

## LIBR 559A: Sociotechnical Perspectives of Information Systems – Course Syllabus (3)

We acknowledge that we are on the traditional, ancestral and unceded territory of the hən̓q̓əmin̓əm̓ speaking Musqueam people.

<b>Program:</b>	MLIS and Dual MAS/MLIS
<b>Year:</b>	2017 Summer Session Term 1
<b>Course Schedule:</b>	Tuesdays and Thursdays from 1:00 pm to 3:50 pm
<b>Location:</b>	Room 295 - Henry Angus Building (ANGU-295)
<b>Instructor:</b>	Richard Arias-Hernandez
<b>Office location:</b>	IBLC 484
<b>Office phone:</b>	604-822-1458
<b>Office hours:</b>	Tuesdays and Thursdays from 10:00 am to 12:00 pm
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<b>Connect:</b>	<a href="http://connect.ubc.ca">http://connect.ubc.ca</a>

**Course Goal:** The purpose of this course is to explore the sociotechnical aspects of information systems. This course will draw upon multiple perspectives, including information science, sociology, anthropology, human-computer interaction, and media and communication studies to critically examine the ways in which technologies shape and are shaped by their contexts of use. To this end, we will focus on information practices within groups, communities and organizations, the constraints and opportunities afforded through technologies, and how social, political, and historical influences are intertwined with technology.

**Course Objectives:** Upon completion of this course students will be able to

- Understand and utilize different perspectives in the appraisal of information technology [1.2]\*
- Identify social, technical, historical, political and organizational factors that shape and are shaped by technology [1.3, 1.4]\*
- Describe instances where technologies have failed, succeeded, or had unintended consequences and the potential reasons behind these outcomes [1.3, 1.4]\*
- Analyze the implications of sociotechnical factors on the design, adoption, evaluation and use of technology, especially in information settings [1.3, 1.4, 4.1]\*
- Evaluate different types of information systems in various contexts, such as learning and workplace environments, including libraries [1.3, 1.4, 4.1]\*

\* *Course objectives are stated in terms of student learning outcomes and reference the iSchool Statement on Graduate Competencies:* <http://slais.ubc.ca/programs/about-department/graduate-competencies/>

### Course Topics:

- Historical perspectives on technology and society
- Artifacts and Practices
- Technology and the workplace
- Technology and social relationships
- Design approaches
- Implementation: adoption and diffusion
- Use: intended and unintended outcomes

### Prerequisites:

MLIS and Dual MAS/MLIS: completion of the MLIS core.

MAS: completion of MAS core and permission of the SLAIS Graduate Adviser

**Format of the course:** Every session combines a short lecture with a seminar in which readings are discussed. In-class activities will be led by students.

## Required Reading:

### Required Books:

- Webster, F. (2014). *Theories of the information society* (4th Edition). Routledge. Available to buy online or at UBC Bookstore. One copy of the 3<sup>rd</sup> Edition will be available outside of my office for local consultation only.
- O’Neil, C. (2016). *Weapons of math destruction : how big data increases inequality and threatens democracy*. Allen Lane. Available to buy online or at the UBC Bookstore. One copy on reserve at Korner Library.
- Fuchs, C. (2017). *Social media : a critical introduction*. London: Sage. Available to buy online or at UBC Bookstore. One copy of the 2014 edition on reserve at Korner Library.

