

University of Florida
Food and Resource Economics Department

AEB4334 Agricultural Price Analysis

Spring Term 2021

Section: ONLN
Class Number: 23549
3 Credit Hours

Online asynchronous course delivery via Canvas

Instructor and Contact Information

Instructor: Dr. Mikael Sandberg
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Office Hours: Virtual Office Hours using Zoom; Monday and Wednesday 10:00am – 12:00pm. Other times by appointment.
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E-mail is an efficient and fast way to ask questions. When e-mailing me, please indicate in which class you are enrolled (e.g., AEB4334, Price Analysis, UF class, or something similar) so that I can more effectively address your concerns. Courteous and professional e-mails can expect a prompt reply. Please do NOT use my old UF Gatorlink account (it is still accessible in some e-mail directories). Instead, for quickest response use sandberg1@usf.edu.

E-Learning Canvas: There is a Canvas page for this course that can be accessed via <http://elearning.ufl.edu>. If you are having difficulties accessing E-Learning, please contact the UF Computing Help Desk by calling (352) 392-HELP or e-mail helpdesk@ufl.edu, or visit <https://helpdesk.ufl.edu/>. You will need your UFID/Gatorlink information when contacting them.

General Course Information

Required Text and Materials: *Managerial Economics: Foundations of Business Analysis and Strategy, 13th edition*, by Christopher Thomas and S. Charles Maurice. McGraw Hill. 2020. Hardcover. ISBN: 9781260004755.

- You may also purchase a loose-leaf version of the textbook – ISBN: 9781260506334.

Course Description: 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 AEB3510 or the equivalent. Students are expected to have a working knowledge of basic microeconomics, algebra, and calculus.

Dr. Sandberg reserves the right to change the terms and dates stated in this Course Syllabus at any time. Any changes will be communicated via Canvas. It is the student's responsibility to stay informed about any changes or modifications.

Course Structure and Course Content

Course Objectives: This course applies economic theory to the analysis of the assumed universal goals of consumer utility-maximization and firm profit-maximization. AEB4334 represents a transition from the more intuition-based principles course approach to a more rigorous and analytical treatment of microeconomics. After the successful completion of this course, the typical student should be able to have a rather sophisticated understanding of:

- the economic theory of consumer behavior and decision making;
- the elasticity of demand and its influence on the operations of a firm;
- the economic theory of firm behavior;
- the difference between short-term operating and long-term planning decisions of a firm;
- the use of economic analysis as a tool to achieve profit maximization for firms in a variety of contexts under different market structures.

Topical Course Outline: The instructor reserves the right to change this outline as appropriate.

Introduction and Methods

Introduction Lecture: The Nature of Economic Analysis

Chapter 3: Marginal Analysis for Optimal Decisions

- Unconstrained Optimization
 - Objective Function
 - Marginal Benefit and Marginal Cost
- Continuous versus Discrete Choice Variables
- Constrained Optimization
 - Value per dollar spent

Markets and the Theory of Consumer Behavior

Chapter 5: Theory of Consumer Behavior

- Assumptions about Consumer Theory and Preferences
- Utility Function
- Indifference Curves
 - Marginal Rate of Substitution
- Budget Lines
- Utility Maximization
- Derivation of individual demand and market demand curves
- Substitution and Income Effects of a Price Change

Chapter 6: Elasticity and Demand

- Price Elasticity of Demand
- Price Elasticity and Total Revenue
 - Marginal Revenue
- Income Elasticity of Demand
- Cross-Price Elasticity of Demand

Production: Theory and Empirics

Chapter 8: Production and Cost in the Short-Run

- Production and Cost
- Short-run versus Long-run
- Short-run Production

- Total Product, Average Product, Marginal Product
- Short-run Cost
 - Total Cost, Total Fixed Cost, Total Variable Cost
 - Average Total Cost. Average Fixed Cost, Average Variable Cost, Short-run Marginal Cost
- Production Functions versus Cost Functions
 - Average Variable Cost and Average Product
 - Marginal Cost and Marginal Product

Chapter 9: Production and Cost in the Long-Run

- Isoquants
- Isocost Curves
- Optimal Input Combination
- Optimization and Cost: The Expansion Path
- Long-run costs
 - Relationship between Long-run Cost and Short-run Cost
- Economies and Diseconomies of Scale
- Economies of Scope
- Short-run Expansion Paths

Chapter 10 Handout: Provided on Canvas

- Specification of Short-run Production Functions
- Specification of Short-run Cost Functions

Firm Behavior and Market Structure

Chapter 11: Managerial Decisions in Competitive Markets

- Market Structures and Perfect Competition
- Firm Demand Curve
 - Price Takers
- Profit maximization
- Perfect Competition in the Long-run
- Shut-Down Decision
- Firm's Supply Curve
- Profit-maximizing Input Decisions

