CMPE 80N: Introduction to Computer Networks and the Internet
Spring 1999

Syllabus and General Information

Instructor
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Class Timings
Tuesday, Thursday 2:00–3:45 PM, Natural Sciences Annex 101
Final Exam: Monday, June 7, 4:00–7:00 PM

Course Description
This is a new introductory topical course on computer networks. The course provides a basic overview of computer network architectures and protocols, with emphasis on the basic protocols used in the Internet. The focus is on the engineering aspects of the Internet, rather than applications.

Prerequisites
No pre-requisites are assumed, but some programming experience is valuable. Familiarity with the binary number system will be helpful.

Text
Class Schedule

Week 1: Introduction, networking basics, circuit versus packet switching, protocol layering, the binary number system

Week 2: Local-Area Networks (LANs), multiple-access communication, Ethernet protocols, bridging

Week 3: Overview of IP, the Internet Protocol

Week 4: Internetworking, router basics

Week 5: Overview of Transmission Control Protocol (TCP)

Week 6: Naming, the Domain Name System (DNS)

Week 7: Applications: ftp, e-mail, telnet

Week 8: Web protocols and technologies

Week 9: Internet security

Week 10: Review, project demonstrations

Evaluation Criteria

Homeworks – 10 percent
In-class quizzes (4 or 5) – 30 percent
Final – 40 percent
Project – 20 percent

Project

A class project will be assigned during the second half of the quarter. The projects must be done individually. Details of the project will be discussed in the class later in the quarter.

Class Webpages and Newsgroup

The class Web page is at www.cse.ucsc.edu/classes/cmpe80n/Spring99. A newsgroup ucsc.class.cmpe80n will be available for questions and discussion. Whenever possible, please post your questions to the newsgroup instead of sending e-mail.

Honor code: All work submitted must be your own. Incidents of cheating will be handled according to University policy and may become part of your permanent academic record.