ECSE-6600 Internet Protocols
Spring 2002 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 7th, March 7th, April 25th**

===============================================================================

**JANUARY:**

===============================================================================

1/2 Thursday, January 17, 2002

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 24, 2002

**Lab 1 assigned**
**Homework 1 assigned**

Lecture 3: Internetworking Architecture, IP Model (Chap 3)
Lecture 4: Packet format, Addresses, Fragmentation, ARP (Chap 4-7)

5/6 Thursday, January 31, 2002

**Homework 1 due**

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:

7/8 Thursday, February 7, 2002

EXAM 1: 1st half of class:
Lecture 8: Routing I: Basic Ideas (Chap 8, 11, 14, 16) … Continued

9/10 Thursday, February 14, 2002

Lab 1 due
Homework 2 Assigned
Lecture 9: Routing II: Protocols & Advanced Intra-domain Topics  
(RIP, OSPF, EIGRP, IS-IS, PNNI: Chap 8, 11, 14, 16)
Lecture 10: Routing III: Inter-domain Routing (Chap 14, 15)

11/12 Thursday, February 21, 2002

Homework 2 Due
Lab 2 Assigned
Lecture 11: Routing III: Inter-domain Routing (Chap 14, 15)… Continued
Lecture 12: UDP, TCP data flow & Congestion control (chap 12, 13)

13/14 Thursday, February 28, 2002  [Instructor away: Video-taped Lectures]

Lecture 13: Congestion Control Techniques
Lecture 14: Congestion Control Techniques

[Instructor back on March 2nd]
[EXTRA OFFICE HOURS will be hosted this week for EXAM 2]
MARCH:

15/16 Thursday, March 7, 2002

**EXAM 2:** 1st half of class
Lecture 16: Multicast: IGMP, multicast routing (Chap 17)

*Thursday, March 14, 2002 - NO CLASSES - Spring Break*

17/18 Thursday, March 21, 2002

*Lab 2 Due*
*Homework 3 Assigned*
*Case Study Choices Communicated to TAs*
Lecture 17: Multicast Transport, Multicast Congestion Control (Chap 17+)
Lecture 18: Multicast deployment issues, Source-specific Multicast (Chap 17+)

19/20 Thursday, March 28, 2002

*Homework 3 Due*
Lecture 19: Auto-Configuration/Network Mgmt/NAT
  (BOOTP, DHCP, SNMP, NAT: Chap 23, 20, 30)
Lecture 20: IPv6 Design & Comparison with IPX, Appletalk, CLNP (Chap 33)
21/22 Thursday, April 4, 2002

*Homework 4 Assigned*
Lecture 21: Beyond Best Effort: (Scheduling, Shaping, RTP, RSVP, integrated, differentiated services, IP Telephony: Chap 29+)
Lecture 22: Beyond Best Effort: Continued…

23/24 Thursday, April 11, 2002

*Homework 4 Due*
Lecture 23: Traffic Engineering: MPLS, IP-over-ATM, COPS (Chap 18+)
Lecture 24: Security: Firewalls, IPSEC, VPNs (Chap 32)

25/26 Thursday, April 18, 2002

*Case Study Due*
Lecture 25: Security: Firewalls, IPSEC, VPNs (Continued)
Lecture 26: Naming (DNS), Overlay Networks (Chap 24+)

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

27/28 Thursday, April 25, 2002

**EXAM 3**: 1st part of class
Lecture 28: High Speed Router Design, Transport and Optical Networks