

# World Food Problems

Agro 4103/ApEc 4103

Fall 2009

3 credits

9/8/09

Wednesdays

6:00-9:00 p.m.

306 Borlaug Hall

This course provides a multi-disciplinary look at problems (and some of the possible solutions) affecting food production, storage, and utilization. Presentations and discussions cover sometimes conflicting views on population control, use of technology, as well as the ethical and cultural values of the people in various countries of the world. Emphasis is placed on the need for governments, international assistance agencies, international research and extension centers, as well as the private business sector to assist in solving these complex problems. Students can enroll in either Agro 4103 or ApEc 4103. Previous background in any of the disciplines is not required, but students should expect upper division and/or graduate level assignments.

This course meets the requirements for two of the designated liberal education themes: International Perspectives and Citizenship and Public Ethics.

Class time: A mixture of lecture-discussion and small group activity.

Workload: 3-hours/week lecture-discussion, 6-hours/week reading, writing, studying (as much as 40 pages of reading/week). Several short papers/homework assignments during the semester and a final project presentation and paper.

Grade: 50% of the grade is based on homework assignments, 15% for in-class writing assignments, 15% on the project presentation, 20% on the final paper.

Text: *The World Food Problem: Toward Ending Undernutrition in the Third World*, 2009, by Leathers and Foster

Cases: Available on course website

Course Website: <http://www.apec.umn.edu/faculty/kolson/apec4103.html>

## Supplemental reading:

- *Ending Hunger in Our Lifetime: Food Security and Globalization*. 2003. Available at McGrath Library, [www.amazon.com](http://www.amazon.com) and [www.barnesandnoble.com](http://www.barnesandnoble.com)
- *Feeding the World: A Challenge for the 21<sup>st</sup> Century*, by Vaclav Smil
- *World Development Report 2008: Agriculture for Development* by World Bank, Oct. 2007  
<http://www.worldbank.org/wdr2008>

## Teaching Faculty

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## Course Topics Schedule

### Fall 2009

September 9

- Introduction to course and faculty
- Topic: Resources for a Hungry World (Paul Porter)
- **Assignment #1**, A Hungry World, **due Sept. 30**
- Reading assignment for Sept. 16: Chapters 1-3

September 16

- Topic: Famine and Malnutrition (Kent Olson)
- Reading assignment for Sept. 23: Chapters 4-6

September 23

- Topic: Food Distribution and Security Issues (Kent Olson)
- Reading assignment for Sept. 30: Chapters 7 and 8  
and “Science, Technology, and Skills” (link to this publication on the class web site)

September 30

- Topic: Role of Science and Technology in Addressing World Hunger (Phil Pardey)
- **Assignment #2**, Science, Technology and Culture, **due: Oct. 28**
- Reading assignment for Oct. 7: Chapters 9 and 10

October 7

- Topic: Water Scarcity for Agriculture: The Issue for the Next 2 Decades (K.W. (Bill) Easter)
- Reading assignment for Oct. 14: Chapters 11 and 12

October 14

- Topic: Nutrition, Food, and Health across Cultural Communities (Craig Hassel)
- Reading assignment for Oct. 21: Chapters 13 and 14

October 21

- Topic: Agricultural Productivity (Paul Porter)
- Reading assignment for Oct. 28: Chapters 15 and 16

October 28

- Topic: Role of Institutions (Ron Phillips)
- **Assignment #3**, Productivity, Institutions, Biotechnology, Animals, **due: Nov. 18**
- Reading assignment for Nov. 4: Chapters 17 and 18

November 4

- Topic: Role of Animals (Mike White)
- Reading assignment for Nov. 11: Chapter 19 and 20  
and “Facilitating Change in Senegalese Rice Production” by John Vreyens  
(link to article on class web site)

November 11

- Topic: Africa: Lessons Learned in Senegal and the Democratic Republic of Congo (John Vreyens)
- Reading assignment for Nov. 18: Chapters 21-23

November 18

- Topic: Climate Change and Food Production/Copenhagen Meeting (Paul Porter)

