

AP/HUMA4501 A & AP/SOSC4501 A & SC/STS 4501 A 6.0

SEMINAR IN SCIENCE AND TECHNOLOGY STUDIES

Fall/Winter 2017-2018

In this seminar course you will build on your prior coursework in STS by exploring recent literature in the field, and by developing some qualitative research skills commonly used in STS studies. Your understanding of the field and its methods will be put into practice in an original term research project.

The first term readings will focus on qualitative research ethics and practices, and some classes will feature hands-on activities. Guest lectures and a field trip will provide opportunities to interact with professionals who integrate STS principles and methods in their work. You will have defined your term project by the end of the first term, which will involve one qualitative research method.

In the second term, the classes in January and February will examine samples of contemporary STS research. Class discussions will include an examination of how research methods have been used in these cases. By the beginning of March you will have completed your qualitative research, and will meet weekly with the instructor to discuss your research paper. The course ends with a project presentation and a peer editing session for the final term paper.

Time and Location: Thursdays, 11:30pm-2:30pm; Ross North Rm 812

Course Director:

Jill Lazenby, Ph.D.

Assistant Lecturer, Department of Science and Technology Studies

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416-736-2100 ext. 20466 (during office hours only – no voicemail)

Room 226A, Bethune College, Tuesdays 10:30-12, or by appointment

Course Website: Moodle - <https://moodle.yorku.ca>

EVALUATION:

Participation and Class Prep notes– 20%

Class facilitation – 5%

Fall Term Activities (Best 4 of 5 x 5% each) – 20%

Preliminary Research Plan (Nov. 2) – 5%

Formal Project Proposal + Oral Report (Nov. 30) – 10% + 5%=15%

Final Project Report (Mar. 22) – 5%

Research Paper (Draft and peer comments March 29 + Final paper April 5) – 5% + 25%
= 30%

READINGS:

Warren, Carol A.B. and Tracy Xavia Karner. 2015. *Discovering Qualitative Methods: Ethnography, Interviews, Documents, and Images*. Oxford: Oxford University Press (available in the York Bookstore)

Weekly readings posted to the Moodle website.

CLASS FORMAT AND PARTICIPATION REQUIREMENT:

Weekly classes will normally centre on a student-led discussion of assigned readings, or will involve active discussion of a qualitative method described in the course text.

Attendance at all meetings is mandatory, (a maximum of two classes can be missed with advanced notice due to illness or a personal emergency. More than that will negatively impact grades. Missing classes with an associated activity will result in “0” on that activity.)

Participation grades are based on both the student's attendance record, and the degree of active contribution to class discussions. “Active discussion” is defined by an oral demonstration of understanding of the text, and presentation of questions and comments that deepen analysis in class. It is therefore important that students thoroughly prepare the readings before class, and arrive with suggestions for discussion and debate.

To support participation, as well as assessment of the participation grade in the course, all members of the class are expected to **prepare each week's readings and to submit 1-3 double-spaced pages of notes in advance of the class**, with themes, questions and comments they wish to contribute clearly noted. These notes are meant to facilitate active participation, and are supplementary. Students are expected to make more detailed comments in class.

In some classes there will be guest speakers, and an associated class activity. In March the emphasis will be on assisting students in the completion of their term project. In place of formal classes, some one-on-one meetings with the course director may be held.

COURSE POLICIES:

1. Academic Integrity

All work for this course must be the original work of each student. Collaboration on written and oral assignments is **not acceptable**. Cases of suspected plagiarism or other kinds of academic dishonesty will be forwarded to the Chair of the Department of Science and Technology Studies for an exploratory meeting, and may result in action at the Faculty level.

All direct quotations must be in quotation marks with accurate citations. Sources must be credited for paraphrased ideas, images, and any other content that is not the original work of the author. Figures must have a descriptive caption. Consult with Jill Lazenby if you have any questions.

The **York Senate Policy on Academic Honesty** can be reviewed at <http://www.yorku.ca/secretariat/policies/document.php?document=69>

Keep copies of all rough notes, drafts and completed papers until after you have received a final grade for the course.

2. Assignment Submission

All work must be submitted electronically to Moodle - by 11:55pm on the day of the deadline, or by class time if you are submitting class prep notes.

If a deadline is approaching and you are encountering technical difficulties with Moodle, email a copy of your completed work to Jill Lazenby by the deadline and keep trying to upload to Moodle – the date and time of the email will be considered your submission time.

