

Computer Networks ECE/CS 7457 Fall 2013

Malathi Veeraraghavan
Professor
Charles L. Brown Department of Electrical & Computer Engineering
Rice 407

Course web site reachable through:
<https://collab.itc.virginia.edu/portal>



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Prerequisites

- A course in probability and statistics
- Basic programming skills



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Textbook

No required textbook
Reference textbooks have been listed in lecture notes
Lecture notes are posted on web site

- Reference textbooks in library:
 - J. Kurose and K.W. Ross, "Computer networking: a top-down approach featuring the Internet" (listed under CS/ECE 4457 at the library)
 - D. Bertsekas and R. Gallager, "Data Networks," Prentice Hall (on reserve at Brown)
 - A. Leon Garcia and I. Widjaja, "Communication Networks" (on reserve at Brown)
 - K. S. Trivedi, "Probability, Statistics with Reliability, Queueing and Computer Science Applications," Prentice Hall (requested library purchase)



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Class and office hours

1. Meet twice weekly for class sessions (Tues: 9:30-10:45)
2. Office hours
 - W: 3-4

Office location and phone numbers

1. Office location: Rice 407
2. Phone numbers: 434-982-2208
3. E-Mail: mv5g@virginia.edu

Protocol for office hours meetings:

- If I am meeting with another student, interrupt and let me know that you are waiting



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Grading

- Examinations (69%):
 - Three: during class hours (23% each)
- Online quizzes (most weeks): 9%
- Projects & teamwork: 21%
 - R, matlab programming
 - New network: Reading papers & writing a report
- Course evaluation submission: 1%
- Final grade (typical allocation):
 - 90 (cutoff for A-), 80 (B-), 65 (C-) and 50 (D-)
 - Will adjust levels if needed



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Late assignment policy

- Project reports:
 - 20% penalty: if turned in after 5:00PM the following day
- Extenuating circumstances: let me know



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Class participation

- 30% statistic - an interesting find!
 - most of us are not listening to the speaker during 30% of the time of a lecture
 - approximately 30% of the class is not listening at any given instant in time during a lecture
 - Active learning:
 - Talking about what you have read helps learning
 - Writing helps learning (more effective than typing?)
 - Look for the organization of the material
- Multiple ways to read a paper/book



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Policy with respect to Honor Pledge

Every student in this course is trusted to fully comply with all of the provisions of the UVA Honor system. In addition to pledging that you have neither received nor given aid on your online quizzes and examinations, you also pledge to have not searched for answers on the Web. All alleged honor violations brought to my attention will be forwarded to the Honor Committee. If, in my judgment, it is beyond a reasonable doubt that a student has committed an honor violation, that student could (i) receive a zero for that exam or quiz, (ii) be required to withdraw from the course, (iii) receive a penalty of a lower grade, or (iv) receive an F grade for the course, depending on the severity of the violation, irrespective of any subsequent action taken by the Honor Committee.



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Extra credit

- Typically, these requests are made at the end of the semester
- For fairness, to accommodate one student's request for such an assignment, all students should be offered the same opportunity.
- Other students may then feel a certain pressure to undertake the extra-credit assignment at the end of the semester when students are typically pressured for time.
- Therefore, extra-credit assignments are typically not supported.



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Flipped classroom

Lecture and homework elements are flipped:

- Lecture: transmission
- Homework: assimilation

How does it work?

- At home: students view recordings (**transmission**)
 - rewind/replay as needed, and take notes, write down questions
 - submit online quiz on Collab with multiple-choice questions
- Classes: problem solving in teams (**assimilation**)
 - Tuesdays: practice problems, discussions, Q & A
 - Thursdays: work on projects



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Guidelines for learning from screencast recordings

- Open PPT file
- Play recording; stop and view PPT file, open Web sites, Java applets, run Wireshark, read textbook sections (Kurose/Ross book)
- Write down important points, and questions as you view the recordings
 - be active; don't view the recording as if you are watching TV
 - learning proven to occur when writing (book: Brain rules)
- Ask questions in class during discussion period



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Online quizzes

Goal: to reinforce learning of key points of the week's lectures

Quizzes:

- NOT exams, but rather Open-book/notes
- Pledge applies: solve individually + cannot search for answers on the Web
- Multiple choice questions: graded by Collab
- DUE DATE and TIME:
 - Start of class - 9:30PM - on Tuesday class
- Randomized choices - so if your print and solve, be careful when entering answers online
- Your graded solution and the correct answers will be available to you on Collab after the submission deadline.
- Only one submission per quiz



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Teamwork

Team projects and Q/A discussions

- “In survey after survey of employers, teamwork skills are at the top of the list of attributes they would like to see more of in their new hires”
Oakley et al., 2004
- Free riders discussion
- Peer-rating forms (self-rating included)
 - Preparedness level
 - Level of cooperation and participation in the discussion
 - **Individual project scores** will determined from these ratings and the team project scores



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First assignment

See Assignments under Collab:
Getting to know you form (Aug. 29 before start of class)



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