



Syllabus

2008 Fall Term

E1039 Computer Networks

Textbook: William Stallings, Computer Networking with Internet Protocols and Technology, Prentice Hall, 2004. ISBN 0-13-191155-4

Instructor: Yihjia Tsai

Web: iaic.csie.tku.edu.tw/netintro/

1. Introduction
2. Data Networks and the Internet
3. Protocols and the TCP/IP Protocol Suite
4. Traditional Applications: telnet, email, and ftp
5. Modern Applications: web, and voip
6. Transport Protocols
7. TCP Traffic Control
8. Internet Protocols
9. Interior Routing Protocols
10. Exterior Routing Protocols and Multicast
11. Local Area Networks
12. Network Security

Reference:

Unix Network Programming, volumes 1-2 by W. Richard Stevens. Published by Prentice Hall. ISBNs for volumes 1-2: 013490012X, 0130810819.

Internetworking with TCP/IP, volumes I-III by Douglas E. Comer and David L. Stevens. Published by Prentice Hall. ISBNs for volumes I, II, and III: 0130183806, 0139738436, 0138487146.

TCP/IP Illustrated, volumes 1-3 by W. Richard Stevens and Gary R. Wright. Published by Addison Wesley. ISBNs for volumes 1, 2, and 3: 0201633469, 020163354X, 0201634953.

Advanced Programming in the UNIX Environment by W. Richard Stevens. Published by Addison Wesley. ISBN 0201563177.

Network Programming for Microsoft Windows, Second Edition by Jim Ohlund, Anthony Jones, and James Ohlund. ISBN 0735615799.

Java Network Programming, Third Edition by Eliote Rusty Harold and Elliotte Rusty Harold, 2004. ISBN 0596007213.

Grading: 30% home works + quizzes, 5% attendance, 30% midterm, and 35% final



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Computer networking is an introductory course for modern day communication technologies. This course provides a broad and thorough exploration of a variety of network technology and protocol suites, including wired and wireless networks. Topics to be covered include the design and implementation of computer communication networks, their protocols, and applications.