ASC1*4020
Topics in Arts and Sciences Research:
Historical Perspectives on Science and Society

HIST*4670
Seminar in Science and Society

Fall 2013

Instructor: Tara Abraham (Dept. of History)       Telephone: 519.824.4120 x56012
Office: 1003 MacKinnon Extension                Email: taabraha@uoguelph.ca
Office Hours: Tuesdays and Thursdays 10am to 11am

Seminar Times: Thursdays 2:30pm—5:20pm, MACK 314

Course Website: Access using central login at http://courselink.uoguelph.ca

Course Description

This course offers an advanced introduction to the history of science in its social and cultural contexts. It begins with the assumption that scientific knowledge is not a simple revelation of the order of nature, but rather a product of human activity and thus is historically and socially situated. We will explore this assumption with an in-depth look at Jan Golinski’s marvelous text, Making Natural Knowledge: Constructivism and the History of Science, which examines the ways in which historians of science have been influenced by the notion that science is socially constructed. Along with our reading of Golinski, we will engage with key examples of the questions, themes, and practices that define history of science informed by constructivism. Although our primary focus will be historical, we will also draw upon tools from philosophy.

Learning Objectives

1. To gain a stronger sense of historical and cultural development in science, technology and medicine, and the wider contexts of these pursuits.
2. Through reading and discussion of course readings, to develop skills in critical thinking, inquiry, and analysis.
3. Through engaging in the process of research, to develop skills in information literacy, critical evaluation of information, and written communication.
4. Through seminar presentations and discussions, to gain skills in oral communication.
5. Through leading seminar discussions, to develop skills in leadership.

Course Evaluation

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<th>Evaluation Item</th>
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<tr>
<td>Seminar Presentation</td>
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<tr>
<td>Research Proposal</td>
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<td>Essay Presentation</td>
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<td>Research Essay</td>
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<td>Seminar Participation</td>
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Seminar Presentation due 3 October
Research Proposal due 3 October
Essay Presentation due 5 December
Research Essay due 5 December
Seminar Participation due 5 December
• Your seminar presentation: This will be a 20-minute presentation on one of the weekly readings, with at least 10 minutes following this allotted for discussion and questions. Here I expect more than just a summary of the reading. In your presentation you will be expected to briefly identify and outline the main arguments and evidence presented in the reading, direct our attention to key issues and themes, compare it to other readings for that seminar, and prepare at least three specific questions on the reading for the seminar group to help stimulate and direct discussion. In preparing your presentation, think about the following questions: What is the author's main argument? What evidence is presented to support that argument? What are the strengths and weaknesses of the paper? How do the issues raised by the reading connect with the other readings for that week? Additional instructions to follow.

• The research proposal and preliminary bibliography (due 3 October) will form the basis of your research essay. The proposal itself should be one page in length (double-spaced) and have a bibliography on a separate page. The topic will be of your own choosing, but I expect you to consult with me as you begin to prepare for the proposal. In your proposal I expect you to identify the topic clearly and to provide a clear research question you hope to answer in your essay. The preliminary bibliography should include at least six items relevant to your topic, and at least two of the items should be primary sources.

• The essay presentation should be about 10 minutes in length with 5 minutes for discussion, and will take place during the final weeks of the semester. Here you should outline the topic, the main thesis or argument and the general structure of your essay. I encourage you to be reflective and autobiographical in your presentation: you may discuss what led you to the topic, how your thesis changed or evolved, sources you used, and difficulties you encountered during researching and writing. I will post a sign-up sheet later in the semester to schedule these presentations.

• The last assignment is the research essay (due 5 December), which will be at least 12 pages in length (3000 words) but no more that 15 pages in length (3750 words). Please use double-spacing and 12pt font. More specific instructions to follow. I will require you to submit the hard copy of your original research proposal and bibliography (with my comments) along with your research essay.

• Your seminar participation will comprise a significant portion of your final grade and will be evaluated on the basis of your regular, active engagement as a seminar participant, and your ability to contribute an informed perspective to seminar discussions. Arriving late or leaving early, not keeping up with the readings, or coming to the seminars unprepared is not only disrespectful to the class but will have a negative impact on your success in the course.

