

THIS IS A REFERENCE SYLLABUS DESCRIBING AN NKU COURSE IN GENERAL. ENROLLED STUDENTS SHOULD CONSULT THE ACTUAL SYLLABUS OF THE COURSE IN WHICH THEY ARE REGISTERED.

INF 284 Introduction to Networking and Data Communication

CATALOG DESCRIPTION:

INF 284 Introduction to Networking and Data Communication: Introduction to computer networking; data communications; data transmission, data encoding, data link control; communications network techniques; network protocols; wireless networking; network server configuration; and planning and deploying a local area network. PREREQ: C or better in MAT 109 (or higher) and INF 110, INF 120 or CIT 140.

LAST TAUGHT: Spring 2009 (P. Hart, Y. Hu)

SCHEDULED LAB USAGE: None

STUDENT BACKGROUND EXPECTATIONS:

1. Familiarity with basic algebra.
2. Familiarity with computer terminology, including bits and bytes.

CORE TOPICS COVERED:

- Internet applications
- Data communication
- Information sources and signals
- LANs: packets, topologies, and MAC
- Wireless LANs
- Internetworking
- IP Addressing
- TCP and UDP
- Internet Routing
- Network Security

MOST RECENT TEXTBOOK USED :

Computer Networks and Internets 5th edition, Douglas E. Comer, Prentice Hall, 2008

ISBN 0-13-606127-3

Chapters Covered: 1-6, 13-17, 20-27, 30.

SOFTWARE REQUIRED:

Wireshark.

STUDENT WORK

Assignments using Wireshark, quizzes, and exams.

LEARNER OUTCOMES

Students will be able to...

1. Explain the layers of the OSI and TCP/IP network models.
2. Explain common network topologies and the devices (hubs, switches, routers) required to implement them.
3. Explain the basics of IP addressing and routing.
4. Analyze captured network packets with Wireshark to identify protocols, addresses, and connections.

CROSS-LISTINGS

None