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

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

<table>
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<tr>
<th>Date</th>
<th>Activity</th>
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<tr>
<td>Jan 17th</td>
<td>Meet to organize into groups for poster project. Number per group is 4 (minimum).</td>
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<tr>
<td>Jan 31st</td>
<td>Vandana Shiva lecture (video) <strong>DEBATE</strong> <a href="http://www.youtube.com/watch?v=lq6jpkDNxtI">http://www.youtube.com/watch?v=lq6jpkDNxtI</a></td>
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<tr>
<td>Feb 14th</td>
<td>Readings Discussion 1 (will be posted to Intranet)</td>
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<tr>
<td>Feb 28th</td>
<td>Readings Discussion 2 (posted to Intranet)</td>
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<tr>
<td>March 14th</td>
<td>Outline poster presentations (initial assessment and peer review)</td>
</tr>
<tr>
<td>March 21st</td>
<td>Outline poster presentations (initial assessment and peer review)</td>
</tr>
<tr>
<td>March 26th</td>
<td><strong>Present Posters in Meeting Place</strong></td>
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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](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


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


Pollan, Michael. The Omnivores Dilemma.


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