A: Division: **INSTRUCTIONAL** Date: **APRIL 1999**

B: Faculty: **COMMERCE AND BUSINESS ADMINISTRATION** New Course:

Program: **COMPUTER INFORMATION SYSTEMS** Revision of Course Information form: **NOVEMBER 19, 1991**

C:	D:	E:
CISY 440	**NETWORKING AND DATA COMMUNICATIONS**	**3**
Subject & Course No.	Descriptive Title	Semester Credit

F: Calendar Description: This course will provide an introduction to Data Communication topics including terminology, line facilities, telecommunication equipment, connectivity. The student will get both theory and practical experience with Local Area Networks. The theory portion concentrates on topics such as components, topologies interface cards. The student will be able to set up and design a LAN environment.

Summary of Revisions:

1999-04 Sections: M

G: Type of instruction: Hrs per week

Lecture:	3	Hrs.
Laboratory:		Hrs.
Seminar:	1	Hrs.
Clinical Experience:		Hrs.
Field Experience:		Hrs.
Practicum:		Hrs.
Shop:		Hrs.
Studio:		Hrs.
Student Directed Learning:		Hrs.
Other (Specify)		
Total:	4	Hrs.
Semester Total (4 x 15 wks):	60	Hrs.

H: Course Prerequisites:

Any one of the following:
CISY 210 / 230 / 240 / 250 / 410

I: Course Corequisites:

nil

J: Course for which this Course is a Prerequisite:

nil

K: Maximum Class Size:

35

L:

College Credit Transfer	
College Credit Non-Transfer	
Non-Credit	

M: Transfer Credit:

Requested:	
Granted:	X

Specify Course Equivalents or Unassigned Credit as appropriate:

BCOU	**CMPT (3)**
SFU	
UBC	
UNBC	**CPSC 200 lev (3)**
UVIC	**~~SCS~~ CSC 200 lev (1.5**
Other:	

Course Designer(s): B. Allen

Vice-President, Instruction: J. McKendry

Dean: J. Sator

Registrar: P. Angus

N: TEXTBOOKS AND MATERIALS TO BE PURCHASED BY STUDENTS

Corrigan, Patrick, and Guy Aisling. Building Local Area Networks With Novell's Netware, M & T Publishing Inc., latest edition.

O: COURSE OBJECTIVES

The student will be able to:

1. Apply the fundamental concepts of data communication, including necessary hardware and software,
2. Demonstrate familiarity with data communication protocols, line carriers and services, data error correction / detection,
3. Use a Local Area Network software package,
4. Demonstrate familiarity with Local Area Network topologies, network interface.

P: COURSE CONTENT

1. Data Communication terminology.
2. Line carriers, services and communications media.
3. Data Communication protocols, modems & modulation techniques, multiplexers, synchronous transmission vs. asynchronous transmission.
4. Data transmission integrity error correction, compression, encryption.
5. OSI standards model.
6. Local Area Network terminology, components and topologies.
7. LAN's vs WAN's, Gateways, cabling, Network interface cards, connectivity.
8. File server set-up: its resources, components, configuration.
9. LAN operating system software, directories, users, groups, security set-up procedures.

Q: METHOD OF INSTRUCTION

The concepts and theory of data communication and LAN's will be discussed in class and the student will complete practical "hands on" LAN projects in the computer lab.

R: COURSE EVALUATION

Assignments (2 x 5%)	10%
In class quizzes (2 x 5%)	10%
Term Exams (2 x 20%)	40%
LAN Project (1 x 10%)	10%
Final Exam (1 x 30%)	30%
	100%