

**AGRICULTURAL ECONOMICS 445**  
**AGRICULTURAL AND NATURAL RESOURCE POLICY ANALYSIS**  
**Course Syllabus: Spring 2009**

**I. Basic Information:** Classes meet Tuesdays and Thursdays, 11:00-12:15 in 113 Chase Hall.  
Instructor: Wes Peterson, 314 Filley Hall (0922); epeterson1@unl.edu

**II. Course Description:** The purpose of this course is to introduce students to the use of economic tools and concepts in the analysis and evaluation of public policies affecting agriculture, food, natural resources, and the environment. The course is divided into two parts:

Part I: *Basic Concepts and Theoretical Background for Policy Analysis:* the problem of collective action, basic economics of markets and human behavior, welfare economics, the role of the state, ethical and political dimensions of policy analysis.

Part II: *Economic Tools for Policy Analysis and Case Studies:* benefit-cost analysis, market models, welfare analysis, and partial and general equilibrium analysis. These analytical methods are illustrated with case studies in food, agricultural, natural resource, and environmental policies.

**III. Organization and grading procedures:** This course has been organized to meet the requirements for designation as a capstone and integrative-studies course. In addition to exams and homework exercises, students must complete a written student project and participate in class discussions of ethical issues and policy case studies.

**A. Class Attendance:** Students are expected to attend all class sessions. It is the student's responsibility to keep up with schedule changes.

**B. Reading and Homework Assignments:** The main text for this course is *The Political Economy of Agricultural, Natural Resource and Environmental Policy Analysis*. It is out of print so the chapters have been posted on Blackboard. It is referred to as "Text" in the course schedule. There are supplemental readings from a new book, *A Billion Dollars a Day: The Economics and Politics of Agricultural Subsidies*, also posted on Blackboard. It is referred to as "Billion" in the course outline. An article on the endangered species act is also available on Blackboard, referred to as "Smith and McKee." Reading assignments should be completed before the class for which they are assigned. The readings frequently provide greater depth than can be communicated during a class period and sometimes contain important information that cannot be covered in class. They also serve as a source of exam questions.

Three problem sets are due on the dates indicated in the course outline. The problem sets will be distributed a week before they are due and will not be accepted after the due date. You may work with other students on these exercises but the results are to be written up individually. If two assignments are written with identical wording, both will receive a failing grade. The problem sets are to be submitted as electronic files.

Finally a written report on one of the four E. N. Thompson Lectures scheduled for Spring

Semester is required:

February 10: "Bridging the Gap: Globalization without Isolation by F. W. de Klerk.

March 4: "Notes from Afghanistan" by Sarah Chayes.

March 25: "Illegal Immigrants: Path to Citizenship?" debate between M. Olivas and V. Briggs.

April 14: "Citizenship in a Global Age" by Colin Campbell.

Reports may be submitted at any time during the semester up until April 16 which is the last date they will be accepted. They should be submitted as electronic files attached to an email message. In writing your reports, note that it is inappropriate to refer to the speaker by his or her first name. Refer to speakers by their last names with or without a title (Mr., Ms., Dr., etc.).

**C. Ethics Roundtable and Case Studies.** At the end of the first part of the course, there will be a roundtable discussion of the ethical dimensions of a public policy issue selected by the class. Possible topic: The Ethics of Protecting and Preserving Human Cultures (readings on cosmopolitanism and cultural destruction among Native Americans).

During the second part of the course, five classes will be organized around discussions of the case studies in the book and other assigned readings. The five general discussion topics are:

1. Agricultural development in low-income countries.
2. Environmental policy in Nebraska and the US.
3. Domestic agricultural policy in the US.
4. Food safety in the EU and US.
5. International trade policy.

Participation in the ethics roundtable and class discussions is required. Grade penalties will be assessed for not attending the ethics roundtable or any of the five class discussions unless a valid written excuse is presented prior to the scheduled date of the discussion.

**D. Student Projects:** Student projects are to be submitted in an electronic file on April 23. A description of the requirements for these projects appears at the end of the syllabus. Additional information on these projects will be made available as the term progresses.