### Required Book Chapters/Articles:

- Arias-Hernandez, R. (2013). Exceptional Engineering: Challenges and Opportunities for Socially Just Engineering in Non-governmental Organizations in Colombia. In J. Lucena (Ed.), *Engineering Education for Social Justice* (pp. 227–242). Available at: [https://link.springer.com/content/pdf/10.1007%2F978-94-007-6350-0\\_11.pdf](https://link.springer.com/content/pdf/10.1007%2F978-94-007-6350-0_11.pdf)
- Billey, A., Drabinski, E., & Roberto, K. R. (2014). What’s Gender Got to Do with It? A Critique of RDA 9.7. *Cataloging & Classification Quarterly*, 52(4), 412–421. <http://doi.org/10.1080/01639374.2014.882465>
- Chandler, M.A. (2015). Unequal shelves in D.C. school libraries benefit wealthier students. *The Washington Post*. March 9, 2015. Available at: [https://www.washingtonpost.com/local/education/unequal-shelves-in-dc-school-libraries-benefit-wealthier-students/2015/03/09/f548db96-bd1f-11e4-8668-4e7ba8439ca6\\_story.html?utm\\_term=.bcc85022807f](https://www.washingtonpost.com/local/education/unequal-shelves-in-dc-school-libraries-benefit-wealthier-students/2015/03/09/f548db96-bd1f-11e4-8668-4e7ba8439ca6_story.html?utm_term=.bcc85022807f)
- Chow-White, P.A. and Duster, T. (2011) Do Health and Forensic DNA Databases Increase Racial Disparities? *PLoS Med*, 8(10). Available at: <http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1001100>
- Cockburn, C. (1981). The Material of Male Power. *Feminist Review*, (9), 41. <http://doi.org/10.2307/1394914>.
- Cooke, N. A., Sweeney, M. E., & Noble, S. U. (2016). Social Justice as Topic and Tool: An Attempt to Transform an LIS Curriculum and Culture. *The Library Quarterly*, 86(1), 107–124. <http://doi.org/10.1086/684147>
- Dean, G. (2015). The Shock of the Familiar: Three Timelines about gender and Technology in the Library. *Digital Humanities Quarterly*, 9(2). Available at: <http://www.digitalhumanities.org/dhq/vol/9/2/000201/000201.html>
- Diaz, A. (2008). Through the Google Goggles: Sociopolitical Bias in Search Engine Design (pp. 11–34). Springer Berlin Heidelberg. Available at: [https://link.springer.com/content/pdf/10.1007%2F978-3-540-75829-7\\_2.pdf](https://link.springer.com/content/pdf/10.1007%2F978-3-540-75829-7_2.pdf)
- Doyle, A.M., Lawson, K., and Dupont, S. (2015). Indigenization of knowledge organization at the Xwi7Xwva Library. *Journal of Library and Information Studies*, 13(2), 107-134. Available at: <http://jilis.lis.ntu.edu.tw/article/v13-2-s1.pdf>
- Friedman, B., Kahn, P. H., Borning, A., & Huldgtren, A. (2013). Value Sensitive Design and Information Systems. In N. Doorn, D. Schuurbiens, I. van de Poel, & M. E. Gorman (Eds.), *Early engagement and new technologies: Opening up the laboratory* (pp. 55–95). Springer Netherlands. Available at: [https://link.springer.com/content/pdf/10.1007%2F978-94-007-7844-3\\_4.pdf](https://link.springer.com/content/pdf/10.1007%2F978-94-007-7844-3_4.pdf)
- Godfrey, S. (2016). As public libraries embrace maker rooms, are the poorest users being left behind? *The Washington Post*. March 31, 2016. Available at:

[https://www.washingtonpost.com/lifestyle/magazine/as-libraries-embrace-maker-rooms-are-the-poorest-users-being-left-behind/2016/03/30/49a0a530-db50-11e5-891a-4ed04f4213e8\\_story.html?utm\\_term=.909fd01c4fad](https://www.washingtonpost.com/lifestyle/magazine/as-libraries-embrace-maker-rooms-are-the-poorest-users-being-left-behind/2016/03/30/49a0a530-db50-11e5-891a-4ed04f4213e8_story.html?utm_term=.909fd01c4fad)

