Science, Technology, and Society (STAS) 201 – Lecture 01 Introduction to Science, Technology, and Society Fall 2011

Tues and Thurs 11:00-12:15, KNB 131

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Office Hours: Thursdays 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. Students who use technology inappropriately will be penalized in their participation grade.

Textbooks and Readings:

There is one required text for this course:

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

In addition, a number of 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 week 2*

Inquiry modules

o Module 1 25% due week 6

O There are two parts to this assignment: a group presentation (12.5%) and an 8-10 page report (12.5%)

o Module 2 30% *due week 13*

o There are two parts to this assignment: a group presentation (15%) and an 8-10 page report (15%)

• Field trip report 25% *due week 9*

• The report will be 4-6 pages in length and will be written in partnership with another student.

Participation 5% ongoing

Note that there is no final exam for this course.

Description of assignments

- Letter to the editor: Write a short "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 modules: This course involves inquiry-based learning. This means that students will engage in self-directed, problem-based research as part of their learning experience. Over the course of the term we will turn our attention to current scientific issues and engage in a series of inquiry exercises. Briefly, this involves brainstorming questions, researching these questions in small groups, writing up your results, and presenting these findings to your classmates. You will work in groups for this assignment.
- **Field trip report:** We will take a field trip to the new Calgary science centre to explore how science is communicated and represented to the public. Afterwards,

- students will write a report describing their experience. You will work in pairs for this assignment.
- **Participation:** In inquiry learning, students learn from each other as well as from the instructor. In order to promote this, students are expected to come to class having done the assigned readings and prepared to participate in class discussions.

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

There will be a 10% penalty for each day an assignment is late. After 3 days, late assignments will **NOT** be accepted. Under exceptional circumstances (e.g., medical illness), students may ask the instructor for an extension.

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)

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	Grading Scale
A+	96-100
A	90-95.99
A -	85-89.99
B+	80-84.99
В	75-79.99
B-	70-74.99
C+	65-69.99
С	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-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.