**Note on writing:** In recent years, employers have been highly critical of the communication skills of university graduates. University graduates are expected to be able to write well-crafted analyses using correct grammar, syntax, sentence structure, word choice, spelling and so on. To encourage students to work on their writing skills, both the writing and the content of work that is submitted will be evaluated and grade penalties may be assessed for writing errors. All written work will be checked for plagiarism. Any evidence of plagiarism will result in a grade of zero on the exercise in question. Repeated or serious plagiarism may result in reduced final grades and a report to the office of student judicial affairs.

**E. Tests and Grading Procedures:** There will be a midterm exam and a final on the dates listed in the course outline. The dates for tests, homework assignments and the student project will not be changed unless there is an exceptionally good reason for doing so. Students are expected to participate in class discussions even though such participation will not be graded. Evidence of academic dishonesty (plagiarism, cheating) may result in a grade of "F" for the

course. A score of at least 50 percent on the final is required to pass the course. Students with grades of less than 50 percent on the final will fail the course. For students who obtain at least 50 percent on the final exam, grades will be based on the following weights:

Midterm Exam:	18%
First Two Problem Sets (2 at 7% each):	14%
Third Problem Set	10%
Thompson report:	8%
Student Project:	20%
Final Exam:	30%
	100%

### **COURSE OUTLINE**

Jan. 13: Introduction.

*Part I: Basic Concepts and Theoretical Background for Policy Analysis.*

Jan. 15: The problem of collective action and public policy. Introduction to basic economic concepts. Read: Text Introduction to Part I and Chapter 1.

Jan. 20: Basic economic concepts (continued). Text Chapter 2.

Jan. 22: Introduction to welfare economics. Text Chapter 3.

Jan. 27: The invisible hand. Continue reading Text Chapter 3. Read Billion Chapter 2.  
***FIRST PROBLEM SET DUE.***

Jan. 29: Fundamental theorems of Welfare Economics. Continue Text Chapter 3.

Feb. 3: Market failures: imperfect competition and externalities. Text Chapter 4, first third.

Feb. 5: Market failures: common pool resources and public goods. Text Chapter 4, second third and Billion Chapter 5.

Feb. 10: The problem of income distribution and compensation. Text Chapter 4, last part.

Feb. 12: The origin and role of the state, government failure and rent-seeking. Text Chapter 5, first half.

Feb. 17: Politics and the problem of democracy. Text Chapter 5, second half.  
***SECOND PROBLEM SET DUE.***

Feb. 19: Non-economic values in policy analysis: introduction to ethics. Text Chapter 6.

Feb. 24: Justice, fairness and equity in public choice. Continue reading Text Chapter 6.

- Feb. 26: ***Roundtable discussion of an ethical issue: Cultural Preservation or alternative.***
- Mar. 3: ***MIDTERM EXAM.***
- Mar. 5: Review of exam results and discussion of writing, data handling, and other issues related to the student projects.

*Part II: Economic Tools for Policy Analysis.*

- Mar. 10: Introduction to benefit-cost analysis. Text Part II Introduction, Chap. 7, first half.
- Mar. 12: Measuring benefits and costs: shadow prices, discounting, and compensation. Text Chapter 7, second half. (Hand out third problem set due on March 22).
- Mar. 24: ***Class discussion of:*** Agricultural development in low-income countries. Text Chapter 8 (Case study of a banana plantation in Guinea) and Billion Chapter 9.
- Mar. 26: ***Class discussion of:*** Environmental policy in Nebraska and the US. Text Chapter 9 (Case study of groundwater contamination) and article by Smith and McKee.  
***THIRD PROBLEM SET DUE.***
- Mar. 31: Introduction to partial equilibrium analysis. Text Chapter 10, pp. First half.
- Apr. 2: Graphical analysis of U.S. agricultural policies. Text Chapter 10, pp. 223-238.
- Apr. 7: Log-linear models and welfare analysis. Text Chapter 10, second half.
- Apr. 9: Summary of partial equilibrium modeling and welfare analytics of public policies in agriculture and natural resources. Text Chapter 10, Appendices 10.1, 10.2, 10.3.
- Apr. 14: ***Class discussion of:*** Domestic agricultural policy in the US. Text Chapter 11 (Case study of US sugar policy) and Billion Chapter 6.
- Apr. 16: ***Class discussion of:*** Food Safety in the EU and US. Text Chapter 12 (Case study of hormones and GMOs) and Billion Chapter 7.  
***– last day to submit report on E. N. Thompson lecture.***
- Apr. 21: Introduction to complex models. Text Chapter 13, first half and Appendix 13-1.
- Apr. 23: General Equilibrium Analysis. Text Chapter 13, second half.  
***STUDENT PROJECT DUE.***
- Apr. 28: ***Class discussion of:*** International trade policy. Text Chapter 14 (Case study of NAFTA) and Billion Chapters 4 and 8.
- Apr. 31: Summary and course review. Text Chapter 15 and Billion Chapter 10.

