

Soci 419.05, Technoscience and Biomedicalization, Fall 2011

Instructor: Dr. Ariel Ducey

Office Hours: Mondays 3-4 p.m. and by appointment

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[www.soci.ucalgary.ca](http://www.soci.ucalgary.ca)

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## Course Overview

This course considers the terms “technoscience” and “biomedicalization” and what they allow us to see and understand in contemporary practices of medicine and health care. The course is divided into three sections. First we will examine various approaches social scientists have taken to the study of science and medicine, and in particular the emergence of research into scientific and medical *knowledge*. The terms technoscience and biomedicalization both suggest that social scientists should and must critically examine scientific and medical knowledge, a research agenda that remains controversial, as will become evident when we briefly consider the so-called “science wars” of the mid-1990s. The second and third parts of the course will each take up a specific cluster of practices in health care and medicine that could be considered examples of technoscience or biomedicalization: genetics and medicine in the second part of the course, and pharmaceuticals and medicine in the third. Along the way, we will have the opportunity to discuss the following themes and issues (among others):

- What it can mean to say science or medicine is “socially constructed” and the value of that phrase
- The reasons many social scientists have advocated a more critical appraisal of scientific and medical knowledge and practices
- The difference between traditional histories of science and medicine, and those by scholars in the sociology of scientific knowledge (SSK) and science and technology studies (STS)
- How distinctions are made between healthy/ill, normal/abnormal
- The implications of some recent developments in health care and medicine for personal identity and subject positions
- The impact of economic interests on how genetic research and pharmaceuticals are taken up in contemporary medicine
- The implications of contemporary biomedicine and technoscience for various forms of inequality and suffering

## Readings

- 1) There are four books for this course, available in the University of Calgary bookstore:
  - a) Kuhn, Thomas. *The Structure of Scientific Revolutions*. University of Chicago Press.
  - b) Katz Rothman, Barbara. *The Book of Life*, Beacon Press, 2001. [Also available in hardcover as *Genetic Maps and Human Imaginations*, Norton, 1998].
  - c) Ehrenreich, Barbara and Deirdre English. *Complaints and Disorders: The Sexual Politics of Sickness*. City University of New York, Feminist Press, 1973.

- d) Greene, Jeremy. *Prescribing by Numbers: Drugs and the Definition of Disease*, Johns Hopkins University Press, 2007.
- 2) There is also a coursepack available from the UofC bookstore.
  - 3) Finally, links to some required readings will be posted on blackboard. (These readings are accessible through the UofC library; reading and downloading the articles will require that students be logged into their UofC IT account, probably at a university computer.)

Readings will average 75-100 pages a week; less in some weeks, more in others. Carefully examine the course schedule and plan your reading schedule accordingly. Readings must be completed *before* the class for which they are assigned. I may add, omit, or change some readings during the semester as needed. Any changes in the course schedule will be announced in class. In the event of absence, class members are responsible for finding out about such changes from classmates.

### Reading summaries

Students are responsible for summarizing six readings over the course of the semester. Four of the readings will be (randomly) assigned to you, and you may select the other two. These summaries should be typed, double-spaced, and no longer than 300 words. The summaries should be exactly that—they should succinctly, and largely in your own words, capture the author's argument. They will be graded according to the description of letter grades included below. At the end of the semester, the summary sheet for which you received the lowest grade will be dropped (but students are still required to complete the six summaries).

In order to receive a grade for the summary, students must include, in a separate paragraph or section, a personal reflection on the reading: what was your experience doing this reading? What did you find most thought-provoking or challenging? What would you like to see discussed in class? This second paragraph/section does not have to be long but it should be done conscientiously. Comments in this second paragraph/section are not part of the grade for the summary.

I may occasionally compile and distribute the summary sheets (with your names and the second section removed) in class, so that we may use them as the basis for respectful but open discussion of what makes a good summary as well as for refining our understanding of the author's argument.

The summaries do not need to include formal citations or notes. However, students must use quotes when copying someone's exact words, *and* provide page numbers for quotes or references to specific points and ideas in the reading. Always include your name and date on the summary.

The summaries must be emailed to me ([aducey@ucalgary.ca](mailto:aducey@ucalgary.ca); use the subject heading "419 Summary") no later than 9 a.m. on the day they are due.

