

AGEC 640 Agricultural Development and Policy, Fall 2017

Purdue University · Department of Agricultural Economics

Syllabus subject to change. Last updated: 8/14/2017 4:14 PM

Schedule notice: mid-term examination will be held Tuesday 10/17 in class

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Meetings:	Tuesdays and Thursdays, noon-1:15 in RAWLS 1071		
Office Hours:	Tuesdays and Thursdays, 1:30-2:30 in my office; otherwise by email or drop-in		

OVERVIEW

In this course we analyze how the agricultural sector changes over time, interacting with government policies in both the farm and nonfarm sectors. Our goal is to explain and predict major trends and differences across countries, using economic theory to understand what governments do and how agents operating in the food and farm sectors are likely to respond. Lectures and homework assignments are used to provide insights into economic aspects of a wide range of issues affecting the agricultural sector.

OFFICE HOURS

Note that I am generally available during the times listed above, and more generally on class days. I maintain an "open door" policy regarding office hours. However, I have a number of commitments other than AGECE 640, so I strongly recommend that you make an appointment to see me to guarantee that I will be available when you come to my office. Use of email for questions and scheduling of appointments is strongly encouraged. To schedule an appointment, contact my secretary, Tracy Buck (phone: 494-4191, email tbuck08@purdue.edu).

PREREQUISITES

The course is designed for first-year graduate students. There are no specific prerequisites, but more advanced students with stronger backgrounds in economics will be able to apply that knowledge in the context of this course. Readings are intended to be accessible for all graduate students, and can be interpreted at various levels of depth.

LEARNING OBJECTIVES

1. Develop an understanding of broad spatial and temporal patterns of economic development worldwide, with a specific focus on the agricultural sector, its evolution, and the role of policy in shaping the sector.
2. Acquire and hone a set of analytical tools to study the agricultural sector and evaluate agricultural policies.
3. Improve writing, editing and data analysis skills by producing an original document that applies understanding gained in

the course to an important issue of your choosing.

4. Improve verbal communication skills by participating in class activities in a manner that is conducive to group learning and skill development, by making a concise research presentation, and by objectively supporting and constructively critiquing the ideas and opinions of others.

CLASS PROCEDURE

This course follows a lecture format with homework assignments, a mid-course examination and a final paper used to reinforce understanding of class material. Student participation in class discussion is expected. All information regarding the course, including assignments and the class schedule, is available via the course home page at: <http://web.ics.purdue.edu/~shivelyg/AGEC640/>

COURSE STRUCTURE

The course begins with a brief overview of the major policy issues and drivers of change in the food and agricultural sector around the world. We then spend the bulk of the semester building up the analytical methods and results developed by economists to explain and predict household choices, market outcomes and government policies, starting with farm households' decisions over production, consumption and trade. We consider the role of biological constraints, first for nutrition and health, and then for farm productivity, and ask how those constraints can be overcome through technology and specialization. We ask how market prices are formed, how market outcomes respond to various kinds of changes, and what (if anything) we can infer from those outcomes about changes in the well-being of market participants. We then examine the evidence on what governments actually do across countries and over time, and try to explain those interventions in economic terms. The focus is on these modern "political economy" explanations of policy choices, in which government actions are explained as the result of equilibrium among optimizing people in both the public and private sectors. The course concludes with presentation and discussion of student projects.

READINGS

A complete course packet is available for purchase at BoilerCopy, in the Purdue Union; some readings are also on-line, with links provided from this syllabus and the course website. Others will be distributed, as needed, in class.

HOMEWORK ASSIGNMENTS

Links to the three homework exercises are included in the electronic version of this syllabus; opening those documents online offers you live links to the data sources need to complete the assignment. Additionally, students are required to attend two non-class lectures anywhere on the Purdue campus that are related to course topics, and to summarize and critically assess their content in writing. Additional information on the homework assignments will be provided in class.

PROJECT

Your semester-long project is a major component of the course grade. It is expected to be an analytical review of the literature on a researchable topic or policy question. This will help you get started on a thesis or other research paper, offering the chance to conduct a deeper analysis of the existing literature than might otherwise be possible. Some students may already have access to interesting data, in which case it might be possible to use the project as a vehicle to begin work on an original research paper instead of a literature review.

