CNT 6107 Advanced Computer Networks, Spring 2009

Prerequisites: Basic probability theory, general networking knowledge (i.e., CEN 4500 and CEN 5501) and operating systems (COP 4600).

Goals: This course is designed to cover several design issues in the emerging networks. The types of emerging networks that we intend to cover include: Wireless Networks, Asynchronous Transfer Mode (ATM), Fibre Channel, Gigabit Ethernet, and future optical networks. New applications which can primarily benefit from these emerging networks will also be covered. Then we will focus the discussions on protocol design, routing, flow and congestion control in MAC-, Network- and Transport-layer for these emerging networks.

Textbook: (i) "Computer Networks" by A. Tanenbaum, Latest Edition, Prentice Hall. (ii) A collection of manuscripts and research papers will be also made available to students.

Regular lecture attendance is required:. We will randomly choose 10 lectures to check your attendance. Each attendance check accounts for 1% of your final grade.

Exams and Assignments:

- One Final Exam (20% of the final grade): 10am-12noon Thursday Apr. 30.
- One Midterm Exam (20% of the final grade): Dates and format to be determined.
- 3-4 Written Assignments (15% of the final grade): Individually done.
- Oral Presentation(s) (15% of the final grade): Papers from the course packets will be randomly assigned to you. One presentation should last 40-45 minutes in addition to 5-10 minutes of question handling. Presentation dates will be determined later.
- One Term Project (20% of the final grade): Details will be announced later.
- 10 Random Attendance Checks (10% of the final grade):

Assignments and project are due at the beginning of the classes. No late assignments/project or makeup exams are permitted. Cheating in assignments/project/exams will result a "F" on your final letter grade.

The expected letter-grade distribution is as the following:

Final Total Score (out of 100)	vs.	Letter Grade
90 and above		A
85-89		B+
80-84		B
75-79		C+
70-74		C
60-69		D
59 and below		F

Instructor: Jonathan C.L. Liu, Ph.D., Associate Professor, CSE 444, E-mail: jcliu@cise.ufl.edu, Phone: (352) 392-6834, Office Hours: 10:15am-11:45am on Tuesdays and Thursdays

Selected Topics:

o Brief Review on Networking Techniques

o Wireless Networks

o Fibre Channel

o Gigabit Ethernet and beyond

o Asynchronous Transfer Mode (ATM)

o All-Optical Networks

Cell Phone Policy: Cell phones should be turned off (or silent) during the lecture hours to provide the quite learning environment for every student in the classroom.

University of Florida's Honor Code: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." Details of the code can be found at http://itl.chem.ufl.edu/honor.html.

Students with Disabilities: Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.