ENSC315
Global Food Security, Agriculture and the Environment
Winter 2005; Chernoff 117, Thursday 7-10 p.m.
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Overview
Welcome! In the next 12 weeks we will investigate the relationship between food security, food production and the environment. We begin by exploring resource use through a group game activity. We then take a historical look at the dynamic between humans and food. Once we have a broad sense of the evolution of agriculture, we will examine several themes that tie together food security, agriculture and the environment, including: climate change, urban food security, water, and biodiversity. This is followed by a series of lectures on political, technological and social issues that when combined with agriculture and the environment have profound impacts on global food security. We end the course with a look at the future of food security, with particular emphasis on sustainable food projects.
Movies and guest lectures are part of every class so that you are exposed to a range of experiences and expertise. I am always interested in feedback, so please let me know if there are topics of particular interest to you, or aspects of the course that can be improved upon.

Course requirements and grades
There is one major written journal, five in-class writing assignments, mid-term and final exam.

Journal
Select a country or region that is experiencing food insecurity. Find four news pieces, journal articles, and/or web articles (not more than 3 of the four can be web-based). Using the articles, discuss the current food production and environmental challenges that impact this country as it strives to be food secure. 1200 word limit
Due in fifth week of classes (February 10)
30% of final mark

In-class summary assignments
Five in-class writing exercises when you will answer a question that relates to some aspect presented in that day's lecture. Each assignment is worth 5% of the final mark - we will use the best 4 of the 5 marks.
20% of final mark

Midterm exam, February 17
Short answer, definitions, models
20% of final mark

Final Exam, during exam period, TBA
Short essay questions
30% of final mark

Late Policy: Extensions are not normally given for reasons other than illness (with proper medical documentation) or family emergency.
Assignments that are received late will be assessed a penalty of 2% per weekday. Weekends count as two days (ie. 4% per weekend).
**Academic Dishonesty:** Academic dishonesty **will not be tolerated.** Dishonesty includes, but is not limited to, cheating on exams, ‘sharing’ work with a friend, or plagiarizing a secondary source – either intentionally, or inadvertently, by failing to provide proper citations. If you are unsure about what constitutes academic dishonesty, please ask me, or refer to the Arts and Science Course Calendar ([http://www.queensu.ca/calendars/artsci/Regulation12_AcademicDishonestyandFailuretoAbidebyAcademicRules_2391.htm](http://www.queensu.ca/calendars/artsci/Regulation12_AcademicDishonestyandFailuretoAbidebyAcademicRules_2391.htm)).

### Course schedule: lectures and readings

#### Week 1: January 13

**Lecture focus**
- Course overview, introduction
- Guest lecturer: Jeff Moon on library resources
- Lecture: Food security
- Movie: Global Banquet

**Readings**
- Google Food Security: start to look for a country of interest for journal assignment
- To get to this document, google: UN A/RES/58/186
- And connect to the link

#### Week 2: January 20

**January 21st last chance to add/drop courses for semester with no $$$$ penalty**

**Lecture focus**
- Dr. Donefer: Nutrition
- FishBanks (resource allocation game)

**Readings**
- Nutrition reading (Marion Nestle) on reserve in Stauffer library, NOT in course reader

#### Week 3: January 27

**Lecture focus**
- Dr. Donefer: Nutrition
- Hunter gatherer to agriculture
- Movie: Surviving the Dust Bowl

**Readings**
- Nutrition reading (UN/IFPRI) on reserve in Stauffer library, NOT in course reader

#### Week 4: February 3

**Lecture focus**
- The environment and agriculture: global climate change
- Movie: What’s Up with the Weather?

**Readings**

#### Week 5: February 10

**Journal assignment due**

**Lecture focus**
- Urban food security
- Guest lecturer: Wayne Roberts, Project Co-ordinator, Toronto Food Policy Council Group discussion
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<th>Week 6: February 17</th>
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<tr>
<td><strong>Lecture focus</strong></td>
<td>Water and food security</td>
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<td><strong>Readings</strong></td>
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| W Roberts, 2001, *The Way to a City's Heart is Through Its Stomach*  
Toronto Food Policy Council web site  
Neil Wrigley, Daniel Warm and Barrie Margetts, 2003, Deprivation, diet and food retail access: Findings from the Leeds 'food deserts' study, *Environment and Planning A*, 35: 151-188  

**MIDTERM EXAM**

**Week 7: March 3**

| Lecture focus | Agriculture, the environment and biodiversity  
Guest speaker: Dr. vanLoon, expert sustainable Indian food projects  
Movie: ReInventing the World: Food |
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<tr>
<td><strong>Readings</strong></td>
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WE Klohn and BG Appelgren, 2004, Challenges in the field of water resources management in agriculture, *Food and Agriculture Organization* of the United Nations |  |

**MID-TERM READING WEEK February 21-25**

**Week 8: March 10**

| Lecture focus | Land use conflicts  
Guest speakers: local farmer, AND Kingston Food Bank  
Group discussions |
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**Week 9: March 17**

| Lecture focus | Agriculture and the changing political and social environment  
Movie: Costa Rica Counts the Future |
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### Week 10: March 24

**Lecture focus**
- Food security delivery
- Guest lecture: Brian Sterling
- Group discussion

**Readings**

### Week 11: March 31

**Lecture focus**
- Bulking up food production? Biotechnology and food security
- Movie: TBA

**Readings**

### Week 12: April 7

**Lecture focus**
- Future challenges: Food security and the future
- International development and food security
- Course wrap-up
- Group discussion

**Readings**
- Chantal Pohl Nielsen, Sherman Robinson, Karen Thierfelder, Genetic Engineering and Trade: Panacea or Dilemma for Developing Countries, *World Development* 29(8): 1307-1324
- F Lappe, A Lappe, 2004, Diet for a Smaller Planet: Real Sources of Abundance, in *Feeding the Future, From Fat to Famine*, eds A Heintzman and E Solomon, 125-153