Network Programming CSCI-4220

Spring 2001

Course: CSCI–4220
Lectures: Monday, Thursday 12:00-1:50 DCC 318
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TAs:

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Office Hours: Wed 9:30-12, 2-3:30	Office Hours: Tue, Fri 10-11:30	Office Hours: Tue, Fri 4-5

Texts: Unix Network Programming: Networking APIs: Sockets and XTI, 2nd Ed.
W. Richard Stevens

The WWW.

Grading: Tests (2): 30%
Homework/Programming Projects : 70%

Course Home Page: The course home page will include all programming assignments and class handouts. Some class notes and material related to specific topics will also be made available through the home page. Hardcopy of any class handouts will be provided only on request.

Homework and Programming Projects: All homework and programming projects must be done individually. Once programming assignments are made, the course home page will contain information on what is expected for project submission and directions for electronic submission.

Cheating will not be tolerated. Any duplicate or near duplicate project submissions will result in a grade of zero for the project for all students involved and may result in a failure for the entire course. You may *discuss* projects with other students, but sharing of code in any form is not acceptable (this means that looking at another student's code or showing your code to another student is **not** permitted). If you need help with a project - send mail to netprog@cs.rpi.edu ! Please contact the instructor if there is any part of this policy you do not understand.

NetProg-2001 Topic List & Readings

Week of		Topic	Reading
Jan	8	Intro. To Networking, O.S.I. Reference Model	Chapter 1
	15*	Datalink and Transport Layers, Ethernet, TCP/IP	Chapter 2
	22	Sockets Programming TCP Programming TELNET, HTTP, Authd	Chapter 3 Chapters 4,5 RFCs
	29	UDP sockets I/O Multiplexing DNS and address conversion TFTP	Chapter 8 Chapter 6 Chapter 9 RFCs
Feb	5	Buffer Overflow The WWW & Web Programming (CGI)	Handouts Handouts, Links
	12	Cookies, JavaScript, SSL, XML	Handouts, Links
	19	Router and Bridge Software Threads programming IPV6	 Chapter 23 Chapter 10
	26	**Test #1** Client/Server Programming Advanced Sockets Programming	 Chapter 27 Chapters 7,11,21,22
Mar	5	Daemons, inetd SMTP, POP, IMAP, FTP	Chapter 12 RFCs
	12	Spring Break	SLEEP
	19	More Internet Application Protocols Protocol Design Security LDAP	To be determined RFCs
	26	XDR RPC Programming	Handouts
Apr	2	CORBA	Handouts, Links
	9	CORBA	Handouts, Links
	16	?	
	23*	**Test #2**	

*indicates short week (1 meeting)

Important Dates

Test	Date
TEST 1	2/26
TEST 2	4/23

Project	Due Date	Topic (may change)
P1	1/26	Layered Software System
P2	2/9	HTTP Robot
P3	2/23	DNS Relay (UDP)
P4	3/9	CGI Program
P5	3/30	(Something using threads)
P6	4/13	RPC
P7	4/25	CORBA