CAL POLY POMONA

COMPUTER NETWORKS

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Office: 8-43

Office Hours: TR 1:00 - 3:00

Fall 2017

CS 380

Bldg: 8 - 345

TR 3:00 - 4:50

Course Description

Network architectures and standards. Layers and protocols. Circuit switching, packet switching and routing. Client-server concepts. Nework Security. Web computing. Privacy, intellectual property rights and acceptable use. Prerequisite: CS 241 and CS 264 C or better

Course Grading

Midterm	20%
Final	30%
Exercises	20%
Projects	20%
Quizzes	10%
Journal	Extra Credit

Course Objectives

Upon the completion of this course, the student shall acquire the following knowledge and skills:

- Network Architectures
  OSI and TCP/IP
- Layering and Protocols
- Bandwidth / Throughput
- Congestion Control
- Cryptography
- World Wide Web (HTTP/CGI)
- Wireless Networks

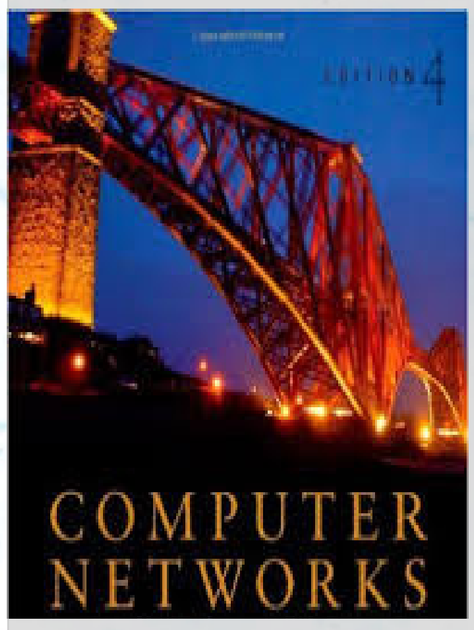
Grading Scale

		A	>= 90
86	<=	B+	<= 89
80	<=	B	<= 85
76	<=	C+	<= 79
70	<=	C	<= 75
66	<=	D+	<= 69
60	<=	D	<= 65
		F	<= 59

NOTE: These are minimum grades earned. With the curve you can get a minus such as an A-, B-, C-...etc

COMPUTER NETWORKS

Textbook



"Computer Networks A System Approach"

Larry L. Peterson and Bruce S. Davie

ISBN-13: 978-0123705488 Edition: Fourth

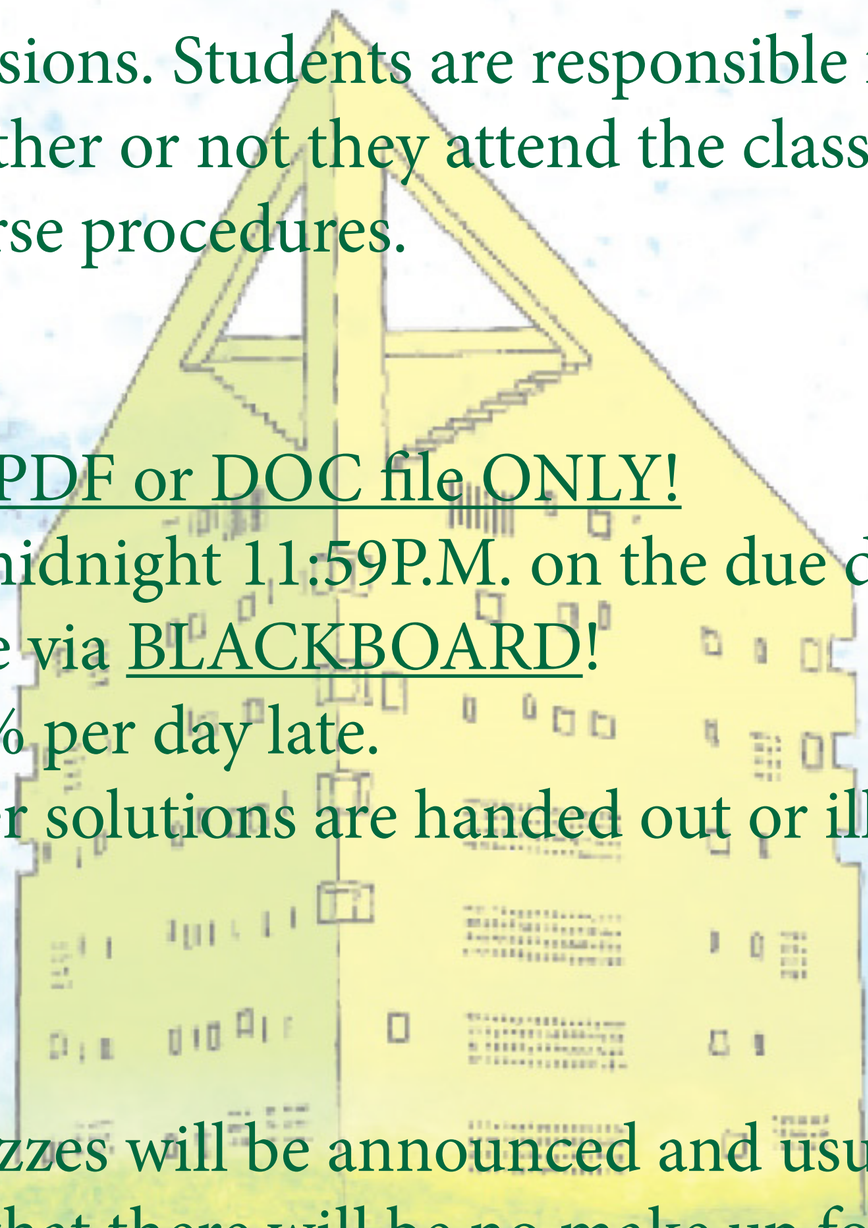
Course Requirements

Attendance

Attendance is expected at all class sessions. Students are responsible for all material presented in the course whether or not they attend the class, including announcements about course procedures.

