

**ECSE-6600 Internet Protocols.**  
**Spring 2006 Tentative Schedule:**

Class hours are from 6:00-8:50 pm on Wednesdays. 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 15<sup>th</sup> 2006, March 22<sup>nd</sup> 2006, May 3<sup>rd</sup> 2006**

=====

**JANUARY:**

=====

**1/2 Wednesday, January 18, 2006**

Lecture 1: Course Introduction, Review of networking (Chap 1, 2, 3, 10)

Lecture 2: Review of networking (Chap 1,2, 3, 10, paper readings)

**3/4 Wednesday, January 25, 2006**

**Lab 1 assigned**

Lecture 3: Review of networking, Architecture (Chap 1,2,3,10, readings)

Lecture 4: IP, Packet format, Addresses, Fragmentation, ARP (Chap 4-9 )

=====

---

---

**FEBRUARY:**

---

---

**5/6 Wednesday, February 1, 2006**

Lecture 5: Comparison with other internetworking models (CLNP, IPX, Appletalk)  
Lecture 6: Routing I: Basic Ideas (Chap 8, 11, 14, 16)

**7 Wednesday, February 8, 2006**

Lecture 7: Routing I: Basic Ideas (Chap 13, 15) ... Continued  
Lecture 8: Routing II: Protocols & Advanced Intra-domain Topics  
(RIP, OSPF, EIGRP, IS-IS, PNNI: Chap 13, 15, 17)

**[ILLUMINATE SESSION will be hosted on February 13th for EXAM 1]**

**8/9 Wednesday, February 15, 2006**

**EXAM 1:** 1<sup>st</sup> half of class:  
Lecture 9: Routing III: Inter-domain Routing (Chap 14 + readings)

**10/11 Wednesday, February 22, 2006**

**Lab 1 due , Lab 2 Assigned**  
Lecture 10: Routing III: Inter-domain Routing (Chap 14 + readings)... Continued  
Lecture 11: UDP, TCP data flow & Congestion control (chap 11, 12)

---

---

---

---

**MARCH:**

---

---

**12/13 Wednesday, March 1, 2006**

Lecture 12: Congestion Control Techniques  
Lecture 13: Congestion Control Techniques

**14 Wednesday, March 8, 2006**

Lecture 14: Multicast: IGMP, multicast routing (Chap 16)  
Lecture 15: Multicast Transport, Multicast Congestion Control (Chap 16+)

**Wednesday, March 15, 2006 - NO CLASSES - Spring Break**

**ILLUMINATE SESSION will be hosted on March 20th for EXAM 2]**

**15/16 Wednesday, March 22, 2006**

**EXAM 2:** 1<sup>st</sup> half of class

**Case Study Choices Communicated to TA**

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

**17/18 Wednesday, March 29, 2006**

**Lab 2 Due**

Lecture 17: Auto-Configuration/Network Mgmt/NAT

(BOOTP, DHCP, SNMP, NAT: Chap 19, 22, 29)

Lecture 18: IPv6 Design & Comparison with IPX, Appletalk, CLNP (Chap 31)

---

---

=====  
**APRIL:**  
=====

**19/20 Wednesday, April 5, 2006**

Lecture 19: Beyond Best Effort: (Scheduling, Shaping, RTP, RSVP, integrated, differentiated services, IP Telephony: Chap 28+)

Lecture 20: Beyond Best Effort: Continued...

**21/22 Wednesday, April 12, 2006**

Lecture 21: Traffic Engineering: MPLS, IP-over-ATM, COPS (Chap 17+)

**[TIME PERMITTING]**

Lecture 22: Security: Firewalls, IPSEC, VPNs (Chap 30)

**[TIME PERMITTING]**

**23/24 Wednesday, April 19, 2006**

**Case Study Due**

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

Lecture 24: Naming (DNS), Overlay & Peer-to-Peer Networks (Chap 23+)

**25 Wednesday, April 26, 2006**

Lecture 25: residual topics (spillover)

Lecture 26: residual topics + review/wrapup.

=====

**[ELUMINATE SESSION will be hosted on May 1st for EXAM 3]**

**25 Wednesday, May 3, 2006**

**EXAM 3: 1<sup>st</sup> part of class**