L A K E H E A D   U N I V E R S I T Y
DEPARTMENT OF SOCIOLOGY
Technology, Society, and Indigenous Peoples in Canada
Sociology 2755-FDE 2016

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Course Description

This course of study examines the relationship between technology and society. The course proceeds according to a *socio-technical perspective*; that is, the notion that technology and society share a reciprocal relationship wherein first we shape our technologies, and then our technologies shape us. The course begins with a breakdown of the concept "technology" in an attempt to determine its fundamental nature. To this end we will examine technology's linguistic roots and historical *reason d'etre*, its essential components, its relationship to rationalism and social progress, and its tendency in modern societies to alienate and disempower. We will examine various sociological theories which inform our understanding of technological development and diffusion (e.g., Technological Determinism, Social Constructivism, Convergence Theory, and so on). The course will identify several sources of technological change (from the contributions made by self-reliant, genius inventors of yesteryear to the hi-tech, corporate research laboratories of today) and examine a number of high profile technological impacts such as fossil fuels, bio-engineering, printing, mass production, the internet and others. The course of study includes a careful examination of the differential effects of technological change and the tendency for the benefits, and the costs, of technological development to be unequally distributed throughout the population. We will study the historical relationship between science and technology, the patterns and theories of technological diffusion, the role of engineers and other experts in the development of technology, the reciprocal relationship between organizational structure and technology, and the role of the government in determining the direction and pace of technological change. All of these topics, and others, will be considered in light of an important observation in the sociological study of technology; namely, technology is a subversive social force… it delivers benefits, but it also exacts costs. And not always in equal measure.

The course of study will also pay particular attention to technology and Canada's Indigenous peoples. Content may include topics such as the impact of major technological systems on the social and economic development of isolated Northern communities, the incorporation of new information and communications technologies into human services on First Nations reserves, traditional Native worldviews vs. the modern scientific approach, technology's role in efforts to resist cultural assimilation, the impact of legal decisions regarding technology on Aboriginal treaty rights, the role of technology in the perpetuation of Native stereotypes, prejudice, and discrimination, and more.

How to Proceed Through the Course of Study

This course of study has no classroom. Rather, it features an excellent book and a variety of online articles. Rudi Volti's *Society and Technological Change* (7th Ed) identifies and discusses most of the important theories and basic concepts needed to develop a thorough understanding of how society shapes technology and, in turn, how technology shapes society. The various online articles provide insight into the nature of the relationship between technology and Indigenous people. The course is comprised of 12 units of study. Each unit of study includes helpful learning objectives, brief synopses, and review questions for each of the 12 required Volti chapters. The Volti text is the source of several important analytical concepts which you will be required to incorporate into several written assignments which focus on issues of importance to Canada's Indigenous population.

Here is what I recommend:

- Set aside 4-5 hours for each of the 12 units of study, find a quiet room, close the door, shut out the world, and focus on the required Volti readings and online articles.
- While reading, take notes which address the Learning Objectives and the Review Questions which appear in the course package for each unit of study. When I set the examinations, I will use the Learning Objectives and the Review Questions as my primary guidelines.
- You might also use the various synopses of the Volti chapters that appear in the course package to help identify the most important terms and concepts for each required chapter.
- Follow along with the Course Schedule, and don't fall behind!

If you have a question, post it in our Discussion Area and I, or one of our classmates, will respond. Or, simply send me an email using brian.mcmillan@lakeheadu.ca

Required Reading Material

Volti, Rudi. 2014. *Society and Technological Change.* 7th Edition. New York: Worth Publishers. ISBN-13: 978-1-4292-7897-3

You are also required to read several online articles throughout the course which pertain specifically to Canada's Indigenous peoples and various technology-related issues. These articles will be used in the preparation of your written assignments. The titles and URLs of these articles can be found in the Assignment modules in the Content area of our course site (see yellow navigator bar at top of page).

Video Material/Discussions

Several online videos are listed in course Contents. These videos will not be covered in examinations. However, these videos are required viewing and are meant to help you deepen your understanding of important course terms and concepts and, in particular, important issues of relevance to Canada's Indigenous peoples. Each video has a corresponding discussion forum found in the Discussions area of our course site (the link to Discussions is on the yellow navigator bar at the top of the page). You are encouraged to view the videos and post any comments you might have in the appropriate discussion forum. You are also encouraged to read the posts of other students and are invited to respond to any and all posts. Your participation in our video discussions carries a maximum weight of 10% of the final course grade.

**Please note that a closure date will be applied to each discussion. See video posts (>Contents) for closure dates.

Timed Online Examinations

There are 2 examinations scheduled throughout the course of study. The tests are accessed using the *Quizzes* tab on the yellow navigator bar at the top of the page. Both exams will be based exclusively on Rudi Volti's *Society and Technological Change* (2014). Both examinations will be timed online tests. Timed online tests can be taken from any computer connected to the internet. I wouldn't advise the use of smartphones, or any other wireless devices, because of common connectivity problems. The exams will be comprised of multiple-choice and true-or-false questions. The first exam will be based on study units 1-6. The second exam will be based on study units 7-12. Please see the *Grading Scheme* for the weighting of exams, and the *Course Schedule* for examination dates.

