Sociology 4930 6.0

The Sociology of Science and Technology

2008-2009 Course Outline

This course provides final year students with an opportunity to apply the theoretical perspectives and methodologies they have learned in previous courses to the role of science and technology in social life. We cover a diverse sociological literature including the recent theoretical contributions of, and debates about technological/scientific determinism, social shaping, and social constructivism. We analyse inter-actions between and among scientific knowledge, technological change and the political, economic and socio-cultural order. We explore longstanding debates about the "objectivity" and “neutrality” of science and technology and we assess the political choices that are embodied in specific applications of technology and lines of scientific inquiry. A major aim is to examine the distinctiveness and centrality of human agency in shaping a social-cultural world that is infused with scientific knowledge and technological know-how.

Students will have the opportunity to apply their their major or minor area of study to explorations of the socio-cultural aspects of science and technology. Major course projects could focus on, for example, the implications of specific technologies for mass communications, health services, work place organisation, educational institutions, and monitoring the natural environment; the portrayal of scientific knowledge in art, literature and film; and the epistemological and ontological implications of social and cultural studies of science for social theory generally.

Sept. 4  Orientation:
Opening the black box of science and technology

Video:  Challenger: The Final Voyage
The Course Outline
(Handouts 1 and 2 will be distributed for the next two weeks’ reading assignments)

Sept. 11  The Challenger Failure


Vaughan, Diane. (Summer 2002). media launch. Contexts; 1, 2; Research Library, 68.


Sept. 18  Science and technology: up & down & all around:
Audio Documentary: THE CULT OF THE AMATEUR&MORAL PANICS


Evans John H (Spring 2003) a brave new world? how genetic technology could change us. *Contexts*, 2, 2; Research Library, 20


Waxman, Sharon (April 26, 2007) I'd Like to Get Off the Stage Right Now. *New York Times*, FASHION & STYLE, Section E.

“Bibliography on Debates” assignment will be handed out and the sign up sheet for in-class presentations will be circulated

Sept. 18th is the last day to enroll without the permission of the course director.

Sept. 25

8:45-10:00 LIBRARY Tutorial in Rm. 531 of the Scott Library

Norda Majekodunmi will be your librarian instructor. The tutorial will be from 8:45 to 10:00

See the next page for the second half of the class
Sept. 25 cont.  10:20-11:20  Thinking Critically about Technology – 1


Oct. 2  Thinking critically about technology -2


THE BIBLIOGRAPHY ASSIGNMENT IS DUE

Oct. 9  NO CLASS- Yom Kippur

(IN-CLASS COMMENTARIES BEGIN NEXT WEEK)
October 16  Refining technological determinism:


October 17th is the last date to enroll in this course. To enroll, you must have the written permission of the course instructor.

Oct. 23  The Social Shaping of Technology 1


Oct. 30  The Social Shaping of Technology 2: The Case of the Cell Phone

Audio discussion: CBC The Current, June 19, 2008 http://www.cbc.ca/thecurrent/2008/200806/20080619.html:

Required readings are on the next page
Oct. 30 continued

**Required Reading**


**Nov. 6**

**The Seamless Web of Technology and Society**

**Required Reading:**


**Nov. 13**

**The Seamless Web 2: Technology-as-mega-project-First Half**

**Required Reading**


**Project/Portfolio Discussions – Second half**
Nov. 20  The Seamless Web 3: The automobile as a socio-technical construction


Nov. 27  Critiques of the Social Construction of Technology Perspectives

**FILM:** “Taken for a Ride”


*(SIGN UP FOR SECOND TERM COMMENTARIES which begin on January 15th)*

*Happy Holidays!*
Second Term

Jan 8  Project/Portfolio Discussions First Half

Science and Objectivity/Subjectivity Second half


Jan 15  The Science and Gender Controversy


Jan. 22  The Science and AIDS Controversy  First half:


Project/Portfolio Discussions Second Half

Jan. 29  The Science and Pharmaceutical Industry Controversy


Feb. 5  The Science in Agriculture Controversy 1


Toler, Deborah (2001) Biotechnology Not The Solution. *Toronto Star*

Feb. 6th is the last day to withdraw from a course without an academic penalty.

Feb. 12  The Science in Agriculture Controversy 2

AUDIO DOC: “DIET FOR A HUNGRY PLANET–FRANKENFOODS”


Feb 19  READING WEEK

Feb 26th  Research/Writing Project and Portfolio Discussions

Mar. 5  The Science and Democracy Controversy


MAJOR PROJECT ESSAYS DUE
Mar. 12  
**Sociological Interventions in Science and Technology**

**Required Reading:**  


Mar. 19  
Portfolio Meetings

Mar. 26  
Portfolio Meetings

April 2  
Portfolio Meetings

**LAST DAY TO SUBMIT ALL FINAL DRAFTS OF COURSE WORK**

**READING MATERIALS**

The reading materials for the course include:

(a) A xeroxed reading kit obtainable from the York Bookstore. BE SURE TO GET THE KIT FOR SOCI 4930 SECTION “A”.


