

COMS 623: Social Contexts of Technology

Dept. of Communication and Culture

University of Calgary

Tue, 2:00-4:50 Fall 2012

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Overview:

Course description. This course will investigate key theoretical ideas, issues and debates surrounding the roles and uses of technology within contemporary societies. The course will focus on communications and information technologies as well as a range of other technologies that serve as exemplars for understanding how and why technologies develop, change, succeed or fail and the multi-directional dynamics of technology and society.

Different theoretical perspectives on technology will be explored to understand the central debates and inform discussions on issues ranging from access, culture and identity, to technology divides, commodification, ownership and control,

Objectives. By the end of the course, students should:

- Be conversant with a variety of theoretical perspectives on technology and society
- Be able to think critically about the roles and uses of technology in modern societies, including their design, marketing, consumption and use, and their governance
- Be familiar with processes and relevant actors and institutions that shape and are shaped by technologies
- Have a solid understanding of central questions, concepts and debates within communications studies, science, technology and society studies, innovation studies, and related fields (e.g., culture, technology and development, environment and sustainability)

Readings:

A list of readings will be provided on the first day of class. Most of these will be available through class or Blackboard. Students will be expected to come prepared and to have done the readings in advance.

Course organization:

The course is organized as a seminar, emphasizing weekly discussions and students' reflections on the readings and other relevant topics. Regular, timely and meaningful participation and seminar lead discussion responsibilities are key factors in evaluations. Research papers will be judged according to the extent and critical analysis of the literature investigated and utilized and the application of theoretical insights to the topic.

Evaluation areas:

1. Reading responses		
4 in total @ 5% each		20%
2. Participation		30%
Lead one seminar	20%	
General participation	10%	
3. Research Paper		50%
Written paper	40	
Oral presentation	10	

Brief description of assignments:

- **Reading responses:** On most weeks, students will have the opportunity to prepare a brief written response (~600 words) to a set of two of the assigned readings for the day. Your response should summarize the key points of the readings and present your views or reactions to them. To further class discussion and collaboration, students will post their responses to Blackboard so that classmates can read and comment on them. A total of four responses are due over the course of the term.
- **Participation:** Seminar classes work best when everyone comes prepared and contributes to class discussion. Effective participation requires you to critically engage with ideas presented in the readings as well as ideas presented in class. Participation will be evaluated on two aspects:
 - First, you will be asked to lead one seminar discussion. This entails preparing a brief presentation based on the week's readings and leading a class discussion. An outline of your presentation should be submitted prior to class.
 - Second, you will be evaluated on your overall participation, both in class and online (via Blackboard).
- **Research paper:** This constitutes the main assignment of the course. Each student is a research paper of about 18-20 pp. (~5000 words) on a topic that builds upon concepts and ideas introduced in the course. Students are encouraged to choose a topic that relates to their personal research interests. Topics must be approved in advance by the instructor. Papers are due on December 4 at the beginning of class.
 - In addition, students will give a formal presentation (~15 min.) on their research paper on the second-to-last and the last day of class.

Assignments should be *double-spaced* in suitable font such as Times New Roman 12 point. References and bibliographic information should be formatted in an accepted academic style; consult a style manual if necessary. Proper spelling and grammar are expected.

Late assignments are discouraged. A penalty of one sub-grade (e.g., A- to B+) will be assessed for each day an assignment is late. After 5 days, late assignments will **NOT** be accepted. Under exceptional circumstances (e.g., medical illness), students may petition for an extension.

NOTE:

It is the student's responsibility to keep a copy of each submitted assignment.

Note: Please hand in your essays directly to your tutor or instructor if possible. If it is not possible to do so, a daytime drop box is available in SS320; a date stamp is provided for your

use. A night drop box is also available for after-hours submission. Assignments will be removed the following morning, stamped with the previous day's date, and placed in the instructor's mailbox.

Grading System - The following grading system is used in the Faculty of Graduate Studies.

Grade	Grade Point Value	Graduate Description
A+	4	Outstanding
A	4	Excellent – superior performance showing comprehensive understanding of the subject matter
A-	3.7	Very good performance
B+	3.3	Good performance
B	3	Satisfactory performance
<p>Note: The grade point value (3.0) associated with this grade is the minimum acceptable average that a graduate student must maintain throughout the program as computed at the end of each registration anniversary year of the program.</p>		
B-	2.7	Minimum pass for students in the Faculty of Graduate Studies
<p>Note: A student who receives a B- or lower in two or more courses will be required to withdraw regardless of their grade point average unless the program recommends otherwise. Individual programs may require a higher minimum passing grade.</p>		
C+	2.3	
C	2.0	All grades below B- are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements. A student who receives a grade of F will normally be required to withdraw unless the program recommends otherwise.
C-	1.7	
D+	1.3	
D	1.0	
F	0.0	

Plagiarism

Using any source whatsoever without clearly documenting it is a serious academic offense. Consequences include failure on the assignment, failure in the course and possibly suspension or expulsion from the university.

