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 (any program)

AUTHOR: Computer Studies Faculty

DATE: Sep 2008   **PREVIOUS OUTLINE DATED:**   Jan 2008

APPROVED:

_____   _____
                                                  CHAIR   DATE

TOTAL CREDITS: 2

PREREQUISITE(S):   NONE

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

Technology and Society   **TNY120**
Course Name   **Course Code**

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 have 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 issues 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 technology and its' role in the Technological Revolution. (chapters 1 – 4)**

   Potential Elements of the Performance:

   - define technology
   - describe the information and technological revolution
   - differentiate between innovation representing a paradigm shift vs innovation representing a refinement of existing technologies
   - determine sources of innovation funding in Canada
   - relate historical events to the development of various technologies
   - cite various technological failures and how these failures have affected our use of technology
   - evaluate the effectiveness of the media on perceptions of technologies
   - appreciate the difficulties in predicting the consequences of a new technology
   - identify and research current and new technologies
   - identify the reasons why people are often resistant to change
   - define the following: Luddite, Neo-Luddite, Anarcho-Primitivists

2. **Understand the social impact of technology and the role it plays in our daily lives. (chapters 5 and 6)**

   Potential Elements of the Performance:

   - determine the factors that influence access to various technologies
   - define the "digital divide" and propose a solution(s) to it
   - discuss the advantages/disadvantages in the following: service economy, manufacturing economy, agricultural economy
   - cite various businesses created out of technological advances
   - discuss how various businesses have adapted to technological changes
   - discuss the impact of economics on innovation
   - discuss the impact of technology on employment

3. **Understand the legal and moral issues surrounding technology.
    (chapters 7 and 8)**

    Potential Elements of the Performance:

    - discuss the ways in which technology has changed the way we communicate
    - describe the various new forms of social interaction brought about through technology
    - discuss problems such as internet addiction, identity theft, and internet predators
    - cite legislations relating to the privacy and freedom of information
    - discuss the philosophical, legal, and economic issues of privacy versus freedom of 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/cracking and crime laws
    - define professional liability and how it affects employers
    - differentiate between the "Code of Conduct" and "General Ethics"

4. **Understand the use and impact of technology in education,
    science, medicine and entertainment. (chapters 9 - 12)**

    Potential Elements of the Performance:

    - discuss whether young children should use computers
    - discuss the use of technology (hardware/software) in the education of children
    - discuss the impact of technology on libraries
    - discuss the uses of technology in science and medicine
    - discuss the ethical issues relating to medical and scientific technologies
    - discuss the influence of digital technology in areas such as photography, music, movies and animation
    - discuss the impact of digital formats on television
    - discuss the predictions surrounding the effects of technology in the future and how it will change our lives

Technology and Society   **TNY120**
Course Name   **Course Code**

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. **Technology and
   the Technological Revolution**   **4 WEEKS**

2. **Social Issues**   **4 WEEKS**

3. **Legal and Moral Issues**   **4 WEEKS**

4. **Technology in education, science,
   medicine, and entertainment**   **3 WEEKS**

IV.   REQUIRED RESOURCES/TEXTS/MATERIALS:

Text: Technology and Society
by Jan L. Harrington
Jones and Bartlett Publishing
ISBN: 9780763750947

ADDITIONAL RESOURCE MATERIALS

Additional reference material will either be given to the students or placed on
LMS 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

Technology and Society   **TNY120**
Course Name   **Course Code**

V.   EVALUATION PROCESS/GRADING SYSTEM:

Tests /Quizzes	40%
Term Project	20%
Attendance	15%
Participation in Class Discussions	15%
Chapter Internet Research	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/quizzes 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.

Technology and Society   **TNY120**
Course Name   **Course Code**

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
A+	90 - 100%	4.00
A	80 – 89.9%	
B	70 – 79.9%	3.00
C	60 – 69.9%	2.00
D	50 – 59.9%	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 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 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.

Plagiarism:
Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. 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.

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

Substitute course information is available in the Registrar's office

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.   ADVANCE CREDIT TRANSFER:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question.