

COSC 6377: Computer Networks

Fall 2009

Instructors: Rong Zheng
Email: rzheng (at) cs.uh.edu
Lectures MW 2:30pm – 4:00 pm in SEC 204
Office Hours: MW 4:00pm-5:00pm
Class web site: Go to www.uh.edu/webct, click on WebCTVista button

References:

- [Kur05] James F. Kurose, Keith W. Ross, "Computer Networking: A Top-Down Approach Featuring the Internet", 3rd ed. Pearson Education
- [Pet03] Larry L. Peterson and Bruce S. Davie, Computer Networks - A Systems Approach, 3rd Edition, Morgan Kaufmann, 2003
- [Bertsekas90] Dimitri Bertsekas, Robert Gallager, Data Networks (2nd Edition), Prentice Hall.

Prerequisites: Algorithms, data structure, operating systems, UG Computer networks

Synopsis:

Computer networking is a rapidly advancing field. The Internet is already an integral part of society. It is therefore important for computer scientists and computer engineers to be familiar with the fundamentals as well as practices of computer networking. This graduate course will emphasize on the algorithms, protocols and performance evaluation of the Internet. Topics include routing, congestion control, network security and selected materials in wireless networks. Students will work on projects to experiment with network protocols and tools.

Tentative schedule:

Lectures	Topic	Reading, Assignments
1 st week	Overview	TBA
2 nd week	Fundamentals of the Internet	TBA
3 rd week	Network services and diagnostic	TBA
4 th – 5 th weeks	Physical Layer	TBA
6 th – 8 th week	Connectivity	TBA
9 th – 10 th week	Reliability	TBA
11 th – 12 th week	Quality of Service	TBA
13 th – 14 th week	Advanced topics	TBA

Grading

There will be one midterm (30% of grade), one final (30%), one survey paper (10%) and three assignments (30%). Late assignments will be assessed a penalty of **5 points** per day unless announced otherwise. You will be given a total of **three** grace days to be used at your discretion. All tests will be **closed book**. You will be allowed one 8.5"×11"one-sided sheet of notes for each test.

No cheating will be tolerated on any graded assignment: **what you turn in must be your own work**. The minimum penalty for any transgression will be an **F grade** for the course. **People failing the assignments OR the exams will fail the course.**