AEB 5188: Economics of Agribusiness Decisions

Fall 2025

Instructor: Prof. Patrick S. Ward Email: wardp@ufl.edu

Phone: (352) 294-9050

Office hours: Mon 3:00 – 4:00 PM **Zoom meeting room:**

(by appointment) Wed 8:00 – 9:00 AM https://ufl.zoom.us/my/prof.ward

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 <u>not</u> 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. I am more than happy to meet with groups of students during office hours.

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, managerial decision making under alternative industry structures, game theory and strategic behavior, decision making under risk and uncertainty, and the economics of information. The motivating framework for the study of managerial economics is Michael Porter's "Five Forces Framework", which helps firms to understand their position within their industry and the challenges and opportunities they face. The five forces are:

- 1. The threat of new entrants
- 2. The bargaining power of input suppliers
- 3. The bargaining power of buyers
- 4. Rivalry among existing competitors in the industry
- 5. The threat of substitute products or services

As we will discover over the course of the semester, these five forces combine to shape the attractiveness and profitability of a firm's participation in a particular industry.

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.

Course Materials:

- Required 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. (I will rely on the 10th edition, but earlier editions would likely suffice).
- Optional supplemental text: Managerial Economics: Foundations of Business Analysis and Strategy, 13th edition, by Christopher Thomas and S. Charles Maurice. McGraw Hill. 2020. ISBN: 978-1-260-00475-5. (I will rely on the 13th edition, but earlier editions would likely suffice).
- *E-learning:* There is an <u>E-Learning Canvas webpage</u> for this course that can be accessed using your GatorLink username and password. On Canvas, I will also post 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 (Microeconomics), YouTube (Managerial Economics tutor), or LinkedIn Learning (available from http://elearning.ufl.edu).

Class Structure: The class format is fully online and asynchronous. Recorded lectures will be posted on Canvas in a sequence of course modules. Students will not be allowed to progress through the course modules until they have completed preceding modules, including scoring at least 6 out of 10 on a quiz to test your understanding of the material covered in each module.

Course Assignments and Expectations:

Participation (30 points): Although this is a fully online class, 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. There will be a separate discussion board for each module throughout the course, and students are encouraged to submit 3-2-1s (form available on Canvas), in which they discuss 3 things they learned by completing a course module, 2 things they found particularly

interesting in the module, and 1 question that remains after completing the module. In addition to posting their won 3-2-1s, students are encouraged to comment on other students' 3-2-1s.

Introduction video (30 points): 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.

Problem sets (240 points): These are meant to give you opportunities to master the economic concepts and methods that we discuss in the regular class meetings. 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 the recorded lectures. 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 (300 points): 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. This is the essence of Porter's "Five Forces Framework." 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. 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.

Exams (400 points): 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). The first midterm exam will be due on October 1, 2025 and the second midterm exam will be due on December 8, 2025.

Composition of Final Score:

Total Points	Course Assignments
30 points	Participation
30 points	Introductory video
240 points (30 points each)	Problem sets (8)
300 points (100 points each)	Group projects (3)
5) 200 points	Midterm exam I (October 1, 2025)
025) 200 points	Midterm exam II (December 8, 2025)
1000 points	Total
025) 200 points	Midterm exam II (December 8, 2025)

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
В	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
С	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
Е	59.9% or less	≤ 629	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

Broad 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)
- 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. Decisionmaking under risk and uncertainty and the economics of information (Ch. 12)
- V. Regulatory environment (Module Group B)

Suggested weekly schedule:

Week	Dates	Content	
1	Aug. 21-22	Course introduction	
2	Aug. 25-29	Fundamentals of managerial economics (Ch. 1)	
2	Sep. 1	Labor Day – No class	
3	3 Sep. 2-5	Market forces: demand and supply (Ch. 2)	
4	Sep. 8-12	Market forces: demand and supply (cont'd) (Ch. 2); quantitative demand analysis (Ch. 3)	
5	Sep. 15-19	Theory of individual behavior (Ch. 4)	
6	Sep. 22-26	Production processes and costs (Ch. 5)	
	Sep. 29-30	Review for midterm exam I	
7	Oct. 1	Midterm Exam I	
	Oct. 2-3	No additional material	
8	Oct. 6-10	Organization of the firm (Ch. 6)	
9	Oct. 13-16	Nature of industry (Ch. 7)	
9	Oct. 17	Homecoming	
10	Oct. 20-24	Managerial decisions in competitive markets (Ch. 8); Managerial decisions in monopolistic and competitively monopolistic markets (Ch. 8, 11)	
11	Oct. 27-31	Basic oligopoly models (Ch. 9)	
12	Nov. 3-7	Game theory (Ch. 10)	
13	Nov. 10-14	Economics of information and uncertainty (Ch. 12)	
14	Nov. 17-21	Economics of information and uncertainty (continued) (Ch. 12);	
15	Nov. 24-28	Thanksgiving holiday – No class	
16	Dec. 1-3	Regulatory environment (continued) (Module Group B)	
	12/8	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!!***