

CNT 6107 Advanced Computer Networks, Spring 2013

Prerequisites: Basic probability theory, general networking knowledge (i.e., CNT 4007 and CNT 5106) 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:

- NO Final Exam;
- Two Midterm Exams (40% of the final grade): Dates and formats to be determined.
- 3-4 Written Assignments (20% of the final grade): Individually done.
- One Term Project (20% of the final grade): Details will be announced later.
- Oral Presentation (10% of the final grade): You will need to present your term project at the end of the semester. Presentation dates will be determined 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
93 and above		A
90-92		A-
87-89		B+

83-86	B
80-82	B-
77-79	C+
73-76	C
70-72	C-
67-69	D+
63-66	D
60-62	D-
59 and below	F

Instructor: Dr. Jonathan C.L. Liu, CSE 444, (Preferred) E-mail: jcliu@cise.ufl.edu, Phone: (352) 392-1200, Office Hours: 1:45pm-2:45pm on Mondays and Wednesdays.

Teaching Assistant: Yilin Shen (yshen@cise.ufl.edu), Office hours: 3pm - 4pm at E309 on Tuesday, Thursdays and Fridays;

Teaching Assistant: Yibin Wang (yibwang@cise.ufl.edu), Office hours: 2pm - 3pm at E309 on Thursdays and 11am - 1pm at E309 on Fridays;

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 quiet 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.