

CS436 Curriculum

Introduction

Three lectures

Lectures 1, 2:

Introduction to Distributed Computer Systems (minor revisions to current 37 pages)

Lecture 4:

Introduction to Operating Systems (as is ? 16 pages)

Facilities Required in a Distributed System

Three Lectures

Lecture 7:

Network Analogy (as is 8 pages)

Lectures 8, 9:

Communications Issues (as is 38 pages)

Communications Systems

Six Lectures

Lecture 10:

Network Models (11 pages)

Lecture 11:

Transport Layer (8 pages)

Lecture 12:

Network Layer (8 pages)
Datalink and physical layer (3 pages)

Lecture 13:

Application layer (5 pages)
Presentation layer (5 pages)
Session layer (6 pages)

Lecture 14:

Network Standards (17 pages)

Lecture 15:

Local-area Networks (6 pages)
ISDN (6 pages)
FDDI (1 page)

Applications

Twelve lectures

Lecture 16:

Historical survey of networking; growth of the Internet (based on current Comparison of OSI/DOD/SNA, 22 pages)

Lecture 17:

Internet: Protocols: IP TCP, UDP, sockets (new)

Lecture 18:

Internet: Applications: ftp, telnet, etc. the RFC process

Lecture 19:

Internet: Addressing and name services; ARP, RARP; routing, bridging

Lecture 20:

Internet: E-mail: SMTP, POP, MIME, X.400

Lecture 21:

WWW: background, HTTP, HTML; architecture for a Web site

Lecture 22:

Examples of distributed file systems: nfs, LANs, workgroups

Lecture 23:

Client-server

Lecture 24:

Resource discovery: WAIS, Archie, Veronica, Gopher?

Lecture 25:

Lecture 26:

Lecture 27:

Security in Distributed Systems

Three lectures

Cryptography (21 pages, as is)

Problems in Distributed Systems

Three lectures

Databases (22 pages, as is)