3. Late Work

Students are expected to take responsibility for the deadlines in the course. Please provide professional documentation verifying an unavoidable medical or personal situation if you miss deadlines for those reasons.

In-class presentations, class facilitation, and oral reports may not be postponed. You must switch with another student in the class if you have an unavoidable emergency or illness that prevents you from your pre-booked class facilitation. Provide relevant documentation to Jill Lazenby.

Late class preparation papers, class activities, and oral reports will not be accepted. The grade will be “0” on these components if late.

A **brief extension** of up to one week may be negotiated **only for the Final Term Project Paper** by meeting with Jill Lazenby **no less than one week before** the schedule deadline. Please provide a statement of explanation and any relevant documentation.

On documentation: Have a doctor complete an attending physician’s statement if you are sick (see Moodle), or provide relevant professional documentation to verify the circumstances and time period you were unavailable to complete work due to a personal emergency.

4. Special Circumstances

Students who feel that there are extenuating circumstances that may interfere with the successful completion of any course requirements are encouraged to discuss the matter with Jill Lazenby early in the term. Students with physical, learning, or psychiatric disabilities who require reasonable accommodations in teaching style or evaluation methods should discuss this with Jill Lazenby in September, so that appropriate arrangements can be made. Please provide any relevant documentation.

STS 4501A 6.0 – Seminar in Science and Technology Studies Fall/Winter 2017-2018 Schedule (Tentative) See Moodle for Assigned Readings		
No.	Date	Topic
1	Sept. 7	Introduction to the Course
2	Sept. 14	STS in Practice Methods: qualitative research Warren and Karner, Ch.1; Handbook Ch. 1
<i>Last day to add a course without permission – Sept. 20</i>		
3	Sept. 21	Experts, Publics and Science – student led <i>Handbook</i> Ch. 25; Collins, 2014; Sorgner, 2016
4	Sept. 28	Methods: Ethics Approval and Research with Human Subjects Warren and Karner, Ch. 2, Morello-Frosch et al., 2015, Senate Policy
5	Oct. 5	Methods: Ethnography <i>Class Activity 1: Ethnographic observation – Due October 22 at 11:55pm</i> Warren and Karner Ch 3-4
6	Oct. 12	Science and Spaces – student led Sismondo, Ch 10, <i>Handbook</i> Ch 15, Latour and Woolgar, Ch 2
7	Oct. 19	Methods: Writing Field Notes <i>Oct. 22 – Class Activity 1 due</i> Warren and Karner, Ch 5, Myers, 2010
<i>Fall Reading Days – October 26-29 – No classes</i>		
8	Nov. 2	Methods: Interviewing <i>Preliminary Research Plan due (beginning of class)</i> Warren and Karner, Ch 6-7
9	Nov. 9	Crafting Public Histories of Medicine Linked Field Trip: Visit to Sanofi-Pasteur (tentative date) Dr. Chris Rutty presentation <i>Class Activity 2: Field trip report and discussion</i> See Moodle for readings
10	Nov. 16	STS in action: The role of the science librarian Guest speaker: John Dupuis <i>Class Activity 2 due</i> <i>Class Activity 3: Report on class</i> See Moodle for readings
11	Nov. 23	One-on-one appointments and preliminary qualitative project or makeup class Arrange to meet with Jill Lazenby this week. <i>Class Activity 3 due</i> <i>Class Activity 4: Individualized qualitative exercise (due Jan. 11)</i>

12	Nov. 30	Visual Knowledge – partly student led Methods: Images and texts Formal Project Proposal and Oral Report Class Activity 5: Image analysis (due Jan. 4) Warren and Karner Ch 8; Dobos, 2015
Fall classes end Dec. 4- Winter break: Dec. 22-Jan. 3		
13	Jan. 4	Big Data – student led Class Activity 5 Due Michael and Lupton, 2016; Mittelstadt and Floridi, 2016
14	Jan. 11	Big Science – student led Giudice, 2016; Reyes-Galindo, 2012
15	Jan. 18	Pharmaceutical Studies – student led Class Activity 4 Due Pollock, 2014; Sismondo, 2015
16	Jan. 25	Science at the Boundary – Alternative Medicine – student led Keshet, 2010; Vuolanto, 2015
17	Feb. 1	Reproductive Science, Ethics, and Policy – student led Dickenson, 2013; Fulfer, 2017
18	Feb. 8	Methods: Interpreting research and writing Warren and Karner, Ch 9-10
Last day to drop a full year course without receiving a grade – Feb. 9		
19	Feb. 15	Informal progress reports and discussion (participation grade) or makeup class
Feb. 17-23 – Winter Reading Week – No classes		
20	Mar. 1	One-on-one meetings
21	Mar. 8	One-on-one meetings
22	Mar. 15.	One-on-one meetings
23	Mar. 22	Project Presentations
24	Mar. 29	Editing Workshop and Peer Review of Draft Papers Paper draft due before class – bring a hard copy for exchange Peer comments – 5%
25	Apr. 5	Final Papers Due at 11:55pm
Last day to submit work – April 6 Winter classes end April 5 – April 9-23 Exam period (no exam in STS 4501)		

