Science, Technology and Society STAS 401.04 L01
Special Topics in Science, Technology and Society
Technology and Development
Winter 2013
W 13:00-15:50

Instructor: Edna F. Einsiedel

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Office Hours: Tue 3:30-4:30; Mon 10-11; other times by apt.

Course Description
This course will focus on technology questions and issues in an international development context. The key questions to be addressed include the following: What are the meanings of "development" and what challenges have been posed by the contested meanings of *development*? What are the different ways of thinking about *technology*? How are the different interpretations of *technology* relevant for thinking about international development processes and values? What is appropriate technology? How have different technologies for international development been designed, introduced, and how have these fared in the context of their intended and unintended consequences? What values are embedded in technologies? What/whose knowledges are implicated? What are the indicators for its "success", who makes these assessments and how? In considering these questions, students should be able to think critically about a given technology and to consider its social and political contexts for development.

Objectives of the Course
At the end of this course, students should be able to
1. consider technologies in their broader social contexts, with reference to the key questions of interest in this course.
2. critically analyze the appropriateness of given technologies for international development contexts.
3. further develop research and writing skills.

Internet and electronic communication device information

Laptops may be used in-class for class-related purposes only. Cell-phones should be turned off during the class period,

Textbooks and Readings:
No textbook is required; selected readings will be available on Blackboard.

Assignments and Evaluation

1. **Group Projects (35%).** Students will work in groups of two and will choose a technology to examine in any of the four development arenas covered in the course. Students will be responsible for researching this technology in terms of its historical context and the key questions posed for this course (see course description). The group will write a brief report of up to 10 pages (double-spaced) and do an oral presentation in class, scheduled during the week the topic is covered. All reports will be due on the same designated date beforehand. (20% for written report, 15 % for oral presentation)

2. **Research Paper (45%).** Students will select a topic of their choice, submit a research brief (up to 2 pp. including initial reference list) on the proposed paper topic for approval, and complete a full research paper of no more than 10 pages (double sp., 12 size font) on the designated date, or approximately 2800 – 3000 words. **The research must include information/data from two interviews** – either from a developer, a user, a policy maker, or other relevant stakeholder. (5 % for Paper Brief; 25% for paper; 10% for presentation)

3. **Class Participation (20%).** Students will lead one class discussion (8%), will submit a 200-word analytical response to each of four of the reading sets (8%), and   will also be assessed on on-going participation in weekly class discussions (4%).

All assignments must be completed or a grade of F may be assigned at the discretion of the instructor.

It is the student's responsibility to keep a copy of each submitted assignment.
Note: Please hand in your essays directly to your 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.

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 Department of Communication and Culture Research Ethics site:
http://www.comcul.ucalgary.ca/ethics

or the University of Calgary Research Ethics site:
http://www.ucalgary.ca/research/cfreb

Note on Research Ethics:

This course (or assignment) will obtain course-based ethics approval from the faculty research ethics committee as soon as project selections have been finalized. 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

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Registrar-scheduled Final Examination: None

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 http://www.comcul.ucalgary.ca/needtoknow. 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: http://www.ucalgary.ca/ssc/writing-support

Grading System

The following grading system is used in the Department of Communication and Culture:

	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 (3rd Floor Taylor Family Digital Library, http://www.ucalgary.ca/ssc/writing-support) 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.ucalgary.ca/provost/students/ombuds

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.

READINGS:

Akubue, A. (2000), Appropriate technology for socio-economic development in third world countries. Journal of technology studies , 26:1 .

Feenberg, A. (1991), Critical theory of technology. Oxford: Oxford University Press.

Hesketh, T. and ZW Xing (2011) The consequences of son preference and sex-selective abortion in China and other Asian countries. CMAJ, Mar. 14.

Hughes, Thomas (2004), Human-built world: how to think about technology and culture. Chicago: Univ. of Chicago Press.

International Food policy Research Institute (2002), Green revolution: curse or blessing?

Jasanoff, S. (2002), Reimagining science, technology and development. Environmental values, 11:3, 253-76

Juma, C. (2005), Innovation: applying knowledge in development. Millenium Project. London: Earthscan

Marden, E. (1999), The Neem tree patent: international conflict over the commodification of life. Int'l and Comparative Law Review. 279, 22 BC.

Nature Supplement (2011) — 474:7352, . Special supplement on Biofuels, developing countries, sustainable development.

Postman, N. (19930< Technopoly: the surrender of culture to technology. New York: Vintage.

Schumacher, E.F. (1973) Small is beautiful: a study of economics as if people mattered. London: Blond and Briggs.

Serageldin, I.(2007), From green revolution to gene revolution. Community food. http://www.communityfood.com/articles/articles/150/1/FROM-GREEN-REVOLUTION-TO-GENE-REVOLUTION/Page1.html

Tenner, E. (1997) Why things bite back: technology and the revenge of unintended consequences. New York: Vintage (selected chapters)

Turner, L. (2008), Medical tourism initiatives should exclude commercial organ transplantation. Journ Royal Society of Medicine, 101:391-394

Williams, CC & AC (2004), Willington, The diverse and contested meanings of sustainable development. The geographical journal. 170:2, 99-104.

OTHER SOURCES OF INTEREST:

Warschauer, M. (2003). Technology and social inclusion: Rethinking the digital divide. Cambridge, MA: MIT Press.
Wilson, E. J. (2004). The information revolution and developing countries. Cambridge, MA: MIT Press