### Exams

There are two exams for this course, a mid-term and a final. Both are take-home exams and will include short answer and essay questions. The final take-home exam will be cumulative (it will

cover materials from the entire semester).

### Quizzes

On a few occasions, short quizzes will be given in class (they should require no more than 15-20 minutes of class time). The purpose of these quizzes is to make sure that students are keeping up with the reading and to find out if there are any areas that I need to review in class or emphasize. The quizzes will be graded, but count for a small portion of the final grade. If you are keeping up with the reading and attending class, the quizzes should not be difficult for you. If you have been keeping up with reading and attending class and you find the quizzes *are* difficult, you should see me to discuss the course and general strategies for approaching the course materials.

### Grading

Your final grade will be calculated as follows:

- 1) Summary sheets – 30%
- 2) Quizzes – 5%
- 3) Mid-term take-home exam – 25%
- 4) Final take-home exam – 40%

The following scale converts percentage grades to letter grades for this class.

A+ = 95-100	B = 75-79	C- = 55-59
A = 90-94	B- = 70-74	D+ = 50-54
A- = 85-89	C+ = 65-69	D = 45-49
B+ = 80-84	C = 60-64	F = below 45

The following description of letter grades comes from the U of Calgary Calendar:

- A indicates superior performance, excellent mastery of the material.
- B indicates above average performance, good mastery of the material.
- C indicates satisfactory performance, a basic understanding of the material.
- D indicates marginal performance, minimal understanding of the material.
- F indicates unsatisfactory performance.

### Instructor Contact Information

I am available during office hours and at other times by appointment. My office is Room 938, Social Sciences Building. My office phone number is 220-5054, and my email address is [aducey@ucalgary.ca](mailto:aducey@ucalgary.ca).

In general, I prefer that you contact me by email for administrative purposes only. For instance, you may email me to schedule an appointment outside of office hours. Students

with substantive questions should come to office hours or schedule an appointment. If you have questions related to grading, readings, or wish to discuss the course in greater depth, see me during office hours or make an appointment.

***Emergency evacuations:***

In the case of fire or other emergency evacuation of this classroom/lab, please proceed to the assembly point by the ICT Food Court.

***Deferrals:***

If at all possible you must provide advance notice to the instructor if you are unable to take a test or pass in an assignment or essay on time. All requests for deferral of a course component due to health reasons must be accompanied by written documentation as outlined in the University Calendar and should be obtained while the student has the physical or emotional problem rather than after recovery. Deferrals will be allowed in the following circumstances: illness, domestic affliction or religious conviction. Travel arrangements and misreading of the syllabus are not valid reasons for requesting a deferral. Deferrals will not be granted if it is determined that just cause is not shown by the student.

If you have missed a test for a legitimate reason, the instructor can require you to write a “make up” test as close in time to the original test as possible or can choose to transfer the percentage weight to another course component. If the instructor schedules a “make up” test for you, its date and location will be at the convenience of the Department of Sociology.

***Deferred Final Exam Form:***

Please note that requests to defer a Registrar-scheduled final exam are dealt with through the Registrar’s Office. Further information about deadlines, and where paperwork should be taken, is available on the form, which can be found at:

[http://ucalgary.ca/registrar/files/registrar/APP%20FOR%20DF%20EXAM\\_0.pdf](http://ucalgary.ca/registrar/files/registrar/APP%20FOR%20DF%20EXAM_0.pdf)

***Deferred Term Work Form:***

Deferral of term work past the end of a term also requires a form to be filled out. It’s available at <http://www.ucalgary.ca/registrar/files/registrar/defTW.pdf>

Once an extension date has been agreed between instructor and student, the form should be taken to the Faculty of Arts Program Information Centre (SS 110) for approval by an Associate Dean (Students).

***Ethics Research:*** Students are advised that any research with human subjects--including any interviewing (even with friends and family), opinion polling, or unobtrusive observation--must have the approval of the Departmental Ethics Committee. In

completing course requirements, students must not undertake any human subjects research without discussing their plans with the instructor, to determine if ethics approval is required.

***Academic Misconduct:*** Plagiarism, cheating and other academic misconduct are regarded as serious academic offences. Students are advised to consult the University Calendar which presents a Statement of Intellectual Honesty and definitions and penalties associated with cheating, plagiarism, and other academic misconduct.

