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)

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 UN Food Security Declaration 2004. 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	The World Commission on Environment and Development, 1989, *Our Common Future*, 95-146 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	Ronald Wright, 2004, *A Short History of Progress,* 34-48 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	B Smit and M Skinner, 2002, Adaptation Options in Agriculture to Climate Change: A Typology, *Mitigation and Adaptation Strategies for Global Change*, 7: 85-114 Al Gore, 1993, *Earth in the Balance*, Chapters 6, 7

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

Readings	W Roberts, 2001, The Way to a City's Heart is Through Its Stomach Toronto Food Policy Council web site http://www.city.toronto.on.ca/health/tfpc_hs_report.pdf 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 AW Drescher, 1999, Urban Agriculture in the Seasonal Tropics: The Case of Lusaka, Zambia, in *For Hunger Proof Cities*, eds M Koc, R MacRae, L Mougeot, J Welsh, International Development Research Centre, Ottawa, 67-76 A Moskow, 1999, The Contribution of Urban Agriculture to Gardeners, Their Households, and Surrounding Communities: The Case of Havana, Cuba, in *For Hunger Proof Cities*, eds M Koc, R MacRae, L Mougeot, J Welsh, International Development Research Centre, Ottawa, 77-83
Week 6: February 17	
Lecture focus	Water and food security MIDTERM EXAM
Readings	M deVilliers, 2003, *Water: The Fate of Our Most Precious Resource*, The Problem with Irrigation, 152-163 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 7: March 3	
Lecture focus	Agriculture, the environment and biodiversity Guest speaker: Dr. vanLoon, expert sustainable Indian food projects Movie: ReInventing the World: Food
Readings	Gary VanLoon, 2004, Agricultural Sustainability
Week 8: March 10	
Lecture focus	Land use conflicts Guest speakers: local farmer, AND Kingston Food Bank Group discussions
Readings	David Campbell, Helen Gichohi, Albert Mwangi and Lucy Chege, 2000, Land use conflict in Kajiado District, Kenya, *Land Use Policy* 17: 337-348 W Husbands, 1999, Food Banks as Antihunger Organizations, in *For Hunger Proof Cities*, eds M Koc, R MacRae, L Mougeot, J Welsh, International Development Research Centre, Ottawa, 103-109
Week 9: March 17	
Lecture focus	Agriculture and the changing political and social environment Movie: Costa Rica Counts the Future

Readings	Peter Penz, 2004, Dams, Guns and Refugees, *Alternatives*, 30(4): 8-12 Clarke, P. 2000. Food Security and War in Afghanistan. *Development* 43(3): 113-119
Week 10: March 24	
Lecture focus	Food security delivery Guest lecture: Brian Sterling Group discussion
Readings	D Sparling, B Sterling, 2004, Food Traceability: Assessing the Full Business Value, *Grocery Trade Review*, George Morris Centre Clugston, M. 2002, Harvest of Goodwill, Canadian Geographic, 122(1): 66-71 Mancusi-Manteri, E. 2000. Food Aid for Social Development in Post-Conflict Situations. *Development* 43(3): 106-112
Week 11: March 31	
Lecture focus	Bulking up food production? Biotechnology and food security Movie: TBA
Readings	Ismail Serageldin, 1999, Biotechnology and Food Security in the 21st Century, *Science*, 285:387-389 Chantal Pohl Nielsen, Sherman Robinson, Karen Thierfelder, Genetic Engineering and Trade: Panacea or Dilemma for Developing Countries, *World Development* 29(8): 1307-1324 N Clark, K Stokes, J Mugabe, 2002, Biotechnology and development: threats and promises for the 21st century, *Futures*, 34: 785-806
Week 12: April 7	
Lecture focus	Future challenges: Food security and the future International development and food security Course wrap-up Group discussion
Readings	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 V Shiva, 2004, The future of food: countering globalization and recolonisation of Indian agriculture, *Futures*, 36: 715-732