AEB4334: Agricultural Price Analysis – Spring 2024

Course Time and Location:

• Semester: Spring 2024

• Time and Location: M, W, F | Period 6 (12:50 pm -1:40 pm), Matherly (MAT) 0018

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: https://ufl.zoom.us/j/3310373641.

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. Danielle Shu; 1170B McCarty Hall A; (352) 294-7640;

E-mail: dshu@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: <u>ddepatie@ufl.edu</u>

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 economics 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, 13th edition, by Christopher Thomas and S. Charles Maurice. McGraw Hill. 2020. ISBN: 9781260004755.
 - o It is a McGraw-Hill eBook.
 - o A paperback (ISBN:9781260565546) or loose-leaf version of the textbook (ISBN:9781260506334) is also acceptable.
- *E-learning:* There is an <u>E-Learning Canvas webpage</u> 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, | 200 points | 33.4% |
| etc.) | | |
| - Attendance and In-class activities (50 points) | | |
| 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 4/30/2024 @ 3:00 PM - 5:00 PM (in the classroom or on Canvas). 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 | 5 points |
|---|------------------------------------------------------------|---------------------|
| • | APA #2 Commodity Selection | 10 points |
| • | APA #3 Fundamental Analysis | 10 Points |
| • | APA #4-#6 M1 to M3 Price Monitoring and Technical Analysis | 40 points (total 3) |
| • | APA #7 Project Poster | 20 points |
| • | APA #8 Team Member Evaluation | 15 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, and poster development. 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: There will be extra points available.

Weekly Schedule:

| Week | Chapter | Topic | Assignments Due | | |
|------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--|--|
| 1 | | Orientation: Get Started (1st day of class) | Jan.8th | | |
| | Module 1 (Marginal Analysis for Optimal Decisions) | | | | |
| 1 | 1 | Managers, Profits, and Markets | | | |
| 2 | | APA #1 Project Kickoff | APA Kickoff (W2) | | |
| 3 | 3 | Marginal Analysis for Optimal Decisions | | | |
| 4 | 4 | Basic Estimation Techniques and Forecasting APA #2 Commodity Selection assigned | APA Team Organization due (W4) | | |
| | | Module 2 (Markets and The Theory of Consumer | r Behavior) | | |
| 5 | 2 | Demand, Supply, and Market Equilibrium | | | |
| 6 | 6 | Elasticity and Demand APA #3 Price Analysis Month 1 | Problem Set 1 due (W6, Feb.12th) APA Commodity Selection due (W6, Feb.16th) No Exam for Module 1 | | |
| 7 | 5 | Theory of Consumer Behavior | | | |
| | • | Module 3 (Production Theory and Empir | ics) | | |
| | 0 | Production and Cost in the Short Run | A.D.A.M. 1 (WO) | | |
| 8 | 8 | APA #4 Fundamental Analysis | APA M1 due (W8) | | |
| 9 | | Spring Break | | | |
| 10 | 9 | Production and Cost in the Long Run | Problem Set 2 due (W10, Mar.11th) Exam 1 (Fri, Mar.15th) | | |
| | | Production and Cost Estimation | APA Fundamental Analysis | | |
| 11 | 10 | APA #5 Price Analysis Month 2 assigned | due (W11, Mar.22nd) | | |
| | | Module 4 (Firm Behavior and Market Struc | cture) | | |
| 12 | 11 | Managerial Decisions in Competitive Markets | | | |
| 13 | 12 | Managerial Decisions for Firms with Market Power - Monopoly APA #6-#7 Final Report and Poster assigned | Problem Set 3 due (W13, Apr.1st) APA M2 due (W13, Apr.5th) Exam 2 (Fri, Apr.5th) | | |
| 14 | 12 | Managerial Decisions for Firms with Market Power – Monopolistic | | | |
| 15 | 13 | Strategic Decision Making in Oligopoly Markets. APA #6 Final Report due | APA Final Report M3 due (W15) | | |

| 16 | 14 | Pricing Strategy - Price Discrimination | Problem Set 4 due (W16, |
|----|----|--------------------------------------------------|-------------------------------------|
| | | Course wrap up | Apr.22nd) |
| | | APA #7 Poster due | APA poster due (W16, |
| | | | Apr.24 th) |
| | | | Exam 3 (Wed, Apr.24 th) |
| | | Final Exam (optional) 4/30/2024 @ 3:00 PM - 5:00 | |
| 17 | | PM (on Canvas) | |

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 | ≥ 372 | 4.00 |
| A- | 90.0 - 92.9% | 360 - 371 | 3.67 |
| B+ | 86.0 - 89.9% | 344 - 359 | 3.33 |
| В | 83.0 - 85.9% | 332 - 343 | 3.00 |
| B- | 80.0 - 82.9% | 320 - 331 | 2.67 |
| C+ | 76.0 - 79.9% | 304 - 319 | 2.33 |
| C | 73.0 - 75.9% | 292 - 303 | 2.00 |
| C- | 70.0 - 72.9% | 280 - 291 | 1.67 |
| D+ | 66.0 – 69.9% | 264 - 279 | 1.33 |
| D | 63.0 - 65.9% | 252 - 263 | 1.00 |
| D- | 60.0 - 62.9% | 240 - 251 | 0.67 |
| Е | 59.9% or less | ≤ 239 | 0.00 |

