

***Introduction to Data
Communications and Networking***

Professor: Behrouz Forouzan Call#: 2925 Units: 5

1. GENERAL INFORMATION

Distance Learning Center

Table 1 gives you the information for contacting Distance Learning Center:

Table 1 *Information about Distance Learning Center*

DLC Office: LC-107
Phone: (408)864-8969 FAX: (408)864-8245 and (408)864-5546
Site: http://www.deanza.edu/distance
Office Hours: Mon. to Thur., 8:00 AM to 6:00 PM; Friday: Closed

Professor

Table 2 gives the information you need to know about your professors:

Table 2 *Information about Your Professor*

Name: Behrouz Forouzan
Office Hours: On line (by email) September 21 to December 7
Fax: (408)-864-8245 and (408)-864-5546
Email: forouzanbehrouz@fhda.edu
Home Page: http://faculty.deanza.edu/forouzanbehrouz/

Course Description

An introduction to the concepts of telecommunications, data communications, networks including local and wide area networks, and internetworking.

Objectives

After completing the readings and written assignments, and viewing the lessons, you should be able to:

- a. Identify major applications of networking.
- b. Describe the internetworking equipment.
- c. Learn about data communication protocols.

Prerequisite

EWRT 100B and READ 91 (or LART 100), or ESL 4 advised.

Some Important Dates

Table 3 gives you some important dates that needed to be remembered.

Table 3 *Some Important Dates*

Last day to add (if space available): Saturday, October 3
Last day to drop and receive a refund: Saturday, October 3
Last day to drop with no record of grade: Friday, October 9
Last day to request a Pass/No Pass grade: Friday, October 16
Last day to drop with a “w” grade: Friday, November 13

2. REQUIREMENTS

The following is the minimum requirements for the course:

1. Do on-line orientation and be sure to have an email address (see Section 3)
2. Obtain the textbook.(see Section 4).
3. Be prepared to spend a minimum of 10 hours per week using and studying the materials.
4. View video tapes (see Table 12)
5. Read the corresponding chapters in the textbook (see Table 11)
6. Pass midterm and final tests (see Section 8).

3. ORIENTATION AND EMAIL

On-Line Orientation

Do the orientation on line. The information is given in Table 4.

Table 4 *On-Line Orientation*

Site: http://www.deanza.edu/distance
Deadline: Submit the Student Information Form by 12 noon on Friday, October 2

Registered students who do not complete the online orientation by the deadline may be dropped to make room for students on the wait list.

Email Address

Be sure you have a valid e-mail address on record with De Anza.

4. DROP POLICY

Dropping from this course is totally the responsibility of the student. If you do not drop yourself, it means that you want to stay in the course. In this case, an appropriate grade (A, B, C, D, or F) will be assigned to you at the end of the quarter. The professor has no responsibility to drop you from the course, although he may choose to do so at his discretion.

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5. COURSE MATERIALS

The following course materials are required for the course: the textbook and a calculator.

Textbook

Table 5 show the required textbook for the course. The textbook is available at De Anza Bookstore (and some other ones).

Table 5 *Textbook*

Book:	<i>Data Communications and Networking, Fourth Edition</i>
Author:	Behrouz Forouzan
Publisher:	McGraw-Hill, Inc.
ISBN:	0-07-296775-3

Calculator

You may need a calculator when practicing or taking the tests.

6. VIDEO TAPES

This is a telecourse which requires watching 16 90-minute video tapes. There are several options for viewing these tapes:

Watching At Home

Watch these tapes at home during the cable TV broadcasts (see Table 12).

A complete television schedule with broadcast times and dates is in Table 12 of this syllabus.

Recording

Record your video programs during the telecasts and view them when convenient.

Viewing at De Anza

View the tapes in Library West Computer Lab at De Anza College.

Checking Out

Check out tapes from the Library West Computer Lab to view overnight at home. If you choose this option, please pay attention to the following:

- a. SMART DASB Card required. The Smart Card Office is located in the lower level of Hinson Campus (408-864-5551).
- b. DLC ID Card required (available at the De Anza College Distance Learning Center, LC-107).
- c. One tape at a time may be checked out for 48 hours, no renewals.
- d. Return tapes to Library West Computer Lab or in the drop box outside of Learning Center West (please report any videotape technical problems).
- e. Late fines: \$2.00/day (maximum fine-\$50.00); replacement/lost tape charge: \$50.00/tape.

