CNT3004: Computer Network Concepts

Summer 2012

Instructor: Dr. Cliff Zou (HEC 243), 407-823-5015, czou@cs.ucf.edu

Course Time: TuTh 2:00PM - 3:50PM, HEC 118

Office Hour: TuTh 12:00PM – 2:00PM

Course Webpage: http://www.cs.ucf.edu/~czou/CNT3004/

Catalog Course Description:
Network media, protocol, current and evolving standards for local, metropolitan, wide area and wireless networks.

Objectives:
The objectives of this course are to introduce the fundamental concepts, structure and components of computer networking, to overview selected protocols associated with the Application, Transport, Network, Link, and Physical Layers of the OSI Reference Model and to show how these protocols are organized to produce computer networks.

The tentative grading policy is:

<table>
<thead>
<tr>
<th>Coursework</th>
<th>approximate %</th>
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<tbody>
<tr>
<td>1. Homework assignments</td>
<td>(30%)</td>
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<td>2. Exam 1</td>
<td>(20%)</td>
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<tr>
<td>3. Exam 2</td>
<td>(20%)</td>
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<td>4. Final Exam (comprehensive)</td>
<td>(30%)</td>
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The final grade will use +/- policy, i.e., you may get A, A-, B+, B, B- … grade.

Prerequisites: CGS 1060C Introduction to Computer Science.

Course Materials:

Class Notes: PowerPoint slides will be posted on the class Web site before each class.

Chapters in the textbook covered in CNT 3004

- Chapter 1: Introduction
- Chapter 2: Network Models
- Chapter 3: Data and Signals
- Chapter 7: Transmission Media
- Chapter 9: Using Telephone and Cable Networks for Data Transmission
- Chapter 10: Error Detection and Correction
- Chapter 11: Data Link Control
- Chapter 14: Wireless LANs
- Chapter 15: Connecting LANs, Backbone Networks, and Virtual LANs
- Chapter 19: Network Layer Addressing (only the basic concepts needed for Chapter 25)
- Chapter 25: Domain Name System
- Chapter 26: Remote Logging, Electronic Mail, and File Transfer
- Chapter 27: WWW and HTTP
- Chapter 31: Network Security