

CIS 677

Computer Networks

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h1

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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
 - ❑ Memory
 - ❑ System bus
 - ❑ Interrupt
 - ❑ Power
 - ❑ Voltage
 - ❑ Current
 - ❑ Peak and RMS values
 - ❑ Sine curve
 - ❑ Amplitude, Frequency, Phase
- ❑ CIS 459.21: C Programming

Tentative Schedule

9/24/98	Chapter 1: Introduction
9/29/98	
10/1/98	Chapter 2: The Physical Layer
10/6/98	
10/8/98	Quiz 1
10/13/98	Chapter 3: The Datalink Layer
10/15/98	
10/20/98	
10/22/98	
10/27/98	Chapter 4: The Medium Access Layer

Tentative Schedule (Continued)

10/29/98	Quiz 2
11/3/98	
11/5/98	Chapter 5: The Network Layer
11/10/98	
11/12/98	Chapter 6: The Transport Layer
11/17/98	Final Lab due
11/19/98	Quiz 3
11/24/98	Last class
11/26/98	Thanksgiving Holiday
12/1/98	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:
 - ❑ TCP/IP
 - ❑ Window Flow Control
 - ❑ Cyclic Redundancy Check
 - ❑ Parity
 - ❑ Start and Stop Bits
 - ❑ Baud, Hertz, and Bits/sec
 - ❑ Algorithms for determining packet routes
- ❑ This is the first course on networking.
We cannot cover everything in 10 weeks.

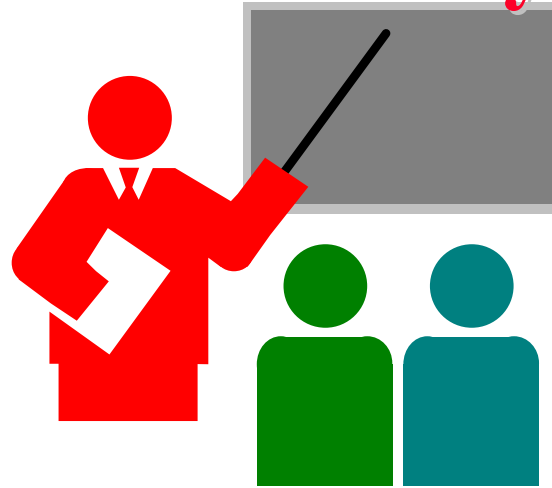
Why You Shouldn't take this course?

- ❑ 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 Dreesse Lab, 2015 Neil Ave
- ❑ No office hours on 10/20, 12/1, 12/3
- ❑ Grader: Arjan Durrese, DL299, Durrese@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?

T F

- 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 its 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.

Marks = Correct Answers _____ - Incorrect Answers _____ = _____