



## **A A E/ECON 747: FRONTIERS IN AGRICULTURAL ECONOMICS 2**

**Credits:** 3

### **Meeting Time and Location**

Mondays and Wednesdays, 9:30 a.m. – 10:45 a.m., B30 Taylor Hall

**Instructional Mode:** face-to-face only

This class meets for two, 75-minute class periods each week over the spring semester and carries the expectation that students will work on course learning activities (reading, writing, problem sets, studying, etc.) for about 3 hours out of the classroom for every class period. This syllabus includes more information about meeting times and expectations for student work.

### **INSTRUCTOR**

**Instructor:** Dr. Andrew W. Stevens

### **Instructor Availability**

Office hours: Thursdays, 11:30 a.m. – 12:30 p.m., 330 Taylor Hall

**Instructor Email:** awstevens@wisc.edu

### **OFFICIAL COURSE DESCRIPTION**

#### **Course Description**

Organization, design, and performance of food and agricultural markets. Industrial organization; firm boundaries, contracting, and collective action; spatial, temporal, and quality dimensions of market design.

#### **Requisites**

ECON 709 and ECON 711

#### **Course Narrative**

*My objective in this course is to equip you to conduct interesting, relevant, and high-quality research in the area of agricultural economics. To do this, we will explore and discuss seminal research in a variety of subfields, synthesize past research, propose new research questions, and evaluate the state of the field.*

### **LEARNING OUTCOMES**

By the end of this course, you will be able to:

- describe the general state and history of the American agricultural sector, agricultural policy, and the major subfields of agricultural economics
- apply and extend microeconomic models in agricultural contexts to evaluate or predict economic behavior or outcomes
- conduct and interpret econometric analyses motivated by microeconomic theory
- synthesize and summarize research in the field of agricultural economics through clear writing
- generate interesting and relevant research questions informed by the economic literature

## **GRADING**

Your course grade will depend on three components: problem sets, a literature review, and a final exam:

- Problem sets: 4 worth 100 points each – 40% of your final grade
- Literature review: 300 points – 30% of your final grade
- Final exam: 300 points – 30% of your final grade

I reserve the right to curve the following grading scale in students' favor at the end of the semester. However, I do not expect to do this.

- A: >90
- AB: 80-90
- B: 70-80
- BC: 60-70
- C: 50-60
- D: 40-50
- F: <40

## **REQUIRED TEXTBOOK, SOFTWARE & OTHER COURSE MATERIALS**

All required readings for this course will either be available to students through the University of Wisconsin–Madison library or provided by me. There is no required textbook.

You will need access to Stata or some other statistical software (R, SAS, SPSS, etc.) in order to complete the problem sets. Each of these programs is available to you through the Campus Software Library.

## **EXAMS, QUIZZES, PAPERS & OTHER MAJOR GRADED WORK**

This course will include a cumulative take-home final exam that will be distributed on May 4 and due on May 6. I will provide specific instructions near the end of the semester. You are not allowed to consult each other or collaborate when completing the final exam.

## **HOMEWORK & OTHER ASSIGNMENTS**

This course will include four problem sets and a literature review:

- Problem sets:
  - Distribution dates and due dates are included in the course schedule below. My intent is for you to have at least two weeks to work on each problem set before it is due.
  - Problem sets will include both mathematical and econometric (data-based) problems. You must submit all relevant work (including code) for full credit.
  - You are allowed (encouraged) to work together on problem sets but must write up your own answers. Identical answers and/or work (code) is unacceptable.
  - You may submit problem sets via hard copy, email, or a combination of the two.
- Literature review:
  - Each student will write an in-depth literature review of academic research in one of the following areas: production economics, agricultural technology adoption, commodity price analysis, agricultural supply, crop insurance, climate change in agriculture, or demand analysis.
  - In addition to reviewing the relevant literature, you will propose three possible research questions that would push the literature forward.
  - Students must choose their topic by Monday, February 3 and meet with me by Monday, February 17 to discuss their topic.

