your notes need to be typed up as plain text documents and emailed to me by 5pm on Monday following the class on Thursday.

Co-curricular Requirement: The Mathematics, Computer Science and Physics department offers a series of discussions that appeal to a broad range of interests related to these fields of study. These co-curricular sessions will engage the community to think about ongoing research, novel applications and other issues that face these disciplines. Each student is required to attend at least *three* of these sessions, and turn in a short paper describing the contents of the session, and his/her *critical reflections* about the topic and content. These papers are due in class within a week of the session. A paper submitted beyond a week from the event being discussed in the paper will not be accepted. The MCSP Conversation Series website has the schedule of talks in the series.

Grading

The final grade will be computed based on the grades in the quizzes, notes, midterm, the final exam, homeworks, and co-curricular activities according to the following weights.

Component	Weight		
Co-curricular	4%		
Class Notes	30%		
Homework/Quizzes	20%		
Midterm	21%		
Final Exam	25%		

The final course grade will be calculated as follows:

< 60	60-62	63-65	66-69	70-72	73-75	76-79	80-82	83-85	86-89	90-92	> 92
F	D-	D	D+	C-	C	C+	B-	B	B+	A-	A

Academic Integrity

Students are expected to adhere to the Academic Integrity policies of Roanoke College. All work submitted for a grade is to be strictly the work of the student unless otherwise specified by the instructor. The policies as outlined in the Academic Integrity handbook will be enforced in the course.

Graded programs are subject to the Roanoke College Academic Integrity policies. Copying a program or a portion of a program (even a single line) or reading another person's program to obtain ideas for solving a problem is plagiarism. Other examples of integrity violation include writing code for some else, using code written by someone else, telling someone else how to solve a problem or having someone tell you how to solve a problem (and using their method). These cases apply to any work that is handed in for a grade under the instructor's assumption that the work is your own. Unless specified otherwise by the instructor, discussion among students should be limited to general discussion of concepts and language details, not specific aspects of a solution to the assigned problem.