I can advise you on what topics are likely to prove most fruitful. Often I will encourage you to do this course project on the same topic as other work you are pursuing so as to specialize and achieve a deeper level of analysis, but sometimes it is preferable to diversify and start research on something new. Please read (and re-read) carefully the [guidelines for the course project](#) as you work on it.

The final result of the project is a written document. The paper has a length limit of 25 double-spaced pages, inclusive of all charts, tables and references. You will also present the project results in class, using a maximum of five slides. For the class presentation the five-slide limit will be strictly enforced, to help you practice distilling results into a very brief message that can be communicated visually and in person.

To make the project as productive as possible, we will proceed in stages. First, you must send to me as an email a title and brief (maximum one-paragraph) description of your chosen topic. You must do this by the start of class on Thursday **October 5th** to allow time for me to provide feedback. This feedback will allow you to modify your plan as needed. The second stage is to submit a complete list of your references. This list is due in class on Thursday, **November 30th**. This is roughly three weeks before you will be scheduled to turn in the final draft. You must present a brief synopsis of the project in class (on either **November 28th** or **November 30th**). The final paper is due by 5pm on Friday **December 15th**. You must submit your final paper by email, in PDF format.

EXAMINATIONS

A mid-term examination covering lecture material will be held in class on **October 17th**. No final examination will be given. The mid-term examination is designed to test understanding of key concepts and course material.

GRADING POLICY

The final course grade will be computed from points earned from homework assignments, examinations and a course project, as follows:

Homework assignments (3@ 10% each)	30%
Non-class lecture assignments (2@5% each)	10%
Course project	35%
Mid-term examination	25%
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Total	100%

COMMUNICATION

Please note that my primary out-of-class method of communication will be via email to your Purdue email address. I will not generally attempt to contact you at email addresses other than your Purdue email address. It is your responsibility to check for mail on a regular basis. I recommend checking your Purdue email account at least once every 24 hours.

SPECIAL NEEDS

If you have a disability that requires academic adjustments, please make an appointment to meet with me during the first week of classes to discuss your needs. Please note that university policy requires all students with disabilities to be registered with Adaptive Programs in the Office of the Dean of Students before classroom accommodations can be provided.

ACADEMIC INTEGRITY

University policy on academic dishonesty is clear: academic dishonesty in any form is strictly prohibited. Anyone found to be cheating or helping someone else cheat will be referred directly to the Dean of Students for disciplinary action. Penalties are severe and may include dismissal from the University. The risks associated with cheating far outweigh the perceived benefits. Academic dishonesty includes citing someone else's work as your own, using "cheat sheets" or sharing your answers with someone else. If you are unsure whether your planned action constitutes academic dishonesty, seek clarification from your instructor. Reports of cheating can be made through the Office of the Dean of Students (purdue.edu/odos; 765-494-8778; integrity@purdue.edu). Information regarding your rights and responsibilities as a student is contained in the Purdue University Code of Conduct. Writing assignments for this course will be checked for originality using the iThenticate software.

CAMPUS EMERGENCIES

In the unusual event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. To get information about changes in this course visit the course home page, contact me by email at shivelyg@purdue.edu, or call me at my office (494-4218) or at home (743-6439).

To report an emergency, call 911. To obtain updates regarding an ongoing emergency, sign up for Purdue Alert text

messages, view www.purdue.edu/ea. There are nearly 300 Emergency Telephones outdoors across campus and in parking garages that connect directly to the PUPD. If you feel threatened or need help, push the button and you will be connected immediately.

If we hear a fire alarm during class we will immediately suspend class, evacuate the building, and proceed outdoors. Do not use the elevator. If we are notified during class of a Shelter in Place requirement for a tornado warning, we will suspend class and shelter in class or in the basement. If we are notified during class of a Shelter in Place requirement for a hazardous materials release, or a civil disturbance, including a shooting or other use of weapons, we will suspend class and shelter in the classroom, shutting the door and turning off the lights.

Please review the [Emergency Preparedness](#) website for additional information.

CLASS TOPICS AND READINGS

Background reading:

Otsuka, K. (2012) "Food Insecurity, Income Inequality, and the Changing Comparative Advantage in World Agriculture." Presidential Address at the 27th International Conference of Agricultural Economists, Foz do Iguaçu, Brazil. (hyperlinked [here](#)).

