LAKEHEAD UNIVERSITY

Technology, Society, and Indigenous Peoples of Canada

SOCI-2755-WDE 2021 Mr. Brian McMillan brian.mcmillan@lakeheadu.ca

COURSE OUTLINE

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 *raison 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 special 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 and videos. Rudi Volti's *Society and Technological Change* (8th 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 6 study modules. Each module includes learning objectives, brief chapter synopses, review questions for the required Volti chapters and the online articles, and titles and links to supplementary online videos and articles.

Here is what I recommend:

- Set aside a minimum of 5-6 hours each week, find a quiet room, close the door, shut out the world, and focus on the required Volti readings, online articles, and videos.
- While reading, take notes which address the Review Questions which accompany each Study Module found in the course package. When I set the examinations, I will use 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 Volti chapter.
- Follow along with the Course Schedule, and do your best not to fall behind!

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

Required Reading Material

Volti, Rudi. 2017. *Society and Technological Change*. 8th Edition. New York: Worth Publishers. ISBN-13: 978-1-319-05825-8

Online Articles: 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. The titles and URLs of these articles can be found in their respective Study Modules in the Content area of our course site (see navigator bar at top of page).

Video Material

The course of study includes several online videos. These videos should be considered required viewing and are meant to deepen your understanding of important course concepts and, in particular, important issues of relevance to Canada's Indigenous peoples. 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. The titles and links to the videos can be found in their respective Study Modules in the Content area of our site. The videos are not included in the examinations.

Grading Scheme

Exam #1	30%
Exam #2	30%
Exam #3	30%
Assignments	10%

Written Assignments

Information regarding the written assignments will be posted Monday January 11th.

Timed Online Examinations

There are 3 examinations scheduled throughout the course of study. The exams are accessed using the *Quizzes* tab on the navigator bar at the top of the page. All 3 exams will be based on the required readings in Rudi Volti's *Society and Technological Change*, and the required online articles pertaining to Indigenous issues. All 3 examinations will be timed online tests. Timed online tests can be taken from any computer connected to the internet. I advise against 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 covers study modules 1 and 2. The second exam covers study modules 3 and 4. The third exam covers study modules 5 and 6. Please see the *Grading Scheme* for the weighting of exams, and the *Course Schedule* for examination dates and times.

Timed online examinations must be written during the prescribed examination windows; for example, 9:00 a.m. – 8:00 p.m. Eastern Time. You must login sometime during the prescribed examination window and complete the exam in a single sitting. You will not be allowed to commence before the designated start time (e.g., 9:00 a.m.) and you will not be allowed to commence after the designated completion time (e.g., 8:00 p.m.). You will be allowed to login in only once. See the Course Schedule (*Content* tab) for examination window 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, answering questions, and moving from one page to another. Click the *Quizzes* tab on the navigator bar at the top of the page to access the practice quiz.

<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. Work schedules, weddings, travel activities, faulty technology, etc. are not considered acceptable reasons for rescheduling examinations. It is your responsibility to familiarize yourself with the University's policy regarding missed examinations.

Discussions Forum

Our course site features a Discussions tool (tab located on the navigator bar at top of page) where you can interact with classmates, discuss course concepts and issues, and seek clarification of course content (learning objectives, review questions, etc.). If you have an issue of a private nature, please do not use the Discussions forum but rather email me directly: brian.mcmillan@lakeheadu.ca

*PLEASE NOTE: Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities and/or medical conditions to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please contact Student Accessibility Services http://studentaccessibility.lakeheadu.ca

Thunder Bay - SAS -- SC0003, 343-8047 or sas@lakeheadu.ca
Orillia - SAS - OA 1030, 705-330-4008 ext 2103) or oraccess@lakeheadu.ca

COURSE SCHEDULE

Jan. 11 - 31: The Nature of Technology (Volti ch. 1)

Scientific Knowledge and Technological Advance (Volti ch. 4)

Dismantling the Divide between Indigenous and Scientific Knowledge (Agrawal)

Video: Indigenous Knowledge to Close Gaps in Indigenous Health

Feb. 1 - 12: Winners and Losers (Volti ch. 2)

Canada's Tibet: The Killing of the Innu (C. Samson et al.) Video: Prohibition in Northern Canada (Vice International)

Sat. Feb. 13: Examination #1, 9:00 a.m. - 9:00 p.m. ET (Toronto time)

*See Course Outline for details

Feb. 15 - 19: Winter Break

Feb. 20 - Mar. 7: The Diffusion of Technology (Volti ch. 5)

The Internet Age (Volti ch. 14)

Digital Divides and the 'First Mile': Framing First Nations Broadband Development in Canada (R. McMahon et al.) Video: Social Media gives Traction to Idle No More (CBC)

Wed. Feb. 24: Deadline: Assignment #1, 11:59 p.m. ET (Toronto time)

Mar. 8 -19: Tech and Jobs: More of One Less of the Other? (Volti ch. 10)

Technological Change and Life on the Job (Volti ch. 11)

Resource Extraction and Aboriginal Communities in Northern Canada: Cultural

Considerations (National Aboriginal Health Organization)

Video: On Thin Ice: Inuit Way of Life Vanishing in Arctic (A. Putra)

Sat. Mar. 20: Examination #2, 9:00 a.m. – 9:00 p.m. ET (Toronto time)

*See Course Outline for details

Mar. 21 - Apr. 3: The Sources of Technological Change (Volti ch. 3)

Tech and Its Creators: Who's in Charge of Whom? (Volti ch. 18) Food Security across the Arctic (Inuit Circumpolar Council)

Video: Food Security in Canada (CBC)

Fri. Mar. 26: Deadline: Assignment #2, 11:59 p.m. ET (Toronto time)

Apr. 4 - 13: Organizations and Technological Change (Volti ch. 19)

Governing Technology (Volti ch. 20) Video: Radical Parallelism (TVO)

T. B.A. Examination #3

*See Course Outline for details

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