J

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGl

SAULT STE. MARIE, ONTARIO

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COURSE OUTLINE

Course Title :   Technoloev in Perspective

Course No.:   TNYIOO

Program: Electrical / Electronics / Instrumentation Technician

Semester: One

Author(s):   A. Gooderham

Date: Aue. 1998

Previous
Outline Dated: Aue. 1997

Approved: *^^n-/....;^*   *L^^^/'i^*
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                         Dean   Date

Course Name: **Course No.**
Technology in Perspective   **TNYIOO**

TOTAL CREDITS:	**3**
PREREQUISITES:	**None**
COURSE LENGTH:	**3 hrs/wk, 17 wks**
TOTAL CREDIT HOURS:	**51 hrs.**

I. COURSE DESCRIPTION

This course is designed to introduce the participant to an array of types of technology, their impact en society and their inter-relationship. The student will, upon completion, appreciate the changes that technology has brought about not only in the working world but in society in general. In order to better prepare the student for changes in an educational experience and "on the job" learning various study skill techniques as well as safety practices and procedures will be explored to promote life long learning in a safe and efficient manner. The ethical issues surrounding technological advances and their impacts on the working world is vital knowledge in preparing the student for future careers and career changes. This course will also allow the student the opportunity to learn, practice and demonstrate a number of the generic skill requirements as outlined in the provincial generic skill learning outcomes documents.

IL TOPICS TO BE COVERED:

1. Learning Styles

2. WHMIS and General Safety Practices

3. Historical View of Information Technologies

4. PC Overview

5. Systems, Networks and Impacts

6. Application Software

7. Quality of Life Issues and Threats to I.T. Systems

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III. LEARNING OUTCOMES AND ELEMENTS OF PERFORMANCE:

A. Learning Outcomes:

1. An understanding of different learning styles and personal style

2. An appreciation of workplace safety and ethics on the job

3. Familiarization with P.C. terms, I.T. history and system fianctions

4. An appreciation for ethics, security and impUcations of I.T. on society

B. Learning Outcomes with Elements of Performance:

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

1. Determine his/her own learning style

Potential elements of the performance:

- complete a learning styles inventory worksheet   Weeks 1 & 2
- discuss their style and career matches in a group
- complete test questions and time management assignment

2. Describe the WHMIS system and other general safety techniques and issues

Potential elements of the performance:

- complete the WHMIS safety test   Weeks 2 & 3
- complete questions on general safety techniques
- discuss ethical issues from safety video

3. Identify how I.T. systems work together, the effects on careers, changes in organizations, culture, society and knowledge base

Potential elements of the performance:

- complete impact case studies in groups
- identify learning styles and career matches
- describe cultural changes in organizations
- complete test questions

Weeks 3 & 4

4. Describe historical impacts of I.T.

Potential elements of the performance:

identify the main era's in I.T. development
describe the significant advances in each era
speculate on future development
complete test questions and interview assignment

Weeks 5 & 6

5. Identify basic components of a PC, their fiinction and the operating system

Potential elements of the performance:

complete a true/false-short answer quiz on terminology
complete a PC purchase assignment and analysis
complete formal test questions

Weeks 6 thru 8

6. Describe how info-systems are built using critical thinking

Potential elements of the performance:

- perform numerical conversions of various numbering systems
- draw, evaluate and discuss critical thinking (digital) block diagrams
- complete test questions

Weeks 8 & 9

7. Describe various application software uses, requirements and impacts

Potential elements of the performance:

     identify specific software packages and their characteristics   Weeks 9 thru 13
     describe the hardware requirements of mm pkg's, games, graphics etc.
     describe the business changes due to software
     describe the need for training today vs. the past
     complete test questions and group case study on impacts

8. Describe privacy issues and threats to and from I.T. systems

Potential elements of the performance:

- discuss ethical issues from videos   Weeks 13 thru 17
     describe the impacts of I.T. devices for the disabled
     describe various encryption techniques
     complete test questions

IV. REQUIRED STUDENT RESOURCES:

- Text: Laudon, Traver & Laudon, <u>Information Technology and Society</u>, Wadsworth Publishing Company, ISBN 0-534-19512-1 (Available i:i the campus Shop)

V. METHODS OF EVALUATION:

The following Grading System will be used:

        A+ = 90% - 100%
        A = 80% - 89%
        B = 70% - 79%
        C = 55% - 69%
        R = less than 55% (Repeat Course)
        X = Temporary Grade as per College Policy

A final grade will be derived as follows:

WHMIS	= 15%
Quiz #1	= 2%
Time Management	= 5%
Interview	= 2%
Test#1	= 15%
PC Assignment	= 20%
Software assignment	= 2%
PC quiz	= 2%
Test #2	= 15%
Corner Store Case	= 2%
Attendance and Attitude	= 20%
	100%

VI. SPECIAL NOTES:

1. The Instructor reserves the right to modify the course as is deemed necessary to meet the needs of the students.

2. Students with special needs (Physical Limitations, Visual/Hearing Impairments etc.) are encouraged to discuss confidentially, required accommodations with the instructor and/or contact the Special Needs Office, Room El204, Extension 493, 717 or 491.

3. A portion of the final grade is based on cooperation and attitude. Regardless of a persons background or ability, in order to work in an industrial or business environment requires the ability to work in harmony and with respect for your peers and supervisors. This attitude is measured and reflected either positively or negatively in your overall grade, primarily by your attendance and timely submittal of assignments.

    Attendance is a measure not only of physical presence at an appointed hour but also a measure of \ our cooperation and attitude. Attendance is expected and will therefore be penalized by 1/2% for everj hour missed or late without a valid and acceptable excuse. This 1/2% will be deducted from your overall grade. It must be noted that an extensive collection of resource materials are available in the school library (resource center), the public library as well as Algoma University and Shouldice library (Lake Superior State University) all of which you have access to.

    In a course such as this, periodicals, trade magazines, manufacturer literature and the INTERNE! may be your best sources for current information. Your instructors and library personnel can provide you with direction as to where to look for information on your particular discipline. Utilize them.

VII. PRIOR LEARNING ASSESSMENT:

Students who wish to apply for advanced credit in this course, should consult with the Professor.