The University of Western Ontario Faculty of Information and Media Studies

MLIS 9707A, LIS PhD 9862A, MS 9235A Technological Society: Inequality, Power, and Social Networks

Fall 2012

Classes

Time: Fridays 9:00-11:50 am

Location: NCB 295

Instructor: Prof. Anabel Quan-Haase (Ph.D.)

Associate Professor FIMS/Sociology

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Office Hours: Fridays 12-1pm.

If these times are not convenient, we can also meet by appointment.

1. Course Description

Technology has become such an intrinsic part of our everyday lives in the West that we need to carefully consider its social, economic, and political implications. The aim of this class is to examine the intersection of technology and society by systematically analyzing technology design, implementation, and use. The course provides a solid understanding of the role of technology in society (historically and theoretically) and gives students the tools they need to embark on a critical and in-depth inquiry of our technological society. Key topics include privacy, social networks, inequality, digital skills, and digital creativity.

2. Course Objectives

Students completing this course will:

- 1. To give students a thorough grounding in the key issues, texts, traditions and debates within theories of technology and society.
- 2. Understand new trends in the design and implementation of technologies through reading current articles.
- 3. To learn how to examine the use and social consequences of technologies.
- 4. To examine the social dimensions of media technologies, including their practices, social implications, and ethical dimensions.
- 5. To learn about the history of technology (from the book and printing press through the telephone and radio, television, the web and cellphones).

3. Prerequisites

None.

4. Resources

The class materials are accessible online.

Text: Quan-Haase, A. (2012). *Technology and society: Inequality, Power, and Social Networks*. Don Mills: Oxford University Press. ISBN: 9780195437836.

You can purchase a copy of the textbook at the UWO bookstore or online at http://www.bookstore.uwo.ca. There are also copies available at the UWO library.

If you misplace this course outline, you can download another copy from the course website.

5. Course Requirements and Grading

		Proportion of
Requirements	Date	Test Grade
Participation	Throughout	15%
Discussion Facilitation	TBA	15%
Critique	Oct. 5	20%
Creative Design Group Work	Nov. 2	10%
Presentation of Final Paper	TBA	10%
Final Paper	Nov. 30	30%
Total		100%

Students are expected to do the weekly readings. The weekly readings will be the basis for class discussions and the assignments. Each student will facilitate a class on a topic of their choice. There are a total of 2 individual assignments and a class presentation based on the final paper. The final assignment consists of a research project that you will develop yourself. Detailed information on each of the assignments will be provided in the introductory lecture.

6. A few words about the assignments and deadlines

I will not give extensions except under special circumstances. If you cannot meet the deadline, notify the instructor as soon as possible, preferably before the scheduled date and present adequate documentation. Late papers without permission are subject to a cumulative penalty of 4 points per day.

Please also submit a digital copy of your work to aquan@uwo.ca.

6.1 Participation

The course will use a seminar format where we will engage each other's ideas and opinions to negotiate our learning. Students are requested to come prepared to class, to participate actively in the discussions and to allow others space to express their views. Participation grades will be based on level of engagement in the course discussions and preparedness. Students are expected to attend all classes. If you cannot attend a class, please notify the instructor about the reasons for your absence. Missing classes without notifying the instructor will lead to a lower participation mark.

6.2 Discussion Facilitation

You will be responsible for leading a 15 minute class presentation and 5-10 minute discussion of a topic of your choice (see list of topics below). The first day of class a list with the weekly readings and topics will be distributed and students will be assigned a set of papers and a topic to discuss. The main objective in your facilitation will be to ensure that the class gains a firm and critical grasp of the topic, key concepts, and theories. You are free to facilitate the discussion in any way you choose (e.g. through the use of exercises, examples, cases, etc.). You can, for example, identify 2-3 general questions based on the readings and use these questions to guide discussion on the readings of the week. You should also try to identify links between the weeks' readings and material covered earlier in the course (if applicable). The facilitation will be graded based on comprehensive coverage of subject matter, pertinent links with other assigned readings, critique and questions raised and handling of discussion.

6.3 Critique

For the critique, select a paper, report, or web site on an information or communication technology of your choice and provide a detailed evaluation of it. Your critical evaluation should focus on theoretical, methodological, and practical concerns. You are expected to identify and evaluate key aspects of the paper in terms of weaknesses and strengths.

The assignment will be about 4 pages in length (double spaced, 12 font size) and is due on **October 5** in class.

6.4 Creative Design Group Work

This is a creative project. It can consist of a tweet, a blog post, or a web site analysis. It is meant to expose students to digital content and engage them with the ephemerality of the digital audience.

A 1-2 page summary is due on Nov. 2 reporting on the project goals, and best practices. [This is a very informal report that stresses creativity.]