Required Texts

2. A set of online readings, available through CourseLink and through the University of Guelph Library website.

Seminar Schedule

1. What is the history of science? What is constructivism?

5 September Outline of Course, Introductions
12 September Origins of Constructivism, the Social Dimensions of Science [lecture-discussion]

Golinski, Introduction and Chapter 1

Podcast: Listen to Lorraine Daston’s podcast (21 November 2008) on “How to Think About Science: Episode 2” (~54 minutes in length) from the CBC Radio One programme Ideas. http://www.cbc.ca/ideas/episodes/2009/01/02/how-to-think-about-science-part-1---24-listen/ and be prepared to discuss!


2. Social Spaces: Identity and Discipline

19 September

Golinski, Chapter 2


3. Physical Spaces: Places of Production

26 September

Golinski, Chapter 3


4. Language, Metaphor, and Rhetoric
3 October

Golinski, Chapter 4


5. Visual Cultures

10 October

Golinski, Chapter 5


6. Women in the History of Science

17 October

Golinski, Chapter 6 and Coda


7. Gender and Science

24 October
Katherine Park (2006). “The evidence of the senses,” in 
Hypatia 2(3): 37-49.

8. Objects

31 October


9. Essay Presentations

7 November

14 November

21 November

Course Policies

1. Contact. My email address is taabraha@uoguelph.ca. As per university regulations, all students are required to check their <uoguelph.ca> email account regularly: E-mail is the official route of communication between the university and its students. Please put the course number (i.e. ASCI 4020 or HIST 4670) in the subject line of your message. Please keep in mind that I generally do not check email over weekends.

2. Late Assignments. Hard copies of assignments are due on their assigned due dates. Late assignments will be penalized 3% per day, including weekends and holidays. You may submit your assignment electronically to the Assignment Dropbox on the course website, to confirm the date and time submitted. However, I will not grade your assignment until I receive a hard copy. If there are any discrepancies between the hard copy and electronic copy, I will consider the date the hard copy was submitted to be the submission date for your assignment. For instructions on submitting assignments outside of class, please see item 8 below.

3. Student Rights and Responsibilities. Each student at the University of Guelph has rights which carry commensurate responsibilities that involve, broadly, being a civil and respectful member of the
University community. The Rights and Responsibilities are detailed in the Undergraduate Calendar: [http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c14/c14-rightsrespon.shtml](http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c14/c14-rightsrespon.shtml)

4. **When you cannot meet a course requirement.** When you find yourself unable to meet a course requirement due to illness or compassionate reasons, please advise the course instructor (or other designated person) in writing, with name, address and e-mail contact. Where possible, this should be done in advance of the missed work or event, but otherwise, just as soon as possible after the due date, and certainly no longer than one week later. Note: if appropriate documentation of your inability to meet that course requirement is necessary, the course instructor, or delegate, will request it of you. Such documentation will rarely be required for course components representing less than 10% of the course grade. Such documentation will be required, however, for Academic Consideration for missed end-of-term work and/or missed final examinations. See the Undergraduate Calendar for information on regulations and procedures for Academic Consideration. [http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml](http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml)

5. **Academic Misconduct.** The University of Guelph takes a serious view of academic misconduct, and it is your responsibility as a student to be aware of and to abide by the University's policy. The University of Guelph is committed to upholding the highest standards of academic integrity and enjoins all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. Included in this category are such activities as cheating on examinations, plagiarism, misrepresentation, and submitting the same material in two different courses without written permission. Students are expected to be familiar with the section on Academic Misconduct in the Undergraduate Calendar, and should be aware that expulsion from the University is a possible penalty. Students should also familiarize themselves with the concept of plagiarism and take the tutorials to learn what plagiarism means, and how to avoid it, at: [http://www.academicintegrity.uoguelph.ca/](http://www.academicintegrity.uoguelph.ca/). If an instructor suspects that academic misconduct has occurred, that instructor has the right to examine students orally on the content or any other facet of submitted work. Moreover, in the College of Arts it is expected that unless a student is explicitly given a collaborative project, all submitted work will have been done independently. Students have the responsibility to familiarize themselves with the Undergraduate Calendar, including Section VIII “Undergraduate Degree Regulations and Procedures” which includes a sub-section addressing academic misconduct. The URL for the Undergraduate Calendar is: [http://www.uoguelph.ca/registrar/calendars/undergraduate/current/](http://www.uoguelph.ca/registrar/calendars/undergraduate/current/). Please read [http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c01/index.shtml](http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c01/index.shtml) for a statement of Students’ Academic Responsibilities; also read the full Academic Misconduct Policy ([http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml](http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml)). You are also advised to make use of the resources available through the Learning Commons ([http://www.learningcommons.uoguelph.ca/](http://www.learningcommons.uoguelph.ca/)) and to discuss any questions you may have with your course instructor or teaching assistant.