- The due date for the literature review will depend on when in the semester the relevant material is covered and will occur one week after the due date for the relevant problem set. (For example, a literature review of agricultural technology adoption would be due on Monday, March 2.)
- A separate rubric for the literature review will be handed out in class. The three main objectives of this assignment are: (1) to get you to read more deeply in at least one topic area in this course beyond the required assigned readings and develop critical reading skills, (2) to identify active research questions in the literature and opportunities for future research, and (3) to practice clear academic writing. (Note: I will heavily weigh quality of your writing when grading this assignment.)
- As part of your literature review, you must have a third party (other than me) give you feedback on a rough draft. When you submit your final literature review, you must also submit evidence of prior feedback. Although you may work with another graduate student or faculty member, **I strongly encourage you to meet with someone at the UW–Madison Writing Center (<http://writing.wisc.edu/>)**. This service is free to you and an excellent resource regardless of your baseline writing ability.

## **COURSE SCHEDULE** (I reserve the right to make adjustments if needed.)

\*When we get to each subject area, I will hand out a list of relevant papers and let you know which ones will be required reading.

### I. COURSE PRELIMINARIES

- W – Jan 22: What is Agricultural Economics?
- M – Jan 27: A brief history of American agriculture I
- W – Jan 29: A brief history of American agriculture II

### II. AGRICULTURAL PRODUCTION

- M – Feb 3: Production economics
- W – Feb 5: Production economics
- M – Feb 10: Production economics
  - **Problem set 1 distributed**
- W – Feb 12: Technology adoption
- M – Feb 17: Technology adoption

### III. COMMODITY PRICES AND AGRICULTURAL SUPPLY

- W – Feb 19: Models of price expectations
- M – Feb 24: Models of price expectations
  - **Problem set 1 DUE**
- W – Feb 26: Storage models
- M – Mar 2: Storage models
- W – Mar 4: Vector autoregressive (VAR) models
- M – Mar 9: Agricultural supply
  - **Problem set 2 distributed**
- W – Mar 11: Agricultural supply
  
- M – Mar 16: SPRING RECESS – NO CLASS
- W – Mar 18: SPRING RECESS – NO CLASS

### IV. TOPICS IN AGRICULTURAL PRODUCTION

- M – Mar 23: Crop insurance
  - **Problem set 2 DUE**

- W – Mar 25: Crop insurance
- M – Mar 30: Climate change and adaptation
  - **Problem set 3 distributed**
- W – Apr 1: Climate change and adaptation
- M – Apr 6: Climate change and adaptation
- W – Apr 8: Climate change and adaptation

#### V. CONSUMER DEMAND AND FOOD POLICY

- M – Apr 13: Demand analysis
  - **Problem set 3 DUE**
- W – Apr 15: Demand analysis
  - **Problem set 4 distributed**
- M – Apr 20: Demand analysis
- W – Apr 22: Demand analysis
- M – Apr 27: Food policy
- W – Apr 29: Food policy
  - **Problem set 4 DUE**
- M – May 4: FINALS WEEK – NO CLASS
  - **Final exam distributed**
- W – May 6: FINALS WEEK – NO CLASS
  - **Final exam DUE**

### ACADEMIC CALENDAR & RELIGIOUS OBSERVANCES

Please refer to the official UW–Madison academic calendar for important deadlines including the last day to drop courses or withdraw without notation on your transcript, the last day to drop courses with full tuition refund, the last day to drop courses, and the last day to apply for a pass/fail grade or convert your enrollment from for-credit to audit: <https://secfac.wisc.edu/academic-calendar/>

Wisconsin law mandates that any student with a conflict between an academic requirement and any religious observance must be given an alternative for meeting the academic requirement. If you wish to request relief from any aspect of this course for a religious observance, please notify me via email within the first two weeks of class and specify the specific days or dates for which you are requesting relief. We will work together to determine an appropriate way to satisfy the affected course requirements in an appropriate way.

### ACADEMIC INTEGRITY

By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct which may result in disciplinary action. Examples of disciplinary action include, but are not limited to, failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion.

### ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Providing reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform me of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. I will work either directly with you or in coordination with

the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.

## **DIVERSITY & INCLUSION**

Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.