Video Streaming

The video lessons are also available by videostreaming. A high speed Internet connection is needed to view the videostreams. If you are connecting from home, this generally means a cable modem or DSL connection. **To access the streams** go to the Catalyst web site at

<https://catalyst.deanza.edu>

and login by following the instructions below. You will not be able to login until the first day of instruction. Once you've logged in, click on your course. The links to the videostreams, instructions and FAQ tips and troubleshooting are on this page.

Quick Login Instructions

You need username and password for login:

- ❑ **Username:** Your De Anza College Student ID (NOT YOUR SOCIAL SECURITY NUMBER).
- ❑ **Password:** Your Birthday in this format: MMDDYYYY (Two digit month, followed by two digit day, followed by FOUR digit year; no slashes or spaces.)

Technical Support

For technical help with Catalyst (Moodle), please visit the links to FAQ on Catalyst site

<http://catalysthelp.deanza.edu/?p=faq>

Log in information and request for password can also be located from catalyst site

<https://catalyst.deanza.edu>

If your question or issue is not covered in the FAQ, go to

<http://catalysthelp.deanza.edu>

where you will be able to submit a tech help request. Please note that Catalyst is De Anza's branding of Moodle software.

RealPlayer Download

Videos are streamed using RealPlayer. For a free download of the RealPlay software and to test your computer go to the Distance Learning Center web site

<https://www.deanza.edu/distance>

Select the "Technology" link, then the "Webcasts and Videostreams" link and follow the directions there.

Congestion

The quality of the videostream can be affected by Internet congestion on the De Anza Campus or network congestion with your Internet service provider.

7. READING ASSIGNMENTS

To receive knowledge about the course, follow the steps below:

1. Read chapters 1-18 (inclusive) of the textbook.
2. Review the summary section at the end of each chapter.
3. Answer review questions.
4. Try to do all exercises to be prepared for the tests.

**You find the answer to odd-numbered questions
and exercises at your professor home page:**

<http://faculty.deanza.edu/forouzanbehrouz/>

**Please do not ask for answer to even-numbered questions;
they are not available. You need to trust yourself in this case.**

8. TESTS

Two midterm and one final tests will be given during the term. Absolutely no make up tests.

First Midterm Test

Carefully note the information in Table 6 about the first midterm. **This is a take-home project. The test is available on the due date at the professor's site.**

Table 6 *First Midterm test (takehome project)*

First Midterm Test (Take-Home Project)

Due: Wednesday, October 21, 2009

Delivery: E-mail the answers to your professor (forouzanbehrouz@fhda.edu)

Chapters: Midterm test covers chapters 1, 2, and 3

Points: The test is worth 75 points.

Second Midterm Test

Carefully note the information in Table 7 about the second midterm. **This is a take-home project. The test is available on the due date at the professor's site.**

Table 7 *Second Midterm test (takehome project)*

First Midterm Test (Take-Home Project)

Due: Wednesday, November 11, 2009

Delivery: E-mail the answers to your professor (forouzanbehrouz@fhda.edu)

Chapters: Midterm test covers chapters 4, 5, 6, and 7.

Points: The test is worth 75 points.

Final Test

Carefully read information provided in Table 8 about final test. **This is a take-home project. The test is available the first day of final week at the professor's site.**

Table 8 *Final test*

Final Test (Take-Home Project)

Date: Wednesday, December 9, 2009

Delivery: E-mail the answers to your professor (forouzanbehrouz@fhda.edu)

Chapters: Midterm test covers chapters 8 to 18 (inclusive)

Points: The test is worth 100 points.

9. GRADING

Two midterm and one final tests will be given during the term.

Points

Students can obtain the points for each activity as listed in Table 9.

Table 9 *Points*

<i>Activity</i>	<i>Number</i>	<i>Unit Points</i>	<i>Subtotal Points</i>
First Midterm test	1	75	75
Second Midterm test	1	75	75
Final exam	1	100	100
Total Points			250

Final Grade

The final grade is based on the points obtained according to Table 10:

Table 10 *Grades*

<i>Percentage of Total Points</i>	<i>Grades</i>
90% to 100%	A
80% to 89%	B
70% to 79%	C
60% to 69%	D
0% to 59%	F

Incomplete

Title 5 of the Education Code defines the “I” grade as “Incomplete academic work. To be eligible to receive an “I” grade you must obtain the instructor's agreement and sign an Incomplete Contract form.