(c) From time to time, additional readings may be assigned. They will be provided on the course web page.

**CONTACTING ME OUTSIDE OF CLASS TIME:**

From time to time you will need to contact me to make an appointment, to let me know about when you will be submitting a late assignment, to let me know that you are ill or facing a personal emergenc and can’t attend classes etc. Your first recourse should be to phone my office number (in the header on the first page of this outline) and leave a message as necessary. If I do not answer, listen to my phone mail message which will give you information about how to reach me quickly. **DO NOT USE MY yorku.ca e-mail address for any of these purposes.**
EVALUATION

Your Course Portfolio:

The evaluation for this course will be based on the content of your course portfolio. If you are familiar with evaluation systems used in fine arts, creative writing or music programmes, the approach being used in this course is similar.

The advantages of this portfolio system are several. For one thing, it allows you to improve your grade by revising assignments after you get them back based on comments you have received from me. It also allows you to build on work you have already submitted and to include things for the evaluation of your portfolio in addition to your specific assignments. Finally, it works as a kind of personal journal of the course. Not all students in a course are interested in the same things or in everything that the course covers. The portfolio allows you to focus on the course issues and topics which most interest you and to be credited in your grade for the way you develop them in your portfolio collection. (Continued on the next page)

Here is how it works:

As the course proceeds, your portfolio will accumulate a variety of materials: notes on class discussions; newspaper clippings, video clips, magazine and journal articles which you collect on the course issues and themes in which you are most interested. Attached to each of these items should be a brief annotation which states why you have included the item and to what aspects of the course it applies.

Your portfolio should also include your specific assignments (see below), including the copies I originally graded and copies of any re-submissions. Since your final course project paper is due very close to the portfolio meetings, I will re-evaluation UNLESS YOU HAVE SUBMITTED IT TO ME BY ITS DEADLINE OR EARLIER.

During the final three weeks of the course, you will meet with me to discuss your portfolio and use it to show me how your thinking about science and technology developed through being in the course. Among other things, you may take me through the course ideas and topics, pointing out the ones which most interested you; you may draw my attention to improvements you made in a specific assignment; you may point to your notes on class sessions and course materials; you may review the items you have added and you may present anything else that will demonstrate how you have been engaged in the course over the year.

I will assign 25% of your final grade to your portfolio, based on our meeting and the materials included in it.

(Evaluation is continued on the next page)
A. Specific Assignments: **60% of grade as follows**

1. A bibliographic/debate analysis project, **DUE OCTOBER 2nd** — **10%**
   
   See Handout #3 for a detailed description of what is expected.

2. Two Commentaries (one each term) on Course Readings: Presented in class and due in written form **one week after** you present them in class. See Handouts #4 and #5 — **10% each**

3. A research/writing project due **NO LATER THAN MARCH 6th**: — **30%**
   
   See Handouts #7 and #8 for a detailed description of the paper requirement and project ideas.

   **NOTE:** A detailed paper proposal, including bibliography, must be submitted in writing by **no later than Jan. 15th**. See Handout # 6 for proposal content.

B. The Portfolio: **25% of grade** **DUE AT YOUR PORTFOLIO MEETING (Mar 19, 26th or April 2nd). ADDITIONAL MATERIALS MAY BE ADDED UNTIL APRIL 2nd**

Evaluation is based on how your course portfolio demonstrates development in your thinking about science and technology and your writing throughout the course (e.g., the overall improvement in the intellectual and writing quality of your assignments, the submission of additional materials such as course reading notes, extended notes and additional research on the topics of your bibliography assignment and commentaries, photographic displays or video clips (can be electronic), with your commentary, illustrating course ideas etc. etc. etc.):

C. Seminar attendance and participation: **15% of grade** (**7.5 for attendance and 7.5 for participation**)  

**COURSE POLICIES YOU NEED TO NOTE**

**Missing Due Dates for Assignments:**

I provide some leeway for you to fit assignments into your own schedule. However, you MUST let me know if you are missing a due date and when you expect to have the assignment in to me. **Failing to do this will result in grade deductions for the assignment in question.** As well, all assignments must be handed in by the end of the term in which they are assigned with the exception of written commentaries on presentations that are made in the **last week of the first term**. These written commentaries will be due on January 15th, 2008. Please also note that you have to complete 80% or more of the course assignments in order to receive a passing grade in the course.
**Academic Dishonesty:**

Please read carefully the York University Policy on academic dishonesty which is attached to this outline. If I suspect or discover an instance of academic dishonesty, I follow the formal procedures outlined in this policy.

**Prolonged illness/personal crisis:**

If you become ill for an extended period or experience a personal crisis that seriously impedes your ability to maintain pace with the course, you (or someone who can speak on your behalf) MUST discuss your situation with me as soon as possible. I will be willing to making special arrangements for you to complete assignments AS LONG AS you have attended at least two thirds of the classes. If you miss, or anticipate missing, more than a third of the classes, I will advise you to withdraw, since the instruction that you need in order to meet the course requirements satisfactorily takes place in class sessions.

That’s all for now!

**Welcome to the course!**