You must document not only direct quotations but also paraphrases and ideas where they appear in your text. A reference list at the end is insufficient by itself. Readers must be able to tell exactly where your words and ideas end and other people's words and ideas begin. This includes assignments submitted in non-traditional formats such as Web pages or visual media, and material taken from such sources.

Please consult your instructor or the Writing Centre (SS 106, efwr.ucalgary.ca) if you have any questions regarding how to document sources.

Students with Disabilities

If you are a student with a disability who may require academic accommodation, it is your

responsibility to register with the Disability Resource Centre (220-8237) and discuss your needs with your instructor no later than fourteen (14) days after the start of the course.

Students' Union

For details about the current Students' Union contacts for the Faculty of Arts, see www.comcul.ucalgary.ca/su

Graduate Students' Association

For details on the Graduate Students' Association, please see <http://www.ucalgary.ca/GSA/>

Student Ombudsman

For details on the Student Ombudsman, please see <http://www.ucalgary.ca/GSA/services/ombudsperson.html>

Emergency Evacuation and Assembly Points

For information on the emergency evacuation procedures and assembly points, please see <http://www.ucalgary.ca/emergencyplan/assemblypoints>

"SAFEWALK" Program -- 220-5333

Campus Security will escort individuals day or night -- call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phone located at most parking lot booths.

Ethics

The instructor will obtain course-based ethics approval from the faculty research ethics committee. Whenever you perform research with human participants (ie. surveys, interviews, observation) as a part of your university studies, you are responsible for following university research ethics guidelines. Your instructor must review and approve of your research plans and supervise your research. For more information about your research ethics responsibilities, see

Conjoint Faculties Research Ethics Board (CFREB)

<http://www.ucalgary.ca/research/cfreb>

Wk	Date	Topic	Readings
1	9/11	Introduction to the course Visions & versions of technology	<ul style="list-style-type: none"> - Franklin, The real world of technology, ch. 1 - Pacey, ch. 1-2: Technology: practice and culture; beliefs about progress - Ellul, J. The technological order
2	9/18	Theoretical lenses for understanding: social shaping approaches	<ul style="list-style-type: none"> - Feenberg, The parliament of things - Pinch, T. and W. Bijker (1997). The social construction of facts and artifacts - Law, J. (1992). Notes on the theory of the actor-network - Klein and Kleinman, The social construction of technology: structural considerations - Winner, Do artifacts have politics?
3	9/25	Other theoretical lenses	<ul style="list-style-type: none"> - J. Schot and A. Rip (1996), The past and future of CTA - Sundbo, J., (1995), Three paradigms in innovation theory - Wyatt (2008), Technological determinism is dead; long live technological determinism
4	10/2	The spectrum of 'use': 'users', non-users	<ul style="list-style-type: none"> - Oudshoorn and Pinch, Introduction: How users and non-users matter - Wyatt, Non-users also matter: the construction of users and non-users of the internet. - Berg and Lie, Feminism and constructivism: do artifacts have gender?
5	10/9	Learning from technology 'failures'	<ul style="list-style-type: none"> - Lipartito, K. (2003) Picturephone and the information age: the social meaning of failure. - Ananny, M. and N. Winters (2007), Designing for development: understanding one laptop per child in its historical context. Information and communication technologies and development, 1-12 - Tabb, 2008, A Chicken in Every Pot; One Laptop per Child: - the trouble with global campaign promises - Gregory, et. al., Technological stigma
6	10/16		NO CLASS
7	10/23	Technology issues	<p>Technological issues – standards of “fit”: Rights, access, ethics, risks and benefits</p> <ul style="list-style-type: none"> - Ali, 2011. The power of social media in developing countries: new tools for closing the global digital divide and beyond - Smith, The alternative technology movement
8	10/30	Technology issues – sites of (dis)order: the body; the home; nature	<ul style="list-style-type: none"> - Taylor, Image of contradiction: obstetrical ultrasound in American culture - Raucher, What they mean by good science: the medical community's response to boutique fetal ultrasounds - (chapter from Wired wilderness) <p>Gordon Gow:</p>
9	11/6	Technology issues	<p>Technological issues – control, democratization, and governance</p> <ul style="list-style-type: none"> - Sclove, R. (1999), Design criteria and political strategies for democratizing technology - Genus, A. (2006), Constructive technology

			assessment as democratic, reflective discourse. - RICHARD HAWKINS
10	11/13		READING DAYS
11	11/20	Field Trip: Surveillance technologies	
12	11/27		Class Presentations
13	12/4		Class Presentations