November 24 (Tuesday) – field trip to Feed My Starving Children

November 25 - No class – Thanksgiving Eve

December 2

- Presentations on Term Projects

December 9

- Presentations on Term Projects

December 16 (Last day of classes)

- Topic: Discussion of all topics in World Food Problems course (Kent Olson & Paul Porter)

December 18

- Final Paper Due (before 4:30 pm)

### Guest Lecturers

K. William Easter	Professor, Dept. of Applied Economics 317 ClaOff; 612-625-7728; <a href="mailto:easte001@umn.edu">easte001@umn.edu</a>
Craig Hassel	Associate Professor, Dept. of Food Science and Nutrition 164 FScN; 612-624-7288; <a href="mailto:chassel@umn.edu">chassel@umn.edu</a>
Phillip Pardey	Professor, Dept. of Applied Economics 218 ClaOff; 612-625-2766; <a href="mailto:parde001@umn.edu">parde001@umn.edu</a>
Ron Phillips	Regents Professor, Dept. of Agronomy and Plant Genetics 411 BorH; 612-625-1213; <a href="mailto:phill005@umn.edu">phill005@umn.edu</a>
John Vreyens	Director, International Agriculture Programs, CFANS 190 Coffey Hall; 612-624-3221; <a href="mailto:vreyens@umn.edu">vreyens@umn.edu</a>
Mike White	Professor, Dept. of Animal Science 350 ABLMS; 612-624-5370; <a href="mailto:white008@umn.edu">white008@umn.edu</a>

## Grading System

**In-class writing (30%) and homework assignments (30%):** Students will be assigned questions to answer briefly in writing during class based on the readings and discussions for that day. There will be 10 of these in-class question sets worth 3 points each. Students will also be assigned three homework assignments to answer after the class presentations and discussions; these will be worth 10 points each. In case of illness, contact us before the next class.

**Final Project Presentation (15%) and Paper (25%):** Each student is expected to develop and submit an **original** paper utilizing information obtained from lectures, readings and discussions. Each student will give an oral project presentation to the class before the written paper is due. The paper topic must be approved in advance by a course instructor. It can be written from your discipline or major perspective but must integrate other course related issues as appropriate. Due date is firm and no late submissions are allowed.

Your paper must be typewritten (word-processed) using standard margins, double spacing, and a font size of 12. Instructors will grade it on the quality of writing (*be sure you proof it several times before submission*), and the degree to which it shows critical thinking, originality, and integration of information and ideas encountered in the course. It must be 10-12 pages in length (not including references).

**Place final paper in faculty mailbox or give to secretary/staff person.** Locations for paper submissions: **Agro 4103:** P. Porter - 411 Borlaug Hall or **ApEc 4103:** K. Olson – 316 ClaOff

Criteria to be used in assessing your paper are listed below. A paper, "What do professors want from student writing," is available on the class website for an expanded discussion of these criteria.

- (20pts)      Organizing Principle: the outline or flow of the paper
  - (30pts)      Introduction: Frame of reference clearly stated; what is the problem or opportunity?
  - (100pts)     Detailed Content: Well developed and supported solutions and/or actions with references and detailed examples
  - (50pts)      Conclusion (Executive Summary): Implications, Inferences and Critical Analysis – follow up on organization principle.
  - (20pts)      Bibliography: Citations according to instructor's examples.
  - (30pts)      Precision: Grammar, spelling, style, and clarity
- This total of 250 possible points will constitute 25% of the final grade.**

Letter grades for the course will be assigned as indicated in the following table.

Average Score Range	Letter Grade
95-100	A
90-94	A-
86-89	B+
83-85	B
80-82	B-
76-79	C+
73-75	C
70-72	C-
66-69	D+

**Note:** Scholastic misconduct is broadly defined as "any act that violates the right of another student in academic work or that involves misrepresentation of your own work. Scholastic dishonesty includes, (but is not necessarily limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as your own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials; or interfering with another student's work."