FD '02

CIS 360
Telecommunications and Network Systems
Syllabus

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Office Hours: Tuesday and Thursday 1:00-2:00

Course Description

This is an introductory class which covers the basic concepts in data transmission and network systems, including transmission protocols, network configurations, packet concepts, and internetworking.

Course Objectives

At the end of the course the students should understand and be able to demonstrate knowledge of:

1. How computers communicate asynchronously with peripherals.
2. The principle physical communications media in use today.
3. How analog paths are used to send digital signals.
4. Concepts of packetization.
5. The physical components of LANs.
6 How networks become internetworks.
7. Internet protocols, routing, and naming.
8. Several common network applications.

Textbook

Required

Computer Networks and Internets, by Douglas Comer. 2nd ed. Prentice Hall, 1999.

Evaluation

Students will be evaluated based on five criteria:

1.	Midterm:	30 %
2.	Final exam	30 %
3.	Assignments	20 %
4.	Quizzes (unannounced)	10 %
4.	Deportment and attendance	10 %

Assignments will be graded based on both content and on style. Only computer output (or, I suppose, typwriter output) will be accepted. **No handwriting!** Assignments must be turned in within two class sessions. Five points will be

deducted for each day after the due date. Since this is an upper-division computer science course, I expect all driagrams to be done using drawing software (no hand-drawn assignments).

Overall grades will be assigned based on the scale:

90-100 = A
80-89 = B
70-79 = C
60-69 = D
<60 = F

A word on plagiarism

Students are expected to do their own work. Informal discussion is encouraged, but copying from each other or from published sources is prohibited: this includes "cut and paste" from websites. The penalty for copying on tests, quizzes, or assignments is: first time, a zero mark for that item of evaluation, second time an F for the course.

And on missing class

It is essential that you attend all classes. Three unexcused absences will result in a one-grade reduction. Be sure to let me know ***before*** you miss the class by calling 735-4825. Leave a voicemail message if I don't answer. If you miss more than one class due to illness I may require an explanation from your doctor.

Getting help

For quick help, an email (losborne@chaminade.edu) is probably the fastest way to contact me or obtain an appointment, you can also call me at 735-4825. Feel free to drop in on me (Freitas 217) during office hours: Tuesday and Thursday 1:00-2:00. Dropping by my office at other times may or may not prove fruitful, but you are welcome to try. If you show up I will do my best to make time for you

Tentative schedule

Note: We will attempt to follow this schedule, but may deviate as the interests and progress of the class become obvious. Students should have read the reading assignment *before* the class meeting.

Class	Date	Topic	Readings	Exercises Due
1	Tues, Aug 27	Class intoduction		
2	Thurs,Aug 29	Basic Concepts	Chap 1,2,3	
3	Tues, Sept 3	Local communication	Chap 4	First assignment due
4	Thurs, Sept 5	Modems and Muxs	Chap 5	
5	Tues, Sept 10	Packets and Frames	Chap 6	
6	Thurs, Sept 12	LAN topologies	Chap 7	
7	Tues, Sept 17	Hardware addressing	Chap 8	
8	Thurs, Sept 19	Physical topologies	Chap 9	
9	Tues, Sept 24	Physical topologies, cont.		
10	Thurs, Sept 26	Repeaters and bridges	Chap 10	
11	Tues, Oct 1	Telephone system	Chap 11	
12	Thurs, Oct 3	Digital telephony		
13	Tues, Oct 8	WANs and routing	Chap 12	
14	Thurs, Oct 10	Network ownership and performance	Chap 13	
15	Tues, Oct 15	Review		
16	Thurs, Oct 17	**Midterm**		
17	Tues, Oct 22	OSI model	Chap 14	
18	Thurs, Oct 24	The Internet	Chap 15	
19	Tues, Oct 29	Internetworking and the Internet	Chap 15	
20	Thurs, Oct 31	IP addresses	Chap 16	
21	Tues, Nov 5	Address reolution	Chap 17	
22	Thurs, Nov 7	Host addressing	Chap 26	
23	Tues, Nov 12	Datagrams	Chap 18	
24	Thurs, Nov 14	IP encapsulation	Chap 19	
25	Tues, Nov 19	IPv6	Chap 20	
26	Thurs, Nov 21	ICMP	Chap 21	
27	Tues, Nov 26	TCP	Chap 22	
Holiday!	**Thurs, Nov 28**	**Thanksgiving**		
28	Tues, Dec 3	Applicationsl	Chap 27	
29	Thurs,Dec 5	Security	Chap 28	