Ali, 2011. The power of social media in developing countries: new tools for closing the global digital divide and beyond. Harvard human rights journal, v. 24, 185-219.

Ananny, M. and N. Winters (2007), Designing for development: understanding one laptop per child in its historical context. Information and communication technologies and development, 1-12

Ellul, J. (1964), The technological society. New York: Alfred Knopf.

Flynn, J. (2003). Nuclear stigma. N. Pidgeon, ed., The social amplification of risk. Cambridge: Cambridge Univ. Press.

Feenberg, A. (1991). The parliament of things (ch. 1). In A. Feenberg, Critical theory of technology. Pp. 3-20. New York: Oxford University Press. Pp. 3-20

Franklin, U. (1999) *The Real World of Technology*. (CBC Massey lectures series.) Concord, ON: House of Anansi Press. Pp. 1-26. The lecture can be heard at: <http://www.cbc.ca/ideas/massey-archives/1989/11/07/1989-massey-lectures-the-real-world-of-technology/>

Genus, A. (2006), Constructive technology assessment as democratic, reflective discourse. Technological forecasting and social change. 73:1, 13-26.

Gregory, R., J. Flynn, P. Slovic (1995) Technological stigma. American Scientist, 83:220-223.

Klein and Kleinman(2002) The social construction of technology: structural considerations. Science, technology, and human values. 27:1, 28-52.

Law, J. (1992). Notes on the theory of the actor-network. Systems Practice, 5:4, pp. 379-393.

Lipartito, K. (2003) Picturephone and the information age: the social meaning of failure. Technology and culture, 44:1, 50-81.

Oudshoorn, N. and T. Pinch (2003), Introduction: How users and non-users matter. In N. Oudshoorn and T. Pinch, eds., How users matter: the co-construction of users and Technology. Cambridge, Mass.: MIT Press. Pp. 1-25.

Pacey, A. (1990). The culture of technology. (ch. 1 & 2). Cambridge: MIT Press. Pp. 1-34.

- Pinch, T. and W. Bijker (1997). The social construction of facts and artifacts. In W. Bijker, T. Hughes, and T. Pinch, eds., *The social construction of technological systems*. Cambridge: MIT Press. Pp. 17-50.
- Raucher, M. (2009) What they mean by 'good science': the medical community's response to boutique fetal ultrasounds. *Journ of Medicine and Philosophy*, 34: 528-544
- J. Schot and A. Rip (1996), The past and future of CTA. *Technological forecasting and social change*. V. 54, 251-268.
- Sclove, R. (1999), Design criteria and political strategies for democratizing technology. In R. Schomberg, ed., *Democratizing technology: theory and practice of a deliberative technology policy*. Hengelo: International Centre for Human and public Affairs.
- Smith, A. (2005). The alternative technology movement: an analysis of its framing and negotiation of technology development. *Research in human ecology*, 12:2, 106-119.
- Sundbo, J., (1995), Three paradigms in innovation theory. *Science and public policy*,
- Taylor, JS, Images of contradiction: obstetrical ultrasound in American culture. In S. Franklin and H. Ragone, ed.s, *Reproducing reproduction: kinship, power, and technological innovation*. Philadelphia: Univ of Pennsylvania press.
- Winner, L. (1986). Do artifacts have politics? In L. Winner, *The whale and the reactor: a search for limits in the age of high technology*. ChicagoL Univ. of Chicago Press, 19-39.
- Wyatt, S. (2008), Technological determinism is dead; long live technological determinism. E. Hackett, O. Amsterdamska, M. Lynch, J. Wajcman, eds., *The handbook of science and technology studies*. Cambridge, Mass.: MIT Press. Pp. 165-180.
- Wyatt, S. (2003), Non-users also matter: the construction of users and non-users of the internet. N. Oudshoorn and T. Pinch, eds., *How users matter: the co-construction of users and technology*. Cambridge: Massachusetts Institute of Technology Press. Pp. 67-79.