AGRICULTURAL ECONOMICS 346
WORLD FOOD ECONOMICS
Course Syllabus: Spring 2022

I. Basic Information: Classes meet Tuesday and Thursday, 9:30-10:45, in Room 210 Filley.
Instructor: Wes Peterson, 207b Filley (0922), 472-7871, epeterson1@unl.edu

II. Course Description: The purpose of this course is to describe the world food system and assess its performance in terms of satisfying global food needs. Food is not only a basic necessity of life but a central component in social interaction and culture. Although the average amount of food available to individuals around the world is higher than it has ever been, there are still more than 800 million people (about 10 % of world population) who are chronically hungry and the scourge of famine has not been completely eliminated even though it is well within the means of the international community to put an end to it. On the other side, obesity has become a world health crisis and there is tremendous international conflict over trade in food and agricultural commodities, bio-technologies such as genetic modification, and the environmental sustainability of agricultural production and processing. This course is based on a systems approach to the study of food production, processing, marketing, and consumption. The importance of technology and economic relationships is emphasized. There are five parts:
　　A. Introduction and overview of world food and agriculture.
　　B. World food systems.
　　C. The main components of world food systems.
　　D. National food systems.
　　E. International dimensions of food system performance.

ACE Learning Outcome.

This course is designed to provide an opportunity for students to satisfy ACE Learning Outcome 9: Exhibit global awareness or knowledge of human diversity through analysis of an issue. It can also be counted toward the international course requirement in CASNR and in Agricultural Economics, Agribusiness or Natural Resource and Environmental Economics.

The issues that will be analyzed are the effectiveness of the world food system in assuring adequate amounts of safe and nutritious food for all people now and in the future and the impact of the national and international policies that drive food system performance.

The course also reinforces Learning Outcome 1: Write texts in various forms, with an identified purpose, that respond to specific audience needs, incorporate research or existing knowledge, and use applicable documentation and appropriate conventions of format and structure; and Learning Outcome 3: Use mathematical, computational, statistical or formal reasoning (including reasoning based on principles of logic) to solve problems, draw inferences and determine reasonableness.

Opportunities to Achieve ACE Learning Outcome 9.

Students will achieve global awareness and an appreciation for human diversity through class discussions, readings, and problem sets. The problem sets and classroom discussion will require:

— the collection, interpretation and presentation of secondary statistical data to reinforce ACE Learning Outcome 3;

— written discussions that highlight the implications of the results obtained in completing the problem sets to reinforce ACE Learning Outcome 1;

— integration of the material learned in this course through classroom participation and outside research as well as the skills, general knowledge and specialized methods learned in other courses to compose reports on the problem sets that can be used to assess the accomplishment of ACE Learning Outcome 9.

III. Graded Assignments and Assessment.

1. Exams: Two in-class exams and a final examination will be administered on the dates indicated in the course outline. No make-up exams will be given. Students who miss an exam and are unable to provide a valid written excuse will receive a grade of zero on the missed exam. Special arrangements will be made for students who miss an exam and can provide a valid written excuse prior to the exam. Exams will include problems and essay questions based on material covered in class and in the readings.

2. Problem Sets: Three problem sets will be due in class on the dates indicated in the course outline. Those that are turned in late will not be accepted unless the student can provide a valid written excuse. These assignments are to be submitted electronically as attachments to an email message sent to the instructor (epeterson1@unl.edu). The assignments should be in single files in Word or a Word-compatible program (PDF files will not be accepted; Excel attachments will be ignored). All problem sets will require the use of data to analyze a question and a written commentary of two to three pages discussing the problems, the results of the analyses done and the implications of the findings for public policy.

Writing and Plagiarism: Problem sets are to be submitted as electronic files in Word or a compatible program. They will be checked for plagiarism using plagiarism detection software and other methods. Evidence of plagiarism will mean a grade of zero on the exercise in which the plagiarism is detected. Plagiarism may also lead to a lower grade for the course and a report to Student Affairs. The way to avoid plagiarism is to understand that using words or ideas from some other source requires that the source be clearly indicated and appropriate use of quotation marks be made. The most common error students make is to copy words from someone else's work without enclosing the copied passages in quotation marks and providing the source.

