

**L A K E H E A D   U N I V E R S I T Y**  
**DEPARTMENT OF SOCIOLOGY**  
**Technology and Society**  
**Sociology 2755-SA**

Brian McMillan  
UC0038  
brian.mcmillan@lakeheadu.ca  
Office Hours: by appointment  
Sociology Department Website: <http://sociology.lakeheadu.ca>

Spring 2011  
Mon.-Thurs. 6:30-9:00pm  
ATAC 2001

**Course Description**

This course of study examines the reciprocal relationship between technological change and social structure. The first half of the course identifies and examines the essential sociological theories and concepts which inform our understanding of technological development and diffusion. The second half of the course focuses on the consequences of specific technologies in areas such as medicine, work, food, environment, and communications.

**Reading Material**

Required: Volti, Rudi. 2010. *Society and Technological Change 6<sup>th</sup> Edition*. New York: Worth Publishers

Recommended: please see the Course Schedule below for recommended readings. All recommended readings are available on Library Reserve.

**Examinations\***

There are 2 examinations scheduled throughout the course of study. The format of the exams will be announced in class. Please see the Grading Scheme for the weighting of the exams, and the Course Schedule for examination dates.

*\*Lakehead University has a very strict policy regarding the failure to write formally-scheduled exams at the prescribed time. It is your responsibility to familiarize yourself thoroughly with this policy, especially in the matter of required documentation (e.g., a doctor's note). Knowing your obligations in this area may help you avoid serious academic penalty.*

**Grading Scheme**

Midterm Exam.....50%  
Final Exam.....50%

**WebCT Course Site**

A WebCT site has been set up for the course. Login using myCourseLink. Classroom slides will be uploaded to the site as the course progresses.

## Course Schedule

### May 2 **The Nature of Technology**

#### Required reading:

Volti, ch. 1, "The Nature of Technology"

Volti, ch. 8, "Genetic Technologies"

#### Recommended reading:

1) Macionis, John J., Linda M. Gerber. 2011. "Material Culture and Technology". Pp. 66-67 in *Sociology: Seventh Canadian Edition*. Toronto: Pearson Canada

2) Macionis, John J., Linda M. Gerber. 2011. "Max Weber: The Rationalization of Society". Pp. 91-95 in *Sociology: Seventh Cdn Edition*. Toronto: Pearson Canada

3) Marx, Leo. 1993. "Does Improved Technology Mean Progress?" Pp. 3-14 in *Technology in the Future*, edited by Albert H. Teich. New York: St. Martin's Press

### May 3 **Winners & Losers: The Differential Effects of Technological Change**

#### Required reading:

Volti, ch. 2, "Winners & Losers: The Differential Effects of Technological Change"

#### Recommended reading:

1) Postman, Neil. 2003. "Informing Ourselves to Death". Pp. 101-10 in *Computers, Ethics, and Society*, edited by M. David Erman and Michele S. Shauf. NY: Oxford

2) Weinberg, Alvin, M. 1972. "Can Technology Replace Social Engineering". Pp. 171-78 in *Technology and Society*, edited by Noel deNevers. New York: Addison-Wesley Publishing Co.

3) Volti, ch. 6, "More Miles to the Gallon", pp. 109-111

### May 4 **The Sources of Technological Change**

#### Required reading:

Volti, ch. 3, "The Sources of Technological Change"

#### Recommended reading:

1) Hopkins, Patrick D. 2009. "The Intersection of Culture, Gender, and Technology". Pp. 195-203 in *Technology and Society: Building our Sociotechnical Future*, edited by Deborah G. Johnson and J. M. Wetmore. Cambridge, Massachusetts: MIT Press

2) Volti, Rudi. 2004. "The Dawn of the Motor Age, 1886-1905". Pp. 1-21 in *Cars and Culture*. Westport, CT: Greenwood Press

3) Volti, ch. 12, "Newspapers", pp. 217-21

### May 5 **The Diffusion of Technology**

#### Required reading:

Volti, ch. 4, "The Diffusion of Technology"

#### Recommended reading:

1) Einsiedel, Edna F. 2009. "Patents in the Public Sphere: Public Perceptions and Biotechnology Patents". Pp. 51-63 in *Emerging Technologies: From Hindsight to Foresight*, edited by Edna F. Einsiedel. Vancouver, BC: UBC Press

2) Goyder, John. 2005. "Technological Diffusion". Pp. 75-91 in *Technology and Society: A Canadian Perspective 2<sup>nd</sup> Edition*. Peterborough: Broadview Press

May 9 **Technology and its Creators**

Required reading:

Volti, ch. 16, "Technology and its Creators: Who's in Charge of Whom?"

