AGEC 622
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AGEC 622 Organization of Agricultural and Food Markets
Spring 2020

Instructor: Meilin Ma (OH MW 2-3pm)
Lecture time and location: TR 1:30-2:45pm at Stanley Coulter Hall G038
Instructor office: KRAN 629
Instructor email: mameilin@purdue.edu

Prerequisites

ECON 606, ECON 607, and AGEC 651, or consent of the instructor. ECON 620 is highly recommended.

Course Description

This course focuses on industrial organization (I.O.) issues in agricultural and food markets. These markets could hardly be considered to be perfectly competitive. Processing and marketing sectors of agricultural products have been evolving dramatically in recent decades, both in developed and developing economies. Specifically, food manufacturing and retailing have consolidated, product differentiation has increased, and vertical coordination of stages along the supply chain has strengthened. Analysis of these topics requires methodologies from the realm of applied I.O. This course provides students with basic analytical tools for related topics by referring to classic and frontier research papers on I.O. issues in agricultural and food markets in the United States and developing economies. Training students to write research papers using applied I.O. methods is another goal.

Grading

Course grades are based on one research paper (45%), three problem sets (45%), and research presentation (10%).

Grades are not curved. Letter grade A+ is given to grades of 97-100, A to 93-96.9, A- to 90-92.9, B+ to 85-89.9, B to 80-84.9, B- to 75-79.9, C to 67-74.9, D to 60-66.9, and F to <60.

Research papers shall be prepared as short journal articles (e.g., articles of 3000-3500 words as published at Economic Letters). Instructors help students in choosing a research topic early of the semester. Students will then write one-page proposals and obtain comments from the instructors. First and final drafts and timely comments follow. Formatting guidance and writing rules will be provided. In the last week of the semester, students give 10-minute presentations of their papers to obtain comments from the instructors and their peers.
Due dates

Problem set 1: first lecture of week 3 (Jan 28, 2020)
Brainstorm matrix: first lecture of week 6 (Feb 18, 2020)
Problem set 2: first lecture of week 8 (Mar 3, 2020)
Research proposal: first lecture of week 9 (Mar 10, 2020)
First draft: first lecture of week 12 (Mar 31, 2020)
Problem set 3: first lecture of week 15 (Apr 21, 2020)
Research presentation: week 16 (Apr 30, 2020)
Final draft: 6PM on May 8, 2020

Reference Textbooks


Course Outline

1. Market Power in Modern Agricultural Commodity Markets

1-1. Economic modeling and course overview
   - Why and how economists construct economic models
   - How models are applied to answering real-world questions
   - What this course offers to you and expects from you


1-2. Big pictures of modern agricultural markets


1.3. Market power in commodity markets

- Market definition and market integration

1-4. Theoretical background

- Structure-Conduct-Performance Approach
- New Empirical IO


- Oligopoly and oligopsony power
- Flexible-Oligopoly-Oligopsony-Market Model (FOOM)
- Measurement of market power


- Market power and agricultural policy and investment


- Market power and retail pricing


- Market power in the context developing economies


**Workshop: Writing a Research Article**

- How to generate research ideas
- How to write a research proposal
- How to collect data for empirical analysis
- Guidance for academic writing and formatting

2. Horizontal and Vertical Integration

2-1. Theoretical background

- Boundary of a firm

Tirole, Chapter 1.1 and Chapter 4.1-4.3
- The principal-agent problem and adverse selection
- Bargaining, moral hazard, and the hold-up problem


2.2 Integration of agricultural supply chains


2-3. Producer cooperatives

- Farmer cooperatives in developed economies


- Farmer cooperatives in developing economies


2-4. Contract farming

- Contracting and welfare


- Contracting and productivity


- Contracting and quality


- Contracting and pricing


3. Quality and Product Differentiation

3-1. Theoretical background

Tirole, Chapter 7


3-2. Implications of quality differentiation


3-3. Quality certification and imperfect information


3-4. Advertisement and product selection


4. Innovation and New Trends in Food Supply Chains

4-1. Economics of R&D

Tirole, Chapter 10
- Patents and licensing
- Process innovations


4-2. Innovation in the Agricultural Sector


4-3. E-Commerce


