

EESB16: Feeding Humans - The Cost to the Planet

Course Outline 2013

Lecturer: Cindy Bongard

Email: bongard@utsc.utoronto.ca

Lectures: Tuesdays 1-3 HW214

TAs: Rachel Strickman (rachel.strickman@mail.utoronto.ca)

Stephanie Gagliardi (stephanie.gagliardi@mail.utoronto.ca)

Office hours: Tuesdays: 3-4 pm in PO104 Room #109

This course outlines the development of modern industrialized agriculture, including the tools of genetic engineering and its application to the species we rely on for food. Environmental impacts of these developments will be highlighted, including of over-harvesting, genetic erosion, soil erosion, pesticide and fertilizer use, and the issues surrounding the use of genetically modified organisms. The course has been enjoyed by students of biology, environmental science, and social sciences. **Note that readings will be assigned rather than using a text book. Materials will be posted to Intranet.**

Prerequisite: [BGYA01H](#) & BGYA02H (no exceptions)

Course Text: None. Readings provided via UTSC Intranet

Date	Lecture
Jan 8 th	1 Introduction + traditional agriculture
Jan 15 th	2 Industrialized crop production
Jan 22 th	3 Pesticides
Jan 29 th	4 Fertilizers
Feb 5 th	5 Confined Animal Feeding Operations
Feb 12th	Midterm test
Feb 19 th	READING WEEK
Feb 26 th	6 Recombinant biotechnology
March 5 th	7 Plant methods + gene transfer
March 12 th	8 GM crops and their special issues
March 19 th	9 GM animals
March 26th	**Poster Presentations** in Meeting Place
April 2 nd	10 Fisheries and Forestry + Recap

Evaluation

Midterm Exam	35%
Final Exam	40%
Poster Presentation	15%
Participation	10%

Exam Format:

Midterm: Multiple choice

Final: Multiple choice, definitions, short answers/short essay.

Tutorials

Students will give poster presentations in groups of 4 students during the poster session scheduled March 26th in a public part of the campus (likely Meeting Place).

Tutorials will be used to assign poster groups, initial poster assessment, and for discussion of reading material/videos, etc.

EESB16 Tentative Tutorial Schedule

Jan 17 th	Meet to organize into groups for poster project. Number per group is 4 (minimum).
Jan 31 st	Vandana Shiva lecture (video) DEBATE http://www.youtube.com/watch?v=Iq6jpkDNxtI
Feb 14 th	Readings Discussion 1 (will be posted to Intranet)
Feb 28 th	Readings Discussion 2 (posted to Intranet)
March 14 th	Outline poster presentations (initial assessment and peer review)
March 21 st	Outline poster presentations (initial assessment and peer review)
March 26 th	**Present Posters in Meeting Place**

Note: Tutorials

T0001 Thursdays 5-6 HW308

T0002 Thursdays 5-6 AA205

Late penalty:

Failure to have your completed poster available for evaluation would result in a mark of 0; posters will be assessed in tutorial and when presented publicly in March.

Academic integrity/plagiarism

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:

- Using or possessing unauthorized aids
- Looking at someone else's answers during an exam or test.
- Misrepresenting your identity.

In academic work:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see <http://www.utoronto.ca/academicintegrity/resourcesforstudents.html>).

AccessAbility

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca.

Suggested Poster Topics 2013

See material in **Lecture 1** posting to Intranet

Resource Books, Optional Reading

Armesto, Felipe Fernandez. 2002. *Near a Thousand Tables: A History of Food*. The Free Press. Simon and Schuster Inc. ISBN 0-7432-2644-5

Cook, Christopher D. 2005. *Diet for a Dead Planet: How the Food Industry Is Killing Us*

Dalby, Andrew. 2000. *Dangerous Tastes: The Story of Spices*. University of California Press. ISBN 0-520-22789-1

Goodall, Jane. 2005. *Harvest for Hope: A Guide for Mindful Eating*. Time Warner Book Group. ISBN 0-446-53362-9

Prance, Sir Ghilleen and Mark Nesbitt. 2005. *The Cultural History of Plants*. Routledge, UK. ISBN 0-415-92746-3

[Schlosser](#), Eric. 2005. Fast Food Nation: The Dark Side of the All-American Meal.

Pollan, Michael. The Omnivores Dilemma.

Time Magazine. Getting Real About the High Price of Cheap Food.
<http://www.time.com/time/health/article/0,8599,1917458,00.html>

Other readings will be provided as material is introduced.

NOTE: March 24th = last day to drop course without academic penalty (per UTSC Calendar)

http://www.utsc.utoronto.ca/~registrar/calendars/calendar/Sessional_Dates.html#2012_Winter_Session