

AEB 5188: Economics of Agribusiness Decisions

Fall 2023

Instructor: Prof. Patrick S. Ward

Email: wardp@ufl.edu

“Live” Lecture: MWF 8:30 AM – 9:20 AM

Phone: (352) 294-9050

Office hours: MW 9:30 – 10:30 AM or by appointment.

Lecture location: [Zoom](#)

Office hour location: Zoom

Course Description (per the Course Catalog): Comprehensive treatment of microeconomic theory and its use in managerial decision making.

Credits: 3

Grading scheme: Letter grade

Prerequisites: AEB 3103 or ECO 2023.

Communication: E-mail (either to my email address or via Canvas messaging) is the best way to reach me. Any issues that require action **MUST** be handled by email so that there is a written record of need. Phone calls or after class conversations are not likely to result in action. Class cancellations, changes in office hours, meeting locations, or the syllabus will be announced on Canvas. Be sure that you receive those notifications in a timely manner (controlled in your Canvas settings).

Because of the nature of the problem sets and group projects, I will not provide assistance on problem sets or group projects over email; if you have specific questions, please make an appointment to have a virtual chat with me during office hours. If you have not yet made sincere efforts to solve the problem(s), I will not provide hints on how to do so. Groups of students are encouraged.

Course motivation (or, “Why you should be excited about taking this course”): This course is designed to introduce students to a variety of topics in managerial economics, with applications to agribusiness decision making. This course covers concepts such as consumer behavior and demand, production processes and costs, firm and industrial organization, game theory and strategic behavior, and the economics of information and uncertainty.

Expected Student Learning Outcomes: After the successful completion of AEB 5188, a typical student should be able to:

- Understand the importance of various aspects of the economic environment to agribusiness decision making
- Apply theoretical concepts from managerial economics in the real-world context of a specific sector of the agribusiness industry
- Analyze a variety of economic problems using graphical, mathematical, and statistical methods.
- Analyze the structure, conduct, and performance of a specific sector of the agribusiness industry.
- Create a series of written reports related to forces affecting a firm’s profitability and competitiveness in the agribusiness industry.

Required Course Materials:

- **Text:** *Managerial Economics and Business Strategy*, 10th edition, by Michael R. Baye and Jeffrey T. Prince. McGraw Hill. 2022. ISBN: 978-1-260-94054-1.
- **E-learning:** There is an [E-Learning Canvas webpage](#) for this course that can be accessed using your GatorLink username and password. On Canvas, I will slides to complement the text and the material covered in lectures. 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.
- **Other:** This course combines analytical concepts with practical application. As such, students are expected to have or develop a basic knowledge of mathematics (specifically algebra and calculus) as well as the use of computational tools (namely Microsoft Excel) for applying mathematical concepts. **If you do not have an adequate background in mathematics or Microsoft Excel, please access tutorials or other resources from Khan Academy (<https://www.khanacademy.org>), YouTube (there are many available, such as those on <https://www.youtube.com/c/HamblinMath/featured>), or LinkedIn Learning (available from <http://elearning.ufl.edu>).**

Class Structure: The class format is fully online. Lectures will be recorded and posted on Canvas. Students are invited to join the lecture sessions “live” using the Zoom link above.

Course Assignments and Expectations:

Participation: Although this is a fully online class, and many of you – if not most – will be limited to watching recorded videos asynchronously, there are still several ways for you to remain engaged in the course throughout the semester. Obviously, I expect you all to be active participants and contribute to group projects. You can also participate and make valuable contributions to the overall learning environment by sharing thoughts or content through the course discussion boards on Canvas.

Introduction video: In order to foster the sorts of engagements we might get if we were all in the classroom together, I would like each student to record a short introductory video. In your video, please share (1) your name; (2) your hometown; (3) your undergraduate institution and degree; (4) if you are currently employed, the name of your employer and your role there; (5) what you hope to learn during this course (and perhaps the MAB program more broadly); and (6) an interesting fact about yourself. You are welcome to share any additional information that you feel may be relevant, including – but not limited to – your preferred pronouns.

Problem sets: These are meant to give you opportunities to master the mathematical methods that we discuss in the regular class meetings. I expect there will be 8 problem sets over the course of the semester, so you will be expected to stay up-to-speed with the material that is covered in class. Problem sets must be submitted through Canvas by the specified date and time to be eligible for full credit. Late submissions will be deducted 10 points for each 24-hour period past the due date/time. Any problem set submitted more than 72 hours past due will not receive any credit.