Readings (see Moodle for links and additional Internet materials):

Bonneuil, C., Foyer, J., & Wynne, B. (2014). Genetic fallout in bio-cultural landscapes: Molecular imperialism and the cultural politics of (not) seeing transgenes in Mexico. *Social Studies of Science*, 44(6), 901-929. doi:10.1177/0306312714548258

Collins, H. (2014). Rejecting knowledge claims inside and outside science. *Social Studies of Science*, 44(5), 722-735. doi:10.1177/0306312714536011

Dickenson, D. L. (2013). The commercialization of human eggs in mitochondrial replacement research. *The New Bioethics*, 19(1), 18-29. doi:10.1179/2050287713Z.00000000018

Dobos, A.R., Orthia, L. A. and Lamberts, R. (2015). Does a picture tell a thousand words? The uses of digitally produced, multimodal pictures for communicating information about Alzheimer's disease. *Public Understanding of Science*, 24(6), 712–730. doi: 10.1177/0963662514533623

Fulfer, K. (2017). Cross-border reproductive travel, neocolonialism, and Canadian Policy. *International Journal of Feminist Approaches to Bioethics*, 10(1), 225-247.

Hackett, E. J., Amsterdamska, O., & Lynch, M. E. (2007). *The Handbook of Science and Technology Studies* (3). Cambridge, US: The MIT Press.

Keshet, Y. (2010). Hybrid knowledge and research on the efficacy of alternative and complementary medicine treatments. *Social Epistemology*, 24(4), 331-347. doi:10.1080/02691728.2010.506959

Michael, M., & Lupton, D. (2016). Toward a manifesto for the 'public understanding of big data'. *Public Understanding of Science*, 25(1), 104-116. doi:10.1177/0963662515609005

Mittelstadt, B., & Floridi, L. (2016). The ethics of big data: Current and foreseeable issues in biomedical contexts. *Science and Engineering Ethics*, 22(2), 303-341. doi:10.1007/s11948-015-9652-2

Morello-Frosch, R., Varshavsky, J., Liboiron, M., Brown, P., & Brody, J.G. (2015). Communicating results in post-Belmont era biomonitoring studies: Lessons from genetics and neuroimaging research. *Environmental Research*, 136, 363-372. doi: 10.1016/j.envres.2014.10.001

Myers, N. (2010). Pedagogy and performativity: Rendering laboratory lives in the documentary *Naturally obsessed: The making of a scientist*. *Isis*, 101(4), 817-828. doi:10.1086/657480

Pollock, A. (2014). Places of pharmaceutical knowledge-making: Global health,

postcolonial science, and hope in South African drug discovery. *Social Studies of Science*, 44(6), 848-873. doi:10.1177/0306312714543285

Sismondo, S. (2011). *An introduction to science and technology studies* (2). Hoboken, GB: Wiley-Blackwell.

Sismondo, S. (2015). Pushing knowledge in the drug industry: Ghost-managed science. In S. Sismondo & J. A. Greene (Eds.), *The pharmaceutical studies reader* (pp. 150-164). Chichester, West Sussex: John Wiley & Sons.

Sorgner, Helene. (2016). Challenging expertise: Paul Feyerabend vs. Harry Collins and Robert Evans on democracy, public participation and scientific authority. *Studies in History and Philosophy of Science*, 57: 114-120.

Vuolanto, P. (2015). Boundary work and power in the controversy over therapeutic touch in Finnish nursing science. *Minerva*, 53(4), 359-380. doi:10.1007/s11024-015-9284-3

Warren, Carol A.B. and Tracy Xavia Karner. (2015). *Discovering qualitative methods: Ethnography, interviews, documents, and images*. Oxford: Oxford University Press.