Chapter 12: Managerial Decisions for Firms with Market Power

- Market Power
- Monopoly
 - Barriers to Entry
 - Profit Maximization
 - Short-run versus Long-run
- Monopolistic Competition
 - Profit Maximization
 - Short-run versus Long-run
 - Advertising and Product Development

Chapter 13: Strategic Decision Making in Oligopoly Markets

- Game Theory
 - Dominant Strategies
 - Nash Equilibrium
- Best-Response Curves

- Derivation and analysis
- Nash Equilibrium

AEB4334 Semester Schedule: Below you find a week-by-week preliminary semester schedule. I reserve the right to change this outline at any time, as warranted by circumstances and outside events.

Week	Dates	Monday	Wednesday
1	Jan 11 & Jan 13	Introduction and Syllabus	Framework of Microeconomic Analysis
2	Jan 18 & Jan 20	LABOR DAY (NO CLASS)	Ch 3: Marginal Analysis for Optimal Decisions
3	Jan 25 & Jan 27	Ch 3: Marginal Analysis for Optimal Decisions	Ch 5: Theory of Consumer Behavior
4	Feb 1 & Feb 3	Ch 5: Theory of Consumer Behavior	Ch 5: Theory of Consumer Behavior
5	Feb 8 & Feb 10	Ch 5: Theory of Consumer Behavior	Ch 6: Elasticity and Demand
6	Feb 15 & Feb 17	Ch 6: Elasticity and Demand	EXAM 1 (February 17)
7	Feb 22 & Feb 24	Ch 8: Production and Cost in the Short Run	Ch 8: Production and Cost in the Short Run
8	Mar 1 & Mar 3	Ch 9: Production and Cost in the Long Run	Ch 9: Production and Cost in the Long Run
9	Mar 8 & Mar 10	Ch 9: Production and Cost in the Long Run	Ch 10 Handout: Production and Cost Estimation
10	Mar 15 & Mar 17	EXAM 2 (March 15)	Cost, Profit, and Markets Review Unit
11	Mar 22 & Mar 24	Ch 11: Managerial Decisions in Competitive Markets	Ch 11: Managerial Decisions in Competitive Markets
12	Mar 29 & Mar 31	Ch 11: Managerial Decisions in Competitive Markets	Ch 12: Managerial Decisions for Firms with Market Power
13	Apr 5 & Apr 7	Ch 12: Managerial Decisions for Firms with Market Power	Ch 12: Managerial Decisions for Firms with Market Power
14	Apr 12 & Apr 14	EXAM 3 (April 12)	Ch 13: Strategic Decision Making in Oligopoly Markets
15	Apr 19 & Apr 21	Ch 13: Strategic Decision Making in Oligopoly Markets	
16	Apr 26 & Apr 28	FINAL EXAM	

End-of-Chapter Problems: Each chapter in the textbook is accompanied by numerous study problems and exercises labeled ‘Technical Problems’ (some of them are excellent!). The solutions for ALL Technical Problems are posted on Canvas under ‘Solutions.’ To do well in this class, you should work and master these problems. Below are the recommended exercises out of each chapter. These problems are not to be turned in for credit, rather they are assigned to help you learn the material.

Chapter	Recommended Technical Problems
Chapter 3	2, 3, 4, 6, 8, 10, 12
Chapter 5	1, 3, 4, 5, 6, 7, 8, 10, 15, 16
Chapter 6	1, 2, 4, 8, 9, 14, 16
Chapter 8	2, 4, 7, 9, 10, 12, 14
Chapter 9	1, 2, 3, 4, 6, 7
Chapter 10 (Handout)	1, 2
Chapter 11	1, 2, 3 (skip part c), 6, 8, 11
Chapter 12	1, 4, 5, 7, 9, 12, 13, 15, 16
Chapter 13	3, 4, 11

Module Structure: AEB4334 will be delivered by the use of modules in Canvas. Each module roughly corresponds to an in-class lecture. Thus, in a normal week there would be two modules posted – one for Monday and one for Wednesday. The modules will be posted at 10:00am on Mondays and Wednesdays. On Exam days there will be no modules posted.

Each module will have three primary components:

1. PowerPoint Lecture notes;
2. An mp4 video file of the PowerPoint slides with my lecture accompanying them;
3. Review Exercises (with solutions) designed to accompany the lecture in the module. The first two modules (i.e., January 11 and January 13) will not have Review Exercises. Additional exercises and review problems are available at the end of the chapters in your textbook (see previous page).

