SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY

SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

COURSE TITLE: MICROCOMPUTER APPLICATIONS

CODE NO.:   COM100   SEMESTER: TWO

PROGRAM: CAREER ADJUSTMENT PROGRAM

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PREVIOUS OUTLINE
DATED: NEW

APPROVED: _____   95-01-04
DEAN, SCHOOL OF BUSINESS &
HOSPITALITY   DATE

Total Credits: 4

Total Credit Hours: 64

Prerequisites: None

I.   PHILOSOPHY/GOALS:

This course is designed to provide students with the level of computer literacy needed to function in today's workplace. Utilizing a hands-on approach, the concepts of microcomputer operating systems (DOS), word processing (WordPerfect 5.1), and spreadsheet (Lotus 1-2-3) applications will be covered. In addition, students will develop keyboarding skills through the use of an automated typing tutor program.

II.   STUDENT PERFORMANCE OBJECTIVES:

Upon successful completion of this course, the student will:

1.   Have learned the basic skills necessary to input data through the use of a keyboard.

2.   Be able to keyboard from straight copy at a minimum rate of 16 gross w.p.m. for three minutes with a maximum of 3 errors under supervised conditions.

3.   Be able to describe the components of a computer and outline the functions of each.

4.   Discuss computer software and explain the difference between system software and application software.

5.   Describe several types of personal computer applications software.

6.   Be able to use basic WordPerfect 5.1 functions.

7.   Be able to use basic Lotus 1-2-3 functions.

8.   Be able to use basic DOS commands.

9.   Be able to proofread.

III. **TOPICS TO BE COVERED:**

1. Overview of the Typequick Program (including loading the
    program using the Keyboarding Menu and printing results).

2. Touch keyboarding techniques.

3. Keyboarding speed and accuracy development.

4. Proofreading skills.

5. Overview of microcomputers: identifying the components of a
    computer and describing their functions; distinguishing
    between data and information; distinguishing between system
    software and application software; understanding the steps
    involved in purchasing, setting up and maintaining a PC; and
    formatting a disk to make it useable.

6. WordPerfect 5.1 basic functions: creating; saving;
    retrieving; editing; formatting; printing; moving; copying;
    spell checking; searching and replacing; changing margins
    and line spacing; indenting text; adding page numbers;
    setting tabs; using headers and footers; and viewing a
    document prior to printing.

7. DOS 5.0 basic functions: checking date, time and default
    drive; using file specifications for files stored on disk;
    distinguishing between internal vs. external DOS commands;
    clearing the screen; copying files; listing a directory;
    renaming files; displaying the contents of a file to the
    screen; deleting files from the disk; creating and deleting
    subdirectories; changing the current directory; changing the
    DOS prompt; specifying a path; using wildcard characters;
    using /P and /W options of the DIR command; and checking the
    status of a disk.

8. Lotus 1-2-3 basic functions: entering labels, values and
    formulas; saving; printing; correcting errors; using UNDO
    and help; retrieving; adjusting column width; using cell
    ranges, formatting a worksheet; copying entries; using SUM
    and AVG; determining percentages; displaying formulas in the
    worksheet; using NOW; moving contents of a range of cells;
    inserting/deleting rows and columns; freezing horizontal and
    vertical titles; entering percentage values; using
    highlighting method to sum range values; changing default
    settings; and graphing.

IV. **LEARNING ACTIVITIES/REQUIRED RESOURCES:**

(1) **KEYBOARDING**   (12 hours)

Learning Activities:

Prior to the beginning of the keyboarding component, the
instructor will provide an overview of the following topics:

Turning on the microcomputer and printer
Familiarization of equipment - monitor
                              - CPU
                              - disk drive
                              - printer
                              - keyboard
Review of Typequick program - loading & main menu
Introduction to keyboarding menu
Arrangement of work station
Posture checkpoint
Keyboarding technique
Print options and procedures
Reports
Document production

Using the Typequick Typing Tutor Program, students will then
complete the following lessons:

Lesson 1   -   a s d f j k l ; space and return
Lesson 2   -   e h i . left shift
Lesson 3   -   t n r o
Lesson 4   -   c u v w right shift
Lesson 5   -   g x p ,
Lesson 6   -   q m y z b

Time Permitting:

Lesson 7   -   1 2 3 4 5
Lesson 8   -   6 7 8 9 0
Lesson 9   -   Speed Building
Lesson 10   -   Accuracy Improvement

Resources:

Typequick Disk

(2)   **INTRODUCTION TO COMPUTERS**   (2 hours)

Following completion of **Module 1 - INTRODUCTION TO
COMPUTERS**, the student should be able to:

1.   Describe the components of a computer and outline their
     functions.
2.   Distinguish between data and information.
3.   Distinguish between system software and application
     software.
4.   Function in the microcomputer environment at Sault
     College.
5.   Associate the microcomputer environment at Sault
     College with the concepts of LAN and WAN networks.
6.   Understand the steps involved in purchasing, setting
     up, and maintaining a PC.
7.   Format a disk to make it useable (see DOS8 - DOS11).

