SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



CICE COURSE OUTLINE

COURSE TITLE: Technology and Society

CODE NO.: TNY120 SEMESTER: Winter

MODIFIED CODE: TNY0120

PROGRAM: General Education Course (any program)

AUTHOR: Computer Studies Faculty

MODIFIED BY: Sherry Benford, Learning Specialist CICE Program

DATE: Jan. 2010 **PREVIOUS OUTLINE DATED:** Jan. 2009

APPROVED: "Angelique Lemay" Feb. 2010

CHAIR, COMMUNITY SERVICES DATE

TOTAL CREDITS: 2

PREREQUISITE(S): NONE

HOURS/WEEK: 2

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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 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 C.I.C.E student with the assistance of a Learning Specialist, will demonstrate the basic ability to:

1. Understand a basic knowledge of technology and its' role in the Technological Revolution. (chapters 1 – 4)

Potential Elements of the Performance:

- demonstrate a basic understanding of 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 a basic understanding of 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 a basic knowledge of 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 basic knowledge of 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

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

3 WEEKS

2. Social Issues

4 WEEKS

3. Legal and Moral Issues 4 WEEKS

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

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Text: <u>Technology and Society</u>

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 students' 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 METHODS**:

Tests/Quizzes/Assignments	Weight
Tests/Quizzes	60%
Assignments/labs	40%
_	100%

The following semester grades will be assigned to students:

Grade	Definition	Grade Point Equivalent
A+	90 – 100%	4.00
Α	80 – 89%	
В	70 - 79%	3.00
С	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
U	placement or non-graded subject area. 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 W	Grade not reported to Registrar's office. Student has withdrawn from the course without academic penalty.

NOTE: Mid Term grades are provided in theory classes and clinical/field placement experiences. Students are notified that the midterm grade is an interim grade and is subject to change.

VI. SPECIAL NOTES:

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.

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.

Prior Learning Assessment:

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. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

Substitute course information is available in the Registrar's office.

Disability Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Disability Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

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.

Plagiarism:

Students should refer to the definition of "academic dishonesty" in *Student Code of Conduct*. A professor/instructor may assign a sanction as defined below, or make recommendations to the Academic Chair for disposition of the matter. The professor/instructor may:

- (i) issue a verbal reprimand,
- (ii) make an assignment of a lower grade with explanation,
- (iii) require additional academic assignments and issue a lower grade upon completion to the maximum grade "C",
- (iv) make an automatic assignment of a failing grade,
- (v) recommend to the Chair dismissal from the course with the assignment of a failing grade.

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.

Student Portal:

The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations. Announcements, news, the academic calendar of events, class cancellations, your learning management system (LMS), and much more are also accessible through the student portal. Go to https://my.saultcollege.ca.

Electronic Devices in the Classroom:

Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

Absences due to medical or other unavoidable circumstances should be discussed with the professor. Students are required to be in class on time and attendance will be taken within the first five minutes of class. A missed class will result in a penalty in your marks unless you have discussed your absence with the professor as described above. The penalty depends on course hours and will be applied as follows:

Course Hours	Deduction
5 hrs/week (75 hrs)	1.0% /hr
4 hrs/week (60 hrs)	1.5% /hr
3 hrs/week (45 hrs)	2.0% /hr
2 hrs/week (30 hrs)	3.0% /hr

Absentee reports will be discussed with each student. Final penalties will be reviewed and assessed at the discretion of the professor.

CICE Modifications:

Preparation and Participation

- A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
- 2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
- 3. Study notes will be geared to test content and style which will match with modified learning outcomes.
- 4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

A. Tests may be modified in the following ways:

- 1. Tests, which require essay answers, may be modified to short answers.
- 2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
- 3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
- 4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

B. Tests will be written in CICE office with assistance from a Learning Specialist.

The Learning Specialist may:

- 1. Read the test question to the student.
- 2. Paraphrase the test question without revealing any key words or definitions.
- 3. Transcribe the student's verbal answer.
- 4. Test length may be reduced and time allowed to complete test may be increased.

C. Assignments may be modified in the following ways:

- 1. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
- 2. Some assignments may be eliminated depending on the number of assignments required in the particular course.

The Learning Specialist may:

- 1. Use a question/answer format instead of essay/research format
- 2. Propose a reduction in the number of references required for an assignment
- 3. Assist with groups to ensure that student comprehends his/her role within the group
- 4. Require an extension on due dates due to the fact that some students may require additional time to process information
- 5. Formally summarize articles and assigned readings to isolate main points for the student
- 6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

D. Evaluation:

Is reflective of modified learning outcomes.