

Brooklyn College
Department of Computer & Information Sciences

CISC 7332 [*748X] Local Area Networks

37½ hours plus conference and independent work; 3 credits

Local area network (LAN) technology. Topologies and transmission media. LAN protocols. The IEEE 802 standard. High speed LANs. Optical fiber LANs. The FDDI standard. Circuit-switched LANs. LAN performance measurements. The network interface. Internetworking. Network design issues. Commercial systems.

Textbook:

Local and Metropolitan Area Networks, 6th ed. by: W. Stallings.

Syllabus:

1. Introduction to Local Area Networks (LANs):
Chapter 2: 2.9, 2.10
2. Topics in Data Communications:
Chapter 2: 2.3, 2.4
3. LAN Topologies and Transmission Media:
Chapter 4: 4.2, 4.5, 4.6
4. LAN Protocols:
Chapter 5:
5. IEEE 802.2: Logical Link Control (LLC);
Chapter 6: 6.1, 6.3, 6.4
6. IEEE 802.3: Medium Access Control - CSMA/CD:
Chapter 7: 7.2, 7.4
7. 100Base-T, 100VG-AnyLAN , anfg Gigabit LANs:
Chapter 7: 7.8, 7.10, 7.11
- 8 IEEE 802.5: Medium Access Control - Token Ring;
Chapter 8: 8.1, 8.2
- 9 The Fiber Distributed Data Interface (FDDI):
Chapter 8: 8.6, 8.7

10 Wireless LANs:

Chapter 10:

11. Asynchronous Transfer Mode (ATM) LANs:

Chapter 11: 11.3, 11.4

12. Internetworking:

Chapter 12 & 13:

13. Network Performance;

Chapter 15: