



Course Code: Title TNY130: TECHNOLOGY IN SOCIETY **Program Number: Name** 2090: COMPUTER PROGRAMMER

Department: **COMPUTER STUDIES**

Semester/Term: 17F

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.

Total Credits: 3

Hours/Week: 2

Total Hours: 0

Substitutes: **TNY120**

Course Evaluation: Passing Grade: 50%, D

Other Course Evaluation & Assessment Requirements: Tests/Quizzes/Assignments Weight

Tests/Quizzes 60% Assignments/labs 40%

100%

Grade

Definition Grade Point Equivalent

A+ 90 100% 4.00 A 80 89% 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W Student has withdrawn from the course without academic penalty.

OTHER EVALUATION CONSIDERATIONS:

In order to pass this course the student must obtain an overall test/quiz average of 50% or better, as well as, an overall assignment average of 50% or better. A student who is not present to write a particular test/quiz, and does not notify the instructor beforehand of their intended absence, may be subject to a zero grade on that test/quiz.

Assignments are to be submitted on time. Notification will be given as to when they are due, which will be typically 7 days from date of issuance. Late assignments will not be accepted.

Books and Required Resources:

Technology & Society by Harrington Publisher: Jones and Bartlett Learning

Course Outcomes and Learning Objectives:

Course Outcome 1.

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

Learning Objectives 1.

- 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

Course Outcome 2.

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

Learning Objectives 2.

- · 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

Course Outcome 3.

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

Learning Objectives 3.

- · 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
- · analyze 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"

Course Outcome 4.

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

Learning Objectives 4.

- · 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

Date:

Friday, September 1, 2017

Please refer to the course outline addendum on the Learning Management System for further information.