

**LAKEHEAD UNIVERSITY**  
**DEPARTMENT OF SOCIOLOGY**  
**Technology and Society**  
**Sociology 2755FA 2012**

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UC0038

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Office Hours: Tues. 1:00-2:00 PM & Thurs. 1:00-2:00 PM

Sociology Department Website: <http://sociology.lakeheadu.ca>

Fall 2012

Wed.. 7:00-10:00 PM

ATAC 2001

**Course Description**

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

**Required Reading Material**

Volti, Rudi. 2010. *Society and Technological Change, 6th Edition*. New York: Worth Publishers

**Examinations**

There are 2 examinations scheduled throughout the course of study. The exams will be based on the required readings and all classroom activities (lectures, videos, discussions). The exams may include short-answer, essay, and multiple-choice questions. Please see the Grading Scheme for the weighting of exams, and the Course Schedule for examination dates.

**Class Attendance**

You should make every effort to attend all classes. Reading the required course textbook is not a substitute for attending classes. Course examinations will, in part, cover material which will only be made available during classes (lectures, videos, activities). You should ensure that you are prepared for classes by reading your assigned chapters *before* the classes in which the chapters are addressed. See the Course Schedule below for reading dates.

**Grading Scheme**

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

**COURSE SCHEDULE** (subject to minor changes)

Sept. 12 **What is Technology?**

Required reading:

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

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

Sept. 19 **The Two Faces of Technology**

Required reading:

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

Volti, ch. 8, "Genetic Technologies"

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.

Sept. 26 **Theories of Technological Change: Part 1**

Required reading:

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

Volti, ch. 4, "Scientific Knowledge and Technological Advance"

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

Oct. 03 **Theories of Technological Change: Part 2**

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

Oct. 10    **Theories of Technological Diffusion**

Required reading:

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

Volti, ch. 12, "Printing"

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

Oct. 17    **Technology and Ethics**

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

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:

Oct. 24    **MIDTERM EXAMINATION:** regular class time and location

Oct. 31    **Technology and Jobs: Part 1**

Required reading:

Volti, ch. 9, "Work in Non-industrial Societies"

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

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

Nov. 7    **Technology and Jobs: Part 2**

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

Nov. 14 **Surveillance Technologies**

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

Nov. 21 **Technology and Organizations**

Required reading:

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

Volti, ch. 6, "Technology, Energy, and the Environment"

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

Nov. 28 **Technology and Government**

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 Ertman 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

T.B.A. **FINAL EXAMINATION:** location, date and time to be announced