AEB4334: Agricultural Price Analysis – Fall 2025

Course Time and Location:

- Semester: Fall 2025
- Time and Location: M, W, F | Period 6 (12:50 pm -1:40 pm), Fine Art C (FAC) 0127

Instructor information:

- Instructor: Dr. Xumin Zhang, Lecturer (Food and Resource Economics)
- Office: Food and Resource Economics, 1177 McCarty Hall A
- Contact: (352) 294-7623; xumzxm@ufl.edu;

Office Hours and Location:

Tuesday, Wednesday, Thursday, 2-4 pm or by appointment (Zoom conference by appointment: https://ufl.zoom.us/j/3310373641**.**

Teaching Assistant: TBD, Office Hours TBD

Course Description (from Catalog):

Quantitative measurement of factors affecting agricultural and resource prices; seasonal and cyclical fluctuations; index measures of price and quantity variables; theory and application of consumer behavior principles.

Prerequisites: AEB3103 and AEB3550, or the equivalent. AEB4334 will be taught with the assumption that students are comfortable with the material covered in these courses. In addition, students are expected to have a working knowledge of basic economics, algebra, and calculus.

Undergraduate Advisor: Ms. Michelle Baldwin; 1170B McCarty Hall A; (352) 294-7640; E-mail: baldwin.ma@ufl.edu; Schedule an appointment

Undergraduate Coordinator: Dr. Misti Sharp; 1189 McCarty Hall A; (352)294-7632; E-mail: mistisharp@ufl.edu; Schedule an appointment

FRE Technology Assistance: Dave Depatie; 1197 McCarty Hall A; (352) 394-7641; E-mail: ddepatie@ufl.edu

Expected Student Learning Outcomes

After the successful completion of AEB4334, a typical student should be able to:

- Demonstrate an understanding of economic theory of consumer behavior, the elasticity of demand, the production decision, and profit maximization for firms under different market structures.
- Apply economic analysis as a tool to evaluate agricultural prices and develop profit maximization decisions for firms.

Course Summary/Topics:

- Part 1: Introduction and Marginal Analysis for Optimal Decisions

Students will be able to explain managerial economics, economic profit, and use marginal / demand and supply analysis to make optimized business decisions.

　　Chapter 1: Managers, Profit, Markets

　　Chapter 3: Marginal Analysis for Optimal Decisions

　　Chapter 4: Basic Estimation Techniques

- Part 2: Markets and The Theory of Consumer Behavior

Students will be able to explain market demand, supply, and price elasticity and use individual demand curves to derive market demand.

　　Chapter 2: Demand, Supply, and Market Equilibrium

　　Chapter 6: Elasticity and Demand

　　Chapter 5: Theory of Consumer Behavior

- Part 3: Production Theory and Empirics

Students will be able to explain the concepts of production and cost analysis and use cost functions to analyze cost structure.

　　Chapter 8: Production and Cost in the Short Run

　　Chapter 9: Production and Cost in the Long Run

　　Chapter 10: Production and Cost Estimation

- Part 4: Firm Behavior and Market Structure

Students will be able to explain the different market structures and define the profit-maximizing output and price for firms.

　　Chapter 11: Managerial Decisions in Competitive Markets

　　Chapter 12: Managerial Decisions for Firms with Market Power

Chapter 13: Strategic Decision-Making in Oligopoly Markets.

Chapter 14: Pricing Strategy - Price Discrimination

Required Course Materials:

- ***Textbook:*** Managerial Economics: Foundations of Business Analysis and Strategy, 14th edition, by Christopher Thomas and S. Charles Maurice. McGraw Hill. 2024. ISBN: 9781266257797.
  - It is a McGraw-Hill eBook.
  - A paperback (ISBN: 9781266257797) or loose-leaf version of the textbook (ISBN: 9781264934058) is also acceptable.
- ***E-learning:*** There is an E-Learning Canvas webpage for this course. E-learning can be accessed via http://elearning.ufl.edu using your Gatorlink username and password. If you are having difficulties accessing E-learning, please contact the UF Computing Help Desk by calling (352)-392-HELP or via email helpdesk@ufl.edu.

Class Structure: Primarily Classroom (face to face)

Composition of Final Score:

Course Assignments	Total Points	% of Total
Assignments (Quizzes, Problem Sets, Reflections, etc.) - Attendance and In-class activities (50 points)	200 points	33.4%
Agricultural Price Analysis (APA) Project	100 points	16.6%
Exams (3)	300 points	50%
Final Exam (Optional)	(100 points)	(16.6%)
Total	600 points	100%

Assignment due dates are provided in Canvas > Syllabus (or Assignments). Late submissions are acceptable, but will incur a 50% penalty deduction.

Course Assignments and Expectations:

Canvas Assignments (200 points):

There will be quizzes for each chapter (e.g., multiple-choice, short-answer questions, etc.).

There will be individual reflections, discussions, or learning activities for each module.

There will be one Problem Set for each module, a total of 4 problem sets (multiple questions).

I apply a double-deadline approach to assignments (quizzes and learning activities only, not bonus points and price analysis projects). The first deadline is one week after the lesson (for students who need strict deadlines). The second deadline is the Monday before the exam day (Exams are usually scheduled for Friday). Students choose the deadlines that work better for effectively managing time (time management is the key to success).

