

Arts & Science 3B03 – Technology & Society I

2015-16 (Term 1)

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Office Hours: W, 1-2:30pm (or by appt)

Class Times: W, 2:30-4:20 pm; Th, 3:30-4:20pm
Burke Science Building 104

Course Description:

In this course, we will explore the multiple and complex relationships between technology and society, considering the extent to which these terms mutually constitute each other. Taking an integrative, inquiry-based approach, we will investigate various perspectives on the technology-society nexus, and consider the impacts of such intersections on a range of social issues (e.g., privacy, trust, identity, community) and within diverse social contexts (e.g., work, war, health care). Throughout, these topics will be taken up and assessed with the assistance of both historical and contemporary examples.

The course will have a seminar format. During the Wednesday meetings, I will introduce the topics and readings, but students will also be expected to contribute questions and objects of analysis, to participate in discussions, to work in small groups, and to help shape the flow and direction of our work. In most cases, Thursday classes will be led by small groups of students, who will be responsible for selecting an issue or example connected to that week's topic and collaboratively facilitating discussion of it.

Course Objectives:

Upon successful completion of this course, students should be able to:

1. Describe, discuss, compare and evaluate a wide range of arguments about the complex interrelations between technology and society
2. Apply and extend scholarly understandings of the technology-society interface in order to conduct insightful analyses of historical and current case studies.
3. Develop, investigate, and respond effectively to compelling and researchable questions about technology and society.
4. Take an active, inquisitive, and analytical approach to their interactions with technology in their daily lives

Required Texts:

There are no texts to purchase for this course; all course readings will be accessible through online channels such as public websites and McMaster's eBook collections and journal databases. Links to these materials will be available on the course Avenue site. See the schedule below for initial reading assignments. Additional readings may be assigned as we move through the course.

Assignments and Evaluation:

Group Exploration/Facilitation	Various (Sept. 24-Nov. 26, 2015)	= 25%
Contribution to Group Newspaper Analysis	Due September 30, 2015	= 5%
Capstone Project Proposal	Due October 21, 2015	= 5%
Newspaper Analysis Case Study	Due November 11, 2015	= 15%
Capstone Paper	Due December 7, 2015	= 40%
Participation	Throughout term	= 10%

Assignment Descriptions & Evaluation Criteria:

Group Exploration & Facilitation (25%)

Working in groups of 3-5, students will be expected to select an example or issue related to the week's theme, and to lead discussion of it during the Thursday class. This will involve locating a brief news article or other introductory source (e.g., a website/video/advertisement) about the

topic/example chosen, preparing 1-2 central questions for discussion, circulating the discussion questions & introductory material in advance, and leading the session on the assigned day. The facilitation should be structured such that all group members participate actively in some way, and should involve no more than 20 minutes of introductory presentation, followed by 25 minutes for group discussion, activities, etc.

Capstone Proposal (5%) and Final Paper (40%)

These assignments ask you to develop, investigate, and respond to a researchable question about the interrelations between technology and society. You will be required to construct a research question of interest to you, to identify and obtain information relevant to answering the question, to evaluate the validity and appropriateness of the evidence, to draw reasoned conclusions, and to communicate a coherent and persuasive response in an essay of 10-12pp in length. Your capstone paper cannot take up the same topic as your group exploration/facilitation, unless it is sufficiently distinctive in approach/focus.

As a first step in this process, you will be required to submit a brief (1-2pp) proposal that outlines your planned research question and indicates its significance, and describes the approach you intend to take to exploring it. The proposal should also include a preliminary discussion of 3-5 scholarly sources of relevance to your research question.

Newspaper Analysis Contribution (5%) and Case Study (15%)

As a class, we will conduct a collaborative analysis of the presence and positioning of technology within *The Hamilton Spectator* at select moments across 2015. We will work together to develop a shared rubric for finding and coding stories relevant to technology, and each student will subsequently be responsible for applying this rubric to one edition of the paper. This material will be collected and entered into a database, forming the basis of a group discussion in which we'll synthesize our findings and consider their implications. Completing these pieces will count toward 5% of your final grade.

Students will also be responsible for selecting one item (news story, advertisement, etc.) from within their assigned newspaper, and writing a 3 page critical analysis that connects that example to issues taken up in class, evaluates its implications and ramifications, and raises questions for further consideration. If possible, these case studies will be collected, along with our shared documentation of the presence of technology in the paper over the year, and published online.

Participation (10%):

Participation in the class process is one of the key indicators of your understanding of the course material. The expectations include: regular attendance, reading the assigned materials, contributing to class discussion, helping to shape the course direction by suggesting questions, topics and areas of focus, completing in class activities, listening respectfully, and engaging with others' comments to further our understandings of the materials and thematics.