- Hathcock, A. (2015). White Librarianship in Blackface: Diversity Initiatives in LIS. *In the Library With the Lead Pipe*. Available at: <http://www.inthelibrarywiththeleadpipe.org/2015/lis-diversity/>
- Jenkins, M. (2014). D.C. adds a social worker to library system to work with homeless patron. *The Washington Post*. August 27, 2014. Available at: [https://www.washingtonpost.com/local/dc-adds-a-social-worker-to-library-system-to-work-with-homeless-patrons/2014/08/26/2d80200c-2c96-11e4-be9e-60cc44c01e7f\\_story.html?utm\\_term=.2d5626c26687](https://www.washingtonpost.com/local/dc-adds-a-social-worker-to-library-system-to-work-with-homeless-patrons/2014/08/26/2d80200c-2c96-11e4-be9e-60cc44c01e7f_story.html?utm_term=.2d5626c26687)
- Latour, B. (1988). Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer. *Social Problems*, Vol. 35, No. 3, June 1988. Available at: [https://www.nyu.edu/projects/nissenbaum/papers/Latour\\_Mixing.pdf](https://www.nyu.edu/projects/nissenbaum/papers/Latour_Mixing.pdf)
- Nieuwsma, D. (2004). Alternative Design Scholarship: Working Toward Appropriate Design. *Design Issues*, 20(3), 13-24. Available at: <http://www.jstor.org/stable/1511985>
- Pinch, T. J., & Bijker, W. E. (1984). The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit Each Other. *Social Studies of Science*, 14(3), 399–441. Available online at: <http://www.ihs.uw.edu/wp-content/uploads/2012/10/The-Social-Construction-of-Facts-and-Artefacts.pdf>
- Walsham, G. (1997). Actor-Network Theory and IS Research: Current Status and Future Prospects. In *Information Systems and Qualitative Research* (pp. 466–480). Boston, MA: Springer US. Available at: [https://link.springer.com/content/pdf/10.1007%2F978-0-387-35309-8\\_23.pdf](https://link.springer.com/content/pdf/10.1007%2F978-0-387-35309-8_23.pdf)
- Winner, L. (1980). Do Artifacts Have Politics? *Daedalus*, Vol. 109, No. 1, Modern Technology: Problem or Opportunity? (Winter, 1980), pp. 121-136. The MIT Press. Available online at: <https://innovate.ucsb.edu/wp-content/uploads/2010/02/Winner-Do-Artifacts-Have-Politics-1980.pdf>

### Course Assignments:

Assignment	Type	Weight	Date Due
Seminar moderation	Group	20%	TBD
Co-construction of Society and Technology - Analytic Report	Individual	20%	June 1
Annotated bibliography – Class Wiki	Individual	20%	June 8 June 22
Term Project – Socially Just or Culturally Appropriate Information Services and Sociotechnical Structures	Group	30%	June 22
Participation	Individual	10%	Overall

### Course Schedule [week-by-week]:

Session	Topic	Assigned Reading	Assignment
Session 1, May 16	Introduction Politics of technology	Winner (1980) Diaz (2008)	
Session 2, May 18	SCOT, ANT, and the co-construction of society and technology	Pinch & Bijker (1984) Latour (1988) Walsham (1997)	
Session 3, May 23	Change & the Information Society: Bell & Castells	Webster (2014) Intro, Ch. 2, 4, & 6	
Session 4, May 25	Status Quo & the Information Society: Schiller & Habermas	Webster (2014) Intro, Ch. 8 & 9	

Session	Topic	Assigned Reading	Assignment
Session 5, May 30	Big Data and Inequality	O'Neil (2016)	
Session 6, June 1	Social Media and Inequality	Fuchs (2017) Ch. 5, 7, and 8	<b>Co-construction of Society and Technology - Analytic Report</b>
Session 7, June 6	Values in the design of information technology	Friedman et al. (2013) Arias-Hernandez (2014) Nieusma (2004)	
Session 8, June 8	Gender, Sex, and Sexuality	Cockburn (1981) Billey et al. (2014) Dean (2015)	<b>Annotated bibliography 1</b>
Session 9, June 13	Race and Ethnia	Hathcock (2015) Doyle et al. (2015) Chow-White & Duster (2011)	
Session 10, June 15	FRONTLINE/World Ghana: Digital Dumping Ground. PBS (Video Documentary - 2009). Guest Talk: Anselm Spoerri		
Session 11, June 20	Inequalities and Social Justice in GLAMs	Chandler (2015) Godfrey (2016) Jenkins (2014) Cooke et. al. (2016)	
Session 12, June 22	Presentations of Term Projects		<b>Annotated bibliography 2 Term Project Report</b>

**Attendance:** The calendar states: "Regular attendance is expected of students in all their classes (including lectures, laboratories, tutorials, seminars, etc.). Students who neglect their academic work and assignments may be excluded from the final examinations. Students who are unavoidably absent because of illness or disability should report to their instructors on return to classes." Up to two excused absences are allowed with prior notification to me. Additional absences will require a note from a health professional or Access and Diversity. Failure to provide this documentation could result in a lower course mark.

