SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

Sault College

COURSE OUTLINE

COURSE TITLE: Operating Systems I

CODE NO. :   CSO105   **SEMESTER:**   One

PROGRAM: Computer Studies (CET/CNT/CPA/CSST)

AUTHOR: Dan Kachur / Doug McKinnon

DATE: August 2001

APPROVED:

_____   _____
                          DEAN   **DATE**

TOTAL CREDITS: 5

PREREQUISITE(S):   None

HOURS/WEEK: 4

I.   COURSE DESCRIPTION:

Students will be introduced to Operating Systems including Microsoft Windows 9X, DOS, and Linux / Unix. Additional topics to be covered include: Word Processing, Internet, and e-mail.

Using Microsoft Windows 9x, you will explore and become familiar with the: Desktop, Start Menu, Status Bar, Task Bar, Icons, Sub-Menus, Find, Recycle-Bin, My Computer, Windows Explorer, and Keyboard Shortcuts.

The DOS section of this course will have you implement more than 20 internal and external commands.   In addition, you will be introduced to OS concepts such as: boot process, mbr, fat, fat16, fat32, long filenames, ascii, bits, bytes, cylinders, tracks, sectors, platters, and partitions.

Linux / Unix history will be explored, followed by the implementation of integral command line commands.

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1.   **Use the Windows 9x Operating System.**
        Potential Elements of the Performance:

        This learning outcome will constitute approximately 10% of the course.

        - Identify desktop components
        - Identify and explain the purpose of the task bar
        - Use the start menu
        - Apply proper shutdown procedures
        - Create shortcuts to the desktop
        - Copy, move, and delete files using My Computer and Windows Explorer
        - Restore files using the recycle bin.
        - Identify all parts of a Windows 9x Window
        - Identify and use drive letters
        - Format both system and non-system diskettes

2. **Use the Internet including: email, www, ftp**
   Potential Elements of the Performance:

   This learning outcome will constitute approximately 15% of the course.

   - Read and abide by the college security policy on Internet usage
   - Explore the concepts of tcp/ip, http, ftp, www
   - Identify and compare web browser software packages
   - Work with URLs
   - Identify common web sites
   - Identify and use Search Engines
   - Learn e-mail etiquette
   - Identify e-mail protocols
   - Configure your mailbox including mail server entries
   - Send and retrieve e-mail
   - Send and retrieve e-mail attachments
   - Apply CC and BCC e-mail addressing
   - Work with a pre-configured listserv
   - Organize folders
   - Identify download / upload transfer rate concepts

3. **Produce documents and reports using Microsoft Word**
   Potential Elements of the Performance:

   This learning outcome will constitute approximately 10% of the course.

   - Learn the Microsoft Word GUI environment including, title bar, Menu bar, and status bar
   - Create documents
   - Open, close, save and delete documents
   - Identify default file extensions
   - Format your documents using bold, italics, underlining, font face, font size, headers, footers
   - Use spell check and thesaurus
   - Insert graphics
   - Compare text Vs .wpd file types
   - Apply styling to your documents
   - Learn and apply four methods of cut, copy, and paste
   - Work with rulers, margins, and tabs
   - Apply bullets
   - Explore and apply right-mouse click routines
   - Control page layouts using various view methods
   - Learn and apply print concepts including options and properties

4. **Define and apply Operating Systems theory and concepts**
    <u>Potential Elements of the Performance</u>:

    This learning outcome will constitute approximately 15% of the course.

    - Compare various operating systems
    - Learn the concepts of kernel, shell, process, program execution, input / output operations, communications, error detection, and memory management
    - Explore the details of cylinders, tracks, sectors, platters and partitions
    - Explore the boot process of an operating system with relation to computer hardware
    - Learn the concepts of bits, bytes, ascii, ebcdic, and binary

5. **Apply Internal and External DOS commands**
    <u>Potential Elements of the Performance</u>:

    This learning outcome will constitute approximately 30% of the course.

    - Compare internal Vs external DOS commands
    - Learn the DOS tree structure
    - List files by name, extension, date
    - Create and remove directories
    - Copy / move files and directories
    - Hide / protect files and directories
    - Apply wildcards
    - Load and use the keyboard buffer file
    - Create files using a DOS editor
    - Create / modify autoexec.bat and config.sys files
    - Learn the relevance of io.sys, msdos.sys, and command.com
    - Create and work with standard batch files
    - Compare "exe", "com", and "bat" files
    - Format system and non-system diskettes
    - Duplicate diskettes
    - Explore the debug utility
    - Search for files
    - Set system date and time
    - Compare "real" Vs "protected Mode"
    - Identify the 5 types of memory usage
    - Apply memory management in real-mode
    - Create an optimized memory managed boot-disk

6. **Apply Linux/Unix commands and fundamentals**
   Potential Elements of the Performance:

   This learning outcome will constitute approximately 20% of the course.

   - Learn the history of Linux / Unix
   - Learn about the various versions of Linux / Unix
   - Investigate the current trend of Linux
   - Use Telnet to login to a Linux server
   - Learn multi-tasking and multi-session
   - Learn the Linux boot process
   - Compare Linux vs. Dos commands
   - Create, use, and remove Linux directories
   - Use wildcards
   - Compare Linux editors
   - Create documents using a Linux editor
   - Create and modify a ".profile" file
   - Work with pipes, filters, and redirection
   - Change file / directories attributes

III. REQUIRED RESOURCES/TEXTS/MATERIALS:

Textbook:

Title: Windows Users Guide to DOS
Authors: Carolyn Gillay & Bette Peat
Publisher: Franklin, Beedle & Associates
ISBN: 1-887902-42-2

- **1 box of 3.5" Floppy diskettes**

IV. EVALUATION PROCESS/GRADING SYSTEM:

    3 WRITTEN TESTS (20% each)   60%
    LAB AND TAKE-HOME ASSIGNMENTS   40%

    QUIZZES MAY BE ASSIGNED RANDOMLY and factored into
    The Evaluation/Grading system

    (The percentages shown above may vary slightly if circumstances
     warrant.)

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The following semester grades will be assigned to students in postsecondary courses:

Grade	Definition	Grade Point Equivalent
A+	90 - 100%	4.00
A	80 - 89%	3.75
B	70 - 79%	3.00
C	60 - 69%	2.00
R (Repeat)	59% or below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field placement or non-graded subject areas.	
U	Unsatisfactory achievement in field placement or non-graded subject areas.	
X	A temporary grade. This is used in limited situations with extenuating circumstances giving a student additional time to complete the requirements for a course (see *Policies & Procedures Manual – Deferred Grades and Make-up*).	
NR	Grade not reported to Registrar's office. This is used to facilitate transcript preparation when, for extenuating circumstances, it has not been possible for the faculty member to report grades.	

VI.   SPECIAL NOTES:

Special Needs:
If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your instructor and/or the Special Needs office. Visit Room E1204 or call Extension 493, 717, or 491 so that support services can be arranged for you.

Retention of course outlines:
It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

Plagiarism:
Students should refer to the definition of "academic dishonesty" in *Student Rights and Responsibilities*. Students who engage in "academic dishonesty" will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course outline amendments:
The Professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

VII.   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 a challenge exam or portfolio.

VIII.   DIRECT CREDIT TRANSFERS:

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.