Group projects: One of the important concepts we will emphasize over the course of the semester is that there are various forces or factors in the economic environment that shape a manager’s decision making. In class, we will discuss these factors from a theoretical perspective, but these group-based projects are meant to bridge the gap between theory and practice. In these projects, students will be organized into groups of 2-3 students, and these groups will have the opportunity to study aspects of

the economic environment related to (1) consumer demand, sensitivity to price changes, and substitute and complementary goods; (2) the nature of the industry, specifically the market structure, firm’s conduct within the industry, and their economic performance; and (3) the regulatory environment of the industry, specifically government policies in the marketplace. Each written report should be roughly 5-8 pages in length. Half of your individual grade on these group projects will be based on the group’s submission. The other half of your individual grade will be based on your peers’ assessments of your effort and contribution to the project. Consequently, it is possible that two members of the same group could receive different grades on these group projects, based on consensus evaluations of differential contributions to the final group report. The due dates for these assignments will depend on our progression through course material, but they will coincide with our coverage of these topics in class.

Writing assignment: The best way to learn economic theory is to apply it. For your individual writing assignment, you will pick one interesting economic question related to agribusiness decision making and use material we will cover over the course of the semester to answer that question. These individual writing assignments will be due by midnight on Wednesday, December 6, but students are *strongly* encouraged to start thinking about interesting questions sooner rather than later. Assignments will be graded on the quality of the question (Is it interesting? Will people care about this question?), and on the quality of economic thought and methodological rigor used to answer the question. Please see the attached New York Times article for inspiration.

Exams: There will be two midterm exams over the course of the semester. For each midterm exam, the exam will be distributed through Canvas, and students will have up to 24 hours to submit the completed exam (also through Canvas). Exams will be open-note and open-book, but students are expected to work on their own. The first midterm exam will be due on October 4, 2023 and the second midterm exam will be due on December 6, 2023.

Composition of Final Score:

Course Assignments	Total Points
Participation	30 points
Introductory video	30 points
Problem sets (8)	240 points (30 points each)
Group projects (3)	300 points (100 points each)
Writing assignment	100 points
Midterm exam I (October 4, 2023)	150 points
Midterm exam II (December 6, 2023)	150 points
Total	1000 points

Letter grade distribution:

Grade	Percentage	Total points	Grade Points
A	93% or more	≥ 930	4.00
A-	90.0 – 92.9%	900 - 929	3.67
B+	86.0 – 89.9%	860 - 899	3.33
B	83.0 – 85.9%	830 - 859	3.00
B-	80.0 – 82.9%	800 - 829	2.67
C+	76.0 – 79.9%	760 - 799	2.33
C	73.0 – 75.9%	730 - 759	2.00
C-	70.0 – 72.9%	700 - 729	1.67
D+	66.0 – 69.9%	660 - 699	1.33
D	63.0 – 65.9%	630 - 659	1.00
D-	60.0 – 62.9%	600 - 629	0.67
E	59.9% or less	≤ 629	0.00

*****Please note that grades are not ‘rounded’ or ‘adjusted’ at the end of the term.*****

This class adheres to UF grading policies:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

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/>

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 umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: [Visit the Counseling and Wellness Center website](#) 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 [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

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

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

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

Writing Studio: 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).

Course outline:

- I. Fundamentals of managerial economics (Ch. 1)
- II. Market forces: supply and demand (Ch. 2)
 - a. Elasticities of demand (Ch. 3)
 - b. Theory of consumer behavior (Ch. 4)
 - c. Theory of firm behavior (Ch. 5)

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- III. Market and industry structure and firm decision making
 - a. Organization of the firm (Ch. 6)
 - b. Organization of the industry (Ch. 7)
 - c. Managerial decision making in various market structures (Ch. 8, 11)
 - d. Game theory and strategic behavior (Ch. 9, 10)
- IV. Economics of information and uncertainty (Ch. 12)
- V. Regulatory environment (Module Group B)

Tentative weekly Schedule:

Week	Dates	Content
1	8/23, 8/25	Course introduction; fundamentals of managerial economics (Ch. 1)
2	8/28, 8/30, 9/1	Fundamentals of managerial economics (continued) (Ch. 1)
3	9/4	Labor Day – No class
	9/6, 9/8	Market forces: demand and supply (Ch. 2)
4	9/11, 9/13, 9/15	Quantitative demand analysis (Ch. 3)
5	9/18, 9/20, 9/22	Theory of individual behavior (Ch. 4)
6	9/25, 9/27, 9/29	Production processes and costs (Ch. 5)
7	10/2	Review for midterm exam I
	10/4	Midterm Exam I
	10/6	Homecoming weekend – No class
8	10/9, 10/11, 10/13	Organization of the firm (Ch. 6); Nature of industry (Ch. 7)
9	10/16, 10/18, 10/20	Nature of industry (continued) (Ch. 7); Managerial decisions in competitive markets (Ch. 8)
10	10/23, 10/25, 10/27	Managerial decisions in competitive markets (continued) (Ch. 8); Managerial decisions in monopolistic and competitively monopolistic markets (Ch. 8, 11)
11	10/30, 11/1, 11/3	Basic oligopoly models (Ch. 9); Game theory (Ch. 10)
12	11/6, 11/8	Game theory (continued) (Ch. 10)
	11/10	Veterans' Day – No class
13	11/13, 11/15, 11/17	Economics of information and uncertainty (Ch. 12)
14	11/20	Economics of information and uncertainty (continued) (Ch. 12)
	11/22, 11/24	Thanksgiving holiday – No class
15	11/27, 11/29, 12/1	Regulatory environment (Module Group B)
16	12/4	Review for midterm exam II
	12/6	Midterm Exam II

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 Canvas as an announcement. It is solely the student's responsibility to stay informed of any changes.

