

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



Sault College

COURSE OUTLINE

COURSE TITLE: Technology and Society
CODE NO.: TNY120 **SEMESTER:** ANY
PROGRAM: General Education Course for any program
AUTHOR: Frank Turco / Dan Kachur
DATE: Winter 2006 **PREVIOUS OUTLINE DATED:** Fall 2006

APPROVED:

DEAN **DATE**

TOTAL CREDITS: 2

PREREQUISITE(S): None

HOURS/WEEK: 30 Hours - 2 hours a week for 15 weeks:

2 - 1 hour theory classes with the professor 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, emerging trends and futuristics.

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:

A. Learning Outcomes:

1. **Appreciate the benefits and weaknesses of technology in society.**
2. **Describe the various legal and moral issues of technology to society within a Canadian context.**
3. **Appreciate the social impact and role technology plays in the workplace now and into the future.**
4. **Describe the issues of responsibilities and professional ethics in a technologically advanced society.**

B. Learning Outcomes and Elements of the Performance:

1. **Appreciate the benefits and weaknesses of technology in society.**

Potential Elements of the Performance:

- describe the information and technological revolution
- identify many of the common issues and themes of technology in society
- appreciate benefits of technology in areas such as medicine, science, research, automation, disabilities, hazardous environments
- appreciate weaknesses of technology in areas such as fraud, theft, displacements, downsizing, and a changing environment.

This learning outcome will constitute 15 % of the course's grade. (Possible weighting strategy)

2. Describe the various legal and moral issues in a Canadian context with respect to privacy and information.

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 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 and crime laws

This learning outcome will constitute 35 % of the course's grade. (Possible weighting strategy)

3. Appreciate the social impact and role computers have in the workplace now and into the future.

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

This learning outcome will constitute 25% of the course's grade. (Possible weighting strategy)

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 all professionals and employers
- define “Professional Ethics” versus “General Ethics”
- review various ethical theories
- define ethical guidelines for professionals
- analyse various case studies that define professionalism and ethics

This learning outcome will constitute 25 % of the course’s grade. (Possible weighting strategy)

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. Benefits/Weaknesses of Technology	2 WEEKS
2. Legal and Moral Issues	5 WEEKS
3. Social Impact	4 WEEKS
4. Responsibilities and Ethics	4 WEEKS

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**TEXTBOOKS TO BE USED AS REFERENCE MATERIAL:**

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

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V. EVALUATION PROCESS/GRADING SYSTEM:

Tests	20	%
Quizzes	20	%
Mini Participation Assignments	20	%
Assignments	40	%

Some minor modifications to the above percentages may be necessary. The professor reserves the right to adjust the mark up or down 5% based on attendance, participation, 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 both the test 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.

NOTE: If action is to be taken, it will range from marks being deducted to a maximum of removal from the course.

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

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<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 - 100%	4.00
A	80 - 89%	4.00
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 instructor and/or the Special Needs office. Visit Room E1101 or call Extension 2493 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 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.