ECE 303 Communications Networks

Syllabus Spring 2019

Professor: Shivam Mevawala

Course Description:

Analysis and design of communication networks. Network protocols, architecture, security, privacy, routing and congestion control, Internet, local area networks, wireless networks, and multimedia services. Physical layer, multiple access techniques, transport layer. Introduction to probabilistic and stochastic analytic techniques for communication networks.

Textbook:

James F. Kurose and Keith W. Ross. *Computer Networking: A Top-Down Approach 5th Edition.* Addison Wesley. ISBN-10**:** 0136079679

Homework:

Roughly bi-weekly homework will be assigned but not collected. We will go over it in class, and people will be invited at random to work the homework problem out on the board. This will count as part(but not all) of your participation grade.

Quizzes:

There will be 5/6 quizzes based on reading assignments. To make things interesting, I will be assigning a few research papers on current, recent topics in networks . In order to ensure that you actually read the papers, there will be short (20 minute) quizzes. In addition, you must fill out the paper evaluation for each paper. This gets you one point out of 5 on the quiz.

Projects:

There will be 2 projects. The first one is a small project worth 10% of your final grade. The second one will be more substantial and will be a competition between you and your fellow classmates. This will be 20% of your final grade. More details will be provided during the course.

Grading:

Participation (10%), Midterm (20%), Final (20%), Quizzes (20%), Projects(30%)

Policies:

One letter grade is deducted for lateness of projects. Extreme lateness may result in further deductions.

Collaboration between teams is allowed and encouraged; explicit copying of code is not. Any code that you did not write yourself that is not part of the basic MATLAB or other language installation must be attributed. Failure to do so results in an F on the project.

Missed exams receive a grade of F without prior arrangements or a note from the Dean's office indicating medical emergency.

Exams are supposed to be hard, not simple regurgitation of homework problems. They are also graded on a curve. The general rule of thumb is I take the mean and the standard deviation. 1 STD above the mean is an A, between the mean and 1 std above is a B, between the mean and 1 std below is a C, etc. I reserve the right to adjust this upwards or downwards somewhat, but generally I do not.

To compute your final grade, your letter grade on the above components is used in conjunction with the percentages listed above. 3.7 on a 4.0 scale earns an A, 2.7 earns a B, etc.

Google Group:

This google group will have most of the announcements for the class. Please join when you get a chance. https://groups.google.com/forum/#!forum/ece30319

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