A grading rubric, which lists the criteria by which participation will be assessed, will be provided to students early in the term. Students will also be given an opportunity to engage in reasoned self-assessment of their participation over the duration of the course. This self-assessment (which will need to be explicitly justified) will count toward 5% of the final participation grade.

Policy Statements

Assignment Deadlines & Missed/Late Work:

Students are expected to hand in all assignments on the specified due dates. Late submissions will be subject to a penalty of **3%** per day (including weekend days). Assignments submitted after the beginning of class on the due date will be counted as one day late. No assignments will be accepted after the last day of classes (Dec. 8, 2015.) Facilitated discussions **MUST** take place on the scheduled dates. If you are unable to lead the discussion for which you have been scheduled, you

will receive a mark of zero for the assignment unless appropriate documentation is provided.

Given that some course assignments require electronic submission, you should familiarize yourself with the Avenue to Learn dropbox in advance of the deadlines, and ask for assistance as necessary. Problems with electronic submission WILL NOT be accepted as an excuse for lateness.

McMaster Student Absence Form (MSAF):

In the event of an absence for medical or other reasons, students should review and follow the Academic Regulation in the Undergraduate Calendar "Requests for Relief for Missed Academic Term Work." Please also see the MSAF statement on our website (<http://artsci.mcmaster.ca/forms-requests/>) and direct any questions or concerns to Shelley Anderson or Rebecca Bishop in the Arts & Science Program Office as appropriate.

McMaster Policy on Academic Integrity:

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences—e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty, please refer to the Academic Integrity Policy, located at: <http://www.mcmaster.ca/academicintegrity>. The following illustrates only three forms of academic dishonesty: 1) Plagiarism—e.g., the submission of work that is not one's own or for which other credit has been obtained. 2) Improper collaboration in group work. 3) Copying or using unauthorized aids in tests and examinations.

Academic Accommodation of Students with Disabilities:

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or email sas@mcmaster.ca. For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities.

Sustainable Written Work Submission Guidelines

The written work submission guidelines for this course have been chosen to support the more sustainable use of paper, energy and toner. Four levels of criteria have been developed by the Office of Sustainability and encouraged for adoption by professors and faculties. The submission guidelines for this course meet the **Platinum** standard. All written work must be submitted in the following format: double-sided pages, reduced line spacing (1.5 lines), exclusion of title page, sans-serif font. Most work will also be submitted and returned online. For more information about criteria for sustainable written work submissions, visit the Office of Sustainability website: www.mcmaster.ca/sustainability

Course Modifications & Email Contact

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of students to check their McMaster email and course websites weekly during the term and to note any changes. Announcements will be made in class and by using the course email distribution list.

Course Schedule

Note: all readings should be completed **PRIOR** to the W class on the week for which they are assigned

A. Definitions & Theoretical Approaches

Week 1 (September 9,10): Introduction: Popular Visions & Received Views

- In-class screening (W): *Humans*, S1, Ep.1.
- In-class reading/analysis exercise (W/Th): *The Hamilton Spectator* (date TBD)
- **Required Reading:**
 - Franklin, U. (1999). *The Real World of Technology*. Toronto: House of Anansi Press (pp. 1-26).

Week 2 (September 16, 17): Approaches to Understanding the Intersection

- **Required Readings:**
 - Winner, L. (1986). Technologies as forms of life. In *The Whale and The Reactor*. Chicago: University of Chicago Press (pp. 3-18).
 - Bijker, W.E. (2010). How is technology made? That is the question! *Cambridge Journal of Economics*, 34, 63-76.
 - Hayles, N.K. (2012). Tech-TOC: Complex temporalities and contemporary technogenesis. In *How we Think: Digital Media and Contemporary Technogenesis*. Chicago: University of Chicago Press (pp. 85-106 only).

B. Issues in the Intersection

Week 3 (September 23, 24): Control and Trust

- **Required Readings:**
 - Slack, J.D. & Wise, J.M. (2015). Control. In *Culture and Technology* (2nd ed.) (pp. 59-73). New York: Peter Lang.
 - Postman, N. (1993). The broken defenses. In *Technopoly: The Surrender of Culture to Technology* (pp. 71-91). New York: Vintage Books.
 - Waytz, A., Heafner, J., & Epley, N. (2014). The mind in the machine: Anthropomorphism increases trust in an autonomous vehicle. *Journal of Experimental Social Psychology* 52, 113-117.

Week 4 (September 30, October 1): Privacy, Security, and Surveillance

- **Required Readings:**
 - Bauman, Z. & Lyon, D. (2013). In/security and surveillance. In *Liquid Surveillance* (pp. 100-120). Cambridge: Polity Press.
 - Van den Hoven, J. (2006) Nanotechnology and privacy: The instructive case of RFID. *International Journal of Applied Philosophy*, 20, 215-228.
 - Reilly, P. (2015). Every little helps? YouTube, sousveillance and the 'anti-Tesco' riot in Stokes Croft. *New Media & Society*, 17(5), 755-771.