World Development Report 2008: Agriculture for Development. Washington, DC: The World Bank. (not in reading packet; available online)

Week 1. Introduction and background

8/22 [What's ahead? Introduction to agricultural development and policy](#)

8/24 [Some context: The world food and financial crises of 2007-09](#)

Class profile (from introduction sheet)

Readings:

Abbott, Philip C. (2009) "Development Dimensions of High Food Prices." Paris: OECD (95 pages).

Masters, W. (2008) "Beyond the Food Crisis in Africa." *African Technology Development Forum*, 5(1-2): 3-13.

Week 2. Fundamental concepts in agricultural development

8/29 [Farm and food problems: the development paradox and structural transformation](#)

8/31 [Mouths to feed, farmers to employ: population growth and demographic transition](#)

Readings:

[USDA Release No. 0181.16](#) (8/23/16) "USDA to Purchase Surplus Cheese for Food Banks and Families in Need, Continue to Assist Dairy Producers"

Norton, G.W., J. Alwang and W.A. Masters (2006), "Economic Transformation and Growth", chapter 6 in *Economics of*

Agricultural Development (Abingdon: Routledge), 20 pp.

Tomich, Thomas P., Peter Kilby and Bruce F. Johnston (1995), "Poverty and the Rural Economy" and "Structural Transformation" (excerpts), in *Transforming Agrarian Economies* (Ithaca, NY: Cornell University Press), pp. 9-19 and 35-48.

Montgomery, Keith (2000), "Notes on the Demographic Transition." Also available online, <http://www.uwmc.uwc.edu/geography/Demotrans/demtran.htm>.

Homework #1: Drivers of Change (due Tuesday 9/05 in class)

Week 3. Farm households, the "industrialization" of agriculture, and technology

9/05 Does agriculture industrialize?

9/07 Input use, R&D and technology adoption

Readings:

Allen, D.W. and D. Lueck (2002) *The Nature of the Farm: Contracts, Risk and Organization in Agriculture* (Cambridge: MIT Press), excerpts: "Farming in North America" (pages 17-26), "Farm Organization and Vertical Control: Historical and Current Case Studies" (pages 181-191).

Alston, J.M, M.C. Marra, P.G. Pardey and T.J. Wyatt (2000) "Research returns redux: a meta-analysis of the returns to agricultural R&D." *Australian Journal of Agricultural and Resource Economics*, 44 (2): 185-215.

Week 4. Nutrition and food markets

9/12 Input use, R&D and technology adoption

9/14 Nutrition, health and human capital

Note, slides are here on: Imperfect information and food demand. Interesting material, but this will not be covered in class and will not be on the exam.

Readings:

Haddad, L. et al. (2004) "Nutrition Trends and Implications," chapter 2 in *The Fifth Report on the World Nutrition Situation: Nutrition for Improved Development Outcomes*. UN Standing Committee on Nutrition. (not in packet, linked [here](#)).

Shively, G. and G. Thapa (2017) "Markets, transportation infrastructure and food prices in Nepal." *American Journal of Agricultural Economics* 99(3): 660-682 (not in packet, linked [here](#)).

Omiat, G. and G. Shively (2017) "Charting the cost of nutritionally-adequate diets in Uganda, 2000-2011" *African Journal of Food Agriculture, Nutrition and Development* 17(1): 11571-11591 (not in packet, linked [here](#)).

Homework #2: Food prices, nutrients and the least-cost diet (due Thursday 9/28)

Week 5. Market equilibrium and social welfare

9/19 Market equilibrium with trade and policy (slides 1-22)

9/21 Policy incidence and social welfare: value and limitations of economic surplus (slides 23-40)

Readings:

Schmitz, A., H. Furtan and K. Baylis (2002) "Theoretical Considerations" and "Trade and Macroeconomic Effects", chapters 4 and 5 in *Agricultural Policy, Agribusiness and Rent-Seeking Behavior*. Toronto: University of Toronto Press, pp 83-118 and 119-153.

Hines, James R., Jr. (1999) "Three Sides of Harberger Triangles." *Journal of Economic Perspectives* 13(2): 167-88.

Week 6. Policies and their impacts

9/26 Measuring policies: distortions and investment (slides 1-20)

9/28 Nominal and effective protection (slides 21-40)

Week 7. Policies and their impacts, continued

10/03 Aggregate measures of support (slides 41-60)

10/05 Aggregate measures of support (slides 61-80)

Project Assignment #1: topic for the course project (due by Thursday 10/05)

Readings:

Masters, W.A., "Guidelines on National Comparative Advantage and Agricultural Trade," APAP III Methods and Guidelines Paper No. 4001 (Bethesda, MD: Abt Associates, 1995), pages 1-29.

