Course topic summary:

This is an introductory course to communication networks. The topics include: Introduction to communications network architectures, Layer approach of protocol hierarchy, protocols, and resource allocation techniques with emphasis on performance issues.


References:

2. Other relevant articles and material.

Instructor: Professor Hwa Chang

Office: Room 131, Halligan Hall; e-mail: hchang@eecs.tufts.edu; Telephone: 627-5178
Office hours:
• Mondays: 2:50pm - 4:20 pm
• Thursdays: 10:00am - 12:00pm
• or by appointment

Teaching Assistant: Zhong Zou
Office: 229A, Halligan Hall; e-mail: Zhong.Zou@tufts.edu; Phone: (617) 820-6480
Office hours: (Tentatively)
• Tuesday: 10:00-11:00 am
• Thursdays: 12:00pm - 1:00pm

E-mail List: We will have a class mailing list which will be frequently used to make announcements. **Make sure you get on the mailing list!!**

Course web page: All assignments, hints, handouts, and announcements will eventually be posted on the class' web page: http://www.eecs.tufts.edu/~hchang/ee129-f06.

Tentative schedule:

1. Introduction
   Definition of a network
   Network architectures
2. The physical layer
   - Signals
   - Data
   - Encoding and transmission
   - Wireless
   - T-series carrier
   - SONET
   - Switching

3. The data link layer

4. The medium access sub-layer

5. The network layer

Quiz: There will be a quiz given in class every Wednesday, if time allows. The six highest grades will be used to calculate your quiz score. Normally, no make-up quizzes will be given.

Homework: Normally there will be a weekly homework assignment due every Monday. Solutions to the homework will be placed in a book in the ECE office and on the course web site a week after the due date. Normally no late homework will be accepted for a grade after the solutions are posted.

Projects: Two or three projects will be assigned.

Examinations: There will be one midterm-exam and one final exam. The midterm-exam will be given tentatively on Thursday, October 26th. Time is to be decided. The final exam is scheduled from 12:00pm to 2:00pm on Tuesday, December 19th by the registrar office. If you have a schedule conflict at any of the exam times, you should inform Professor Chang at least one week before the exam. If you miss an exam for some unexpected reason, you must get in touch with Professor Chang or the ECE secretary within 24 hours of the scheduled exam. The final exam will be comprehensive.

Course grading:

Your course grade will be determined from five factors having the weights shown here:

- Homework Average: 15%
- Projects: 10%
- Quizzes: 15%
- Midterm-exam: 25%
- Final exam: 35%