Contribution to Newspaper Analysis due before class on Wednesday, September 30

Week 5 (October 7, 8): Identity

- **Required Readings:**
 - Kelan, E. (2007). Tools and toys: Communicating gendered positions towards technology. *Information, Communication & Society*, 10(3), 358-383.
 - M'charek, A., Schramm, K., & Skinner, D. (2014). Topologies of race: Doing territory, population and identity in Europe. *Science, Technology, & Human Values*, 39(4), 468-487.
 - Marciano, A. (2014). Living in the VirtuReal: Negotiating transgender identity in cyberspace. *Journal of Computer-Mediated Communication*, 19, 824-838.
 - Havstad, J.C. (2010). Human reproductive cloning: A conflict of liberties. *Bioethics*, 24(2), 71-77.

Week 6 (October 14, 15): Fall Break – No classes

Week 7 (October 21, 22): Humanity, Posthumanism, & Transhumanism

○ **Required Readings:**

- Braidotti, R. (2013). Post-anthropocentrism: Life beyond the species. In *The Posthuman* (pp. 55-67 only). Cambridge: Polity Press.
- More, M. (2013). The philosophy of transhumanism. In *The Transhumanist Reader* (pp. 3-17). Chichester: Wiley-Blackwell.
- Robert, J.S. & Baylis, F. (2003). Crossing species boundaries. *American Journal of Bioethics*, 3(3), 1-13.

Capstone Project Proposal due before class on Wednesday, October 21

Week 8 (October 28, 29): Human/Non-Human Encounters

- Guest Lecture (W): Dr. Amelia DeFalco: Human/Non-Human Caregiving
- Guest Lecture (Th): Dr. Hendrik Poinar: De-extinction of the Woolly Mammoth
- **Required Readings: [TBD]**

Week 9 (November 4, 5): Interpersonal Relationships, Communication & Community

○ **Required Readings:**

- Baym, N.K. (2015). Digital media in everyday relationships. In *Personal Connections in the Digital Age* (2nd ed.) (pp.142-173). Cambridge: Polity Press.
- Pendry, L.F. & Salvatore, J. (2015). Individual and social benefits of online discussion forums. *Computers in Human Behavior*, 50, 211-220.
- Sanderson & Cheong (2010). Tweeting prayers and communicating grief over Michael Jackson online. *Bulletin of Science, Technology and Society*, 30(5), 328-340.

C. Sites of Intersection

Week 10 (November 11, 12): Work

○ **Required Readings: (53)**

- Nakamura, L. (2014). Indigenous circuits: Navajo women and the racialization of early electronic manufacture. *American Quarterly*, 66(4), 919-941.
- Ticona, J. (2015). Strategies of control: Workers' use of ICTs to shape knowledge and service work. *Information, Communication, & Society*, 18(5), 509-523.
- Trottier, D. (2014). Crowdsourcing CCTV surveillance on the Internet. *Information, Communication & Society*, 17(5), 609-626.

- **Newspaper Analysis Case Study due before class on Wednesday, November 11**

Week 11 (November 18, 19): Art

○ **Required Readings: (57)**

- Benjamin, W. (1936/1968). The work of art in the age of mechanical reproduction. In H. Arendt (Ed.), *Illuminations* (pp. 217-251). New York: Schocken Books.
- Bazin, A. (1945/2009). The ontology of the photographic image. In L. Braudy & M. Cohen (Eds.), *Film Theory & Criticism* (7th ed.) (pp. 159-163). New York: Oxford University Press.
- McKay, C. (2013). Covert: The artist as voyeur. *Surveillance & Society*, 11(3/4), 334-353.

Week 12 (November 25, 26): Health Care

○ **Required Readings: (56)**

- Allhoff, F. (2009). The coming era of nanomedicine. *The American Journal of Bioethics*, 11(3), 3-11.
- Hogan, A.J. (2013). Set adrift in the prenatal diagnostic marketplace: Analyzing the role of users and mediators in the history of a medical technology. *Technology and Culture*, 54(1), 62-89.
- Oudshoorn, N. (2012). How places matter: Telecare technologies and the changing spatial dimensions of healthcare. *Social Studies of Science*, 42(1), 121-142.

Week 13 (December 2, 3): War

○ **Required Readings: (48)**

- Virilio, P. (2002). The squared horizon. In *Desert Screen: War at the Speed of Light*. London: Continuum (pp. 20-26).
- Slayton, R. (2011). From death rays to light sabers: Making laser weapons surgically precise. *Technology and Culture*, 52(1), 45-74.
- Lin, P., Abney, K., & Bekey, G. (2014). Ethics, war, and robots. In R.L. Sandler (ed.), *Ethics and Emerging Technologies*. Houndmills: Palgrave Macmillan (pp. 349-362).

Capstone Paper due by 5pm on Monday, December 7