Week 8. October break

10/10 *Oct. break -- no class*

10/12 *Oct. break -- no class*

Readings:

Tsakok, I. (1990) "Single-Market Analysis: Calculating the Impact of Price Policy," chapter 6 in *Agricultural Price Policy* (Ithaca: Cornell University Press), pages 158-182.

OECD (2008) "Agricultural Policies in OECD Countries at a Glance 2008" (Paris: OECD), pages 33-58.

Mid-term exam to be given Thursday 10/19 in class

Week 9. Mid-term exam and impact evaluation

10/17 *Mid-term exam* (an example of a previous exam is linked [here](#)).

10/19 Impact evaluation in theory and practice

Week 10. Measuring Impacts using Household Survey Data

10/24 Indirect and unintended consequences

10/26 No class meeting

Readings:

- Fisher, Monica and Gerald Shively (2005) "Can income programs reduce tropical forest pressure? Income shocks and forest use in Malawi." *World Development* 37(7): 1115-1128 (in packet, also linked [here.](#))
- Shively, Gerald (2001) "Agricultural Change, Rural Labor Markets and Forest Clearing: An Illustrative Case from the Philippines." *Land Economics* 77(2): 268-284 (in packet, also linked [here.](#))
- Chibwana, C. et al. (2014) "Measuring the Impacts of Malawi's Farm Input Subsidy Program." *African Journal of Agricultural and Resource Economics* 9(2): 132-147 (in packet, also linked [here.](#))

Homework #3: Markets, market failures and policy failures (due Thursday 11/09)

Week 11. Explaining policies: economics of the public sector

10/31 No class meeting

11/01 Markets: how far reaches the invisible hand?

Readings:

- Hillman, A. (2003) "Private Solutions for Externalities" and "Public Policy for Externalities," ch. 4.1 and 4.2 in *Public Finance and Public Policy: Responsibilities and Limitations of Government* (New York: Cambridge University Press); pages 228-294.
- Ricker-Gilbert, Jacob, Thomas Jayne and Gerald Shively (2013) "Addressing the 'Wicked Problem' of Input Subsidy Programs in Africa." *Applied Economics Perspectives and Policy* 35(2): 322-340 (not in packet, [linked here.](#))

Week 12. The political economy of agricultural policy (part one)

11/07 Policy: how well can market failures be remedied?

11/09 Political economy theories and public choice

Readings:

- Hillman, A. (2003) "Political Behavior and Public Policy" and "Public Policy and Rent-Seeking Behavior," ch. 6.2 and 6.3 in *Public Finance and Public Policy: Responsibilities and Limitations of Government* (New York: Cambridge University Press), pages 416-460.
- Masters, W.A. and A. Garcia (2010) "Price Distortion and Stabilization: Stylized Facts and Hypothesis Tests," in K. Anderson, ed., *The Political Economy of Agricultural Price Distortions*. Washington, DC: The World Bank.
- Anderson, K. (1995) "Lobbying Incentives and the Pattern of Protection in Rich and Poor Countries." *Economic Development and Cultural Change* 43(2): 401-424.
- Cadot, et al. (2004) "Lobbying, Counterlobbying and the Structure of Tariff Protection in Poor and Rich Countries." *World Bank Economic Review* 18(3): 345-366.
- Yao, Yang (2011) "From production-oriented to welfare-oriented government." *East Asia Forum Quarterly* 3(2): 6-7 (not in packet, [linked here.](#))

Project assignment #2: List of references due Thursday 11/30

Week 13. The political economy of agricultural policy (part two)

11/14 The stylized facts of agricultural policy

11/16 Political economy hypothesis tests

Week 14. Papers

11/21 Project planning and notes on effective writing

11/23 *Thanksgiving holiday (no class)*

Week 15. Project presentations

11/28 Student presentations: Group A

11/30 Student presentations: Group B

Week 16. Papers

12/05 No class meeting. Work on papers.

12/07 No class meeting. Work on papers.

12/15 Final paper (electronic PDF) due by 5:00 pm by email to shivelyg@purdue.edu.