SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY
SAULT STE. MARIE, ON

COURSE OUTLINE

COURSE TITLE: INTRODUCTION TO COMPUTER SCIENCE

CODE NO.: CET 105-5   **SEMESTER: ONE**

PROGRAM: COMPUTER ENGINEERING TECHNOLOGY

AUTHOR: Peter Savich

DATE: AUGUST 1994 PREVIOUS OUTLINE DATED: SEPTEMBER 1993

APPROVED: _____ 94-08-24

           DEAN   **DATE**

COURSE NAME:	**CODE NO.:**
INTRODUCTION TO COMPUTER SCIENCE	**CET 105-5**

C O U R S E   O U T L I N E

LENGTH OF COURSE: **4 HOURS PER WEEK FOR 16 WEEKS**
                                  (TWO 1 HOUR THEORY CLASSES PER WEEK &
                                  ONE 2 HOUR LAB CLASS PER WEEK)

PREREQUISITES: **NONE**

I.   PHILOSOPHY/GOALS

This is an introductory computer course for students enroled in the School of Engineering Technology's Computer Engineering Technology or C.E.T. program. The goal of this course is to have the student appreciate the need for information technologies (computers) within today's society and specifically utilize his/her personal computer skills developed within this course throughout his/her career. This course provides the introduction to some of the terms and concepts that will be discussed more in depth, in later courses. Within this course, the student will learn what makes up the basic physical parts of the computer, what software is, and how computers process information. The student will develop skills in keyboarding, wordprocessing, and in using the MS DOS operating system for personal computers.

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

II.   **STUDENT PERFORMANCE OBJECTIVES (OUTCOMES):**

Upon completion of the course, participants will be able to:

1.   Define the terms <u>hardware</u> and <u>software</u>, distinguish between <u>operating system software</u> and <u>application software</u>, and identify and discuss the four elements in the flow of information in a computer: <u>input, processing, output, and storage.</u>

2.   Appraise the utility of some of the software application programs available for the IBM PC microcomputer and compatibles.

3.   Demonstrate basic skills with the operating system for personal computers: MS DOS ver 5.0

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

CODE NO.:

CET 105-5

4.   Prepare sample engineering/business reports using representative software applications such as WordPerfect 5.1 for DOS (word processing package).

5.   Adopt the overall goals of the CET program and curriculum designed to prepare computer engineering technician/technologists for industry.

6.   List all the hardware and software used within the CET program and develop a sufficiently large computer vocabulary in order to discuss general concepts within the computer field.

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

CODE NO.:

CET 105-5

III.   **Topics to be covered:**

1.   **General Computer Concepts**

2.   **Application software for wordprocessing**

3.   **Keyboarding**

4.   **Operating systems (DOS ver 5.0 in detail)**

5.   **CET Program curriculum**

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

IV.   LEARNING ACTIVITIES / REQUIRED RESOURCES

Module 1:   General Computer Concepts

Learning Activities:

Complete all module activities in the text by Maran Graphics "Computers Simplified", and specifically be able to:

chapter 1

1.   Define the terms <u>hardware</u> and <u>software</u>.

2.   Distinguish between "<u>operating system software</u>" and "<u>application software</u>".

3.   Identify and discuss the four elements in the flow of information in a computer: <u>input, processing, output, and storage.</u>

chapter 2

4.   Describe the two main types of cases: Desktop and Tower.

5.   Identify the major components of the computer.

6.   Define what an expansion card is and describe how it works with a computer.

7.   Name the different types of expansion slots.

8.   Explain different ways to protect your equipment.

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

IV.   LEARNING ACTIVITIES / REQUIRED RESOURCES

Module 1:   <u>General Computer Concepts</u> (cont'd)

<p align="center">chapter 3</p>

9.   List several input devices and explain how they work.

10.   Explain the function of many of the computer keyboard's keys.

11.   List several output devices and explain how they work.

12.   Define what a video adapter is and how graphics are
        displayed.

13.   Describe the differences between different types of monitors.

14.   Identify two type of printers and describe the differences between them.

15.   Describe how a printer's speed and quality are measured.

16.   Explain what modems are used for.

17.   Define what a scanner is and what it does.

<p align="center">chapter 4</p>

18.   Define memory

19.   Discuss how memory works and how it is memory.

20.   Define and discuss conventional and extended memory.

21.   Explain the three factors that affect CPU performance: speed, type and
        generation.

22.   Define the differences between Intel's CPU chips.

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

CODE NO.:

