
CIS 677

Computer Networks

Raj Jain
The Ohio State University
Columbus, OH 43210
Jain@CIS.Ohio-State.Edu

<http://www.cis.ohio-state.edu/~jain/cis677-98/>



How

What

When

Why



How am I going to grade you?

What are **we** going to cover?

When are **you** going to do it?

Why you should **not** take this course?

Grading

Quizzes (Best 2 of 3)	50%
Class participation	10%
Homeworks	20%
Labs	20%

Answers to Frequently Asked Questions

Yes, I do use “curve”. Your grade depends upon the performance of the rest of the class.

All homeworks are due at the beginning of the next class.

All late submissions must be preapproved.

All quizzes are open-book and extremely time limited.

Quizzes consist of numerical as well as multiple-choice (true-false) questions.

There is negative grading on incorrect multiple-choice questions.

First few chapters are quantitative (lots of calculations)

Everyone including the graduating seniors are graded the same way.

If you have any questions about grading, please ask now.

Textbook

A.S. Tanenbaum, “Computer Networks,” **3rd Edition**,
Prentice-Hall, ISBN 0-13-349945-6, 1996.

Prerequisite

CIS 675: Computer Architecture

- q Memory
- q System bus
- q Interrupt
- q Power
- q Voltage
- q Current
- q Peak and RMS values
- q Sine curve
- q Amplitude, Frequency, Phase

CIS 459.21: C Programming

Tentative Schedule

4/98	Chapter 1: Introduction
9/98	
1/98	Chapter 2: The Physical Layer
5/98	
3/98	Quiz 1
13/98	Chapter 3: The Datalink Layer
15/98	
20/98	
22/98	
27/98	Chapter 4: The Medium Access Layer

Tentative Schedule (Continued)

29/98	Quiz 2
3/98	
5/98	Chapter 5: The Network Layer
10/98	
12/98	Chapter 6: The Transport Layer
17/98	Final Lab due
19/98	Quiz 3
24/98	Last class
26/98	Thanksgiving Holiday
1/98	Graduating Seniors Grades Due

What Is This Course About?

This is a course on Networking Architecture

This is not a course on network building or usage

You will be able to understand protocols

You will not be able to build or use a Novell Netware network

An example of the difference between architecture and implementation is the computer architecture course and a course on Intel Pentium Chip.

An example of the difference between implementors and users is that of Pentium chip designers and the rest of us.

What Is This Course About? (Continued)

You will learn about networking concepts that will help you understand networking jargon:

- q TCP/IP
- q Window Flow Control
- q Cyclic Redundancy Check
- q Parity
- q Start and Stop Bits
- q Baud, Hertz, and Bits/sec
- q Algorithms for determining packet routes

This is the first course on networking.

We cannot cover everything in 10 weeks.

Why You Shouldn't take this course?

You aren't ready for the hardwork

You don't have 15 hours/week

You don't have the background

You just want to sit and listen

You are not ready to take the initiative

Only key concepts will be covered in the class.

Students are expected to read the rest from the book.

This does not cover what you want

Office Hours

Tuesday: 2:00 to 2:30 PM

Thursday: 2:00 to 2:30PM

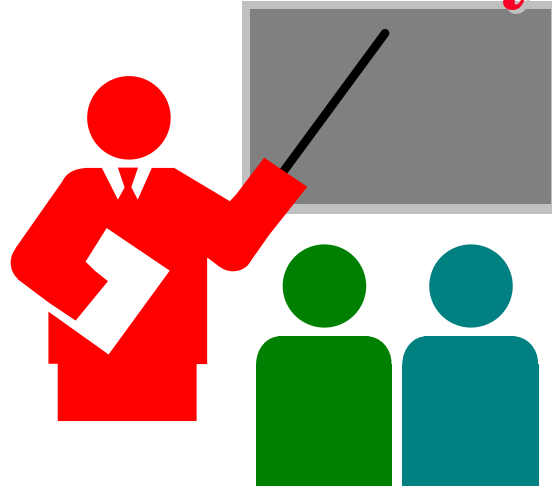
Office: 297 Drees Lab, 2015 Neil Ave

No office hours on 10/20, 12/1, 12/3

Grader: Arjan Durresi, DL299, Durresi@cis.ohio-state.edu

Grader's Office Hours: M/W/F 2:00 to 2:30PM

Summary



There will be a lot of self-reading

Goal: To prepare you for a career in networking

Get ready to work hard

Quiz 0: Prerequisites

True or False?

- | A system with 32kB memory can hold only 16000 ASCII characters
- | An example of an I/O bus is PCI which connects a Pentium processor with its memory.
- | An example of a system bus is SCSI which connects a PC system with disks.
- | Interrupts are used by CPU to stop an ongoing I/O.
- | A DC current of 4 Ampere at 5 Volts will require 4/5 Watts of power
- | An RMS value of 100 Volts is equivalent to a peak value of 141.4 V.
- | For $I = A \sin (2\pi ft + \phi)$, the amplitude of the current I is A
- | For $I = A \sin (2\pi ft + \phi)$, the frequency is f.
- | If x is 0, then after x++, x will be 1.

Score = Correct Answers _____ - Incorrect Answers _____ = _____