## SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

# SAULT STE. MARIE, ONTARIO



#### **COURSE OUTLINE**

COURSE TITLE: Technology and Society

CODE NO.: TNY120 SEMESTER: ANY

PROGRAM: General Education Course for any program

AUTHOR: Computer Studies Faculty

DATE: Jan 2008 PREVIOUS OUTLINE DATED: Sep 2007

**APPROVED:** "Brian Punch"

CHAIR DATE

TOTAL CREDITS: 2

PREREQUISITE(S): NONE

HOURS/WEEK: 30 Hours Total – 2 hours per week

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#### I. COURSE DESCRIPTION:

This course will introduce students to the impact that technological change has on society. Illustrations and examples will be drawn from the students' discipline. Potential topics include the social and economic impact of new technology, responsibilities and ethics, privacy, liability and technology-based crime, and emerging trends.

It is designed to provide students from varied programs and backgrounds with a particularly relevant and timely appreciation of the impact technology and technological advances have made on every aspect of society. Technology and its implementation in society has strengths, weaknesses, opportunities and threats. This course investigates the social, legal, and ethical issues the use of technology raises.

The course is not intended to provide a bias either for or against any particular issue but rather an opportunity to examine all sides of the issue and appreciate the diversity of opinions and personal preferences.

We will discuss many controversial issues such as privacy versus access to information, privacy versus law enforcement, freedom of speech versus control of content on the Internet, copyright and intellectual property control versus open access and full use and copy freedom.

These and many other issues will require students to participate through independent research via the Internet, electronic mail and recent publications. The student may also be asked to be an active participant as an individual and team player in discussions and debates using a multitude of mediums such as verbal, written, electronic mail and other technologically based mediums.

## II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Understand the impact Internet Technology has on the workplace, home and society and envision its' future potential.

## Potential Elements of the Performance:

- describe the information and technological revolution
- identify and research current and new technologies used in the workplace and society
- explore technologies being implemented in: business, health-care, manufacturing, science, education, and transportation
- recognize threats the Internet brings to the workplace and home
- learn to combat technology threats that target your work, home and mobile technology devices
- explore new wireless technologies that will significantly impact work and home environments

# 2. Acquire knowledge of technology legal / moral issues and rights / responsibilities in the workplace and society.

#### Potential Elements of the Performance:

- describe what the right to privacy and freedom of information legislations are
- appreciate the amount of information available to the general public
- discuss the philosophical, legal, and economic issues of privacy versus freedom of information
- define and describe the terms relevance, reliability, safety and protection in the context of technologically generated information
- analyse various techniques that can be applied to improve the reliability and safety of technology based systems
- define the intellectual property issues as well as the copyright, trademark and patent laws in the Canadian context
- describe what software piracy is and its cost to society
- define and describe various forms of technology based crime such as sabotage, fraud, and embezzlement
- discuss computer hacking and cracking, crime laws, and music downloading

# 3. Focus on the social impact and role technology plays in our daily lives including future potential.

#### Potential Elements of the Performance:

- determine the impact technology has on employment
- describe the changes in the work environment
- describe the health, safety and privacy issues as they relate to this new working environment
- review the broader issues on the impact and control of technology in society - today and into the future

# 4. Describe the issues of responsibilities and professional ethics in a technologically advanced society.

#### Potential Elements of the Performance:

- define professional liability and how it affects employers
- define "Code of Conduct" versus "General Ethics"
- review various ethical theories
- define ethical guidelines for professionals
- analyse various case studies that define professionalism and ethics

#### 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 the order below.

	SPECIFIC TOPICS	APPROXIMATE TIME
1.	Internet Technology Impact	5 WEEKS
2.	Technology Legal and Moral Issue	s 4 WEEKS
3.	Social Impact	3 WEEKS
4	Responsibilities and Ethics	3 WFFKS

#### IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

#### NO TEXT BOOK REQUIRED FOR THIS COURSE

# **ADDITIONAL RESOURCE MATERIALS**

Additional reference material will either be given to the students or placed in the library for the student's use.

Handouts, Guidance, and Material as it relates to the individual topics. Use of research modes such as: Internet, Library Data Base Searches, and articles.

## REQUIRED INDIVIDUAL STUDENT RESOURCES

Participation & Teamwork Individual Research Documentation

#### V. EVALUATION PROCESS/GRADING SYSTEM:

Tests and / or Quizzes	40	%
Assignments	30	%
Participation and Attendance	20	%
Project	10	%

Some minor modifications to the above percentages may be necessary. The professor reserves the right to adjust the mark based upon leadership, creativity and whether there is an improving trend. Students must have passing grades in the tests and assignments portion to pass the entire course.

- \* Students must complete and pass the tests and assignment portion of the course in order to pass the entire course.
- \* All Assignments must be completed satisfactorily to complete the course. Late hand in penalties will be 5% per day. Assignments will not be accepted past one week late unless there are extenuating and legitimate circumstances.
- \* The professor reserves the right to adjust the number of tests, practical tests and quizzes based on unforeseen circumstances. The students will be given sufficient notice to any changes and the reasons thereof.
- \* A student who is absent for 3 or more times without any valid reason or effort to resolve the problem will result in action taken.

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	Grade Point Equivalent	
A+ A	90 – 100% 80 – 89%	4.00	
В	70 - 79%	3.00	
С	60 - 69%	2.00	
D	50 – 59%	1.00	
F (Fail)	Below 50 %	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		
X	subject area.  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 2703 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.

#### Communication:

The College considers **WebCT/LMS** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of the **Learning Management System** communication tool.

The professor reserves the right to use other tools and / or techniques that may be more applicable. These other tools and / or techniques for effective communication will be discussed, identified and presented throughout the delivery of the course content.

Students must achieve a passing grade in **both** the assignment and the test portions of the course.

The topics will not necessarily be covered in the order shown in this course outline.

#### 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.