CET 105-5

IV. LEARNING ACTIVITIES / REQUIRED RESOURCES

Module 1:   General Computer Concepts (cont'd)

23.   Discuss what cache memory is and how it impacts the speed of a computer.

chapter 5

24.   Discuss how data is stored and organized.

25.   Define hard disk and explain how it works.

26.   Explain how cache speeds up processing.

27.   Discuss storage and speed as they relate to choosing a hard drive.

28.   Define floppy disk drive.

29.   Distinguish between and list characteristics of two types of disk drives and disks.

30.   Explain what CD-ROM drives and disks are and discuss several CD-ROM applications.

31.   Explain the function of backup.

chapter 6

32.   Identify the features of a portable computer.

33.   Identify the types of screens used for portable computers.

34.   Discuss how to expand the capabilities of your portable computer.

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

IV.   LEARNING ACTIVITIES / REQUIRED RESOURCES

Module 1:   General Computer Concepts (cont'd)

35.   Discuss the advantages of "docking" a portable computer to a full-sized
      computer.

36.   Discuss the "tricks" a portable computer uses to conserve power.

37.   Explain how a portable computer's CPU, storage, and memory differ from a
      full-sized computer's.

chapter 7

38.   Define what an operating system is and what it does.

39.   Describe similarities and differences between entering commands using the
      MS-DOS command prompt and the MS-DOS Shell.

40.   Describe six characteristics of the Microsoft Windows operating system.

41.   Discuss the differences between MS-DOS, Windows , and OS/2.

chapter 8

42.   Describe some of the common characteristics of word processing software.

43.   Describe some of the common characteristics of spreadsheet software.

43.   Describe some of the common characteristics of data base software.

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

IV.   LEARNING ACTIVITIES / REQUIRED RESOURCES

Module 1:   General Computer Concepts (cont'd)

44.   Differentiate between the different types of databases.

45.   List some common desktop publishing features.

chapter 9

46.   Define local area networks (LAN) and wide area networks (WAN).

47.   Discuss how a computer is added to a network.

48.   Identify the role of the "Network Administrator".

49.   List and define some common network terms.

50.   Identify the types of network layouts.

History of Computers

51.   Describe the history of the computer from the 1800's to present, in terms of historical era, focusing on the needs at the time, the inventors, and the enabling technology.

Numbering Systems

52.   Convert between the following numbering systems (or radixes): binary, decimal, octal, and hexadecimal.

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

IV.   LEARNING ACTIVITIES / REQUIRED RESOURCES

<u>Module 1:</u>   <u>General Computer Concepts</u> (cont'd)

<u>Resources:</u>

textbook by Maran Graphics "Computers Simplified
Academic Edition"

handouts

videotapes

at least four 3 1/2" HD disks

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

IV. LEARNING ACTIVITIES / REQUIRED RESOURCES

<u>Module 2:</u>   <u>**WordPerfect version 5.1 for DOS textbook**</u>

<u>Learning Activities:</u>

1. Utilize WP5.1's on-line help facility

2. Use the mouse and Alt key with arrow keys to activate the "Pull Down Menus" in WP5.1

3. Create and edit a document: start a document, save and name a document, retrieve a document, cursor control, insert or type over text, delete text.

4. Move, copy, delete, and restore text.

5. Format your documents: setting margins, setting tabs, indent text, modify text, control text.

6. Check your documents: search, replace, and spellcheck

7. Print your documents: select paper and form sizes, view document, print displayed document.

8. Manage your documents: delete/move or rename/print/look, other directory/copy/name search.

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

CODE NO.:

CET 105-5

IV.   LEARNING ACTIVITIES / REQUIRED RESOURCES

Module 2:   WordPerfect version 5.1 for DOS textbook (cont'd)

9.   Produce a table with x rows and y columns. Within any cell place text, graphics, or equations.

10.   Utilize WP5.1's equation editor to generate within reports, professional looking formula's at any given setpoint (i.e. font size).

Resources:

textbook by Maran Graphics "WordPerfect 5.1 for DOS Academic Edition"

handouts

videotapes

at least four 3 1/2" HD disks

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

IV.   **LEARNING ACTIVITIES / REQUIRED RESOURCES**

Module 3:   **Keyboarding**

Learning Activities:

1.   Utilize the software training program to develop his/her computer keyboarding skills.

2.   Practice keyboarding skills on a variety of keyboards available throughout the college.

Resources:

          handouts

          at least four 3 1/2" HD disks

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

IV.   LEARNING ACTIVITIES / REQUIRED RESOURCES

<u>Module 4:</u>   <u>MS-DOS 5.0 textbook</u>

<u>Learning Activities:</u>

<u>Section I: Using the command prompt</u>

1.   **Getting started: using this guide, introduction to**
      MS-DOS 5.0 change date or time, specify drives and directories, internal and
      external commands, and help facility.