6.5 Final Paper

The purpose of this assignment is to provide you with a good understanding of one information or communication technology. In the project you will describe what information or communication technology you chose to focus on, what its history is, how diffused it is, and what social implications the technology has had so far. This project should give you with a good understanding of how the technology was designed (utopian visions of designers), what other factors influenced its development and implementation, and how it has affected society (in expected and unexpected ways). Finally, the project should describe a future application of the technology in a new area.

The assignment will be about 10 pages in length (double spaced, 12 font size) and is due on **November 30** in class. A presentation of the final paper and the lessons learned will be shared with the class on **a TBA** time, lasting about 10-15 minutes.

7. Plagiarism

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/handbook/appeals/scholastic_discipline_grad.pdf

As written work will be assigned, please note that "All required papers may be subject to submission for textual similarity review to the commercial plagiarism-detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com)."

8. Cancellation

Please check your email regularly to keep up-to-date with class cancellations in the event of illness. Should your professor cancel a class, please assume that the class facilitation will take place on the following week. We can always schedule several students to present in one class. **Thanks for your understanding.**

9. Course Schedule

It is your responsibility to consult the course schedule in order to keep up with the course readings and ensure you do not miss the deadlines for the assignments. The course schedule outlines the topics to be discussed each week, the readings corresponding to the lectures, and deadlines for the assignments. Assigned readings should be completed **before** attending the class.

Class Schedule

INTRODUCTION TO THE TOPIC

1 Sept. 7 Introduction to the Course: The Technological Society

What is the range of technologies available? What classification systems exist?

Overview of course.

Introduction of key terms. Definition of technology. To discuss the relevance of studying the intersection between technology and society.

Debate on *simulation* and *augmentation*. Our Cyborg society. *Readings*:

- a) Mann, S., & Niedzviecki, H. (2001). *Cyborg: Digital destiny and human possibility in the age of the wearable computer.*Toronto: Doubleday Canada. [An exploration of the wearable computer and how it affects humans and society.]
- b) Tenner, E. (2003). *Our own devices: The past and future of body technology*. New York: Alfred A. Knopf.
- →Assigning Topics and Dates for Class Facilitation.
- →Formation of Group and Creative Design.

2 Sept. 14 Theoretical Perspectives on Technology

To address the fundamental difference between utopian and dystopian views of technology.

To compare and critically examine a wide range of theories on the complex interrelationship between society and technology.

Reading assignment.

- a) Pinch, T., & Bijker, W. E. The social construction of facts and artifacts: Or how the sociology of science and the sociology of technology might benefit each other. Social Studies of Science, 14, 399-441. [The paper describes an integrated social constructivist approach towards the study of science and technology. From this perspective, science and artifacts are defined as social constructs.]
- b) Klein, H. K., & Kleinman, D. L. (2002). The social construction of technology: Structural considerations. *Science Technology Human Values*, 27(1), 28-52.
- c) Additional Readings: Tenner, E. (1996). Why things bite back: Technology and the revenge of unintended consequences. New York: Knopf. [The book stresses the potential of technology for unintended consequences, without falling into dystopian rhetoric and completely rejecting technology.]

3 Sept. 21 The Adoption and Diffusion of Technological Innovations

To understand the process that underlies the adoption of technological innovations and the factors affecting this process. To examine key adopter groups, how the groups differ, and their characteristics.

Reading assignment.

- a) Kim, Y., & Crowston, K. (2011). Technology adoption and use: Theory review for studying scientists' continued use of cyber-infrastructure. In Proceedings of the American Society for Information Science and Technology Annual Meeting. New Orleans. [As ICTs grow in popularity, understanding adoption and use of them is very critical in terms of design and development and deployment of new information systems and technologies.]

 Retrieved from: http://crowston.syr.edu/node/417
- b) Martin, K., & Quan-Haase, A. (2011). Seeking knowledge: The adoption of ebooks by historians. In Proceedings of the ASIS&T Annual Meeting (New Orleans, October 9-13: Wiley-Blackwell).
- c) <u>Additional Reading</u>: Rogers, E. M. (1983). *Diffusion of innovations* (3rd ed.). New York, NY: Free Press.

Sept. 28 Class Cancelled [away at conference] Make up class during READING WEEK (sorry).

4 Oct. 5 Techno-Social Designing

To look at technological design and how it intersects with society and information seeking.

To trace the development of technopoles and uncover their social significance in the modern city and economy. Understanding serendipity and design.

Reading assignment.

- a) <u>Kaptelinin, V., & Nardi, B. A. (2012). Activity theory in HCI:</u> Fundamentals and reflections. Morgan & Claypool Publishers.
- b) Farooq, U., Ganoe, C.H., and Carroll, J.M. 2008. Designing for creativity in computer supported cooperative work.

 International Journal of e-Collaboration, 4(4), 51-75.
- c) Additional Reading: Castells, M., & Hall, P. G. (1994). Technopoles of the world: The making of twenty-first-century industrial complexes. London: Routledge. [This book provides an overview of the concept of technopoles and describes their social and economic relevance.]
- d) Additional Reading: Schumpeter, J. A. (2004). The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle [1934]. New Brunswick, NJ: Transaction Publishers. [This is the most influential social, economic, and political analyses of the link between economic development and the creative process.]

