CS 176 – Introduction to Computer Communication Networks

Fall 1998

1 Course Information

Lecture:	Tuesday/Thursday; 12:30pm to 1:45pm (Phelps 1401)
Discussion:	Friday 1:00pm to 1:50pm (Building 387, Rm 103), or
	Monday 12:00pm to 12:50pm (Building 387, Rm 103)

WWW Page: http://www.cs.ucsb.edu/~cs176/

Textbook: Andrew Tanenbaum, Computer Networks, 3rd Ed, Prentice-Hall, 1996.

Suggested Prerequisites:	CS 130A-B – Data Structures and Algorithms I-II
	PSTAT 120A – Probability and Statistics

2 Professor Information

Kevin Almeroth
Office 2113, Engineering I
E-mail: almeroth@cs.ucsb.edu
Phone: 893-2777
Office Hours: Tue/Thur; 1:45pm - 3:00pm (or by appointment or by open door)

3 Teaching Assistant Information

Kamil Sarac
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Office Hours: Mon/Fri; 3:30pm - 5:00pm (or by appointment)

4 Student Evaluation

Written Assignments	25%	(5 @ 5% each)
Programming Assignments	20%	(2 @ 10% each)
Midterm Exam	25%	
Final	30%	

Written Assignments. Assignments are due at the beginning of class on the due date. Solutions will typically be handed out at the end of class on the same day. Therefore, turning in assignments after the end of class does not make much sense. **Some amount of discussion about assignments is encouraged, but sub-tasking is strictly forbidden.**

Programming Assignments. The same rules apply to programming assignments as to written assignments. Additional requirements are that programs are to be written in C, and *in addition to a hard copy turned in at the beginning of class, you will need to turn in an electronic copy.* More on turn in procedures later.

Tests. There are two exams, both will be closed book, and will take place on the scheduled days. I would strongly encourage attendance, i.e. missing the exam will be more work for everyone involved.

5 Course Outline

	Date	Lecture Topic	Reading	Assignment
1	T 9/29	Course Overview		
		Networking Basics	Chap 1, esp 1.4	
2	Th 10/1	Physical Layer Overview	skim Chap 2	
		Data Link Layer Overview	Chap 3	
		DLL - framing	Sec 3.1	
		DLL - errors	Sec 3.2	
3	T 10/6	DLL - errors (cont)		
		DLL - flow control	Sec 3.3, 3.4	
4	Th 10/8	HDLC, PPP, SLIP	Sec 3.6	HW 1 due
5	T 10/13	Medium Access Control Overview	Sec 4.1	
		Aloha, Slotted Aloha	Sec 4.2	
6	Th 10/15	CSMA, CSMA/CD	Sec 4.2	HW 2 due
7	T 10/20	Ethernet, Token Ring	Sec 4.3,4.5	
		Fast Ethernet, FIDDI		
8	Th 10/22	Midterm		HW 3 due
9	T 10/27	Network Layer Overview	Sec 5.1	
		Internetworking	Sec 5.4	
10	Th 10/29	Routing Overview	Sec 5.2	
11	T 11/3	Routing Algorithms	Sec 5.2.5,5.2.6	
12	Th 11/5	IP and IP addressing	Sec 5.5.1-5.5.3	HW 4 due
13	T 11/10	Subnetting/CIDR + Protocols	Sec 5.9, 5.5.4	
14	Th 11/12	IPv6	Sec 5.5.10	Lab 5 due
15	T 11/17	Transport Layer Overview	Sec 6.1-6.3	
16	Th 11/19	TCP and UDP	Sec 6.4	HW 6 due
17	T 11/24	TCP Congestion Control	Sec 6.4	
	Th 11/26	Thanksgiving – No Class		
18	T 12/1	Review		
19	Th 12/3	Networks in Practice	Chap 1	Lab 7 due
	M 12/7	Final Exam (12:00pm-3:00pm)		