

ECSE-6600 Internet Protocols.
Spring 2004 Tentative Schedule:

Class hours are from 6:00-8:50 pm on Thursdays. Each class is broken up into two 75 min lectures with a 10 min break.

Lecture from 6:00 to 7:15pm (75 min)

10 min break

Lecture from 7:25 to 8:50 pm (75 min)

Please feel free to bring refreshments for the break. But food/drink will not be allowed during the lecture.

Exam will be held during class hours, in lieu of one of the lectures (75 min slot). Class will continue for the second half (lecture) after the break.

Note: Exam dates: Feb 5, March 4, April 22

JANUARY:

1/2 Thursday, January 15, 2004

Lecture 1: Course Introduction, Review of networking, (Chap 1,2, 11)

Lecture 2: Review of networking, Internetworking, (Chap 1,2, 11, paper readings)

3/4 Thursday, January 22, 2004

[Instructor away: Video-taped Lectures]

Lab 1 assigned

Lecture 3: Internetworking Architecture, IP Model (Chap 3)

Lecture 4: Packet format, Addresses, Fragmentation, ARP (Chap 4-7)

5/6 Thursday, January 29, 2004

[Instructor away: Video-taped Lectures]

Lecture 5: Comparison with other internetworking models (CLNP, IPX, Appletalk)

Lecture 6: Routing I: Basic Ideas (Chap 8, 11, 14, 16)

[EXTRA OFFICE HOURS will be hosted this week for EXAM 1]

FEBRUARY:

7 Thursday, February 5, 2004

EXAM 1: 1st half of class:

Lecture 7: Routing I: Basic Ideas (Chap 8, 11, 14, 16) ... Continued

8/9 Thursday, February 12, 2004

Lab 1 due

Lecture 8: Routing II: Protocols & Advanced Intra-domain Topics

(RIP, OSPF, EIGRP, IS-IS, PNNI: Chap 8, 11, 14, 16)

Lecture 9: Routing III: Inter-domain Routing (Chap 14, 15)

10/11 Thursday, February 19, 2004

Lab 2 Assigned

Lecture 10: Routing III: Inter-domain Routing (Chap 14, 15)... Continued

Lecture 11: UDP, TCP data flow & Congestion control (chap 12, 13)

12/13 Thursday, February 26, 2004

Lecture 12: Congestion Control Techniques

Lecture 13: Congestion Control Techniques

[EXTRA OFFICE HOURS will be hosted this week for EXAM 2]

MARCH:

14 Thursday, March 4, 2004

EXAM 2: 1st half of class

Lecture 14: Multicast: IGMP, multicast routing (Chap 17)

Thursday, March 11, 2004 - NO CLASSES - Spring Break

15/16 Thursday, March 18, 2004

Lab 2 Due

Case Study Choices Communicated to TA

Lecture 15: Multicast Transport, Multicast Congestion Control (Chap 17+)

Lecture 16: Multicast deployment issues, Source-specific Multicast (Chap 17+)

17/18 Thursday, March 25, 2004

Lecture 17: Auto-Configuration/Network Mgmt/NAT

(BOOTP, DHCP, SNMP, NAT: Chap 23, 20, 30)

Lecture 18: IPv6 Design & Comparison with IPX, Appletalk, CLNP (Chap 33)

APRIL:

19/20 Thursday, April 1, 2004

Lecture 19: Beyond Best Effort: (Scheduling, Shaping, RTP, RSVP, integrated, differentiated services, IP Telephony: Chap 29+)

Lecture 20: Beyond Best Effort: Continued...

21/22 Thursday, April 8, 2004

Lecture 21: Traffic Engineering: MPLS, IP-over-ATM, COPS (Chap 18+)

[TIME PERMITTING]

Lecture 22: Security: Firewalls, IPSEC, VPNs (Chap 32)

[TIME PERMITTING]

23/24 Thursday, April 15, 2004

Case Study Due

Lecture 23: Security: Firewalls, IPSEC, VPNs (Continued) **[TIME PERMITTING]**

Lecture 24: Naming (DNS), Overlay & Peer-to-Peer Networks (Chap 24+)

[EXTRA OFFICE HOURS will be hosted this week for EXAM 3]

25 Thursday, April 22, 2004

EXAM 3: 1st part of class