KEY TOPICS OF TECHNOLOGY AND SOCIETY

5 Oct. 12 The Labour of Technology

To examine the role technology has played historically in the division of labour and resulting labour struggles.

To analyze the relationship between technology and immaterial labour.

Reading assignment.

- a) Fuchs, C. (2010). Labor in informational capitalism and on the Internet. *The Information Society*, 26(3), 179-196.
- b) Brown, B., & Quan-Haase, A. (2012). 'A workers' inquiry 2.0': An ethnographic method for the study of produsage in social media contexts. *TripleC*, 10(3)
- c) Additional Reading: Dyer-Witheford, N. (1999). *Cyber-Marx: Cycles and circuits of struggle in high-technology capitalism*. Urbana, IL: University of Illinois Press. [Uses Marxist and political economy approaches to examine new developments in cyberspace.]

→ASSIGNMENT 1: "CRITIQUE" DUE IN CLASS.

6 Oct. 19 Web 2.0, Social Media & Audiences.

Understanding social media in a high-tech society: speed, capital, and fast evolution. How do we connect with audiences?

Reading assignment.

- a) Chu, M. and Meulemans, Y.N. (2008). "The problems and potential of Myspace and Facebook usage in academic libraries", *Internet Reference Services Quarterly*, 13 (1), 69-85.
- b) Collins, G. (2011). Social Media Use by Ontario University Libraries. *AQH place online*.

Discussion of the ethical uses of social media in the library.

READING WEEK IN MLIS Programme: Make-up Class.

7 Oct. 26 Privacy: The flow of data through networks.

An exploration of how privacy affects our daily lives.

Reading assignment.

- a) boyd, d. and Hargittai, E. (2010). Facebook privacy settings: Who cares? *First Monday*, 15(8).
- b) Raynes-Goldie, K. (2010). Aliases, creeping, and wall cleaning: Understanding privacy in the age of Facebook. *First Monday*, 15(1).
- c) Additional Reading: Lenhart, A., and Madden, M. (2007). Teens, privacy and online social networks: How teens manage their online identities and personal information in the age of MySpace. PEW Internet and American Life Project.

8 Nov. 2 Capitalizing on the Web: Community in the Network Society

To investigate the Community Question and its link to industrialization.

To provide an overview of the social capital concept and its relevance to community.

Tweeting and its effects on communities.

Reading assignment.

- a) Wellman, B., Quan-Haase, A., Witte, J., & Hampton, K. (2001). Does the Internet increase, decrease, or supplement social capital? Social networks, participation, and community commitment. *American Behavioral Scientist*, 45(3), 437-456.
- b) Chen, G. M. (2011). Tweet this: A uses and gratifications perspective on how active Twitter use gratifies a need to connect with others. *Computers in Human Behavior*, 27(2), 755-762.
- c) <u>Additional Reading</u>: Rainie, L., & Wellman, B. (2012). Networked: The new social operating system. Cambridge, MA: MIT Press.
- d) <u>Additional Reading</u>: Atkinson, C. (2009). The backchannel: How audiences are using Twitter and social media and changing presentations forever. Berkeley, CA: New Riders.

 \rightarrow Discussion of final assignments: questions and answers.

9 Nov. 9 The Digital Humanities: Technology in the Humanities & the Development of Digital Skills

What does the movement of the digital humanities constitute? What are the key developments within the digital humanities?

Reading assignment.

- a) Toms, E. G., & O'Brien, H. L. (2008). Understanding the information and communication technology needs of the e-humanist. *Journal of Documentation* 64(1), 102-130.
- b) <u>Tahir, Muhammad, Khalid Mahmood, and Farzana Shafique.</u> (2010) Use of Electronic Information Resources and Facilities by Humanities Scholars. *The Electronic Library* 28(1), 122-26.
- c) Additional Reading: Borgman, CL. (2010). The Digital Future is Now: A Call to Action for the Humanities. *Digital Humanities Quarterly* 4(1).

Discussion around how we search information as users and how digitization has affected this process.

Overview on how to write a paper.

→**Q&A** on Final Projects.

CONCLUDING CLASSES

10	Nov. 16	Discussion/Presentation of final projects: questions and
		answers.

11 Nov. 23 Discussion/Presentation of final projects: questions and answers.

12 Nov. 30 Ethical Implications of Technology

What are the ethical considerations when adopting technology:

For Libraries 2.0

For Professionals 2.0

For Produsers

For Millennials.

For Haves/Have-Nots

No readings!

→Final Projects Due via Email.

13 Dec. 7 Review Class

Reflections on Creative Design, Creativity in the Humanities,

Digital Work/Play.

Showcase of Group Projects.

Show & Tell.

 \rightarrow Final Projects Returned with Comments.