SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY						
SAULT STE. MARIE, ONTARIO						
Sault College						
COURSE OUTLINE						
COURSE TITLE:	UNDERSTA	NDING TECHNOL	OGY			
CODE NO. :	COM1120		SEMESTER:	ONE		
PROGRAM:		MINISTRATION	SYSTEMS			
AUTHOR:	LYNN DEE E	EASON				
DATE:	SEPT 2002	PREVIOUS OUT	LINE DATED:	FALL 2001		
APPROVED:				2001		
TOTAL CREDITS:	3	DEAN		DATE		
PREREQUISITE(S):	NONE					
HOURS/WEEK:	2 HOURS/15	5 WEEKS				
Copyright ©2000 The Sault College of Applied Arts & Technology Reproduction of this document by any means, in whole or in part, without prior written permission of Sault College of Applied Arts & Technology is prohibited. For additional information, please contact School of Business, Hospitality & Programs (705) 759-2554, Ext. 445						

Code No.

I. COURSE DESCRIPTION:

The personal computer is well established as an integral part of today's office. From the PC itself to the Internet; scanners to digital cameras; word processing to multimedia presentations, students will be introduced to all aspects of the modern computer – its uses, history and future – to develop the computer literacy required in the workplace today.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Demonstrate awareness of the relative size, scope, uses, and variety of available computer systems.

Potential Elements of the Performance:

- Explain the relationship between data and information; a record, a file and a database
- Discuss the scope and impact of technology on our lives
- Identify the basic hardware and software components using appropriate terminology
- Identify the size, uses, and varieties of available computer systems
- Identify the fundamental capabilities and uses of an IT system

This module will constitute 15% of the course grade.

2. Explain the fundamental components and the operational capabilities of a computer system.

Potential Elements of the Performance:

- Describe the purpose and objectives of an operation system
- Describe the fundamental concepts associated with the Windows operating environment using appropriate terminology
- Describe the function and applications of word processing, spreadsheet, and database software
- Explain how data are stored and represented in a computer system
- Identify and describe the relationships between the internal components of a personal computer
- Differentiate between processors
- Describe different approaches to processor design

2

- Describe the relationships between mass storage and the various types of files
- Differentiate and explain the various types of magnetic and optical laser disk devices and media
- Describe procedures for backing up data
- Explain the operation and application of available input devices
- Explain the operation and application of available output devices
- Describe a variety of available specialty terminals
- Prepare a checklist of needs for a potential computer purchase
- Interpret, analyze and report information obtained from computer retailers

This module will constitute 45% of the course grade.

3. Demonstrate an understanding of data communications, network and Internet terminology and applications.

Potential Elements of the Performance:

- Describe the concept of connectivity
- Describe alternatives and sources of data transmission
- Describe the function and operation of data communications hardware
- Describe the various types of network topologies using appropriate terminology
- Discuss the scope of the online world and how to access it
- Describe the various tools used to mine the Internet
- Discuss critical Internet issues confronting our society
- Describe the scope and concepts of e-commerce, electronic publishing and telecommuting
- Discuss the concepts associated with designing and publishing a web site

This module will constitute 20% of the course grade.

- 4. Recognize the issues associated with the widespread use of computers in the workplace today and in the future. <u>Potential Elements of the Performance</u>:
 - Put society's dependence upon computers into perspective
 - Consider ergonomic and environmental concerns when designing a workplace
 - Recognize considerations critical to evaluating ethical questions relating to the use of IT
 - Identify points of security vulnerability for a computer center, an information system, and a PC

3

Code No.

This module will constitute 5% of the course grade.

5. Describe the function and application of software used in the workplace.

Potential Elements of the Performance:

- Describe operating system platforms commonly used in the workplace
- Identify popular utility software programs
- Describe how information is passes between and shared among applications in the Windows environment
- Describe the essential concepts and use of the following types of software:
 - Graphic and Multimedia
 - Personal Information Management
 - Home and Family
 - Education and Edutainment
 - Reference, Business and Management

This module will constitute 5% of the course grade.

6. <u>Potential Elements of the Performance</u>:

Describe the elements involved in an information system using appropriate terminology.

- Differentiate quality information and how information needs and decision making vary at each level of an organization
- Describe the elements, scope and capabilities of an information system
- Describe the capabilities of a data processing system and a management information system (MIS)
- Describe the tools and capabilities of a decision support sytem (DSS)
- Describe the concepts and applications of an expert system and intelligent agents

This module will constitute 5% of the course grade.

- 7. <u>Potential Elements of the Performance</u>: Speculate on the futuristic world ahead of us.
 - Consider the elements which may be involved in a futuristic world
 - Discuss leading-edge and potential applications for the Information Superhighway
 - Discuss the challenges posed by Information technology

4

Code No.

This module will constitute 5% of the course grade.

III. TOPICS:

Note: These topics sometimes overlap several areas of skill development and are not necessarily intended to be explored in isolated learning units or in this order.

- 1. The Technology Revolution
- 2. Software
- 3. Inside the Computer
- 4. Storing and Retrieving Information
- 5. Information Input and Output
- 6. Networks and Networking
- 7. Going Online
- 8. Exploring the Cyberworld
- 9. IT Ethics and Healthy Computing
- 10. Personal Computing
- 11. Information Systems
- 12. Technology and Society

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

<u>Computers, Information Technology in Perspective, 10th edition, by Larry</u> Long and Nancy Long published by Prentice Hall, 2002.

Three manila file folders (letter size)

V. EVALUATION PROCESS/GRADING SYSTEM:

Tests: students will be evaluated on their understanding of the concepts and information presented in class. Three tests will be administered based on projects assigned in class. Test 1 - 10%, Test 2 - 40%, Test 3 - 35%

Projects: Completion of projects as assigned in class

15%

85%

100%

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

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

Code No.

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.

Students are expected to be present to write all tests during regularly scheduled classes.

In the event of a failed course grade, a supplementary test based on the semester's work will be administered to replace EITHER the lowest failed OR one missed test.

Each student will be required to keep a file in a designated room. This will facilitate the return of assignments, grades, and any messages the Office Administration faculty needs to relay to the students.

Code No.

It is expected that 100 percent of classroom work be completed and submitted on time. A late assignment with an attached Extension form will be accepted if submitted within 72 hours of the due date and time. Twenty-five percent will be deducted from late assignments automatically. Failure to follow this procedure will result in a zero grade for the assignment.

Marks will be deducted for incomplete work.

All work must be labeled with the student's name and the project information on each page. All work must be submitted in a labeled folder.

Tests will not be "open book." Students must ensure that they have the appropriate tools to do the test (i.e. diskettes, pencil, pen, etc.).

Test papers will be returned to the student after grading in order to permit verification of the results and to review the tests. However, the student will be required to return all test papers to the professor who will keep them on file for one year.

Keyboarding proficiency is encouraged. Students who are unable to keyboard with a touch type technique are encouraged to use (or purchase) the *All the Right Type* typing tutor software located on the A-wing network and in The Learning Centre.

Regular attendance is expected so the professor can observe work and provide guidance as necessary.

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.