SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO

Sault College

COURSE OUTLINE

COURSE TITLE: Systems Management I

CODE NO. :   CSO200   **SEMESTER:**   3

PROGRAM: Computer Studies

AUTHOR: Fred Carella

DATE: Fall 2005   **PREVIOUS OUTLINE DATED:**   Fall 2004

APPROVED:

_____   _____
                                    DEAN   **DATE**

TOTAL CREDITS: 5

PREREQUISITE(S):   CSO105

HOURS/WEEK: 4

I.   COURSE DESCRIPTION:
This course is intended to provide a firm foundation in the management and use of operating systems. In particular, it continues the work done in CSO105 by using the Windows operating system from a systems management point of view and introduces the student to the Unix operating system. In addition, the following will be covered: D.O.S. internal and external commands, and the writing of Batch files; Windows 2000/XP, windows shell scripting and Windows Scripting Host; UNIX (Linux) and its essential command set and environment, and the writing of Scripts;

II.   LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1.   Manage System Resources
     Potential Elements of the Performance:
     - describe and apply knowledge of the Intel architecture.
     - differentiate between various processor architectures.
     - describe and apply knowledge of the Windows architecture
     - add, modify and manage the Windows registry
2.   Describe and Apply Operating System Concepts
     Potential Elements of the Performance:
     - describe and apply knowledge of virtual memory,
     - define, describe and differentiate pre-emptive and non pre-emptive multitasking systems
     - define, describe and differentiate multi-user systems
     - describe and utilize multi threaded environments,
     - describe and apply knowledge of process scheduling and multitasking
     - defines the role of posix

3.   Demonstrate writing DOS batch files.
     Potential Elements of the Performance:
     - Define and the discuss the need fro scripting.
     - Discuss the process DOS follows when running programs and how batch files can interact with each other an the user.
     - Describe the operation of and write batch files.
     - Discuss and be able to use in scripts pipes, filters and I/O redirection
     - Control the flow of processing in a batch file.

4.   Demonstrate Writing Unix scripts and understanding the basic command set of the Unix operating system
Potential Elements of the Performance:
- Describe the operation of and use basic Unix commands.
- Understand and apply knowledge of the Unix file system.
- Understand and apply unix file permissions and the the various file types.
- Demonstrate an ability to create, edit and manage Unix files and file permissions.
- Discuss and apply knowledge of pipes, filters and I/O redirection.
- Write scripts utilizing the features of the shell and the unix command set.

5.   Write Windows scipts
Potential Elements of the Performance:
- Differentiate between shell scripting and scripting with the Windows Scripting Host.
- Write shell scripts in a Windows environment.
- Write scripts using the Windows scripting host.
- Discuss the various other scripting languages available for the Windows environment.
- Write scripts that utilize or illustrate the following:
  o Variables
  o Arguments
  o Iterative processing
  o Javascript
  o Vbscript
  o Working with files
  o Working with the registery
  o Control Printers.

III. TOPICS:

1.   Managing System Resources
2.   Operating System Concepts
3.   DOS batch files.
4.   Unix scripts
5.   Windows scripting with Windows Scripting Host

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

V.   EVALUATION PROCESS/GRADING SYSTEM:

Outcomes 1 – 3   Test 1 30%
Outcomes 4 – 5   Test 2 30%
Labs   40%
                           100%

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00

CR (Credit)	Credit for diploma requirements has been awarded.
S	Satisfactory achievement in field /clinical placement or non-graded subject area.
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.
NR	Grade not reported to Registrar's office.
W	Student has withdrawn from the course without academic penalty.

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 professor and/or the Special Needs office. Visit Room E1101 or call Extension 703 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.

A student must pass both the theory and lab portions in order to achieve a passing grade.

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.