

Agricultural Economics 367
AGRICULTURAL DEVELOPMENT IN LOW-INCOME COUNTRIES
Course Syllabus, Spring Semester 2023

I. Basic Information.

Classes meet Tuesdays/Thursdays from 09:30-10:45 a.m. in room 210 Filley Hall.
Instructor: Wes Peterson, 314 Filley Hall (0922), 472-7871, epeterson1@unl.edu

II. Course Description.

The purpose of this course is to provide students with a basic understanding of the problems of development in low- and moderate-income countries. Special emphasis is placed on the role of agriculture in development and the study of alternatives for accelerating agricultural development. The first three parts of the course focus on development theories and the general problems of overall growth and development. The final part deals specifically with agriculture, the most important economic sector in many developing countries. Basic economic principles will be used to analyze the problems and prospects for agricultural development in low-income countries. Courses on microeconomic principles (AECN 141, ECON 212 or equivalent) and macroeconomic principles (ECON 211 or equivalent) are prerequisites and economic concepts will be used extensively. Proficiency in Excel is expected.

The main course objective is to help students to develop an understanding of the richness and diversity of developing countries and of their agricultural sectors. The nature of traditional agriculture, the importance of transforming agriculture in low-income countries for food security, adequate nutrition and the eradication of poverty, and the potential for accelerated agricultural development will figure prominently in the discussions. Over the past several decades, the level of diversity among developing countries has increased dramatically with emerging Asian economies reaching high levels of economic growth while many countries in Sub-Saharan Africa have lagged behind. An important goal of this course is to engender respect for and understanding of people in developing countries and their particular circumstances as well as of the role and responsibilities of people in wealthy countries in supporting and promoting global development.

III. ACE Learning Outcomes.

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. The issue that will be analyzed is the development of the food and agricultural sectors in low-income countries in Europe, Asia, Africa and Latin America as a strategy for economic growth, poverty reduction and broad-based economic development.

The course also reinforces ACE 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

ACE Learning Outcome 3: Use mathematical, computational, statistical or formal reasoning (including reasoning based on principals of logic) to solve problems, draw inferences and determine reasonableness.

IV. Opportunities to Achieve ACE Learning Outcomes.

Students will achieve global awareness and an appreciation for human diversity through class

discussions, readings, 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, reading 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.

V. Graded Assignments and Assessment.

A. Exams: Two in-class examinations 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.

B. Problem Sets: Three problem sets will be due 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 in single Microsoft Word or Word-compatible files. DO NOT submit reports in pdf files and do not submit additional Excel or other files.

The problem sets are designed to help students to develop writing and analytical skills while learning about development in low-income countries. For the first problem set, the instructor will provide statistical data and detailed instructions for using the data to derive meaningful results. The second problem set will require that students assemble a fairly large set of data available through particular internet sites. The instructor will provide instructions on where to find the statistical information, what to do with it and how to present it. The final problem set will require that students locate data on their own as a basis for a report on a specific issue related to the world food system with minimal guidance from the instructor. As students work through these problem sets, they will be required to take increasing responsibility for finding information and using it to write professional commentaries on significant global issues related to development, poverty, world hunger and economic justice.

All problem sets will require the use of data to analyze a question and a written commentary of three to four pages discussing the issues, the results of the analyses done and the implications of the findings for public policy. Familiarity with Excel is required for this course.

Writing and Plagiarism: Written reports and homework assignments are to be submitted in a single electronic (word or word-compatible) file as attachments to emails addressed to the instructor. Do NOT send pdf or Excel files or multiple attachments. The instructor will check all written work for plagiarism and evidence of plagiarism will mean a grade of zero on the exercise in which the plagiarism is detected.

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 common criticism of university education from employers is that students have poor writing skills. On the problem sets and reports, both the writing and the content of the assignments will be evaluated, and grades will be lowered for writing errors.