A timed online test requires you to commence and complete the test within a specified time period on a particular day. You will not be allowed to commence before the designated start time, and no responses will be accepted after the designated completion time. See the Course Schedule (>Content) for examination dates and times.

The timed online tests will be administered through our course website (D2L). At the time of the exam you will be required to login using your usual Lakehead University username and password. I have set up a mock timed online test to give you a chance to practice logging in and answering questions. Click the *Quizzes* tab on the yellow navigator bar at the top of the page.

*<u>**PLEASE NOTE**</u>: *Lakehead University has a very strict policy regarding the failure to write formally scheduled examinations at the prescribed time. Special accommodations, such as a make-up exam, will only be offered when missed examinations are due to medical reasons, for which detailed supporting documentation must be submitted. It is your responsibility to familiarize yourself with the University's policy regarding missed examinations. Please note that I have never granted special accommodations in regard to missed examinations on the basis of equipment failure in 30 years of teaching, and I don't plan on spoiling my record any time soon. So please ensure you are at the right place at the right time with the right equipment to avoid disappointment.*

<u>Grading Scheme</u>

Midterm Exam...........................….30%
Written Assignments…………....30%
Video Discussions……………....10%
Final Exam..............................…...30%

<u>Written Assignments</u>

You are required to prepare and submit 6 mini-essays (3-4 pages each) throughout the course of study. The general objective of these mini-essays is for you to demonstrate a strong understanding of specific important course concepts and how they relate to the content of several articles which identify and discuss technology-related issues pertaining to Canada's Indigenous peoples. The specific requirements of each mini-essay can be found in the Assignment modules in the Content area of our course site (see the yellow navigator bar at the top of the page).

These assignments must be the exclusive product of your own individual effort. They are not meant to be a group projects. Each assignment is worth a maximum of 5% of your final course grade. Please see the Course Schedule (>Content) for submission deadlines.

<u>Course Schedule</u>

Sept. 6 - 11:   *The Nature of Technology* (Volti ch. 1)

Sept. 12 - 18:   *Winners and Losers* (Volti ch. 2)

Sept. 16:   Deadline: Mini-essay #1 (Indigenous vs. Western Ways of Knowing), 11:59 p.m. ET

Sept. 18:   Closure: Video #1 Discussion (*Tragedy of Pikangikum*)

Sept. 19 - 25:   *The Sources of Technological Change* (Volti ch. 3)

Sept. 25:   Closure: Video #2 Discussion (*Cold Reality of Canada's Northern Communities*)

Sept. 26 - Oct. 2:   *Scientific Knowledge and Technological Advance* (Volti ch. 4)

Sept. 30:	Deadline: Mini-essay #2 (Technology as a Subversive Force: The Case of Canada's Inuit People), 11:59 p.m. ET
Oct. 3 - 9:	*The Diffusion of Technology* (Volti ch. 5)
Oct. 10 - 14:	Fall Break
Oct. 15 - 21:	*Genetic Technologies* (Volti ch. 8)
Oct. 21:	Closure: Video #3 Discussion (*Life in Iqaluit, Nunavut*)
Oct. 22:	Timed Online Test 1:00-2:20 p.m. ET (Toronto time) **See *Course Outline* for details **See *Midterm Examination Guidance* in Course Content
Oct. 23 - 30:	*Tech and Jobs: More of One Less of the Other?* (Volti ch. 10)
Oct. 24:	Deadline: Mini-essay #3 (Impediments to Technological Diffusion: The Case of 'Inappropriate' Technologies in Isolated Aboriginal Communities), 11:59 p.m. ET
Oct. 31 – Nov. 6:	*Technological Change and Life on the Job* (Volti ch. 11)
Nov. 4:	Deadline: Mini-essay #4 (Modernization vs. Aboriginal Traditional Economies), 11:59 p.m. ET
Nov. 7 - 13:	*The Internet Age* (Volti ch. 14)
Nov. 11:	Closure: Video #4 Discussion (*Wasting Away; This Igloo Greenhouse could Revolutionize Food Production in the North*)
Nov. 14 - 20:	*Tech and Its Creators: Who's in Charge of Whom?* (Volti ch. 18)
Nov. 18:	Deadline: Mini-essay #5 (The Digital Divide and Canada's Remote Northern Native Communities), 11:59 p.m. ET
Nov. 21 - 27:	*Organizations and Technological Change* (Volti ch. 19)
Nov 28 – Dec. 5:	*Governing Technology* (Volti ch. 20)
Dec. 2:	Closure: Video #5 Discussion (TBA)
Dec. 5:	Deadline: Mini-essay #6 (TBA), 11:59 p.m. ET
T.B.A:	Timed Online Test **See *Course Outline* for details