Attendance and In-Class Activities (50 points): Attendance and In-Class Activities are essential components of this class. Regular attendance fosters a dynamic learning environment where you

can engage with peers, ask questions, and grasp complex concepts more effectively. In-class activity is a method to assess your understanding of course material. There will be random attendance taking and self-assessment quizzes, ranging from 2.5 to 5 points throughout the semester.

Exams (300 points): There will be 3 required non-cumulative exams. The exams will include multiple choice, short answers, and calculations. The exams will be administered in class, each a 50-minute test.

Final Exam (Optional):

An optional comprehensive final exam will be given on Dec. 11 at 12:30 pm – 2:30 pm (in the classroom for this semester). Students wishing to replace an exam grade from the semester may take the final exam. Students who miss an exam for any reason (excused or unexcused) may take the final to replace the missing grade. Any student caught cheating on any exam will receive a 0 on the exam and may not use the final to replace that grade (I retain the option of failing any student caught cheating on any exam – the minimum penalty for cheating is a 0 without the option to replace the grade).

Agricultural Price Analysis (APA) Project (100 points)

- APA #1 Team Organization (individual)   10 points
- APA #2 Commodity Selection   10 points
- APA #3 Fundamental Analysis   10 Points
- APA #4 Simulator sign-up and trading practice   5 points
- APA #5 Price Monitoring and Technical Analysis   10 points
- APA #6-#7 Trading simulation (individual)   30 points
- APA #8 Project Report and Poster (individual)   15 points
- APA #9 Team Member Evaluation   10 points
- Total points available: 100 points

There will be a set of assignments for the APA project. It includes commodity selection, technical price tracking, price analysis, fundamental analysis, technical analysis, trading simulation, and project report. Rules and instructions will be available on Canvas.

Students will be divided into teams of 2 students. Rules and assignments will be available on Canvas.

Extra credits: Extra points will be available.

Course Syllabus AEB4334

Weekly Schedule:

Week	Chapter	Topic	Assignments Due
1		Orientation: Get Started (1st day of class)	Aug.21st
Module 1 (Marginal Analysis for Optimal Decisions)			
1	1	Managers, Profits, and Markets	
2		**APA #1 Project Kickoff** (team organizing)	APA Kickoff (W2)
3	3	Marginal Analysis for Optimal Decisions	APA Team Organization due (W3)
4	4	Basic Estimation Techniques and Forecasting **APA #2 Commodity Selection assigned**	
Module 2 (Markets and The Theory of Consumer Behavior)			
5	2	Demand, Supply, and Market Equilibrium	
6	6	Elasticity and Demand **APA #3 Fundamental Analysis**	Problem Set 1 due (W6, Sep.22nd) APA Commodity Selection due (W6, Sep.26th) **No Exam for Module 1**
7	5	Theory of Consumer Behavior	
Module 3 (Production Theory and Empirics)			
8	8	Production and Cost in the Short Run **APA #4 Simulator sign-up and practice**	APA #3 due (W8, Oct.10th) Problem Set 2 due (W8, Oct.6th) **Exam 1 (Fri, Oct.10th)**
9	9	Production and Cost in the Long Run	
10	10	Production and Cost Estimation **APA #5 Price Technical Analysis assigned**	APA #4 due (W10, Oct.24th)
Module 4 (Firm Behavior and Market Structure)			
11	11	Managerial Decisions in Competitive Markets	
12	12	Managerial Decisions for Firms with Market Power - Monopoly **APA #6-#7 Trading simulation assigned**	APA #5 due (W12, Nov.7th)
13	12	Managerial Decisions for Firms with Market Power – Monopolistic	Problem Set 3 due (W13, Nov.10th) **Exam 2 (Fri, Nov.14th)**
14	13	Strategic Decision Making in Oligopoly Markets. **APA #8 Final Report assigned**	APA #6 and #7 trading simulation due (W14)
15		Thanksgiving	

16	14	Pricing Strategy - Price Discrimination Course wrap up **APA #7 Poster due**	Problem Set 4 due (W16, Dec.1st) APA report due (W16, Dec.3rd) **Exam 3 (Wed, Dec.3rd)**
17		Final Exam (optional) Dec.11th. at 12:30–2:30 pm	FAC 0127

Note: The instructor reserves the right to change the terms and dates stated in this course syllabus at any time. Any changes will be communicated on e-learning as an announcement. It is solely the student's responsibility to stay informed of any changes.

Please note that there are holidays.

*   ***By enrolling in this course, you are agreeing to the terms outlined in this syllabus!*****

Student Evaluation: The grade scale is at the discretion of the professor. UF does not have an A+ option. You must provide percentage, total points, and grade points in a table such as this:

Grade	Percentage	Total points	Grade Points
A	93% or more	≥ 558	4.00
A-	90.0 – 92.9%	540-558	3.67
B+	86.0 – 89.9%	516-540	3.33
B	83.0 – 85.9%	498-516	3.00
B-	80.0 – 82.9%	480-498	2.67
C+	76.0 – 79.9%	456-480	2.33
C	73.0 – 75.9%	438-456	2.00
C-	70.0 – 72.9%	420-438	1.67
D+	66.0 – 69.9%	396-420	1.33
D	63.0 – 65.9%	378-396	1.00
D-	60.0 – 62.9%	360-378	0.67
E	59.9% or less	≤ 360	0.00

Please note that grades are not 'rounded' or 'adjusted' at the end of the term.

This course adheres to all UF Academic Policies: https://go.ufl.edu/syllabuspolicies