<u>Resources:</u>

Read: COM1-COM30
Complete: Student Assignment 1, Student Assignment 2

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(3)   **WORD PROCESSING USING WORDPERFECT 5.1**   (28 hours)

<u>Learning Activities</u>:

Following completion of **Module 2 - WORD PROCESSING USING
WORDPERFECT 5.1**, the student should be able to:

<u>Project 1 - Creating and Editing a Document</u>

1.   Both gain access to and exit from WordPerfect.
2.   Create, name, save, retrieve, edit, and print a
     document.
3.   Use the reveal codes feature to locate text and codes.

<u>Resources:</u>

Read: WP1-WP26
Complete: Student Assignments 1 to 10

<u>Project 2 - Formatting Text</u>

4.   List the files on disk.
5.   Delete and restore text.
6.   Switch between "insert" and "typeover" mode.
7.   Underline, centre, bold, and double space text.

8.   Use reveal codes to locate and delete unwanted text
     and/or codes.
9.   Save a document under a new name.
10. Use the spell check to locate and correct spelling
     mistakes.

Resources:

Read: WP32-WP64
Complete: Student Assignments 1 to 10

Project 3 - Moving, Searching, and Replacing Text

11. Move text to new locations within a document.
12. Apply the concept of "indentation" in a document.
13. Use the "search" and "replace" functions to effect
     global changes in a document.
14. Quit WordPerfect and save a document while doing so.

Resources:

Read: WP70-WP92
Complete: Student Assignments 1 to 10

Project 4 - Formatting a Document

15. Add page numbers to a document.
16. Change margins.
17. Use both the default and custom tabs.
18. Create and edit headers and footers.
19. Incorporate footnotes.
20. Use the View Document feature to visualize a document
     before printing.

Resources:

Read: WP98-WP128
Complete: Student Assignments 1 to 10

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(4) **INTRODUCTION TO DOS** (6 hours)

Following completion of **Module 3 - INTRODUCTION TO DOS**, the
student should be able to:

Project 1 - Working with Files on Disk

1.   Check and/or modify the following on a microcomputer
     system - time, date, default drive.
2.   Use file specifications for files stored on disk.
3.   Distinguish between internal and external DOS commands.
4.   Clear the screen.

5.   Copy files from one disk to another.
6.   List a disk directory and understand what is displayed.
7.   Rename files.
8.   Display the contents of a file to the screen and print
     what is currently displayed.
9.   Delete files from disk.

Resources:

Read: DOS2-DOS19
Complete: Student Assignments 1 to 6

Project 2 - Managing and Organizing Files on Disk

10.   Create and delete subdirectories.
11.   Change the current directory.
12.   Change the DOS prompt.
13.   Specify a path.
14.   Understand and use the wild card characters with DOS
      commands.
15.   Copy all files from one disk to another.
16.   Use the /P and /W options of the DIR command.
17.   Check the status of a disk.
18.   Recognize and understand common DOS error messages.

Resources:

Read: DOS25-DOS41
Complete: Student Assignments 1 to 6

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(5) **LOTUS 1-2-3, Version 2.2**   (14 hours)

Following completion of **Module 4 - INTRODUCTION TO
LOTUS 1-2-3**, the student should be able to:

Project 1 - Building a Worksheet

1.   Both gain access to and exit from Lotus 1-2-3.
2.   Identify the components of a spreadsheet.
3.   Move the cell pointer to various locations.
4.   Distinguish between label and value entries.
5.   Enter labels, values, and formulas into a worksheet.
6.   Save and print a worksheet.
7.   Correct errors in a worksheet.
8.   Use the UNDO command.
9.   Access and use the help facility.

Resources:

Read: L2-L34
Complete: Student Assignments 1 to 10

Project 2 - Formatting and Printing a Worksheet

10. Retrieve a worksheet.
11. Adjust column widths.
12. Understand and use cell ranges.
13. Format a worksheet.
14. Copy entries in a range of cells to other cell
     locations.
15. Use the Sum and AVG functions (see L159-L160 for AVG
     functions).
16. Determine a percentage.
17. Print a partial or entire worksheet.
18. Print the cell-formula version of a worksheet.
19. Display formulas in the worksheet.

