Overview

- 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 25%
- Labs 20%
- Note: Labs require programming in C
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 Thursday 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. Grade: +1 for correct. -1/(n-1) for incorrect.
- Everyone including the graduating seniors are graded the same way.
Textbook


Note: There is a significant difference between fifth and sixth editions.
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

3/30/00  Course Overview
3/31/00  Intro to Network Architecture and Protocols
4/6/00   Data Transmission
4/7/00   Datalink Control
4/13/00  Datalink Control (Cont)
4/14/00  Quiz 1
4/20/00  Packet Switching
4/21/00  LAN Systems
4/27/00  LAN Systems (cont)
4/28/00  Bridges
Tentative Schedule (Continued)

5/4/00  IP
5/5/00  Quiz 2
5/11/00 TCP
5/12/00 IPv6
5/18/00 ATM
5/19/00 ATM Traffic Management
5/25/00 Last Lab Due
5/26/00 Quiz 3
6/1/00  Last class
6/2/00  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 implementers 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 hard work
- 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

- Thursday: 2:30 to 3:00 PM
  Friday: 2:30 to 3:00PM
- Office: 297 Dreese 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/Tu/W 2:30 to 3:00PM
Summary

- There will be a lot of self-reading
- Goal: To prepare you for a career in networking
- Get ready to work hard
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 _____ = _______