D. Reading Assignments and Videos: Reading assignments are drawn from a variety of internet sources. Most of the readings are posted on Canvas under “files.” Others can be accessed by following the links included in the course outline. The expectation is that students will do their best to complete readings and videos prior to the class for which they are assigned. It is likely that additional material will be handed out in class and this material is to be considered part of the required reading for the course.

Reading assignments should be seen as complements to the class discussion. They will be useful in introducing additional information and ideas not covered in class presentations and in fleshing out some of the concepts addressed in class. They are not a substitute for class attendance. Readings will be used as a source of exam questions.

The discussion of agriculture is organized around the idea that there are diverse agricultural systems around the world. These systems roughly follow geographic patterns, so it is useful to divide the classes into three sections: Sub-Saharan Africa, Asia, and Latin America. Each of these regions is introduced with a set of videos that give a flavor of what food and agriculture are like in those areas. The videos may also be a source of exam questions.

E. Assessment: The problem sets will be used for departmental and ACE program assessments. These reports are to be submitted electronically as single files that include charts and statistical information as well as the written commentary attached to an email addressed to the instructor. Do not send reports in pdf files and do not send multiple files (e.g., the text in a Word file with charts and so on in a separate Excel file. All submitted assignments should be in single electronic files).

F. Attendance: Most of the substantive content of this course will be introduced during the class periods. As responsible adults, students are free to decide on the best use of their time so attendance will not be taken. Experience shows that students who miss numerous classes or who attend but do not take notes usually perform poorly on exams and written assignments and receive low grades for the course. Provisions for remote access, if necessary, will be explained in class.

G. 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). The final exam is comprehensive and a score of at least 50 percent is required for a passing grade in the course. Students with final exam scores less than 50 percent will fail the course regardless of their grades on other course work. Those with grades of 50 percent and above on the final exam will receive final grades based on the following weights:

In-class exams (2 at 20% each):	40%
Homework assignments (3 at 10% each):	30%
Final exam:	30%

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 background.

- Jan. 24: Introduction.
- Jan. 26: Background on developing countries. Read through the world profile statistics posted on Canvas.
- Jan. 31: What is development? Development, economic growth and equity. *Reading Assignment*: “What Do We Mean by Development?” by Todaro and Smith.

II. Theories of Development.

- Feb. 2: Theories of development– Marx. *Reading Assignment*: “Karl Marx” Stanford Encyclopedia of Philosophy, <https://plato.stanford.edu/entries/marx/>
- Feb. 7: From Marx to dependency theory. *Reading Assignment*: “Dependency Theory: An Introduction” by Vincent Ferraro.
- Feb. 9: Mutual benefits: economic growth and the Washington Consensus (structural adjustment programs). *Reading Assignment*: “The Evolution of Development Thinking: Theory and Policy,” by Gustav Ranis.
- Feb. 14: Current thinking on development: Sustainability, behavioral and experimental economics. *Reading Assignment*: “Goodbye Washington Consensus, Hello Washington Confusion?” by Rodrik.

III. Issues in Development.

- Feb. 16: Population. *Reading Assignment*: “Demographic Terms” at <http://pages.uwc.edu/keith.montgomery/Demotrans/demodef.htm> and “Demographic Transition” at <http://pages.uwc.edu/keith.montgomery/Demotrans/demtran.htm> Also go to: <https://www.census.gov/data-tools/demo/idb/informationGateway.php> and look at the dynamic age pyramids for the US, Kenya, India, China and any other countries you wish.
- Feb. 21: Income distribution. *Reading Assignment*: “Is Economic Inequality Really a Problem? A Review of the Arguments,” by Peterson.
- Feb. 23: Entitlements. *Reading Assignment*: “From Food Availability to Nutritional Capabilities: Advancing Food Security Analysis” by Burchi and De Muro.

First homework assignment due.

