

CmpE 475 Computer Networks Fall 2015

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Class Meetings : Wednesday 12:00-12:50 ETA-B5
Thursday 12:00-13:50 ETA-B5

Textbook : A. Tanenbaum, Computer Networks, Prentice-Hall, 2011, 5th Ed.

Grading :	Term papers & term project	200
	Midterm 1	200
	Midterm 2	250
	Final Exam	350 Total exams: 80%
	Total	1000

Subjects to be covered :

1. Introduction : Overview of computer networks, network hardware/software, layers, OSI and TCP/IP reference models, example networks, standardization (Ch 1)
2. Physical Layer (Data Communications) : Theoretical basis, transmission media, wireless transmission, satellites, wired and mobile telephone system, xDSL, cable television (Ch 2)
3. Data Link Layer : Design issues, error detection and correction, elementary protocols, sliding window protocols, protocol performance, specification and verification, example data link layers (HDLC, PPP) (Ch 3)
4. Medium Access Control Sublayer: Channel allocation problem, multiple access protocols, IEEE 802 standards for local area networks, Ethernet, wireless LAN's, broadband wireless, Bluetooth, bridges and switches (Ch 4)
5. Network Layer : Design issues, routing algorithms, congestion control, quality of service, differentiated services, MPLS, internetworking, Internet Protocol (IP, mobile IP, IPv6), routing protocols OSPF, BGP, multicasting (Ch 5)
6. Transport Layer : Services, elements of a transport protocol, example transport protocol, UDP and TCP, performance issues (Ch 6, if time permits)

Not all sections above will be lectured, you will study the related sections in the textbook and you are responsible for these sections

Exam Dates and Times :

1. Midterm 1 : On November 5, 2015 Thursday 12:00-13:50
2. Midterm 2 : On December 3, 2015 Thursday 12:00-13:50
3. Final Exam : As scheduled by the Registrar

Note that you will NOT be allowed to take the Final Exam if the sum of your Midterm 1 and Midterm 2 grades is less than 50% of the sum of Midterm 1 and Midterm 2 full grades.

Additional Notes :

1. Paper/project grading : 25% less for each day late, no acceptance after 4 days late.
2. You get zero if you miss an exam without official excuse.
3. Your attendance is required in all classes.
4. Successful completion of CmpE 322 Operating Systems course is recommended.
5. The email list cmpe475@listeci.cmpe.boun.edu.tr will be used by all students and by the instructor for internal communications within this course.