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

September 29, 2005

Students Discover Economics in Its Natural State

By ROBERT H. FRANK

WHY do the keypad buttons on drive-up cash machines have Braille dots? It is an interesting question, since the patrons of these machines are almost always drivers, none of whom are blind. The answer, according to my former student Bill Tjoa, is that because A.T.M. producers make keypads with Braille dots for their walk-up machines anyway, it is cheaper to make all machines the same way. The alternative, after all, would be to hold two separate inventories and make sure that each machine went to the right destination. If the Braille dots caused trouble for sighted users, the extra expense might be justified. But they do not.

Mr. Tjoa's question was the title of one of two short papers he submitted in response to what I call the "economic naturalist" writing assignment in my introductory economics course. The specific assignment is "to use a principle, or principles, discussed in the course to pose and answer an interesting question about some pattern of events or behavior that you personally have observed."

"Your space limit is 500 words," the assignment continues. "Many excellent papers are significantly shorter than that. Please do not lard your essay with complex terminology. Imagine yourself talking to a relative who has never had a course in economics. The best papers are ones that would be clearly intelligible to such a person, and typically these papers do not use any algebra or graphs."

Over the years, my students have posed and answered literally thousands of fascinating questions. My favorite was submitted by Jennifer Dulski, who asked, "Why do brides often spend thousands of dollars on wedding dresses they will never wear again, while grooms often rent cheap tuxedos, even though they will attend many formal social events in the future?"

Decades ago, when I first started teaching introductory economics, it never would have occurred to me to give an assignment like this. The idea grew out of my participation in an early pilot program in Writing in the Disciplines, a new pedagogical movement that promises to revolutionize the learning process at every level. The aim of the program, which was sponsored by the John S. and James L. Knight Foundation, was to encourage students to write about concepts they were grappling with in the various disciplines.

The initiative was inspired by the discovery that there is no better way to master an idea than to write about it. Although the human brain is remarkably flexible, learning theorists now recognize that it is far better able to absorb information in some forms than others. Thus, according to the psychologist Jerome Bruner, children "turn things into stories, and when they try to make sense of their life they use the storied version of their experience as the basis for further reflection." He went on, "If they don't catch something in a narrative structure, it doesn't get remembered very well, and it doesn't seem to be accessible for further kinds of mulling over." Even well into adulthood, we find it easier to process information in narrative form than in more abstract forms like equations and graphs. Most effective of all are narratives that we construct ourselves.

The economic-naturalist writing assignment plays to this strength. Learning economics is like learning a language. Real progress in both cases comes only from speaking. The economic-naturalist papers induce students to search out interesting economic stories in the world around them. When they find one, their first impulse is to tell others about it. They are also quick to recount interesting economic stories they hear from classmates. And with each retelling, they become more fluent in the underlying ideas.

Many students struggle to come up with an interesting question for their first paper. But by the time the second paper comes due, the more common difficulty is choosing which of several interesting questions to pursue.

The paper is not a complete substitute for the traditional syllabus. But the lasting impact of the course comes mainly from the papers. When students come back to visit during class reunions, the equations and graphs long since forgotten, we almost always end up talking about the questions they have posed and answered during the intervening years.

To answer her question about wedding dresses, Ms. Dulski argued that because most brides wish to make a fashion statement on their wedding day, a rental company would have to carry a huge stock of distinctive gowns - perhaps 40 or 50 in each size. Each garment would thus be rented only infrequently, perhaps just once every four or five years. So the company would have to charge a rental fee greater than the purchase price of the garment just to cover its costs. In contrast, because grooms are willing to settle for a standard style, a rental company can serve this market with an inventory of only two or three tuxedos in each size. Each suit can thus be rented several times a year, enabling a rental fee that is only a fraction of its purchase price.

Daniel Boorstin, the former librarian of Congress, used to rise at 5 each morning and write for two hours before going into the office. "I write to discover what I think," he explained. "After all, the bars aren't open that early." Mr. Boorstin's morning sessions were even more valuable than he realized. Writing not only clarifies what you already know; it is also an astonishingly effective way to learn something new.

Robert H. Frank has been teaching introductory economics at Cornell University since 1972. He is the co-author, with Ben Bernanke, of "Principles of Microeconomics."

<http://www.nytimes.com/2005/09/29/business/29scene.html>