**Evaluation:** All assignments will be marked using the evaluative criteria given on the [SLAIS web site: http://slais-resource.sites.olt.ubc.ca/files/2015/10/LetterGradesandGradingPolicy.pdf](http://slais-resource.sites.olt.ubc.ca/files/2015/10/LetterGradesandGradingPolicy.pdf)

While these criteria are stated at the level of course marks they also apply to the marks awarded to assignments. Please note that based on these criteria, if on a given assignment you do a good job of meeting ALL the required elements the mark will typically be in the range of B to B+. In order to achieve a mark in the overall "A" range [A-, A, A+] you must demonstrate excellence that goes considerably beyond the basic requirements of an assignment. If you receive a mark such as A-/B+ you should interpret it as a low A-, likewise a mark of B+/A- should be interpreted as a high B+. The top mark represents the awarded letter grade, and the bottom mark indicates the relative position of the numerical equivalent in the range for the letter grade on the SLAIS web site. Use of this split/letter marking scheme allows to more fairly assigning the course marks at the end of the term.

Assignments will not be accepted late. Consideration will be given to legitimate emergencies. If an extension is granted, a late penalty may be imposed; this will be discussed when you request an extension.

**Written & Spoken English Requirement:** Written and spoken work may receive a lower mark if it is, in the opinion of the instructor, deficient in English.

**Access & Diversity:** Access & Diversity works with the University to create an inclusive living and learning environment in which all students can thrive. The University accommodates students with disabilities who have registered with the Access and Diversity unit: [<https://students.ubc.ca/about-student-services/access-diversity>]. You must register with the Disability Resource Centre to be granted special accommodations for any on-going conditions.

**Religious Accommodation:** The University accommodates students whose religious obligations conflict with attendance, submitting assignments, or completing scheduled tests and examinations. Please let your instructor know in advance, preferably in the first week of class, if you will require any accommodation on these grounds. Students who plan to be absent for varsity athletics, family obligations, or other similar commitments, cannot assume they will be accommodated, and should discuss their commitments with the instructor before the course drop date. UBC policy on Religious Holidays: <http://equity.ubc.ca/days-of-significance/>

## **Academic Integrity**

### Plagiarism

The Faculty of Arts considers plagiarism to be the most serious academic offence that a student can commit. Regardless of whether or not it was committed intentionally, plagiarism has serious academic consequences and can result in expulsion from the university. Plagiarism involves the improper use of somebody else's words or ideas in one's work.

It is your responsibility to make sure you fully understand what plagiarism is. Many students who think they understand plagiarism do in fact commit what UBC calls "reckless plagiarism." Below is an excerpt on reckless plagiarism from UBC Faculty of Arts' leaflet, "Plagiarism Avoided: Taking Responsibility for Your Work," (<http://www.arts.ubc.ca/arts-students/plagiarism-avoided.html>).

"The bulk of plagiarism falls into this category. Reckless plagiarism is often the result of careless research, poor time management, and a lack of confidence in your own ability to think critically. Examples of reckless plagiarism include:

- Taking phrases, sentences, paragraphs, or statistical findings from a variety of sources and piecing them together into an essay (piecemeal plagiarism);
- Taking the words of another author and failing to note clearly that they are not your own. In other words, you have not put a direct quotation within quotation marks;
- Using statistical findings without acknowledging your source;
- Taking another author's idea, without your own critical analysis, and failing to acknowledge that this idea is not yours;
- Paraphrasing (i.e. rewording or rearranging words so that your work resembles, but does not copy, the original) without acknowledging your source;
- Using footnotes or material quoted in other sources as if they were the results of your own research; and
- Submitting a piece of work with inaccurate text references, sloppy footnotes, or incomplete source (bibliographic) information."

Bear in mind that this is only one example of the different forms of plagiarism. Before preparing for their written assignments, students are strongly encouraged to familiarize themselves with the following source on plagiarism: the Academic Integrity Resource Centre <http://help.library.ubc.ca/researching/academic-integrity>. Additional information is available on the Connect site <http://connect.ubc.ca>.

If after reading these materials you still are unsure about how to properly use sources in your work, please ask me for clarification.

Students are held responsible for knowing and following all University regulations regarding academic dishonesty. If a student does not know how to properly cite a source or what constitutes proper use of a source it is the student's personal responsibility to obtain the needed information and to apply it within University guidelines and policies. If evidence of academic dishonesty is found in a course assignment, previously submitted work in this course may be reviewed for possible academic dishonesty and grades modified as appropriate. UBC policy requires that all suspected cases of academic dishonesty must be forwarded to the Dean for possible action.

**Connect:** Connect, UBC's e-learning system <http://connect.ubc.ca> will be used to organize class resources, slides, and additional material. It will also be used to manage assignments, grades, and in-class exercises. Make sure that you check the course space in Connect constantly for announcements, resources, assignments, feedback and grades.