- Feb. 28: Trade. *Reading Assignment*: “Agricultural Markets and Sustainability” *The State of Agricultural Commodity Markets, 2020*, Food and Agriculture Organization (FAO), Executive summary and pages 1 - 9. Available at: <http://www.fao.org/3/cb0665en/CB0665EN.pdf>

Mar. 2: **First in-class exam**

IV. Agricultural Development.

- Mar. 7: Food and agricultural systems. *Reading Assignment*: “Chapter One: Growth and Poverty Reduction in Agriculture’s Three Worlds,” *Agriculture for Development*, World Bank at:
https://openknowledge.worldbank.org/bitstream/handle/10986/5990/9780821368077_ch01.pdf?sequence=80&isAllowed=y
- Mar. 9: The Role of Agriculture in Development. *Reading Assignment*: “Agriculture for Development: A New Paradigm and Options for Success,” by de Janvry.
- Mar. 21: Traditional Agriculture in Agriculture-Dependent Countries (Sub-Saharan Africa).
Assignment: Watch videos on life in Africa;
Tanzania: https://www.youtube.com/watch?v=8c_thxPJALA&feature=youtu.be
Rwanda:
<https://www.bing.com/videos/search?q=Rwanda+nature&&view=detail&mid=CEE00098152BA4D7D997CEE00098152BA4D7D997&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3DRwanda%2520nature%26qs%3Dn%26form%3DQBVR%26sp%3D-1%26pq%3Drwanda%2520nature%26sc%3D3-13%26sk%3D%26cvid%3D6E81EFD0079742158C04127405403966>
Mali: <https://www.youtube.com/watch?v=Q7tkxQuCjI>
Nigeria:
<https://www.bing.com/videos/search?q=battabox+nigeria&ru=%2Fvideos%2Fsearch%3Fq%3dbattabox%2520nigeria%26qs%3dMM%26form%3dQBVDMH%26sp%3d1%26pq%3dbatta%2520box%2520%26sc%3d3-10%26cvid%3d13BEEEE94EDE49EAA34F5644492E313E&view=detail&mid=0F2B4410A4172F9D56CE0F2B4410A4172F9D56CE&&FORM=VDRVRV>
- Mar. 23: Rational peasants in traditional agriculture. *Reading Assignment*: T. W. Schultz, “The Economics of Being Poor.”
- Mar. 28: Surplus labor. *Reading Assignment*: “Lewis Model of Development with Surplus Labor”
- Mar. 30: Non-farm activities. *Reading Assignment*: “Nonfarm Income Diversification and Household Livelihood Strategies in Rural Africa: Concepts, Dynamics, and Policy Implications,” by Barrett, Reardon and Webb.
- Apr. 4: Agriculture in Transforming Countries (Asia).
Watch videos: Rice in Asia:
<https://www.bing.com/videos/search?q=rice+in+Asia&&view=detail&mid=E5FCFD1C20D82C943185E5FCFD1C20D82C943185&&FORM=VRDGAR&ru=%2Fvideos%2Fsearch%3Fq%3Drice%2Bin%2BAsia%26qpvt%3Drice%2Bin%2BAsia%26FORM%3DVDRE>
Agriculture in Asia:
<https://www.bing.com/videos/search?q=Asian+agriculture&&view=detail&mid=>

[BE5EF2C076DFE8B63559BE5EF2C076DFE8B63559&&FORM=VRDGA&ru=%2Fvideos%2Fsearch%3Fq%3DAsian%2Bagriculture%26qpvt%3DAsian%2Bagriculture%26FORM%3DVDRE](https://www.bing.com/videos/search?q=Indonesia+oil+palm&&FORM=VRDGA&ru=%2Fvideos%2Fsearch%3Fq%3DAsian%2Bagriculture%26qpvt%3DAsian%2Bagriculture%26FORM%3DVDRE)

Palm oil:

<https://www.bing.com/videos/search?q=Indonesia+oil+palm&&view=detail&mid=337F2FC5CA41B19252BC337F2FC5CA41B19252BC&&FORM=VRDGA&ru=%2Fvideos%2Fsearch%3Fq%3DIndonesia%2Boil%2Bpalm%26qpvt%3DIndonesia%2Boil%2Bpalm%26FORM%3DVDRE>

Apr. 6: Expanding agricultural output through resource intensification: land and labor.