2.   **Manage your directories: files and directories, make directory, change**
      directory, remove directory, and tree command.

3.   **Manage your files: directory, sort files, copy files, rename files, delete files,**
      undelete files, type files, print files, and edit files.

4.   **Manage your floppy disks: 3.5" and 5.25" floppy disks, format and diskcopy**
      commands.

5.   **Manage your hard disk: backup, restore, xcopy, and check disk commands.**

6.   **Write batch files to tailor the operating system to his/her needs.**

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

CODE NO.:

CET 105-5

IV. LEARNING ACTIVITIES / REQUIRED RESOURCES

<u>Module 4:</u>   <u>MS-DOS 5.0 textbook (cont'd)</u>

Section II: Using the MS-DOS Shell

1. **Getting started: start the MS-DOS shell, select commands, change screen mode, change color scheme, and help facility.**

2. **Manage your directories: change disk drives, change directories, create directories, expand or collapse directory levels, delete directories, and show information.**

3. **Manage your programs: start a program, switch between programs, and quit the MS-DOS shell.**

4. **Manage your files: change views, select multiple files, search for files, sort files, copy or move files, rename files, and delete files.**

5. **Manage your disk with disk utility commands: disk copy, backup, restore, format and undelete.**

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

CODE NO.:

CET 105-5

IV. LEARNING ACTIVITIES / REQUIRED RESOURCES

<u>Module 4:</u> <u>MS-DOS 5.0 textbook (cont'd)</u>

<u>Resources:</u>

textbook by Maran Graphics "MS-DOS 5.0 Academic Edition"

handouts

videotape

at least four 3 1/2" HD disks

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

IV LEARNING ACTIVITIES/REQUIRED RESOURCES

Module 5:   CET Program Curriculum

Learning Activities:

1. List the courses within the CET program that use the microcomputers and the application programs available.

2. Discuss the courses within the CET program that use the VAX minicomputer (mainframe computer) and the application programs studied on the VAX hardware.

3. Discuss the hardware/software or systems courses within the CET program.

4. Evaluate the engineering and the general education courses offered within the curriculum.

5. Utilize as required the student development services available at the college, namely: Learning Assistance Centre; Learning Resources Centre (library); Peer tutoring; Counselling and Special Needs services; Athletics; Student Administrative Council (SAC) and Student Clubs; Financial Aid; Co-Op Education; Placement Office; Health services; Native Student Services; and food services.

Resources:

College Calender

handout "CET Program"

videotape

COURSE NAME: **CODE**

NO.:

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

V. METHOD(S) OF EVALUATION

1. Tests

The student will be assessed through a series of three (3) practical computer based tests.

Assignments must be completed and demonstrated and mark recorded <u>before</u> these tests

will be given.

Module No.	Assignments to be demonstrated before test	Test # and objectives being tested
1. General Computer Concepts 2. Wordprocessing	A1, A2, A3 10% of final	T1 20% of final make a table, use the equations editor
3. Keyboarding (Wordprocessing as well) Numbering systems	A4, A5 10% of final	T2 20% of final WPM keyboarding WordPerfect skills convert between radixes
4. MS DOS Op/sys 5. CET program	A6, A7 10% of final	T3 20% of final employ the DOS commands as required

Thus, individual students will be completing tests before other students depending upon

mastery of the learning outcome, or time constraints. Students, are encouraged to offer

voluntary "peer tutoring" to each other within the class. Those students with significantly

advanced skills or students just shown a "trick" by the teacher should help others less

advanced in the class. Students that want to be paid tutors are encouraged to sign up early

in the L.A.C. The professor's recommendation is a strong factor in being accepted.

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

CODE NO.:

CET 105-5

V.   METHOD(S) OF EVALUATION (cont'd)

All test questions are individualized and are of the same complexity.

