SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE MARIE, ON

COURSE OUTLINE

Course Title: **Information Technology & Society**

Code No.: TNY110 Semester: Any

Program: General Education course for any program

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Date: Jan 2002 Previous Outline Date: Jan 2001

Approved: _____ _____
Dean Date

Total Credits: 3 Total Credit Hours: 45

Prerequisites: **Computer Literacy and the ability to effectively use Electronic Mail, ListServs and the Internet as vehicles for researching and educational delivery of this course.**

Length of Course: **45 Hours - 3 hours a week for 15 weeks comprised of:**

1 - 1 hour unassigned lab class per week **2 - 1 hour theory / lab class with the professor per week**

C O U R S E O U T L I N E

I. COURSE DESCRIPTION:

This course 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 its 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 that students 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 PERFORMANCE:

(Generic Skills Learning Outcomes placement on the course outline will be determined and communicated at a later date)

A. Learning Outcomes:

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

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

3. Discuss the legal and moral issues of relevance, reliability, safety, and protection of intellectual property of computer generated information.

4. Research the legal and moral issues of personal and professional liability as well as computer based crime.

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

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

II. LEARNING OUTCOMES AND ELEMENTS OF PERFORMANCE (Continued):

B. Learning Outcomes and Elements of the Performance:

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

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

Potential elements of the performance:

- describe the computer revolution
- identify many of the common issues and themes of technology in society
- appreciate the benefits of computer technology in areas such as medicine, science, research, automation, disabilities, hazardous environments
- appreciate the weaknesses of computer technology in areas such as computer 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:

- define what the right to privacy and freedom of information legislation
- appreciate the amount of information available to creditors, to government officials, to medical professionals and the general public
- discuss the philosophical, legal,and economic issues of privacy versus freedom of information

This learning outcome will constitute 20 % of the course's grade. (Possible weighting strategy)

II. LEARNING OUTCOMES AND ELEMENTS OF PERFORMANCE (Continued):

B. Learning Outcomes and Elements of the Performance:

3. Discuss the legal and moral issues of relevance, reliability, safety, and protection of intellectual property of computer generated information.

Potential elements of the performance:

- define and describe the terms relevance, reliability, safety and protection in the context of computer generated information
- review and discuss the moral and legal issues related to wiretapping and encryption
- review several case studies on the reliability and safety of computer based solutions
  analyze various techniques that can be applied to improve the reliability and safety of computer based systems
- define the intellectual property issues as well as the copyright and patent laws in the Canadian context
- describe what is software piracy and what is its costs to society

This learning outcome will constitute 20 % of the course's grade. (Possible weighting strategy)

4. Research the legal and moral issues of personal and professional liability as well as computer based crime.

Potential elements of the performance:

- define professional liability and how it impacts software and hardware developers
- define and describe various forms of computer based crime such as sabotoge, computer fraud, embezzlement
- discuss computer hacking and cracking and crime laws

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

II. LEARNING OUTCOMES AND ELEMENTS OF PERFORMANCE (Continued):

B. Learning Outcomes and Elements of the Performance:

5. 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 computers in society - toady and into the future

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

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

Potential elements of the performance:

- define what "Computer Ethics" is
- review various ethical theories
- define ethical guidelines for computer professionals
- analyze various case studies that define professionalism and ethics

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

III. TOPICS TO BE COVERED

- 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.	Privacy and Information Issues	4 WEEKS
3.	Protection of Intellectual Property	4 WEEKS
4.	Liability and Computer Based Crime	2 WEEKS
5.	Social impact present and future	2 WEEKS
6.	Responsibilities and Ethics	2 WEEKS

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

TEXTBOOKS TO BE USED AS REFERENCE MATERIAL:

1. **CYBERLAW CANADA - The Computer User's Legal Guide**
By Jeffrey M. Schelling, LLB

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
Box of Disks
Individual Research
Documentation

V. EVALUATION METHODS:

Tests and / or Quizzes	40%
Mini Participation Assignments	20%
Assignments and Lab Work	40%

The tentative breakdown is as follows:

2	Formal Theory Tests	at	10 %	each
10	Mini Quizzes (best 10 of 12 or more)	at	2%	each
10	Mini Participation Assignments(best 10)	at	2%	each
5	Formal Lab Exercises(best 5)	at	2%	each
2	Minor Assignments	at	5%	each
2	Major Assignments	at	10%	each

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.

V. EVALUATION METHODS(Continued):

* 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.

V. **EVALUATION METHODS (Continued):**

GRADING DETAILS

1. TESTS

Written tests will be conducted as deemed necessary; generally at the end of each block of work. They will be announced about one week in advance. Quizzes may be conducted without advance warning.

2. ASSIGNMENTS

Assignments not completed by the assigned due-date will be penalised by 5% per day late. All assignments must be completed satisfactorily to complete the course.

