

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Outline: TELECOMMUNICATIONS AND FUTURISTICS
Code No.: EDP 315-4
Program: ELECTRONIC DATA PROCESSING
Semester:
Date: SEPTEMBER 1985
Author: G. M. WIED

New: _____ Revision: _____ X

APPROVED: 
Chairperson

85-08-27.
Date

TELECOMMUNICATIONS & FUTURISTICS

EDP 315-4

Course Name

Course Number

COURSE DESCRIPTION:

A study of the process of transmission, processing and distribution of information using computers and telecommunication hardware and facilities. Future implications will be introduced including an investigation of TELIDON and its implications for the information society.

AIM

To familiarize students with concepts and terminology as they apply to the expanding field of communications using computers and telecommunication technology. The course is also aimed at providing students with an awareness of the information society and the application of telecommunication theory in this changing environment.

STUDENT EVALUATION:

Term Test and Quizzes	80%	<u>OR</u>	Term Tests	40%
Projects, Participation,			Projects, etc	20%
Attendance	20%		Final Test	40%
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	100%			100%

The student will be responsible for reading the textbook prior to lectures. A final test covering the entire semester's work can be written only if:

- 1) student regularly attends classes (minimum 75% attendance);
- 2) to substitute for an I or O grade on any individual test;
- 2) the achieved grade over the semester is over 40%.

GRADING:

A - 80 to 100%
B - 70 to 79%
C - 60 to 69%
MAY WRITE FINAL IF 45 TO 60%
R - under 45%

TEXTBOOK:

Data Communications - Mary E.S., Loomis; Prentice-Hall, 1983

REFERENCES:

Introduction to computers and Data Processing - CH8
Shelly and Cashman

Computers and Life
J. Frates and Wm. Moldrup

Introduction to Business Telecommunciation
George W. Reynolds

Data Communications and Teleprocessing Systems
Trevor Housley, Prentice Hall, 1983

SPECIFIC OBJECTIVES

<u>TOPIC</u>	<u>REFERENCE</u>	<u>CONTENT</u>
1	Lecture Notes Chapter 1,2, Loomis	<u>Introduction to Telecommunications</u> 1) WHAT, WHY, WHERE, of tele- communications system <ul style="list-style-type: none">- System Components- Data Communications vs Data Processing- business applications of telecommunications
	Shelly & Cashman Chapter 8	2) Basic Configuration <ul style="list-style-type: none">- transmitter- modem- channels (data links)- C.C.U. (communication control unit)- function of the computer- history of telecommunications
2	Loomis - Chapter 3	<u>Data Terminal Equipment (DTEs)</u> <ul style="list-style-type: none">- types of terminal hardware- functions of terminal hardware
3	Loomis - Chapter 4	<u>Data Transmission Characteristics</u> <ul style="list-style-type: none">- transmission speeds- types & modes of transmission- signal representation- lines & transmission medium- transmission, noise, distortion
4	Loomis - Chapter 5	<u>Communications Processing Hardware</u> <ul style="list-style-type: none">- processors- multiplexers- concentrators, etc
5	Loomis - Chapter 6	<u>Networking Alternatives</u> <ul style="list-style-type: none">- private networks- vendor's network architecture- value-added networks- networks: e.g. arpanet, telenet, etc.

- 6 Loomis - Chapter 7 Telecommunications & Software
- on HOST Computers & others
 - for code conversion, error handling, editing, etc.
- 7 Loomis - Chapter 8 Codes and Protocols
- ASCII, EBCDIC, etc. codes
 - protocols defined
 - protocol levels
 - packet controls
- 8 Industry Periodicals & Research Papers Information Society
- "Computers & Life"
Lecture Notes
- TELIDON
 - office automation
 - electronic mail
 - micros and home computers
 - integration of voice, data and image systems
- 9 Industry Periodicals & Research Papers Special Applications
- "Computers & Life"
Lecture Notes
- RABOTICS, Process Control
 - CAD/CAM
 - CAI, CMI
 - EFT
 - Medicine, etc
 - the Fourth and Fifth Generation Software