A frequent criticism of university education from employers is that students have poor writing skills. This course will provide an opportunity for students to work on improving those skills and writing will be considered in assigning grades. Students are expected to make an effort to improve their writing and quantitative reasoning skills as they learn about important issues in

world food economics.

3. Readings: Reading assignments are listed in the class schedule. Most of the readings are posted on Canvas under "files." In one case, the syllabus includes a link to an internet site where the reading can be found. Reading assignments should be completed prior to the class for which they are assigned. Readings may be used to develop questions for the two in-class exams and the final. Be sure to let the instructor know if there are any problems with the links posted on Canvas.

4. Assessment: The problem sets will be used for departmental and ACE program assessments. Reports are to be submitted electronically in Microsoft Word or compatible software package (e.g., rich text). Do not submit PDF files or separate Excel files with data or charts. Assignments should be submitted as single files that include charts and statistical information as well as the written commentary all in one file. The instructor will grade only the single Microsoft Word file submitted and will ignore any PDF or extra Excel files.

5. Class Attendance: Students are expected to attend all class sessions. If it is necessary for a student to miss a class, she/he is still responsible for material covered during the missed class period. It is the student's responsibility to keep up with schedule changes. Experience shows that students who miss numerous classes usually receive low grades for the course.

6. Grading Procedures: The dates for exams and homework assignments are listed in the course outline. They will not be altered unless there is an exceptionally good reason for doing so. There will be severe grade penalties, including possible failure of the course, for any evidence of academic dishonesty (cheating, plagiarism). Because the final is comprehensive, a grade of at least 50 percent is required on the final to pass the course. Students who obtain less than 50 percent on the final will fail the course regardless of their grades on other course work. Those who receive at least 50 percent on the final will receive grades based on the following weighting:

In-class examinations (2 at 15 % each):	30%
Problem Sets (3 at 12 % each):	36%
Final examination:	<u>34%</u>
	100 %

If in-person classes are canceled, you will be notified of the instructional continuity plan for this class by an announcement on Canvas sent to the email address used for Canvas announcements (the UNL address at huskers.unl.edu).

All required university-wide information for students can be found at: go.unl.edu/coursepolicies

Students are expected to adhere to guidelines concerning academic dishonesty outlined in Section 4.2 of University's Student Code of Conduct (http://stuafs.unl.edu/ja/code/). Students are encouraged to contact the instructor for clarification of these guidelines if they have questions or concerns. The Department of Agricultural Economics has a written policy defining academic dishonesty, the potential sanctions for incidents of academic dishonesty, and the appeal process for students facing potential sanctions. The Department also has a policy regarding potential appeals of final course grades. These policies are available for review on the department's website (http://agecon.unl.edu/undergraduate).

Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual needs for academic accommodation. It is the policy of the University of Nebraska-Lincoln to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the Services for Students with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.

Emergency Response:
- **Fire Alarm (or other evacuation):** In the event of a fire alarm: Gather belongings (Purse, keys, cellphone, N-Card, etc.) and use the nearest exit to leave the building. Do not use the elevators. After exiting notify emergency personnel of the location of persons unable to exit the building. Do not return to building unless told to do so by emergency personnel.
- **Tornado Warning:** When sirens sound, move to the lowest interior area of building or designated shelter**.** Stay away from windows and stay near an inside wall when possible.
- **Active Shooter**
  - o **Evacuate:** if there is a safe escape path, leave belongings behind, keep hands visible and follow police officer instructions.
  - o **Hide out:** If evacuation is impossible secure yourself in your space by turning out lights, closing blinds and barricading doors if possible.
  - o **Take action**: As a last resort, and only when your life is in imminent danger, attempt to disrupt and/or incapacitate the active shooter.
- **UNL Alert:** Notifications about serious incidents on campus are sent via text message, email, unl.edu website, and social media. For more information go to: http://unlalert.unl.edu.

Additional Emergency Procedures can be found here:
http://emergency.unl.edu/doc/Emergency_Procedures_Quicklist.pdf

COURSE OUTLINE

I. Introduction and Overview of World Food and Agriculture.

Jan. 18:   Introduction to the course.