For simplicity, the Monday modules and the Wednesday modules are about the same length. This is by design. You can view it as two '1hr 15 min' modules per week.

Please note that the posted mp4 video files are significantly shorter than the traditional lecture time. There are several reasons for this. First, the lectures are delivered via PowerPoint so there is less time devoted to writing things down on the board or in your own notes. Second, during a traditional lecture, students often ask clarifying questions which usually leads interesting in-class discussions. In pre-recorded lectures, this feature will naturally be absent. Consequently, the material will be covered in a shorter period of time than traditional lectures.

On Canvas you will also find Chapter Discussion Boards. Each chapter will have its own Discussion Board on Canvas. The purpose of the Discussion Boards is for students to interact with one another and to ask each other questions about the material covered in class. You can also ask about end-of-chapter exercises out of the book or anything else pertaining to the material. These peer-to-peer discussions are an integral part to the learning experience in this class. Students often find that these Discussion Boards are very helpful. I will monitor the Discussion Boards periodically (a couple of times per week) to ensure accuracy and to answer questions. Therefore, if you find yourself with questions about the material or if you need clarification, the Chapter Discussion Board is an excellent way to start finding answers and to participate in a dialog. Discussions not pertaining to the class or the material covered will not be accepted. No solicitation, spamming, or offensive language allowed. No discussion boards are open for the first week of class.

Evaluation of Performance and Grading

Grades: You can earn 380 points throughout the semester. Your final grade for AEB4334 will be based on the following:

Sum of 2 highest Mid-term	
Exams Grades	200 possible points
Final Exam (Comprehensive)	100 possible points
Assignments	80 possible points
TOTAL	380 possible points

Final course grades will have the following benchmarks out of the 380 possible grade points:

A (≥ 353)	C (277 - 291)
A- (342 - 352)	C- (266 - 276)
B+ (330 - 341)	D+ (254 - 265)
B (315 - 329)	D (239 - 253)
B- (304 - 314)	D- (228 - 238)
C+ (292 - 303)	E (≤ 227)

Please note that grades are not ‘rounded’ or in any way ‘adjusted’ at the end of the term. Grading is not a negotiation process and arguing over grades at the end of the semester is NOT entertained. If you believe that your exam is incorrectly graded or that your grade is incorrectly posted, please contact me via e-mail (i.e., in writing) as soon as possible. You have 7 days after the grade has been posted to voice your concern. After 7 days have passed, your posted grade will be assumed to be correct and accurate

Exams: There will be three regular exams (‘mid-terms’) offered during the semester for AEB4334. Each exam is worth 100 points. Your lowest mid-term grade is dropped, so only your two highest exam grades count (for a total of 200 points towards your final course grade). The exams will consist of multiple-choice, problem-solving, and analytical questions. The exams are closed book and closed notes. A simple calculator may be used. However, other aides are not allowed. The exams will be administered using HonorLock in Canvas. HonorLock requires students to have access to a computer with a webcam (either internal or USB). **The exams will open at 10:00am EST on exam days.** Once you start your exam, you will have 100 minutes to finish. **The exam must be completed by 11:59pm EST on exam days.** This will give you a cushion in case something unforeseen happens or if your internet service is temporarily interrupted.

Final Exam: A mandatory and comprehensive Final Exam is offered during the final exam week: **Monday April 26 at 10:00am EST.** The final exam is exclusively multiple-choice. The exam will be administered using HonorLock in Canvas. Once you start your final exam, you will have 120 minutes to finish. The exam must be completed by 11:59pm EST. This will give you a cushion in case something unforeseen happens or if your internet service is temporarily interrupted.

Tentative Exam Dates:

Mid-term Exam 1: Wednesday February 17 at 10:00am EST

Mid-term Exam 2: Monday March 15 at 10:00am EST

Mid-term Exam 3: Monday April 12 at 10:00am EST

Final Exam: Monday April 26 at 10:00am EST

The instructor reserves the right to change these exam dates as appropriate. Any changes will be communicated via Canvas.

Make-Up Exams: Early or late exams are usually not given. Make-up exams are only given in circumstances with verifiable supporting documentation. Minor illnesses, work, or family obligations are not acceptable excuses for a make-up exam nor are internet services outages – exams are online and you are generously allowed until 11:59pm on exam days. Remember, your lowest mid-term grade is dropped. Use this drop wisely.

Assignments: There will be four take-home projects posted on Canvas under ‘Assignments’ during the semester – each worth 20 points. There are no make-up assignments and late submissions are not entertained. Completed assignments are to be uploaded in Canvas before the designated deadline. Each take-home project will be posted about a week before its due date, so you will have plenty of time to complete your assignment and upload your answers. The assignments will be worth a combined total of 80 points towards your final grade. More information will be provided during the semester.