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

Grades and Grade Points: For information on current UF policies for assigning grade points, see https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/

Attendance and Make-Up Work: Requirements for class attendance and make-up exams, assignments and other work are consistent with university policies that can be found at: https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/

For online course with recorded materials a statement informing students of privacy related issues such as:

Our class sessions may be audio-visually recorded for students in the class to refer back and for enrolled students who are unable to attend live. Students who participate with their camera engaged or utilize a profile image are agreeing to have their video or image recorded. If you are unwilling to consent to have your profile or video image recorded, be sure to keep your camera off and do not use a profile image. Likewise, students who un-mute during class and participate orally are agreeing to have their voices recorded. If you are not willing to consent to have your voice recorded during class, you will need to keep your mute button activated and communicate exclusively using the "chat" feature, which allows students to type questions and comments live. The chat will not be recorded or shared. As in all courses, unauthorized recording and unauthorized sharing of recorded materials is prohibited.

Course Evaluation

Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give

feedback in a professional and respectful manner is available at: https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at: https://gatorevals.aa.ufl.edu/public-results/.

Academic Honesty: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code

Software Use

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Services for Students with Disabilities

The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

0001 Reid Hall, 352-392-8565, https://disability.ufl.edu/

Campus Helping Resources

Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

Health and Wellness

U Matter, We Care: If you or someone you know is in distress, please contact <u>umatter@ufl.edu</u>, 352-392-1575, or visit <u>U Matter, We Care website</u> to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: <u>Visit the Counseling and Wellness Center website</u> or call 352-392-1575 for information on crisis services as well as non-crisis services. Address: 3190 Radio Road. Services provided:

Counseling services
Groups and workshops
Outreach and consultation
Self-help library
Wellness coaching

Student Success Initiative: https://studentsuccess.ufl.edu/ Services provided:

Advising
Peer mentoring
Coaching
Peer tutoring

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the Student Health Care Center website.

Academic Resources

E-learning technical support: Contact the <u>UF Computing Help Desk</u> at 352-392-4357 or via email at <u>helpdesk@ufl.edu</u>.

<u>Career Connections Center</u>: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

<u>Library Support</u>: Various ways to receive assistance with respect to using the libraries or finding resources.

<u>Teaching Center</u>: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

<u>Writing Studio</u>: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

On-Line Students Complaints: https://pfs.tnt.aa.ufl.edu/state-authorization-status/#student-complaint

Lauren's Promise: I will listen and believe you if someone is threatening you.

Lauren McCluskey, a 21-year old honors student athlete, was murdered on October 22, 2018, by a man she briefly dated on the University of Utah Campus. We must all take actions to ensure this never happens again. Any form of sexual harassment or violence will not be excused or tolerated at the University of Florida.

If you are experiencing sexual assault, relationship violence, or stalking, you can take the following actions:

- If you are in immediate danger, call 911.
- Report it to me, and I will connect you to resources.
- Seek confidential sources of support and help:
 - UFPD Office of Victim Services: 51 Museum Road, 352-392-5648
 - Sexual Assault Recovery Services (SARS): Infirmary Building, 352-392-1161
 - Alachua County Rape Crisis Center (confidential): 352-264-6760

Diversity, Equity, and Inclusion: The University of Florida's College of Agricultural and Life Sciences (CALS) supports the University of Florida's commitment to diversity, equity, and inclusion. By fostering a sense of belonging for students, staff, and faculty, while leveraging the uniqueness of the people who study and work at the university, we believe our campus community is enriched and enhanced by diversity, including but not limited to, race, ethnicity, national origin, gender, gender identity, sexuality, class, and religion. This course will support an understanding of the diversity of our distance and campus communities as well as our agricultural and natural resource communities, locally and globally.

This course will strive to create a learning environment for students that supports a diversity of thoughts, perspectives, and experiences while honoring your identities. In this class we will take the following approaches to help achieve this:

- All course participants will use the names and pronouns provided by students for use in class. If these differ from those that appear in official university records, you can change your Display Name at One.UF (see Student Help FAQs eLearning University of Florida (ufl.edu)).
- If your performance in this course is being impacted by your experiences inside and/or outside the classroom, do not hesitate to contact the instructor and/or teaching assistant (TA). Instructors in CALS are a great resource for you and you may provide feedback anonymously. Feedback may result in general announcements to the class, if necessary, or reporting to appropriate UF personnel to address your concerns.

• CALS instructors and TAs like many people, are still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that makes you feel uncomfortable, please discuss with your instructor or TA or contact the CALS Dean's Office (cals-dean@ufl.edu).