Each test will be weighted to 20% of the final mark. In all tests the testing concept is open book, using a computer, perform some tasks previously demonstrated in the assignment(s). All tests are designed to be completed in less than one hour. Historically, students have been allowed only a few mistakes on demonstrations for the professor, with 5% off for any such mistake/omission or required prompting by teacher. The skills being tested were previously demonstrated in the assignments and as such the minimum mark recorded will be 85% for a test. The test if suspended by the teacher can be re-attempted at no penalty later, other than a N.Q.A. coupon will be required. Mastery learning implies minimal mistakes, and any mistakes are usually self-corrected, with time taken to complete the test an overall factor. A student attempting a re-write test (and peer tutored by a classmate) obtaining 100% performance during the re-write, will result in a bonus of 2% for the peer tutor. This incentive is designed to encourage "team work" and "collective responsibility", as will be required in today's society. Finally, if during testing, it seems the student/teacher will not be able to complete the test, alternative arrangements will be made at that time, with no penalty to the student.

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

V.   METHOD(S) OF EVALUATION (cont'd)

The professor's adaptation of "mastery learning" has been incorporated into the evaluation system of this computer course. Thus, failing one particular test, means re-doing the test again, the questions altered, but testing or measuring the same learning outcomes. The test will be re-given when the student is ready. A formal "peer tutoring" situation may constitute being more "ready" for a test. Only three N.Q.A. coupons will be given out per student. The using up of all three coupons on test #1 is not a desirable outcome.

The entire class should have completed tests by certain milestone dates. The tentative dates are as follows for the five modules:

Module	Module Name	Milestone
1 & 2	General Computer Concepts & Wordprocessing	Oct 15
3	Keyboarding, (wordprocessing again), Numbering Systems	Nov 15
4 & 5	MS DOS & CET curriculum	Dec 15

Students will be encouraged to be assessed outside of class lab times to beat the deadline. One "No Questions Asked" or N.Q.A. coupon will be required to write a test after these dates.

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

V.   METHOD(S) OF EVALUATION (cont'd)

2.   Quizzes

The student will be assessed through a series of unannounced quizzes. The total weight of
these quizzes are not to exceed 10% of the final mark. The student should expect an "easy"
2 minute, one or two word answer quiz every lecture.

3.   Assignments

The student will be assessed through a series of lab assignments. Collectively these
assignments will be weighted to 30% of the final mark.

4.   Attendance

The student attending 48 out of the 50 lectures and labs offered, will receive a 2% bonus
for excellent attendance

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

V.   METHOD(S) OF EVALUATION (cont'd)

Summary of Final Mark

1.	Tests	60%
2.	Quizzes	10%
3.	Assignments	30%

		100%
5.	Attendance	2% bonus only

Course Grading Scheme

A+	90+	outstanding achievement
A	80 - 89	above average achievement
B	70 - 79	average achievement
C	55 - 69	satisfactory achievement
U		unsatisfactory given at midterm only
S		satisfactory given at midterm only
R		repeat
X		a temporary grade that is limited to instances where special circumstances have prevented the student from completing objectives by the end of the semester. An "X" grade must have the Dean's approval and has a maximum time limit of 120 days.

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

V.   METHOD(S) OF EVALUATION (cont'd)

Upgrading of an incomplete or "X" grade

When a student's course work is incomplete or final grade is below 55%, there is the possibility of upgrading to a pass when the student's performance warrants it. The student must request that an "X" grade be given before the semester ends. The professor, upon review of the students attendance and assignment completion will decide whether the "X" grade will be granted. The "X" grade contract will be individualized and agreed to before the semester ends. The highest grade recordable for a student needing more than the one semester is an "A", the "A+" is reserved for students mastering the skills within the 16 week course.

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

VI.   PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in the course should consult the

Professor. Credit for prior learning will be given upon successful completion of the

following:

Module 1.

Review the text by Maran Graphics and complete the assignments in all nine chapters.

Text will be provided by the professor and should take less than one hour to complete.

Upon completion of this general computer concepts review, be prepared to answer verbally

to the professor, this module's terminal performance objective, specifically:

a)   Define the terms <u>hardware</u> and <u>software</u>, distinguish between <u>operating system</u>

        <u>software</u> and <u>application software</u>, and identify and discuss the four elements in the

        flow of information in a computer: <u>input, processing, output, and storage.</u>

b)   List three software application programs available for the IBM PC microcomputer

        and compatibles for wordprocessing, spreadsheets, and database management

        systems (DBMS).

c)   Demonstrate basic skills with the operating system for personal computers: MS

        DOS ver 5.0 by being able to: format a disk; use DIR to list files; copy files; make,

        remove, change directories; use the TREE command; and change the DATE and

        TIME.

