

**ECSE-4670 Computer Communication Networks**  
**Fall 2001 Schedule:**

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**AUGUST:**

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Aug 28: Lecture 1: Course Introduction, Networking Ideas (Chap 1)

Aug 31: Lecture 2: Networking Ideas (Chap 1): Protocols, Layers, Services, Multiplexing, Internet architecture, History

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**SEPTEMBER:**

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**September 3:** Labor Day.

Sept 4: Lecture 3: Application Layer (Chap 2): Principles, HTTP, Web Caching, FTP

Sept 7: Lecture 4: Application Layer (Chap 2): Email/SMTP, DNS, Sockets

**Homework 1 assigned**

**September 10**

Last day for graduate and undergraduate students to add courses or change sections without appeal or to put courses on Audit.

Last day for completion of "NE" grade requirements for Spring 2001 courses.

Sept 11: Lecture 5: Transport Layer (Chap 3: Sec 3.1-3.3): Principles, Multiplexing, UDP, Checksums

Sept 14: Lecture 6: Transport Layer (Chap 3: Sec 3.4) Principles of Reliable Data Transfer

Sept 18: Lecture 7: Transport Layer (Chap 3: Sec 3.4, 3.5) Principles of Reliable Data Transfer, Connection oriented transport: TCP

**Homework 1 due (note: moved here due to NY incident)**

**Homework 2 assigned**

**Lab 1 Assigned**

Sept 21: Lecture 8: Transport Layer (Chap 3: Sec: 3.5) Connection oriented transport: TCP, flow control, RTT estimation, Timeouts

Sept 25: Lecture 9: Transport Layer (Chap 3: Sec: 3.6, 3.7)  
Congestion Control, TCP congestion control

**Homework 2 due**

Sept 28: Lecture 10: Transport Layer: Summary (Chap 3: Sec: 3.8)  
Network Layer: (Chap 4: Sec 4.1, 4.2)  
Transport Layer summary, Intro to Network Layer, Routing Principles

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**OCTOBER:**

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**October 1**

Students receive no tuition refund for courses  
dropped after this date.

Oct 2:

**EXAM 1**

Oct 5: Lecture 11: Network Layer (Chap 4: Sec: 4.2,4.5)  
Distance Vector, Link State Routing, Routing in the Internet

**Lab 1 due**

**October 5**

Midterm break begins after last class.

**October 8**

No classes.

**October 9: TUESDAY**

Classes resume. Follow Monday class schedule => no class

Oct 12: Lecture 12: Network Layer (Chap 4: Sec: 4.3, 4.4)  
Hierarchical Routing, IP addressing, forwarding, packet format, fragmentation

**Homework 3 assigned**

Oct 16: Lecture 13: Network Layer Modeling I: Probability Concepts

**Lab 2 assigned**

Oct 19: Lecture 14: Network Layer Modeling I: Probability Concepts (contd)

**Homework 3 due**

Oct 23: Lecture 15: Network Layer Modeling I: Probability Concepts (contd)  
Network Layer Modeling II: Inside a Router: Queuing, Switching

## **Homework 4 assigned**

### **October 23**

Last day for undergraduates to drop a course.

Last day for graduate students to drop courses without appeal.

Oct 26: Lecture 16: Network Layer Modeling II: Inside a Router: Queuing, Switching

Oct 30: Lecture 17: Network Layer Modeling II: Inside a Router: Queuing, Switching

## **Homework 4 due**

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## **NOVEMBER:**

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Nov 2:

## **EXAM 2**

Nov 6: Lecture 18: Link Layer: Chap 5 (Sec: 5.1, 5.2)

Link Layer Intro, Error Detection and Correction

## **Lab 2 due**

Nov 9: Lecture 19: Link Layer: Chap 5 (Sec: 5.3)

Multiple Access Protocols

## **Homework 5 assigned**

Nov 13: Lecture 20: Link Layer: Chap 5 (Sec: 5.5,5.6)

Ethernet, Hubs, Bridges, Switches

Nov 16: Lecture 21: Link Layer: Chap 5

LAN Protocol Analysis

## **Homework 5 due**

Nov 20: Lecture 22: Network Layer Modeling III: Network Analysis

## **Homework 6 assigned**

### **November 20**

Thanksgiving recess begins after last class.

### **November 21-23**

No classes.

**November 26**  
Classes resume.

Nov 27: Lecture 22: Network Layer Modeling III: Network Analysis

Nov 30: Slack and Final Exam Review

**Homework 6 due**

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**DECEMBER:**  
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Dec 4: **EXAM 3 (FINAL EXAM)**

Grades will be ready by 2<sup>nd</sup> week of December