

ANTH/SOCI 2035 - Sociology of Science & Technology

<http://sociologyofscienceandtech.blogspot.com/>

Fall 2006 Lecture
Wednesdays 2:35 - 5:25 pm
Mackenzie Building 3328

Instructor: Anne Galloway
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Office: Loeb A701
Office hours: Wednesday 1:00 - 2:15 or by appointment

PREREQUISITE

SOCI 1000, or ANTH 1000, and second-year standing, or permission of the instructor.

COURSE DESCRIPTION

Our daily lives are so intimately intertwined with science and technology that we often overlook the precise ways in which science and society interact to shape our worlds. Although often assumed to be separate from the rest of society, scientific knowledge and practice share much in common with other forms of culture, and can profitably be studied as a sociological enterprise. A critical and nuanced understanding of the ways scientists work and of how technologies are developed and used allows us to make informed decisions and take responsible actions on the social, political and ethical aspects of scientific and technological progress.

This class will introduce students to material culture studies and recent literature in social and cultural studies of science and technology, while offering the opportunity to critically explore a variety of practices and issues affecting our daily lives. Specifically, students will come to understand how science and technology shape and are shaped by material objects, as well as social and political interests and processes. By studying both structural (macro) and individual (micro) interactions, students will be able to apply this knowledge to their everyday lives, both present and future.

Each class will consist of equal amounts lecture, discussion and workshop activities, separated by short breaks. Students are expected to attend class regularly and be prepared to participate. Although there are no exams for this course, students can expect overlapping assignments--from challenging readings to short presentations and substantial research projects.

REQUIRED TEXTS

Science, Technology and Society: A Sociological Approach, W. Baughspies, J. Croissant and S. Restivo (eds.), London: Blackwell, 2005.

ANTH/SOCI 2035 SCIENCE AND TECHNOLOGY COURSE READER

Both can be purchased at Haven Books (at the corner of Sunnyside and Seneca). Please check the course weblog or call 613-730-9888 to confirm availability.

ASSIGNMENTS

ASSIGNMENT # 1 - GADGETS & GIZMOS - 30%

Students are required to submit a short (7-8 page) research essay critically discussing the social, cultural, political and material importance of a technological device they use on a daily basis. Assignment details will be provided in class and online, and all topics must be approved in writing by the instructor.

Topic approval by: SEPTEMBER 27
Assignment due date: OCTOBER 11

ASSIGNMENT # 2 - I (HEART) TECHNOLOGY- 15%

For the first part of this assignment, students are required to keep a daily use-log, for one week, of the device investigated in Assignment # 1. The second part involves a short (3-4 page) personal and critical analysis of the roles the device plays in the student's everyday life. Assignment details will be provided in class and online.

Assignment due date: OCTOBER 25

ASSIGNMENT # 3 - CYBORGS & HYBRIDS - 25%

This assignment involves three essay questions that require critical engagement with a set of readings included in the Course Reader, as well as additional library research. Assignment details will be provided in class and online.

Assignment workshop: NOVEMBER 1
Assignment due date: NOVEMBER 15

ASSIGNMENT # 4 - CURRENT EVENTS - 15%

Each student is required to prepare a 1-page handout on a current news article that discusses controversies around contemporary and emerging scientific research, and give a short (5 min) presentation on it to the group. Assignment details will be provided in class and online.

Assignment due date: NOVEMBER 22

ASSIGNMENT # 5 - DISCUSSION MODERATION - 15%

Each student is required to moderate, or lead, a small group discussion on one week's assigned readings. This involves preparing a 1-page handout summarising the main points of the readings and posing critical questions for discussion. Moderators are also required to lead discussion and report on questions or conclusions that arise from the group. Assignment details will be provided in class and online.

Topic sign-up: SEPTEMBER 27
Assignment due date: WEEKLY BEGINNING OCTOBER 4

DEADLINES AND RETURN OF STUDENT'S WORK

All deadlines are firm and are indicated above and included in the course schedule below.

Written work is to be submitted in class or placed in the drop box outside the Sociology and Anthropology office by 4pm on the due date. Students must keep a hard-copy of each assignment and the instructor will not be responsible for misplaced assignments.

Late submissions will be penalised 10% every day, including weekends, and no submissions will be accepted or graded after the last day of class.

The Instructor will endeavour to grade and return assignments within two weeks.

DROP/WITHDRAWL DATES

The last day to add or drop fall term courses without penalty is **September 22, 2006**.

The last day to withdraw from fall term courses is **November 6, 2006**.

GRADES

In accordance with the Carleton University Calendar (p 39), the letter grades assigned in this course will have the following percentage equivalents:

| | | | |
|--------------|---------------------------------|-------------|-------------|
| A+ = 90-100 | B+ = 77-79 | C+ = 67-69 | D+ = 56-59 |
| A = 85-89 | B = 73-76 | C = 63-66 | D = 53-56 |
| A - = 80-84 | B - = 70-72 | C - = 60-62 | D - = 50-52 |
| F = Below 50 | WDN = Withdrawn from the course | | |

ABS = Student absent from final exam

DEF = Deferred (See above)

FND = (Failed, no Deferred) = Student could not pass the course even with 100% on final exam.

Final grades are subject to the approval of the faculty Dean, who also has the authority to change grades.

Students wishing to improve the quality of their work should also visit the Student Academic Success Centre located at 302 Tory or online at <http://www.carleton.ca/sasc/> and the Writing Tutorial Service located at 215 Paterson Hall or online at <http://www.carleton.ca/wts/>

INSTRUCTIONAL OFFENCES

Students should be aware of and respect the University's policies on Instructional Offences and Offences of Conduct, as outlined in the Undergraduate Calendar and available online at <http://www.carleton.ca/cuuc/regulations/acadregs14.html#140> and <http://www.carleton.ca/cuuc/regulations/acadregs15.html#150> respectively.

