

CNT 4104 – Introduction to Data Communications

Fall 2009

Course Description

This course provides an introduction to fundamental concepts in the design of data communications networks, networking protocols, and applications. Topics to be covered include network architectures, physical media, protocols for data link, network, transport, and application layers, with focus on internet technologies.

Textbook (required)

L. Peterson and B. Davie, *Computer Networks: A Systems Approach* – 4th ed., Elsevier / MKP, 2007

References (recommended, not required)

Computer Networks, 4th ed., Andrew Tanenbaum, Prentice Hall, 2003.

Data and Computer Communications, 7th ed., William Stallings, Prentice Hall, 2004.

Instructor

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Course Objectives

To learn the basic concepts of data communications

To learn the layered architecture of communication protocols

To learn the principles and functions performed by each layer of the network architecture

To learn the main protocols and standards of the Internet

To learn basic concepts of internetworking, addressing, and routing.

Prerequisites:

COP 3530 and CDA 3331C

Course Outline:

1. Foundation (chap. 1)
2. Direct Link Networks (2)
3. Packet Switching (3)
4. Internetworking (4)
5. End-to-end Protocols (5)
6. Congestion Control and Resource Allocation (6)
7. Applications (9)
8. Network Programming – TCP/IP with sockets

Class Time & Place

Tuesday and Thursday, 3:30 pm - 4:50 pm in BU 410 (Boca Raton campus)

Office Hours

T: 12:20-3:20 PM

R: 2:20-3:20 PM, 5-7 PM

Boca Raton SE480, tel: 561-297-3401

Grading

Assignments 40%

2 Exams 50%

Class participation 10%

Important Dates

10/08/09 Midterm Exam

11/26/09 Holiday – no class

12/03/09 Final Exam

Notes:**• Class Material**

Students should read ahead of time the sections that will be discussed in class.

• Blackboard

The course web site containing Lecture Notes, Assignments, Announcements, Course Schedule, will be maintained on [Blackboard](#). Changes to office hours, to class policies, and other announcements will be posted on Blackboard.

• Assignment Submission

All work in this class must be done individually, unless specified otherwise. Assignments are due at the beginning of the class. No late assignments will be accepted without written evidence the delay was beyond the student's control.

• Academic Ethics

Students are required to adhere to the policy on [Academic Irregularities and Students' Academic Grievances](#) imposed by FAU.