Resources:

Read: L44-L82
Complete: Student Assignments 1 to 10

Project 3 - Enhancing Your Worksheet

20. Use the NOW function to display the current date and
     time.
21. Move the contents of a range of cells to other
     locations in a worksheet.
22. Insert and delete rows and columns.
23. Freeze horizontal and vertical titles.
24. Enter percentage values.
25. Distinguish between "relative" and "absolute"
     addressing.
26. Copy "absolute" cell addresses.
27. Use the highlighting method of sum range values.
28. Print a worksheet in condensed mode.
29. Print selected nonadjacent columns.
30. Apply "what if" analysis.
31. Use both manual and automatic recalculation.
32. Change default settings.
33. Temporarily exit 1-2-3 and return control to DOS.

Resources:

Read: L92-L142
Complete: Student Assignments 1 to 8

Project 5 - Creating Elementary Graphs

34. Create pie, line, and bar graphs.
35. Save a worksheet with the graph settings.
36. View the current graph.

Resources:

Read: L192-221
Complete: Student Assignments 1, 2, 4, 5, 7

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IV. **METHODS OF EVALUATION:**

A+ 90-100%
A   80- 90%
B   70- 79%
C   60- 69%
R   Below 60% (Repeat Grade)

GRADING:

-2   Proofreading/spelling
-1   Format errors
-1/2 Incorrect punctuation

BREAKDOWN OF FINAL GRADE:

KEYBOARDING SPEED*   -   10%

ASSIGNMENTS   -   35%

TESTS: DOS/INTRO TO COMPUTERS   -   5%

         WORDPERFECT 5.1 - TEST #1   -   15%
                           TEST #2   -   15%

         LOTUS 1-2-3   -   20%

TOTAL   100%

*The keyboarding speed component represents 10 percent of the
final mark. This grading is achieved as follows:

SPEED - G.W.P.M. (max. 3 errors on three, 3-minute timed writings)	TERM MARK (represents 10%)
20 and above	10%
19	9%
18	8%
17	7%
16	6%
15	5%
14	4%
13	3%
12	2%
11	1%
10 or less	0%

NOTES: 1.   Beginners - Any student wishing to know his/her
                   keyboarding speed will receive timings during the
                   first class.

                   If the student has no previous keyboarding
                   background, Typequick lessons should be completed.

             2.   Alphabetic keyboarding lessons 1-6 should be
                   completed and submitted at a 95 percent accuracy
                   level. Numeric keyboarding lessons 7 & 8 should
                   be completed and submitted at a 90 percent
                   accuracy level.

3. Keyboarding competency - Following discussion with the instructor, students with keyboarding proficiency may elect to complete only the timed writings of the keyboarding component. The term mark assigned for the keyboarding component will correspond to the speed achieved on the timed writings.

    Those students who elect to complete only the timed writings without completing the Typequick program will be provided with supplemental computer exercises designed to broaden and enhance their computer background.

4. Timings will be held each week following the three-week Typequick component as required.

5. Due dates for the daily assignments: 100 percent completion of all assignments is expected. Any class assignment submitted 1-3 days (holidays and weekends included) after the due date will be subject to a loss of 10 percent of the assignment value. No mark will be assigned after the third consecutive day the assignment is late.

6. If a student is not able to write a test because of illness or a legitimate emergency, that student must contact the teacher prior to the test or as soon as possible and provide an explanation which is acceptable to the teacher (medical certificate or other appropriate proof may be required). In cases where the student has contacted the teacher and where the reason is not classified as an emergency, i.e. slept in, forgot, etc., the highest achievable grade is a "C." In cases where the student has not contacted the teacher, the student will receive a mark of "0" on that test.

WARNING: Academic dishonesty will result in a grade of zero (0) on the assignment or test for all parties.

    Students are advised to maintain a back-up of all files on diskette. Loss of output due to a lost or damaged diskette will not be an acceptable reason for a late or incomplete assignment.

VI. REQUIRED STUDENT RESOURCES:

1. Typequick, Keyboarding Training Course, Typequick Pty.,
    Limited (3 1/2" disk)

2. Microcomputer Applications Kit, by Shelley and Cashman
    Includes the following modules:
    1) Introduction to Computers
    2) Introduction to DOS
    3) WordProcessing Using WordPerfect 5.1
    4) Spreadsheets Using Lotus 1-2-3, Release 2.2

3. Disks - 3 - 3 1/2" high density 1.44mb diskettes

4. One plastic disk container

5. File folder in which to submit assignments and disks

VII. SPECIAL NOTES:

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

Your teacher reserves the right to modify the course as
deemed necessary to meet the needs of students.