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

VI.   **PRIOR LEARNING ASSESSMENT:**

Modules 2 & 3.

Review the handout on "Proper Titling of Graphs" prepared by Peter Savich on how to properly use the SI system of measurement and plot graphs with the labelling of the x - axis and the y -axis and the titles done professionally. The handout will be provided by the Professor. The student will be asked to replicate any one of the pages in the handout as an indicator of his/her abilities in WordPerfect 5.1 that will require a table to be produced, the equation editor to be evoked, and the spellchecker to be used. The file will be saved as: A:\PLA\QUES2.WPD. The student may wish a short tutorial with the instructor first, to familiarize his/herself with this particular software package. The terminal performance objective of this module is to prepare sample engineering/business reports using representative software applications such as WordPerfect 5.1 for DOS (word processing package). The expected time is at least 1 hour and no more than 5 hours for the student to review handout, prepare and demonstrate skills for these two modules.

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

VI.   PRIOR LEARNING ASSESSMENT:

Module 4.

Review the text by Maran Graphics on MS DOS ver 5.0 and complete the assignments in all nine chapters. Text will be provided by the professor. This reading should take less than 2 hours. Upon completion of this operating system review be prepared to answer by demonstration to the professor, this module's terminal objective, specifically:

   a)   Use dosshell to: list all files in all subdirectories.

   b)   Use command prompt to: BACKUP and RESTORE files from one system to
         another.

   c)   Describe what the command prompt DOSKEY command does.

COURSE NAME:

CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE

CET 105-5

VI. PRIOR LEARNING ASSESSMENT:

Module 5.

Review the college calendar regards student development services provided by Sault College. Diagram the software, hardware, and systems courses offered within the three year CET program. Comment on the relative worth of the general education and engineering courses required for the technology graduate of an Ontario CAAT.

COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

VII.   **REQUIRED STUDENT RESOURCE**

        REQUIRED TEXTS:

1.   **Three Module textbooks by**

      Maran Graphics, Prentice Hall:

      Computers Simplified Academic Edition

      WordPerfect 5.1 for DOS Academic Edition

      MS-DOS 5.0 Academic   Edition

Authored by: **Richard and Ruth Maran**

Published by: **Prentice Hall Canada, Toronto, Ont.**

2.   At least five (5) 3.5" high density floppy disks.
      A Student may wish to also purchase "double density"
      5 and 1/4" disks for older computer disk drive systems only if he/she has a
      "low density" disk drive at home. He/she should not buy the "high density"
      5 and 1/4" disks. Using a "high density disk" in the "low density drives" is
      not reliable. Ideally, the student with only a 5 1/4" disk drive system at home
      should consider upgrading to the 3 1/2" HD drives used today.

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COURSE NAME: CODE NO.:

INTRODUCTION TO COMPUTER SCIENCE   CET 105-5

VIII.   ADDITIONAL RESOURCE MATERIAL AVAILABLE IN THE COLLEGE

        LIBRARY AND CAMPUS SHOP

There are many other books on WordPerfect, and the MS DOS operating systems.

There are many books on other application programs such as spreadsheeting, DBMS's,

drawing (AUTOCAD), and networking.

1.   Sault College software support authored notes:

(sold in Campus Shop at approx. $7 / notes)

        MS DOS notes

        WordPerfect 5.1

        Advanced WordPerfect 5.1

        Lotus 123 ver 2.1 notes

2.   Best seller list published textbooks:

(sold in Campus Shop at approx. $21 / book)

        MS DOS For Dummies

        WordPerfect For Dummies

        Lotus 123 For Dummies

        Networks for Dummies

COURSE NAME:

INTRODUCTION TO COMPUTER SCIENCE

VIII. ADDITIONAL RESOURCE MATERIAL AVAILABLE IN THE COLLEGE
LIBRARY AND CAMPUS SHOP

3. Bibliography (available in Sault CollegeLibrary)

Advanced WordPerfect. c1987.	REF Z52.5.W65 A39
WordPerfect Encyclopedia. c1988.	REF Z52.5W65 S34
WordPerfect 5.1. c1990.	REF Z52.5W65 A262
Virtual Reality. c1992.	REF Z5643.I57 M4
The Dictionary of Computer Graphics Technology and Applications. c1991.	REF T385.L3977
Computing Careers & Information Handbook. c1992	QA76.25.C698
The Canadian Internet Handbook. c1994.	TK5105.5.C63765
Internet. c1994.	TK5105.875.I57 I57
Zen and The Art of the Internet. c1993.	TK5105.875.I57 K44
DOS 6 Running Start. c1993.	QA76.76.063 S55885
The DOS 5 User's Handbook. c1991.	QA76.76.063 M375
Directory of Computer Software & Ser. 1993.	REF HD9696.C63 C23482