Instructors have the right to use software to aid in the detection of plagiarism or copying and to examine students orally on submitted work. For students found guilty of academic misconduct, serious penalties, up to and including suspension or expulsion, can be imposed. Hurried or careless submission of work does not exonerate students of responsibility for ensuring the academic integrity of their work. Similarly, students who find themselves unable to meet course requirements by the deadlines or criteria expected because of medical, psychological or compassionate circumstances should review the university’s regulations and procedures for Academic Consideration in the calendar and discuss their...
situation with the instructor and/or the program counsellor or other academic counsellor as appropriate.

6. Classroom Etiquette and Useful Tools. To help other students, the History Department requests that you **turn off** your wireless connections during class unless requested by the instructor to do otherwise. The Department maintains a web site [http://www.uoguelph.ca/history](http://www.uoguelph.ca/history) that will be helpful in various ways to students in History courses - such as conveying names of student award winners, information on undergraduate and graduate programs at Guelph, and news of the Department. There are useful links to on-line resources that include **A Guide to Writing History Research Essays** which will be valuable to students in all History courses. The University of Guelph History Society operates a number of programs to assist History undergraduates, and information about these programs can be accessed through the Department website or [http://www.uoguelph.ca/~histsoc](http://www.uoguelph.ca/~histsoc).

7. Recording of Materials. Presentations in relation to course work – including lectures – cannot be recorded in any electronic media without the permission of the presenter.

8. Email Communication. As per university regulations, all students are required to check their <uoguelph.ca> e-mail account regularly: email is the official route of communication between the university and its students.

9. Handing in and Getting back Assignments. Unless the course instructor says so, all History papers and assignments are to be handed in at class and returned at class. The student must keep copies of any submitted assignments. Students may be asked to re-submit work at any time.

**LATE PAPERS** may **ONLY** be placed through the open slots in the mailboxes of faculty members and Graduate Teaching assistants at the student’s own risk. Mailbox for Dr. Abraham is located in Room 2009, on the 2nd Floor of MacKinnon Extension and the hours are from 8:30 a.m. to 4:30 p.m. Monday to Friday. **Late papers will not be date stamped**. The History department and its instructors bear no responsibility whatsoever for late papers.

10. Drop Date. The last day to drop one-semester Winter 2010 courses, without academic penalty, is **Thursday, October 31st, the 40th class day**. For regulations and procedures for dropping courses, please see the Undergraduate Calendar. [http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml](http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml)

11. Disabilities. Students with special needs and/or disabilities should come see me as soon as possible so that arrangements can be made.

12. Resources. The Undergraduate Calendar is the source of information about the University of Guelph’s procedures, policies and regulations which apply to undergraduate programs. It can be found at: [http://www.uoguelph.ca/registrar/calendars/undergraduate/current/](http://www.uoguelph.ca/registrar/calendars/undergraduate/current/)

If you find yourself in difficulty, contact the undergraduate advisor in your program, or the BA Counselling Office: [http://www.uoguelph.ca/baco/contact.shtml](http://www.uoguelph.ca/baco/contact.shtml) or BAS Counselling Office [http://www.uoguelph.ca/registrar/undergraduate/index.cfm?registrationhandbook/programs/bas](http://www.uoguelph.ca/registrar/undergraduate/index.cfm?registrationhandbook/programs/bas)