***FINAL EXAM. 10:00-12:00 a.m., May 7 (Thursday).***

## **STUDENT POLICY PROJECTS: Analysis of a public policy issue.**

Student projects will consist of a written report on research into a specific public policy or policy issue chosen by the student. You may select:

1. An existing policy such as the Conservation Reserve Program, the Trade Adjustment Act, the Endangered Species Act, Public Law 480, etc.
2. A potential policy change such as elimination of the U.S. cotton program, creation of tradeable permits for underground water use in Nebraska, changes in immigration laws, etc.
3. A broad policy issue such as the idea of decoupling farm program payments, replacement of agricultural subsidies with income or disaster insurance, global warming abatement, carbon sequestration, biofuels, nutrition, obesity, etc.

The topic for the student projects should be chosen relatively early in the term and in any case, no later than March 5 when the student projects will be discussed in class. You should contact the instructor as you develop your topic to make sure you have not chosen something that would be too difficult to analyze in one semester. Don't bite off more than you can chew: choosing to analyze the 2007 farm bill debate may not be feasible whereas a specific program within the farm bill may be sufficiently limited in scope to be doable.

The reports should include a clear description of the policy or issue chosen and sufficient background to make it clear what the nature of the issue is, what existing policies are supposed to accomplish, how they are supposed to accomplish these goals, and how well the policies have worked in the past if that is relevant. The overall goal is to evaluate the social benefits and costs of existing policies or policies that have been proposed to solve a particular problem. It will not be necessary to build a model to carry out this analysis. Using concepts developed in the course, you should work to identify the impacts of existing or potential policies on economic variables (prices and quantities) and on those who will gain or lose from proposed policies or policy changes. In some cases, it may be possible to find more technical analyses of your problem that are based on economic or statistical models and you are free to draw on these results for your analysis (with appropriate citation and documentation).

The papers should be 10-12 pages long excluding references, statistical appendices or other supporting material. You are encouraged to use statistical data and other information to support your analysis. Papers that have no data tables or charts are unlikely to receive a high grade. Grades will be based on how well you use concepts covered in the course as well as your general understanding of the economics, politics, and ethics related to your topic. You should pay particular attention to the distributional impacts (which groups both foreign and domestic bear the costs or receive the benefits). As with other written exercises, the writing on the student project will be evaluated and grade penalties will be assessed for writing mistakes. Papers are to be submitted electronically. All projects will be checked for plagiarism. A copy of the rubric (scoring guide) that will be used to determine the grade will be handed out in class.

All references must be cited and listed at the end in a bibliography. Any information obtained through the internet must be fully documented including the internet address, the source of the information and a full bibliographic citation of the author, publisher, and date of publication if available. Undocumented internet information is not acceptable and will be deleted from the paper. (Note: If the address provided does not allow me to find the reference, it does not exist). Whether from the internet or other sources, ***ALL INFORMATION USED MUST BE FULLY DOCUMENTED WITH ALL REFERENCES CITED APPROPRIATELY.***

It is imperative that students understand plagiarism and how to avoid it. Plagiarism is academic dishonesty and will result in severe grade penalties. It is plagiarism to copy a phrase, sentence, several sentences, a paragraph, etc. written by someone else without enclosing the words that are copied in quotation marks and providing information on the source of the passage. It is plagiarism to follow a particular text closely, changing a few words here and there or altering the order in which the phrases or sentences appear. It is plagiarism to take information from a source (even if the words are not copied word for word) without indicating the source of the information. Full and complete documentation and correct use of quotation marks and citations are mandatory for this exercise. ***ANY EVIDENCE OF PLAGIARISM WILL RESULT IN A FAILING GRADE FOR THE STUDENT PROJECT AND POSSIBLY THE CLASS, AND A REPORT TO STUDENT JUDICIAL AFFAIRS.*** If you are uncertain about any aspect of plagiarism, please consult the instructor.