

CS 421: COMPUTER NETWORKS

FALL 2011

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TAs: Alper Rıfat Uluçınar
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Textbook: J.F. Kurose and K.W. Ross, *Computer Networking*, 5th ed.,
Addison Wesley, 2010.

Supplementary Reading Books:

1. A.S. Tanenbaum, *Computer Networks*, 4th edition, Prentice Hall, 2003.
2. L.L. Peterson and B.S. Davie, *Computer Networks*, 4th edition, Morgan Kaufman, 2007.

Course Outline:

1. Introduction to Computer Networks and the Internet
2. Application Layer: HTTP, FTP, SMTP, DNS
3. Socket programming; Client/server model; Peer-to-Peer networking
4. Transport Layer Protocols: TCP, UDP
5. Congestion control and congestion control in TCP
6. Network Layer Protocols: IP
7. Internet Routing
8. Link Layer: Error Control, Multiple Access
9. Data Link Layer Protocols: Ethernet, PPP
10. Local Area Networks (LAN); Wireless LANs; Bluetooth

Grading:

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| Pop quizzes: | 25% |
| Midterm (November 30, 2011): | 25% |
| Final: | 30% |
| Computer Assignments: | 18% |
| Homeworks: | 2% |

Policy for Computer Assignments and Homeworks:

Weekly or biweekly programming and homework assignments. No late submissions will be accepted. Collaboration is allowed. Cheating and plagiarism will be severely penalized. In all cases of cheating and plagiarism, the letter grade will be F.