COMMUNICATION NETWORKS
ENEE 426, Section 0101
SPRING 2004

Time/Venue
MW 2:00–3:15 pm/EGR 2107 (ITV)

Instructor
Prakash Narayan
Room AVW 2353
Phone: 301-405-3661
FAX: 301-314-9281
e-mail: prakash@eng.umd.edu

Office Hours
Tu 3:30–4:45 pm
Th 11:00 am–12:15 pm
Also by appointment

Teaching Assistant
Quang Trinh
Room EGL 1153 (or 1154)
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Office Hours
M 12:30 pm–1:30 pm
W 9 am–11am
Th 3:30 pm–4:30 pm

Course Objective: The goal of this course is to introduce the student to the basic architectures and operations of modern telecommunications networks, and the services they support. Several associated design issues will be examined and the underlying principles discussed. Topics to be covered will include: review of data communications, telephone networks, network services, standards and protocols, reference models for TCP/IP networks,
frame relay and ATM, LAN technologies, multiplexing, switching, routing algorithms, flow control and buffer management for QoS support, congestion avoidance.

**Course Prerequisite:** ENEE 324 (Engineering Probability) and completion of all lower-division technical courses in the ECE curriculum.

**Topic Prerequisite:** Basic understanding of analog and digital communications (e.g., analog and digital modulation, multiplexing, noise and bit error rate); and a working knowledge of elementary probability.


**References:**


**Course Grade**

The final grade for the course will be determined by the student’s performance in

- homework problem sets (10%);
- two examinations during the course of the semester (25%+25%);
- a final examination (40%).

The schedule of examinations is as follows:

- Examination I: second week of March, 2002;
- Examination II: third week of April, 2002;
• Final Examination: May 17, 2004, 10:30 am–12:30 pm.

Homework problem sets will be distributed from time to time, and solutions provided shortly thereafter.