CIS 677
Computer Networks

Raj Jain

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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              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

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>9/24/98</td>
<td>Chapter 1: Introduction</td>
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<td>9/29/98</td>
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<tr>
<td>10/1/98</td>
<td>Chapter 2: The Physical Layer</td>
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<td>10/6/98</td>
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<tr>
<td>10/8/98</td>
<td>Quiz 1</td>
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<td>10/13/98</td>
<td>Chapter 3: The Datalink Layer</td>
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<td>10/15/98</td>
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<td>10/20/98</td>
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<td>10/22/98</td>
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<tr>
<td>10/27/98</td>
<td>Chapter 4: The Medium Access Layer</td>
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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 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/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 _____ = ______

The Ohio State University

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