Jan. 20:   Statistical profile of the world economy.

Reading Assignment: "The Place of the US in the World (Lead 2021)" posted on Canvas.

Jan. 25:   Population.

Reading Assignments:

1. "Demographic Transition (Wikipedia): https://en.wikipedia.org/wiki/Demographic_transition

2. "The Role of Population in Economic Growth," posted on Canvas.

II. World Food Systems.

Reading Assignments:

1. "Nutrition and Food Systems," pages 21-43, posted on Canvas.

2. Sustainable food systems: Concept and framework (fao.org), posted on Canvas

Jan. 27:   Food systems.

Feb. 1:   Early human food systems and subsistence agriculture.

Feb. 3:   Semi-subsistence food systems and commercial, market-oriented food systems.

III. The Main Components of World Food Systems.

A. Production or Farming Systems.

Reading Assignments:
1. "Land Pressures, the Evolution of Farming Systems, and Development Strategies in Africa: A Synthesis," by T.S. Jayne et al. (2014). Posted on Canvas.

2. "Ecological-Economic Trade-Offs of Diversified Farming Systems—A Review," by Rosa-Schleich et al. (2019), posted on Canvas.

3. "Agricultural Productivity Differences across Countries" by Gollin, Lagakos, and Waugh.

Posted on Canvas.

Feb. 8:   Overview and classification of farming systems.

Feb. 10:   Expanding output through efficient agricultural production.
                  - first homework assignment due.

Feb. 15:   Expanding output through increased use of inputs (land, labor, machinery, etc.)

Feb. 17:   Expanding output through technical change and productivity growth. Research.

Feb. 22:   Sustainable development.

Feb. 24:   **First In-Class Exam**

B. Transportation, Marketing and Distribution: The Post-Harvest System.

Reading Assignment:

1. "Food Losses and Waste in the Context of Sustainable Food Systems," pages 19 - 38. Posted on Canvas.

2. "Mitigating Risks to Food Systems During COVID-19: Reducing Food Loss and Waste," FAO, posted on Canvas.

3. "Record Beef Prices, but the Ranchers Aren't Cashing In," New York Times, posted on Canvas,

Mar. 1:   Purposes of the post-harvest system.

Mar. 3:   Infrastructure, storage, and information.

Mar. 8:   Market power.

C. Consumption and Nutrition.

Reading Assignments: F:\2

1. "Nutrition and Food Systems," pages 43 - 66. Posted on Canvas.

2. "World Food Consumption Patterns." Posted on Canvas.

Mar. 10:   Determinants of household food consumption.

Mar. 22:   Changing food consumption patterns.

Mar. 24:   Nutrition and food assistance programs.
                    - second homework assignment due.

Mar. 29:   Current research on consumer preferences- Henriette Gitungwa

Mar. 31:   **Second In-Class Exam**

IV. National Food Systems.

Reading Assignments:

1. "Nutrition and food systems," pages 67 - 82. Posted on Canvas.

2. "Innovation, Productivity, and Sustainability in Food and Agriculture," Chapter 1. Posted on Canvas

Apr. 5:   The role of government in improving the performance of national food systems.

Apr. 7:   Food and agricultural policies in high-income countries.

Apr. 12:   Cheap food policies and structural adjustment programs in low-income countries.

V. International Dimensions of Food System Performance.

Reading Assignment:

1. "Agricultural Trade and Food Security," by Will Martin. Posted on Canvas

2. "The Coronavirus Pandemic and International Trade" by Peterson. Posted on Canvas.

3. "The Future of Agriculture," The Economist. Posted on Canvas.

Apr. 14:   World food systems: food security, food self-sufficiency and the role of trade.
                    - third homework assignment due.

Apr. 19:   Foreign aid, food aid and development.

Apr. 21:   Global sustainability: environmental impacts of the world food system.

Apr. 26:   Food safety, genetically-modified organisms and the world food system.

Apr. 28:   Hunger, conflict, government failure and international intervention.

May 3:   Globalization of the food system.

May 5:   Summary and review for final exam.

Final Exam: May 12, 10:00 – 12:00