Exercies and Projects

- Assignments must be submitted as a PDF or DOC file ONLY!
- Assignments will be due just before midnight 11:59P.M. on the due date.
- Assignments will be submitted online via BLACKBOARD!
- Late assignments will be penalized 5% per day late.
- Assignments will not be accepted after solutions are handed out or illustrated in the class.



Quizzes

There will be several quizzes. The quizzes will be announced and usually given at the end of class. Please note that there will be no make up for any missed quizzes.

Journal

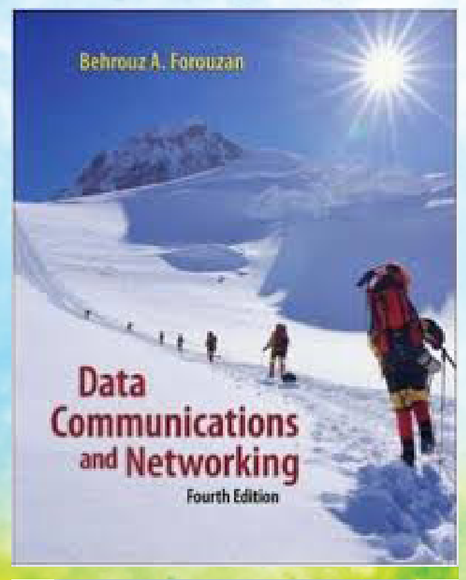
Participating in the journal activities is expected but not required. You may earn up to four additional points from this participation. I encourage every student to write me to express her or his expectations and thoughts about the course. You may use the journal to inform the instructor about your learning style, or comment on the pace and teaching style. Please be assured that your opinion will in no way affect your course grade.

COMPUTER NETWORKS

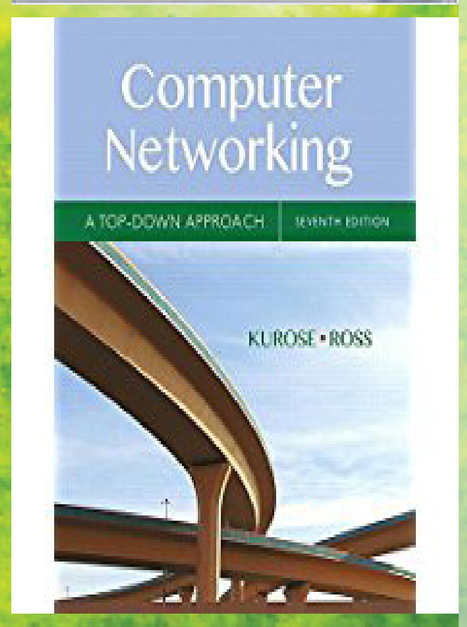
Lecture Schedule

Week 1 Chapter 1	Review, History and Concepts OSI/IP
Week 2, 3 Chapter 2, 3	Network Performance Physical Layer and Data Link Layer
Week 4 Chapter 4, 5	Network Layer Routing/Forwarding
Week 5 Chapter 9	Scalability Transport Layer
Week 6 Chapter 11	Network Security Cryptoghraphy
Week 7 Chapter 12	Security Techniques Integrity/Availability
Week 8 Chapter 13	Congestion Control
Week 9,10 Chapter 14, 16	Session Layer and Presentation Layer Application Layer

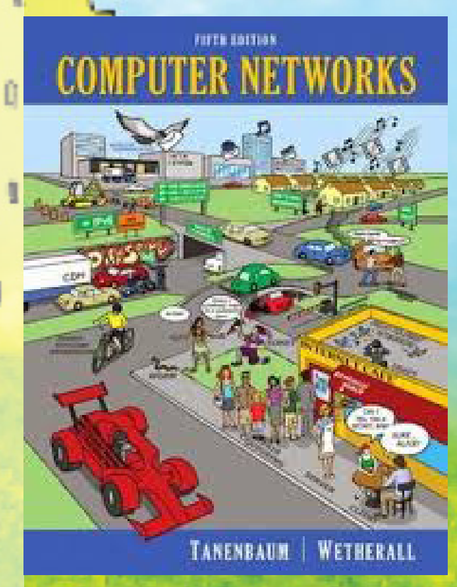
References



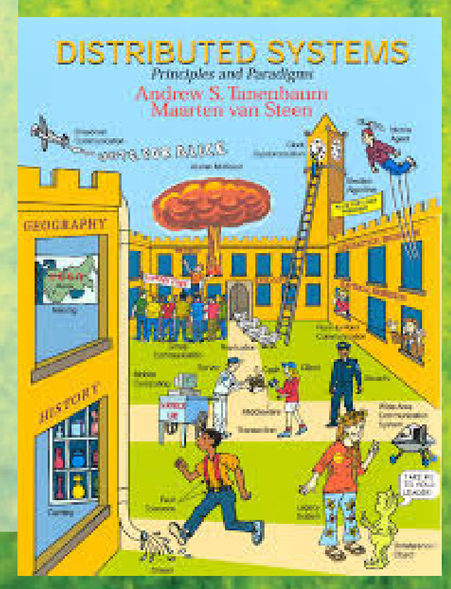
"Data Communication and Networking"
Behrouz A. Forouzan



"Computer Networking top down"
James Kurose and Keith Ross



"Computer Networks"
Andrew Tanenbaum



"Distributed Systems"
Andrew Tanenbaum