

CS 421: COMPUTER NETWORKS

FALL 2010

- Instructors:** Ezhan Kardeşan, Off: EE-508, Tel: 1308, ezhan AT ee “dot” bilkent.edu.tr
Office hours: Tuesday 10:40-12:00 and Thursday 14:00-15:30
İbrahim Körpeođlu, Off: EA-408, Tel: 2599, korpe AT cs “dot” bilkent.edu.tr
Office hours: Tuesday 9:30-10:30 and Friday 10:30-11:30
- TAs:** Alper Rifat Uluđınar, Off: EA-402, Tel: 1288
Cem Mergenci, Off: EA-402, Tel: 1288
- 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; IEEE 802.11 (Wi-Fi) networks

Grading:

Pop quizzes:	25%
Midterm (November 11, 2010):	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.