Academic Integrity:

The De Anza College Schedule of Classes, in the section titled, “Academic Integrity” states that “the submission of work which is not the product of a student's personal effort, or work which in some way circumvents the given rules or regulations will not be tolerated.” Based on this statement, copying another person's work, is an infraction of academic integrity and may result in a failing grade.

10. STUDYING EACH WEEK'S ASSIGNMENTS

The course content comes from the readings and video programs. Table 11 shows each week activity. Note that the contents of the textbook (4th edition) and video lessons do not match exactly. The book has been revised. Watch the video tapes for general information, but read the contents of each chapter carefully. **You are responsible for chapters 1 to 18 (inclusive) of the book.**

Table 11 *Weekly activities*

<i>Week</i>	<i>Reading</i>	<i>Videos</i>	<i>Tests</i>
I <i>Sep. 21 – Sep. 27</i>	Chapter 1, 2	Lesson 1	
II <i>Sep. 28 – Oct. 04</i>	Chapter 2, 3	Lesson 2	
III <i>Oct. 05 – Oct. 11</i>	Chapter 3, 4	Lesson 3	
IV <i>Oct. 12 – Oct. 18</i>	Chapter 4, 5	Lesson 4	
V <i>Oct. 19 – Oct. 25</i>	Chapter 5, 6, 7	Lesson 5	First Midterm October 21
VI <i>Oct. 26 – Oct. 31</i>	Chapter 7, 8, 9	Lesson 6	
VII <i>Nov. 02 – Nov. 07</i>	Chapter 10, 11	Lesson 7	
VIII <i>Nov. 09 – Nov.15</i>	Chapter 11, 12, 13	Lesson 8	Second Midterm November 11
IX <i>Nov. 16 – Nov.22</i>	Chapter 13, 14	Lesson 9	
X <i>Nov. 23 – Nov.29</i>	Chapter 14, 15	Lesson 10	
XI <i>Nov. 30 – Dec.06</i>	Chapter 16, 17, 18	Lessons 11, 12	
XII <i>Dec 07.–Dec.13</i>	Review for final	Review no new lesson	Final Dec. 09

11. BROADCAST SCHEDULE

Video programs for this course are shown weekly on local cable TV in the south San Francisco Bay Area on the following cable networks:

1. COMCAST, CCN1: Los Altos and Sunnyvale – Channel 30; Cupertino, Los Gatos, Milpitas, Mountain View, Santa Clara, Saratoga, San Jose – Channel 27;

San Jose – Channel 27A*; Campbell – Channel 34 (some areas of Campbell receive digital channel 25); Palo Alto, East Palo Alto, Stanford University, Menlo Park and Atherton – Channel 75.

COMCAST, CCN2: Cupertino – Channel 28; San Jose – Channel 28 or 28A (Some areas of San Jose receive digital channel 76.)

For broadcast problems on CCN1 and 2, the Broadcast Media Center can be reached at 408-864-8300 during the hours of 8:00 AM and 5:00 PM Mondays through Thursdays. Voice mail messages may be left at other times and will be returned during the normal hours of operation.

Table 12 shows the TV schedule for each week.

Table 12 *TV Schedule*

<i>Week</i>	<i>Video Tapes Lessons</i>	<i>Lesson Title</i>	<i>CCN1 Wednesdays 8:00 PM to 11:00 PM</i>	<i>CCN2 Saturdays 6:30 PM to 9:30 PM</i>
I	1	Introduction	9/23	9/26
II	2	Network Models	9/30	10/3
III	3	Signals	10/7	10/10
IV	4	Digital Transmission	10/14	10/24
V	5	Encoding, Multiplexing, and Media	10/21	10/31
VI	6	Media	10/28	11/7
VII	7	Error Control	11/4	11/14
VIII	8	Data Link Control	11/11	11/21
IX	9	Multiple Access,	11/18	11/28
X	10	LANs	11/25	11/28
XI	11	Data Link Protocols	12/2	12/5
	12	Virtual Switching and Review	(8:00 AM- 11:00 AM) (11:00 AM- 2:00 PM)	(6:30 PM- 9:30 PM) (9:30 PM- 12:30 AM)
XII	12	No Broadcast		