Recommended reading:

- 1) Heilbroner, Robert L. 2009. "Do Machines Make History". Pp. 97-106 in *Technology and Society: Building our Sociotechnical Future*, edited by Deborah G. Johnson and Jameson M. Wetmore. Cambridge, Massachusetts: MIT Press
- 2) Macionis, John J., Linda M. Gerber. 2011. "Gerhard and Jean Lenski: Society and Technology". Pp. 81-86 in *Sociology: Seventh Canadian Edition*. Toronto: Pearson
- 3) Volti, ch. 12, "Printing", pp. 209-16

May 10 **Organizations and Technological Change**

Required reading:

Volti, ch. 17, "Organizations and Technological Change"

Recommended reading:

- 1) Feagin, Joe R. and Robert Parker. 1996. "The Rise and Fall of Mass Rail Transit". Pp. 385-90 in *Readings for Sociology*, edited by Garth Massey. New York: Norton
- 2) Lowe, Graham S. 1993. "Corporate Capitalism and the Administrative Revolution." Pp. 25-37 in *Work in Canada: Readings in the Sociology of Work and Industry*, edited by Graham S. Lowe and Harvey J. Krahn. Scarborough: Nelson Canada
- 3) Weber, Max. 2007/1946. "The Characteristics of Bureaucracy." Pp. 113-16 in *Seeing Ourselves: Classic, Contemporary, and Cross-Cultural Readings in Sociology*, edited by John J. Macionis et al. Toronto, Ontario: Pearson Education Canada

May 11 **MIDTERM EXAMINATION:** regular class time and location

May 12 **Governing Technology**

Required reading:

Volti, ch. 18, "Governing Technology"

Recommended reading:

- 1) Bereano, Phillip. 2003. "Technology is a Tool of the Powerful." Pp. 85-90 in *Computers, Ethics, and Society*, ed by M. David Erman and M. S. Shauf. NY: Oxford
- 2) Burgess, M. and J. Tansey. 2009. "Technology, Democracy and Ethics: Democratic Deficit and the Ethics of Public Engagement". Pp. 275-86 in *Emerging Technologies: From Hindsight to Foresight*, ed by E. F. Einsiedel. Vancouver: UBC Press
- 3) Winner, Langdon. 1993. "Artifact/Ideas and Political Culture" Pp. 283-92 in *Technology in the Future*, edited by Albert H. Teich. New York: St. Martin's Press
- 4) Volti, ch. 6, "Economic Systems, Government Policies, and the Environment", pp. 111-14

May 16 **Technology and Jobs: Part 1**

Required reading:

Volti, ch. 10, "Technology and Jobs: More of One and Less of the Other"

Recommended reading:

- 1) Fraser, Jill Andresky. 2007. "They Used to Use a Ball and Chain: Technology's Impact on the Workplace." Pp.140-49 in *The Transformation of Work in the New Economy*, Robert Perrucci and Carolyn Cummings Perrucci. L.A., CA: Roxbury

- May 16 **Technology and Jobs: Part 1 (cont'd)**  
 2) Heron, Craig. 1993. "The Crisis of the Craftsman: Hamilton Metal Workers in the Early 20th Century." Pp. 4-13 in *Work in Canada: Readings in the Sociology of Work and Industry*, edited by Graham S. Lowe and Harvey J. Krahn. Scarborough, Ontario: Nelson Canada  
 3) Volti, ch. 9, "Work in Non-industrial Societies"
- May 17 **Technology and Jobs: Part II**  
Required reading:  
 Volti, ch. 11, "Technological Change and Life on the Job"  
Recommended reading:  
 1) Graham, Laurie. 2007. "Inside a Japanese Transplant." Pp. 351-67 in *The Transformation of Work in the New Economy*, Robert Perrucci and Carolyn Cummings Perrucci. Los Angeles, California: Roxbury Publishing Co.  
 2) Reiter, Ester. 1993. "Working at a Burger King Outlet." Pp. 369-79 in *Work in Canada: Readings in the Sociology of Work and Industry*, edited by Graham S. Lowe and Harvey J. Krahn. Scarborough, Ontario: Nelson Canada  
 3) Ritzer, George. 2008. "Control: Human and Non-human Robots". Pp. 115-139 in *The McDonaldization of Society*, George Ritzer. Thousand Oaks, CA: Pine Forge
- May 18 **The Electronic Media**  
Required reading:  
 Volti, ch. 13, "The Electronic Media"  
Recommended reading:  
 1) Burgess, Jean and Joshua Green. 2009. "YouTube's Cultural Politics". Pp. 75-99 in *YouTube*, Jean Burgess and Joshua Green. Malden, MA: Polity Press  
 2) Chadwick, Andrew. 2006. "The Political Economy of Internet Media". Pp. 289-316 in *Internet Politics: States, Citizens, and New Communication Technologies*, Andrew Chadwick. New York: Oxford  
 3) Monahan, Torin. 2009. "Questioning Surveillance and Security". Pp. 537-557 in *Technology and Society: Building our Sociotechnical Future*, edited by Deborah G. Johnson and Jameson M. Wetmore. Cambridge, Massachusetts: MIT Press
- May 19 **Medical & Biological Technologies**  
Required reading:  
 Volti, ch. 7, "Medical and Biological Technologies"  
Recommended reading:  
 1) Bubela, Tania and T. Caulfield. 2009. "When Human Dignity is Not Enough: Embryonic Stem Cell Research and Human Cloning in Canada". Pp. 161-84 in *Emerging Technologies: From Hindsight to Foresight*, ed. by E. F. Einsiedel. Vancouver: UBC Press  
 2) Colen, B.D. 2000. "Organ Concert". Pp. 360-65 in *Technology and Society: A Bridge to the 21st Century*, ed. by Linda S. Hjorth. Columbus, Ohio: Prentice Hall  
 3) Leo, Jonathan. 2007. "American Preschoolers on Ritalin". Pp. 392-401 in *Sociological Odyssey*, edited by Patricia A. Adler and Peter Adler. Belmont, CA: Thomson
- May 20 **FINAL EXAMINATION:** regular class time and location