LAKEHEAD UNIVERSITY

Technology, Society, and Indigenous Peoples of Canada

SOCI-2755-SDE 2020 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, bioengineering, 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 online videos.

Here is what I recommend:

- Set aside a minimum of 3-4 hours each day of the course, 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). *Please note that you may have to hold down the Ctrl key when selecting links on D2L

Video Material

The course of study includes several online videos. These videos will *not* be covered in examinations. However, 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. *Please note that you may have to hold down the Ctrl key when selecting links on D2L

Grading Scheme

Exam #1	33%
Exam #2	33%
Fyam #3	34%

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 dealing with Indigenous issues. The videos are not covered in the exams, but you should consider the videos as required viewing.

All 3 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 cover study modules 1 and 2. The second exam will cover study modules 3 and 4. The third exam will cover study modules 5 and 6. 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 (e.g., 100 minutes) on a particular day. You must logon to the examinations (myCourseLink>Quizzes tab top of page on course site) and commence the test at some point within the designated test window (e.g., 9:00 a.m. - 9:00 p.m. ET). See the Course Schedule (Content tab) 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 navigator bar at the top of the page.

*Please Note: You must complete all 3 examinations in this course on your own with no collaboration with any other person(s) on the days of the examinations. Receiving or giving assistance in direct connection to an examination is a serious violation of the Lakehead University Student Code of Conduct: Academic Integrity; in particular, Section III, para. 26, b., c., e., g. See link below:

https://www.lakeheadu.ca/sites/default/files/uploads/293/docs/Student-Conduct/Student%20Code%20of%20Conduct%20-%20Academic%20Integrity.pdf

*Please Note: 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

- May 1: The Nature of Technology (Volti ch. 1)
- May 3: Scientific Knowledge and Technological Advance (Volti ch. 4)
- May 4: Dismantling the Divide between Indigenous and Scientific Knowledge (Agrawal) Video: Origins: A History of Canada (Part 2): The First Nations (TVO)
- May 5: Winners and Losers (Volti ch. 2)
- May 6: Canada's Tibet: The Killing of the Innu (Samson et al.)
 Video: Prohibition in Northern Canada (Vice International)

Friday May 8: Examination #1: 9:00 a.m. – 9:00 p.m. ET

- May 9: The Diffusion of Technology (Volti ch. 5)
- May 11: The Internet Age (Volti ch. 14)
 Digital Divides and the 'First Mile' (McMahon et al.)
 Video: Social Media gives Traction to Idle No More (CBC)
- May 12: Technology and Jobs: More of One Less of the Other? (Volti ch. 10) Technological Change and Life on the Job (Volti ch. 11)
- May 13: 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 (Putra)

Friday May 15: Examination #2: 9:00 a.m. – 9:00 p.m. ET

- May 16: The Sources of Technological Change (Volti ch. 3)
- May 18: Tech and Its Creators: Who's in Charge of Whom? (Volti ch. 18)
- May 19: Food Security across the Arctic (I.C.C.) Videos: Wasting Away (APTN); Igloo Greenhouses (CBC)
- May 20: Organizations and Technological Change (Volti ch. 19)
- May 21: Governing Technology (Volti ch. 20) Video: Radical Parallelism (TVO)

Saturday May 23: Examination #3: 9:00 a.m. – 9:00 p.m. ET

End