Other Important Information

Students are responsible for all deadlines/critical dates and policies set forth by the University of Florida. Deadlines/critical dates are published on the University of Florida Office of the University Registrar’s website, <http://www.registrar.ufl.edu/>. Current academic policies are presented in the University of Florida Undergraduate Catalog, <https://catalog.ufl.edu>. Please make sure you familiarize yourself with these resources.

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.

HonorLock Exam Proctoring: You will take your exam online in Canvas. In order to maintain a high standard of academic integrity and assure that the value of your University of Florida degree is not compromised, the exams will be proctored by HonorLock. HonorLock will be used to record your exam session and proctors will investigate and report all violations to the instructor.

You will need a computer with a webcam, speakers, microphone and reliable Internet connection to be able to take your exams. **Google Chrome is the only supported browser for taking exams in Canvas.** You DO NOT need to register for an account, download any software, pay any fee for HonorLock, or schedule an appointment in advance. HonorLock is automatically available for all exams in this course.

To get started, you will need Google Chrome and to download the Honorlock Chrome Extension. You can download the extension at www.honorlock.com/extension/install .

When you are ready to take your exam, log onto the Canvas page for the course and click on your exam. Clicking Launch Proctoring will begin the Honorlock authentication process, where you will take a picture of yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.

Prior to each exam, ensure that your computer software is properly updated and that the HonorLock Chrome Extension is installed. You can run a free system check by visiting the HonorLock website and clicking RUN SYSTEM CHECK at: <https://honorlock.com/support/> .

If you experience any technical difficulties, you should seek assistance from Gator Help Desk. If you encounter issues during an exam, HonorLock Support is built into the exam platform and available in real time. As you navigate through your exam, a link to live chat and support services will be available at all times by clicking on the help button in the exam. Honorlock support is available 24/7/365. If you encounter any issues, you may contact HonorLock by live chat (available within the exam itself), via phone (844) 243-2500, and/or email support@honorlock.com.

Students Requesting Classroom Accommodation: 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. Students with disabilities should follow this procedure as early as possible in the semester. Additional information is available at <https://disability.ufl.edu/>

Students are expected to provide advance notice with a minimum of 2 weeks prior to any critical deadlines (such as exams) for any accommodation request to be made by the Instructor. As this is an online course, a physical facility or physical individual presence should be coordinated through the Disability Resource Center.

End-of-Semester Instructor Evaluations: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. 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 ufl.bluera.com/ufl/. This feedback is very important to individual instructors, academic departments, colleges, and the university as a whole.

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: <https://dso.ufl.edu/>

Note: There is zero tolerance for violations to the University Honesty Policy. Any student(s) found to violate the University Honesty Policy, Student Honor Code, or Student Conduct Code for any course activity (including but not limited to: any work submitted for credit) shall receive a grade percentage of zero for the submitted work involved in the violation, require assigned seating, and be reported to administrative personnel at UF. Second or multiple offenses (including offenses on recorded for other courses) shall result in a final course grade percentage of zero percent being assigned and all work submitted for credit in the course assigned a zero.

Campus Resources

The life of a college student can sometimes be overwhelming and concerns may need to be addressed. Resources are available on-campus to help students manage personal issues, deal with health emergencies, or gain insight into career and academic goals.

Health and Wellness

- **U Matter, We Care:** If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit <https://umatter.ufl.edu/> to refer or report a concern and a team member will reach out to the student in distress.
- **Counseling and Wellness Center:** Visit <https://counseling.ufl.edu/> or call 352-392-1575 for information on crisis services as well as non-crisis services.
- **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or visit <https://shcc.ufl.edu/>.
- **University Police Department:** Visit <https://police.ufl.edu/> or call 352-392-1111 (or 9-1-1 for emergencies).

- **UF Health Shands Emergency Room / Trauma Center:** For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; Visit <https://ufhealth.org/emergency-room-trauma-center>.

Academic Resources

- **E-learning technical support:** Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu. You may also visit <https://helpdesk.ufl.edu/>
- **Career Connections Center:** Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services. You may also visit <https://career.ufl.edu/>
- **Library Support:** Various ways to receive assistance with respect to using the libraries or finding resources. Visit <https://cms.uflib.ufl.edu/ask>
- **Teaching Center:** Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring. You may also visit <https://teachingcenter.ufl.edu/>
- **Student Complaints On-Campus:** Visit the Student Honor Code and Student Conduct Code webpage for more information <https://sccr.dso.ufl.edu/policies/student-honor-%20code-student-conduct-code/>
- **On-Line Students Complaints:** <https://distance.ufl.edu/getting-help/student-complaint-process/>.