3. GRADING SCHEME

A+	90 - 100%	Outstanding achievement
A	80 - 89%	Excellent achievement
B	70 - 79%	Average Achievement
C	60 - 69%	Satisfactory Achievement
U	Incomplete:	Course work not complete at Mid-term. Only used at mid-term.
R	Repeat	
X	A temporary grade that is limited to instances where special circumstances have prevented the student from completing objectives by the end of the semester. An X grade must be authorised by the Chairman. It reverts to an R if not upgraded in an agreed-upon time, less than 120 days.	

4. UPGRADING OF INCOMPLETE

When a student's course work is incomplete or final grade is below 60%, there is the possibility of upgrading to a pass when the student's performance warrants it. Attendance and assignment completion will have a bearing on whether upgrading will be allowed. A failing grade on all tests will remove the option of any upgrading and an R grade will result. The highest grade on re-written tests or assignments will be 60%.
Where a student's overall performance has been consistently unsatisfactory, an R grade may be assigned without the option of make-up work.
The method of upgrading is at the discretion of the teacher and may consist of one or more of the following options: assigned make-up work, re-doing assignments, re-writing of tests, or writing a comprehensive supplemental examination.

VI. SPECIAL NOTES

1. All students should be aware of the Special Needs Office in the College. If you have any special needs such as being visually impaired, hearing disabled, physically disabled, learning disabilities you are encouraged to discuss required accommodations confidentially with the Professor and/or contact the Special Needs Office, Room E1204, Ext. 493, or 717, or 491 so that support services can be arranged for you.

2. Your professor reserves the right to modify the course as he/she deems necessary to meet the needs of students.

3. It is the responsibility of the student to retain all course outlines for possible future use in gaining advanced standing at other post-secondary institutions.

4. Plagiarism

   Student should refer to the definition of "academic dishonesty" in the "Statement of 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, as may be decided by the professor.

5. Substitute course information is available at the Registrar's office.

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

7. 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.

ADDENDUM FOR GENERAL EDUCATION APPROVAL

To be approved as a General Education offering within Sault College several key requirements must be met. The following are the criteria and how they relate to this course.

Course Criteria/Reference Checklist. Does it satisfy the requirement and how does it relate.

Is the course 45 instructional hours?

Yes and we will also be delivering it to large section sizes with the aid of technology and alternative delivery strategies. The research components and group work will for the most part be self-directed.

Does this course clearly contribute to one of the following: the learner's personal growth, informed citizenship, or working life (as distinct from specific vocational skills)?

Yes it contributes to all of these categories. It contributes to personal growth and the working life since technology will be an integral part of their time as students as well as employees. Regardless of the student's program discipline, the social, legal, and ethical impact of technology on society provides for student's making informed moral choices when using technology.

Does the course guide learners through the historical context of the issues introduced, their theoretical bases, and their application to contemporary life?

Yes a portion of the course describes why many of the controversial issues are in fact issues today by reflecting how we got to where we are based on the past.

Does this course encourage support continuous learning through discussion, demonstration or practice in investigative methods used in this field?

Yes this course in particular lends itself to continuous learning since there is no right answer but rather in many cases a moral judgement. We will continually discuss and research all sides of the issue in an attempt to make an educated and personal call on particular issues based on facts not strictly opinion. We will use a variety of technology based tools as well as traditional means to research and discuss the issues.

Does the variety in assignments, evaluation tools and teaching/learning methods ensure that the general education outcomes are met?

Yes as examples of the methods that will be applied, we intend to have electronic mail discussions on issues that students will both lead and participate. We will also research material on various issues via the internet and other traditional methods. We will also have reference material available on course related web pages.

Which of CSAC's goal areas are met in this course? Identify the main goal area and any other goal areas that are met.

Many of the CSAC goals are addressed in this course and its delivery method, however, several of the main goals in the order of relevance are Understanding Technology, Work and the Economy, Social Understanding, Civic Life, Cultural Understandings.

Does the course deal with issues related to the course content, not just master of content?

Yes, the course deals with issues of societal concern in a manner that is extremely relevant to the lives of all students even as they are continuously learning and as employees. This course is not intended to provide mastery learning or competencies that are exact and scientific in nature but rather an appreciation for the many issues that impact us all with respect to technology.

Does the course provide opportunities for learners to explore questions related to values and ethics which are raised by the subject matter

Yes, absolutely. We will be discussing and debating several controversial moral and ethical issues as they pertain to technology.

In order to meet the aim of lifelong learning does the course provide transferability between programs or between colleges and universities?

Yes. It is our opinion that the material and discussions we are covering are both timeless and timely in that the issues have been with us for a long time and will be with us indefinitely. They are also timely since the advances in technology and its impact on the workplace has made the issues even more sensitive and controversial.