Second homework assignment due.

Apr. 11: Technological change. *Reading Assignment*: “Green Revolution: Impacts, Limits, and the Path Ahead,” by Pingali,

Apr. 13: Induced innovation. *Reading Assignment*: “Institutional and Technological Innovation: Understanding Agricultural Adaptation to Climate Change in Nepal,” by Chhetri et al.

Apr. 18: **Second in-class exam.**

Apr. 20: Agriculture in urbanizing countries (Latin America)

Watch videos: agriculture and the Brazilian rainforest:

<https://www.bing.com/videos/search?q=Brazilian+agriculture+rainforest&ru=%2Fvideos%2Fsearch%3Fq%3DBrazilian%2520agriculture%2520rainforest%26qs%3Dn%26form%3DQBVR%26sp%3D-1%26pq%3Dbrazilian%2520agriculture%2520rainforest%26sc%3D0-32%26sk%3D%26cvid%3D587650C1616943F08E7DAD6C187C0962&view=detail&mid=E26C0B55D57A7FF748FFE26C0B55D57A7FF748FF&&FORM=VDRVRV>

Argentine beef:

<https://www.bing.com/videos/search?q=Argentina+Agriculture&&view=detail&mid=AD417E8BFF18E95456F8AD417E8BFF18E95456F8&&FORM=VRDGA&ru=%2Fvideos%2Fsearch%3Fq%3DArgentina%2520Agriculture%26qs%3Dn%26form%3DQBVR%26sp%3D-1%26pq%3Dargentina%2520agriculture%26sc%3D8-21%26sk%3D%26cvid%3DE494A8B086014147B7C3F6F17817BE83>

Guatemala coffee:

<https://www.bing.com/videos/search?q=mexico+mayan+farmers&ru=%2Fvideos%2Fsearch%3Fq%3Dmexico%2520mayan%2520farmers%26qs%3Dn%26form%3DQBVR%26sp%3D-1%26pq%3Dmexico%2520mayan%2520farmers%26sc%3D0-20%26sk%3D%26cvid%3D80C07C38ECA8416C8B052AD5FE8163A2&view=detail&mid=E52B2C50A889F18548FBE52B2C50A889F18548FB&&FORM=VDRVRV>

Guatemala cocoa:

<https://www.bing.com/videos/search?q=mexico+mayan+farmers&ru=%2Fvideos%2Fsearch%3Fq%3Dmexico%2520mayan%2520farmers%26qs%3Dn%26form%3DQBVR%26sp%3D-1%26pq%3Dmexico%2520mayan%2520farmers%26sc%3D0->

[20%26sk%3d%26cvid%3d80C07C38ECA8416C8B052AD5FE8163A2&view=detail&mid=318B3404B2382DA6F8AC318B3404B2382DA6F8AC&&FORM=VDRVRV](https://www.coursehero.com/ask/26cvid/3d80C07C38ECA8416C8B052AD5FE8163A2&view=detail&mid=318B3404B2382DA6F8AC318B3404B2382DA6F8AC&&FORM=VDRVRV)

Apr. 25: Marketing systems. *Reading Assignment:* “Strengthening Agricultural Marketing with ICT” by Dixie and Jayaraman, pages 205-221.

Third homework assignment due.

Apr. 27: Input markets and credit. *Reading Assignment:* “Strengthening Agricultural Marketing with ICT” by Dixie and Jayaraman, pages 222-236.

May 2: Agricultural policies. *Reading Assignment:* “Agricultural Policy in Developing Countries: Cheap Food,” by Peterson.

May 4: Foreign aid and food aid.

May 9

May 11

Final exam: 10:00 – 12:00, Tuesday, May 4