***The Freedom of Information and Protection of Privacy (FOIP) legislation*** disallows the practice of having students retrieve assignments from a public place, e.g., outside an instructor's office or the Department main office. Written assignments must be returned to students individually, during class, or during the instructor's office hours; if a student is unable to pick up her/his assignment s/he may provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

***Safewalk:*** The University of Calgary provides a "safe walk" service to any location on Campus, including the LRT, parking lots, bus zones, and campus housing. For Campus Security/Safewalk call 220-5333. Campus Security can also be contacted from any of the "Help" phones located around Campus.

***Academic Accommodation:*** Students with a disability, who require academic accommodation, need to register with the Disability Resource Centre (MC 295, phone 220-8237). Academic accommodation letters need to be provided to course instructors no later than fourteen (14) days after the first day of class. It is a student's responsibility to register with the Disability Resource Centre and to request academic accommodation, if required.

***Handing in papers outside of class, return of final papers, and release of final grades:***

1. When students are unable to submit papers in class, they should make arrangements to hand in their papers directly to the instructor or teaching assistant. Papers will not be accepted in the main Sociology Department office.
2. Final papers will not be returned through the main Sociology Department office. The Freedom of Information and Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place (i.e. outside an instructor's office, the department office etc.) Students who want their final papers returned by mail must attach a stamped, self-addressed envelope with the paper. Otherwise final papers will be available for pick-up only during the instructor's office hours at the end of this term or at the beginning of the next term.
3. Final grades are not posted by the Sociology Department. They are available only online.

**Course Schedule**

CP=course packet; BB=blackboard

\*=dates for which summaries are assigned or can be prepared; summaries are to cover the material assigned for that day

Date	Readings
Sept 12 M	Introduction to the course
Sept 14 W	Merton, "Normative structure of science" (CP)
Sept 16 F	*Merton, "Matthew effect in science" (CP)
Sept 19 M	*Kuhn, chapters 1-6
Sept 21 W	*Kuhn, chapters 7-10
Sept 23 F	*Kuhn, chapters 11-13
Sept 26 M	*Latour & Woolgar, "The construction of a fact: the case of TRF(H)" (CP)
Sept 28 W	Latour & Woolgar continued
Sept 30 F	Discussion continued, catch-up
Oct 3 M	*Excerpts from Becker et al., <i>Boys in White</i> (CP)
Oct 5 W	*Berg, "Construction of Medical Disposals" (BB)
Oct 7 F	Berg continued
Oct 10 M	NO CLASS
Oct 12 W	*Ehrenreich & English, <i>Complaints and Disorders</i>
Oct 14 F	Ehrenreich & English continued
Oct 17 M	*Reading TBA, probably an excerpt from Hacking, <i>The Social Construction of What</i>
Oct 19 W	Discussion continued, catch-up
Oct 21 F	*Excerpts from Gross & Levitt, <i>Higher Superstition</i> (CP)
Oct 24 M	*Star, "Sociology of Science and Technology" (BB)
Oct 26 W	*Keller, "Critical silences in scientific discourse: Problems of form and re-form" (CP)
Oct 28 F	Catch-up, review take home exam
Oct 31 M	*Katz Rothman, section 1 "Mapping the Past"
Nov 2 W	*Katz Rothman, section 2 "Writing the Body"
Nov 4 F	*Katz Rothman, section 3, "Imagining the Future" Watson, "Good gene, bad gene" (CP)
Nov 7 M	Katz Rothman continued TAKE-HOME EXAM DUE
Nov 9 W	*Hedgecoe, "Schizophrenia and the Narrative of Enlightened Geneticism" (BB)
Nov 11 F	NO CLASS
Nov 14 M	*Haraway, "Mice into wormholes" (CP)
Nov 16 W	Haraway continued
Nov 18 F	*Rabinow, "Artificiality and enlightenment" (CP)
Nov 21 M	*Greene, Introduction, Chs. 3 & 4
Nov 23 W	Greene continued

Nov 25 F	*Greene, Chs. 5, 6, Conclusion
Nov 28 M	Greene continued
Nov 30 W	*Martin, "The pharmaceutical person" (BB)
Dec 2 F	*Biehl, "Global pharmaceuticals, AIDS, and citizenship in Brazil" (BB)
Dec 5 M	*Rose & Novas, "Biological citizenship" (CP)
Dec 7 W	Biehl, Rose & Novas continued
Dec 9 F	Catch-up, final exam review
	Take-home final, due date TBA