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

PERIODICALS: (available in Sault College Library)

                PC Magazine

                Byte Magazine

                Computing Canada

                Computers in Education

                Computers in Nursing

VIDEO TAPES: (available at Sault College audio-visual centre)

                Six Part TVO Series: Bits and Bytes (1992 edition)

                Spreadsheets

                Advanced Spreadsheet and Programming

                Word Processing 1

                Word Processing 2

                Word Processing 3

                Computer Applications/Software Introduction

                Applications

                Electronic Publishing

COURSE NAME: **CODE NO.:**

INTRODUCTION TO COMPUTER SCIENCE   **CET 105-5**

IX.   Special Notes

1.   Students with special needs (e.g. physical limitations, visual impairments, hearing impairments, learning disabilities) are encouraged to discuss required accommodations confidentially with the instructor.

2.   Your instructor reserves the right to modify the course as he/she deems necessary to meet the needs of students.

COURSE NAME:
INTRODUCTION TO COMPUTER SCIENCE

CODE NO.:
CET 105-5

X.   COURSE ANALYSIS SHEET (see attached)

COURSE ANALYSIS FORM

| COURSE TITLE: INTRODUCTION TO COMPUTER SCIENCE | | | COURSE |
NO.: CET 105-5			
LEARNING OUTCOMES	**BROAD AREAS OF CONTENT**	**INDICATOR OF IMPORTANCE (IF APPLICABLE)**	**INDICATORS OF SUCCESS**
Define the terms hardware and software, distinguish between operating system software and application software	1. General Computer Concepts	some importance	students use precise terminology when describing computer systems
identify and discuss the four elements in the flow of information in a computer: input, processing, output, and storage.			students purchase a computer system for home use with latest information
List three software application programs available for the IBM PC microcomputer and compatibles for wordprocessing, spreadsheets, and database management systems (DBMS).			loss of computer phobia's
Demonstrate basic skills with the operating system for personal computers: MS DOS ver 5.0 by being able to: format a disk; use DIR to list files; copy files; make, remove, change directories; use the TREE command; and change the DATE and TIME.			collective knowledge of class increased weaker students being helped by more
Produce a WordPerfect 5.1 document that will require a table to be produced, the equation editor to be evoked, and the spellchecker to be used.	2. Application software for wordprocessing	very important	advanced students, with both groups learning how to co-operate
keyboarding skills measurable in WPM	3. Keyboarding	some importance	mastery learning is used properly and not abused by students. Few students lose a coupon for poor test results
Advanced MS DOS command prompt and dosshell skills	4. Operating systems (DOS ver 5.0 in detail)	very important	
value, trust and respect persons excellence and adoption of mission statement	5. CET Program curriculum	important	
			independent study skills developed and use of peer tutoring explored by all students

ASSESSMENT PROCESS

General computer concept & WP51:   3 assignments, then Test 1, re-test if required
WordPerfect & keyboarding module: 2 assignments, then Test 2, re-test if required
MS DOS & CET curriculum module: 2 assignments, then Test 3, re-test if required
"X" grade evaluation: tutoring, re-testing until mastered

ASSESSMENT TOOLS

assignments and exercises in module textbooks, handouts
use of Sault College Computer Lab computers, ability to comprehend verbal and written
instructions given by professor for individualized testing of modules' performance
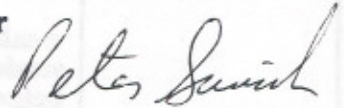objectives

SUPPORTS

L.A.C. peer tutoring services, Information Technology support staff, past students of
course as peer tutors, other faculty, additional lab times at night

REQUIREMENTS FOR SUCCESSFUL COMPLETION OF COURSE

demonstrate skills within all five modules at the mastery learning level, 85% is minimum
mark acceptable on a test otherwise a re-test is required. Failure to pass a re-test implies
0% earned on module test. Two 0% tests would in all likelihood result in an overall
failing mark, either a "R" grade or if negotiable an "X" grade.

A challenge process for this course can be made available to learners within a reasonable
period of time following a learner's request.

SIGNATURES

Professor *Peter Smith*		Program Coordinator or Dean	
Date *August 24/94*		Date	