

Science, Technology, and Society (STAS) 201 – Lecture 01
Introduction to Science, Technology, and Society
Fall 2012
Tues and Thurs 12:30-13:45, ST 133

Instructor: Dr. Patrick Feng
Office Location: SS 308
Office Phone: 220-6819
E-Mail: pfeng@ucalgary.ca
Office Hours: Tuesdays 14:00-15:00 and
by appointment

Course Description

This course provides an introduction to interdisciplinary field of *Science, Technology, and Society*. Using an inquiry-based learning approach, students will investigate topics relating to the social, political, and cultural dimensions of science and technology. We shall study how science and technology have developed historically and the social, legal, and ethical issues raised by these developments.

Topics to be covered include: the scientific method and the scientific revolution; norms and values in science; debate and consensus building in science; scientific controversies; scientific expertise; technology and culture; public understanding of science.

Objectives of the Course

The goals of this course are to:

1. Gain an understanding of how modern science and technology work;
2. Learn about the ways in which science, technology, and society influence one another;
3. Develop reading, writing, and research skills;
4. Reflect critically on the relationship between science and its various publics.

Internet and electronic communication device information

Students are welcome to bring laptops and other devices to class so long as these are used to aid student learning. During class, it is not acceptable to play games, answer email, surf the web, or engage in other non-class activities. Not only do such practices negatively affect you, they also distract other students and undermine our goal of creating a respectful learning environment.

Textbooks and Readings:

There is one required text for this course:

- Jerome Ravetz, *The No-Nonsense Guide to Science*, New Internationalist, 2005.

Additional readings will be made available online via Blackboard.

Assignments and Evaluation

Students will be graded based on following components:

- Letter to the editor 15% *due Sept 20*
- Inquiry module
 - Research plan 10% *due Oct 5*
 - Annotated bibliography 10% *due Oct 19*
 - Report & presentation 30% *due Nov 27, 29, Dec 4*
- Field trip report 25% *due Nov 15*
- Research portfolio 10% *due Dec 6*

Note that there is no final exam for this course.

Brief description of assignments

- **Letter to the editor:** Write a “letter to the editor” (~ 500 words) on a science- or technology-related issue of relevance to the public. Your letter should be written in clear language for a general audience (e.g., someone who is college/university-educated person but *not* a specialist in science). You will also be asked to write a précis (~ 250 words) summarizing a scientific article.
- **Inquiry module:** Over the course of the term we will turn our attention to current scientific issues and engage in a series of **inquiry exercises**. This means that students will engage in group-based, self-directed research as part of their learning experience. Briefly, this involves brainstorming, doing research in small groups, writing up your results, and presenting these findings to your classmates. A research plan (2-3 pages), annotated bibliography (10-15 pages), written report (10-12 pages) and a group presentation (10 min) make up this assignment. You will work in groups for this assignment.
- **Field trip report:** We will take a trip to the Calgary Science Centre and/or local science labs to explore how science is communicated and represented to the public. Afterwards, students will write a report (4-8 pages) based on a series of questions given in class. You will work in pairs for this assignment.
- **Research portfolio:** Each student will maintain a portfolio of the research they conducted for the inquiry module. At the end of the term, students will submit their portfolio along with a short essay (3-4 pages) reflecting on their research. This is an individual assignment.

It is the student's responsibility to keep a copy of each submitted assignment.

Note: Please hand in your essays directly to your tutor or instructor if possible. If it is not possible to do so, a daytime drop box is available in SS320; a date stamp is provided for your use. A night drop box is also available for after-hours submission. Assignments will be removed the following morning, stamped with the previous day's date, and placed in the instructor's mailbox.

Registrar-scheduled Final Examination: NO

Please note: If your class is held in the evening, the Registrar's Office will make every attempt to schedule the final exam during the evening; however, there is NO guarantee that the exam will NOT be scheduled during the day.

Policy for Late Assignments

Assignments submitted after the deadline may be penalized with the loss of a grade (e.g.: A- to B+) for each day late.

Freedom of Information and Protection of Privacy Act

This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIP). As one consequence, **students should identify themselves on all written work by placing their name on the front page and their ID number. Also you will be required to provide a piece of picture identification in order to pick up an assignment or look at a final exam from SS320 after classes have ended.**

For more information see also <http://www.ucalgary.ca/secretariat/privacy>.

Writing Skills Statement

Department policy directs that all written assignments (including, although to a lesser extent, written exam responses) will be assessed at least partly on writing skills. For details see www.comcul.ucalgary.ca/info. Writing skills include not only surface correctness (grammar, punctuation, sentence structure, etc) but also general clarity and organization. Research papers must be properly documented.

If you need help with your writing, you may use the Writing Centre. Visit the website for more details: www.efwr.ucalgary.ca

Grading System

The following grading system is used in the Department of Communication and Culture:
(Revised, effective September 2008)

	Grading Scale
A+	96-100
A	90-95.99
A -	85-89.99
B+	80-84.99
B	75-79.99
B-	70-74.99
C+	65-69.99
C	60-64.99
C-	55-59.99
D+	53-54.99
D	50-52.99
F	0-49

Where a grade on a particular assignment is expressed as a letter grade, it will normally be converted to a number using the midpoint of the scale. That is, A- would be converted to 87.5 for calculation purposes. F will be converted to zero.

Plagiarism

Using any source whatsoever without clearly documenting it is a serious academic offense. Consequences include failure on the assignment, failure in the course and possibly suspension or expulsion from the university.

You must document not only direct quotations but also paraphrases and ideas where they appear in your text. A reference list at the end is insufficient by itself. Readers must be able to tell exactly where your words and ideas end and other people's words and ideas begin. This includes assignments submitted in non-traditional formats such as Web pages or visual media, and material taken from such sources.

Please consult your instructor or the Writing Centre (MacEwan Student Centre 4th floor, efwr.ucalgary.ca) if you have any questions regarding how to document sources.

Academic Misconduct

For information on academic misconduct and the consequences thereof please see the current University of Calgary Calendar at the following link;
<http://www.ucalgary.ca/pubs/calendar/current/k.html>

Students with Disabilities

If you are a student with a disability who may require academic accommodation, it is your responsibility to register with the Disability Resource Centre (220-8237) and discuss your needs with your instructor no later than fourteen (14) days after the start of the course.

Students' Union

For details about the current Students' Union contacts for the Faculty of Arts see <http://www.su.ucalgary.ca/governance/elections/home.html>

Student Ombudsman

For details on the Student Ombudsman's Office see <http://www.su.ucalgary.ca/services/student-services/student-rights.html>

Emergency Evacuation and Assembly points

For information on the emergency evacuation procedures and the assembly points see <http://www.ucalgary.ca/emergencyplan/assemblypoints>

"SAFEWALK" Program -- 220-5333

Campus Security will escort individuals day or night -- call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phone located at most parking lot booths.

Ethics

Whenever you perform research with human participants (i.e. surveys, interviews, observation) as part of your university studies, you are responsible for following university research ethics guidelines. Your instructor must review and approve of your research plans and supervise your research. For more information about your research ethics responsibilities, see the U of C Research Ethics "Information for Applicants," sections 3.0 to 9.0, inclusive:
http://www.ucalgary.ca/UofC/research/html/ethics/info_undergrad.html

Schedule of Lectures and Readings

A detailed schedule will be handed out on the first day of class.