

ECSE-6600 Internet Protocols.
Spring 2007 Tentative Schedule:

Note: Exam dates: Feb 23rd 2007, March 30th 2007, May 1st 2007

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JANUARY:

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1/2 January 16th/Jan 19th, 2007

Lecture 1: Course Introduction, Review of networking (Chap 1-7)

Lecture 2: Review of networking (Chap 1-7 readings)

3/4 January 23rd/Jan 26th, 2007

Lab 1 assigned

Lecture 3: Review of networking, Architecture (Chap 1-7, readings)

Lecture 4: IP, Packet format, Addresses, Fragmentation, ARP (Chap 3, 10)

Jan 30th (see below)

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FEBRUARY:

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5/6 Jan 30/Feb 2nd, 2007

[Instructor away: substitute online video lecture (details to be announced)]

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

Lecture 6: UDP, TCP data flow & Congestion control (chap 12,13)

7/8 February 6th/Feb 9th, 2007

Lecture 7: Congestion Control Techniques (Chap 13 + readings)

Lecture 8: Congestion Control Techniques (Chap 13 + readings)

9/10 February 13th/Feb 16th, 2007

Lab 1 due (Feb 16th), Lab 2 Assigned

Lecture 9: Routing I: Basic Ideas (Chap 11)

Lecture 10: Routing I: Basic Ideas (Chap 11) ... Continued

11 February 20th/Feb 23rd, 2007

NOTE: February 20 Follow Monday class schedule. No class.

Lecture 11: **EXAM 1 (Feb 23rd)**

Feb 27th (see below)

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MARCH:
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12/13 February 27th/March 2nd, 2007

Lecture 12: Routing II: Protocols & Advanced Intra-domain Topics
(RIP, OSPF, EIGRP, IS-IS, PNNI: Chap 11)

Lecture 13: Routing III: Inter-domain Routing (Chap 11+ readings)

{March 5-9 - NO CLASSES - Spring Break.}

14/15 March 13th/March 16th, 2007

Lecture 14: Routing III: Inter-domain Routing (Chap 11 + readings)... Continued

Lecture 15: Multicast: IGMP, multicast routing (Chap 11, 8.6)

16/17 March 20th/Mar 23rd, 2007

Lab 2 Due (March 23rd)

Lecture 16: Multicast Transport, Multicast Congestion Control (Chap 11+)

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

18/19 March 27th/Mar 30th, 2007

Lecture 18: Auto-Configuration/Network Mgmt/NAT
(BOOTP, DHCP, SNMP, NAT)

Case Study Choices Communicated to TA (March 27th)

Lecture 19: **EXAM 2: (March 30th)**

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APRIL:
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20/21 April 3rd/Apr 6th, 2007

Lecture 20: IPv6 Design & Comparison with IPX, Appletalk, CLNP

Lecture 21: Naming (DNS), Overlay & Peer-to-Peer Networks (Chap 10+)

22/23 April 10th/April 13th, 2007

Lecture 22: Beyond Best Effort: (Scheduling, Shaping, RTP, RSVP, integrated, differentiated services, IP Telephony: Chap 4,9,14)

Lecture 23: Beyond Best Effort: Continued...

24/25 April 17th/April 20th, 2007

[Instructor may be away: substitute online video lecture (details to be announced)]

Lecture 24: Traffic Engineering: MPLS, IP-over-ATM, COPS (4, 14+)

[TIME PERMITTING]

Lecture 25: Security: Firewalls, IPSEC, VPNs

[TIME PERMITTING]

26/27 April 24th/April 27th 2007

Case Study Due (April 27th)

Lecture 26: Security: Firewalls, IPSEC, VPNs (Continued) **[TIME PERMITTING]**

Lecture 27: residual topics + review/wrapup.

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28 May 1st 2007

EXAM 3: 1st part of class