Course on

Computer networks

Overview

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Preliminaries

Book:	Computer Networks
	Andrew Tanenbaum
	Third Edition 1997
Course:	12 lectures of 3 hours
	12 lab exercises of about 3.5 hours
Exam:	June 23; 13-16 hour
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Overview theory

- Introduction
- Physical layer
- Data link layer
- Medium access layer
- Network layer
- Transport layer
- Application layer

Treated Subjects and Sections

From Tanenbaum, Computer Networks, 3rd ed. :

Chapter	***Lectures***
1 Introduction	1
1.1 - 1.5.2, 1.5.5, 1.6, 1.9 (1.5.2, 1.5.5 reading)	
2 Physical Layer	2, 3a
2.1 - 2.6 (except 2.4.2), 2.9 (2.3.2-2.3.5 reading)	
3 Data Link Layer	3b, 4, 5a
3.1 - 3.7 (except 3.6.1)	
4 Medium Access Sublayer	5b, 6
4.1 - 4.4.2, 4.5.2, 4.7 (except 4.2.5)	
5 Network Layer	7, 8
5.1 - 5.6 (except 5.3.8 and 5.3.9), 5.7	
6 Transport Layer	9, 10
6.1 - 6.5.1, 6.7	
7 Application Layer	11, 12
7.1 - 7.2, 7.6 - 7.6.3, 7.7, 7.8	

Lab exercises

- Introduction to protocols and layers (chapter 1)
- Data link protocols (chapter 3.3 / 3.4)
  - Java programming exercise using threads
- Ethernet (chapter 4.3.1)
- HTTP, web server (chapter 7.6)
- HTML (chapter 7.6)
  - including: cgi-scripts, Java-applets
- TCP/IP (chapter 5 / 6)

Contact: Ronald van der Meel
Andre Deutz

Other literature

Fred Halsall
Data Communications, Computer Networks and Open Systems 4-ed
Addison-Wesley

William Stallings
Data and Computer Communications
Prentice Hall

Dimitri Bertsekas and Robert Gallager
Data Networks
Prentice Hall

W. Richard Stevens
UNIX Network Programming
Prentice Hall

Other literature

Larry L. Peterson & Bruce S. Davie
Computer Networks: A systems approach
2nd ed. 2000
Morgan and Kaufmann

Jean Walrand
Communication Networks: a first course
2nd ed. 1998
McGraw-Hill

Alberto Leon-Garcia & Indra Widjaja
Communication Networks: Fundamental Concepts and Key Architectures
2000, McGraw-Hill