Students should also be clear on what constitutes academic plagiarism and familiar with proper citation rules for Sociology and Anthropology.

SPECIAL NEEDS & ACCOMMODATIONS

If there is any student in this course who, because of disability, may have a need for special accommodations, please come and discuss this with me. As well students must immediately contact the Paul Menton Centre for Persons with Disabilities to obtain a Letter of

Accommodation for any special arrangements. It is located at 500 UniCentre and online at <http://www.carleton.ca/pmc/>.

Accommodations for Religious Obligations are to be worked out on individual basis with instructor. Consult the Equity Services website (www.carleton.ca/equity) or an Equity Advisor (ext. 5622) for Policy and list of Holy Days. In the case of pregnancy, please contact Equity Services (ext. 5622) to obtain a Letter of Accommodation.

COURSE SCHEDULE

Sept 13

INTRODUCTION

Film

No Maps for These Territories (<http://www.nomaps.com/>)

Readings

Science, Technology & Society

Chapter 1 (pp. 1-18) - Introduction

Sept 20

SOCIAL STUDIES OF SCIENCE & TECHNOLOGY

Mini lecture

What are science and tech? A brief history of social studies of science and technology

Readings & discussion

Science, Technology & Society

Chapter 2 (pp. 19-48) - Cultures of Science

Workshop

Two-way mirrors? Observing science & technology in action

[Sept 22 last day to add or drop courses]

Sept 27

CULTURAL STUDIES OF SCIENCE & TECHNOLOGY

Mini lecture

Cultures of science and technology in action

Readings & discussion

Science, Technology & Society

Chapter 3 (pp. 49-72) - The Dance of Truth

Workshop

Making sense of things, or how to interpret what we and other people do

DISCUSSION MODERATOR SIGN-UP

ASSIGNMENT #1 TOPIC APPROVAL REQUIRED

Oct 4 SCIENCE, TECHNOLOGY & POWER

Mini lecture
Networks and protocols

Readings & moderated discussion
Science, Technology & Society
Chapter 4 (pp. 73-101) - STS and Power in the Postmodern World

Workshop
Collapsing new buildings and other strategies against architecture

Oct 11 TECHNOSCIENCE & EVERYDAY LIFE

ASSIGNMENT # 1 DUE

Mini lecture
Understanding science and tech in our daily lives

Readings & moderated discussion
Science, Technology & Society
Chapter 5 (pp. 102-120) - Life After Science and Technology Studies

Workshop
"At Home He's a Tourist": adventures in trans-disciplinary practice

Oct 18 RISK & TECHNOSCIENCE I

Mini lecture
Surveillance and control societies

Readings & moderated discussion
Course Reader
David Lyon, Chapter 1 - Understanding Surveillance (pp. 13-39) and Chapter 3 - Automating Surveillance (pp. 62-87), in Surveillance After September 11

Workshop
ICU : Watching the watchers

Oct 25 RISK & TECHNOSCIENCE II

ASSIGNMENT # 2 DUE

Mini lecture

Viruses, terminator seeds, designer babies & other risky things

Readings & moderated discussion

Course Reader

Beth Burrows, "Safety First," pp. 67-74 in Redesigning Life? The Worldwide Challenge to Genetic Engineering

Jerry Ravetz, "The post-normal science of safety," pp. 43-53 in Science and Citizens: Globalization & The Challenge of Engagement

Workshop

How to start your own biotech cult in five easy steps

Nov 1 BODIES & TECHNOSCIENCE I

Mini lecture

Cyborgs & Hybrids: The Promise of Monsters

Workshop

Assignment # 3

[Nov 6 - last day to withdraw from fall courses]

Nov 8 BODIES & TECHNOSCIENCE II

Mini lecture

Genetic engineering & intelligent machines

Readings & discussion

Course Reader

Sarah Sexton, "If Cloning is the Answer, What was the Question? Genetics and the Politics of Human Health," pp. 158-170 in Redesigning Life? The Worldwide Challenge to Genetic Engineering

Sonya Dorman Hess, "When I Was Miss Dow," in Women of Wonder, the Classic Years: Science Fiction by Women from the 1940s to the 1970s

Anne McCaffrey, "The Ship Who Sang," in Women of Wonder, the Classic Years: Science Fiction by Women from the 1940s to the 1970s

Workshop

I (heart) my clone!

Nov 15 DEMOCRACY & TECHNOSCIENCE I

ASSIGNMENT # 3 DUE

Mini lecture

When everyone is a producer and consumer, who owns science?

Readings & moderated discussion

Course Reader

Victoria Tauli-Corpuz, "Biotechnology and Indigenous Peoples," pp. 252-270 in Redesigning Life? The Worldwide Challenge to Genetic Engineering

Vandana Shiva, "Biopiracy: The Theft of Knowledge and Resources," pp. 283-289 in Redesigning Life? The Worldwide Challenge to Genetic Engineering

Workshop

Is that organic, fair-trade coffee you're drinking?

Nov 22 DEMOCRACY & TECHNOSCIENCE II

ASSIGNMENT # 4 DUE

Mini lecture

Making science & technology public

Readings & moderated discussion

Course Reader

Alan Irwin, Ch. 5 - "Freeing the Voices: A Science of the People?" pp. 105-134 in Citizen Science: A Study of People, Expertise and Sustainable Development, London: Routledge, 1995.

Student presentations

Current events (Assignment #4)

Nov 29 SCIENCE, TECH & MEDIA

Film

Screening a classic science fiction movie from the 50s to 80s - to be decided by student votes.