AEB 5188: Economics of Agribusiness Decisions

| Instructor: Prof. Patrick S. Ward | | Email: <u>wardp@ufl.edu</u> Phone: (352) 294-9050 | |
|-----------------------------------|--------------------|--------------------------------------------------------------------|--|
| Office hours: | Mon 3:00 – 4:00 PM | Office hour location: | |
| (by appointment) | Wed 8:00 – 9:00 AM | https://ufl.zoom.us/my/prof.ward | |

Fall 2024

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, game theory and strategic behavior, and the economics of information and uncertainty. The motivating framework for the study of managerial economics is Porter's Five Forces Framework, which helps firms to understand their position within their industry and the challenges and opportunities they face.

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 <u>E-Learning Canvas webpage</u> 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 <u>helpdesk@ufl.edu</u>.
- 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 https://www.youtube.com/c/HamblinMath/featured), or LinkedIn Learning (available from https://www.youtube.com/c/HamblinMath/featured).

Class Structure: The class format is fully online. Lectures will be recorded and 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: 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: 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: 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. 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: 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 2, 2024 and the second midterm exam will be due on December 6, 2024.

| 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) | |
| Midterm exam I (October 2, 2024) | 200 points | |
| Midterm exam II (December 6, 2024) | 200 points | |
| Total | 1000 points | |

Composition of Final Score:

Letter grade distribution:

| Grade | Percentage | Total points | Grade Points |
|-------|---------------|--------------|--------------|
| А | 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 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: <u>https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/</u>

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://gatorevals.aa.ufl.edu/students/. 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 e-mail at <u>helpdesk@ufl.edu</u>.

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

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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: <u>https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/</u>

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:
 - <u>UFPD Office of Victim Services</u>: 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

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. Economics of information and uncertainty (Ch. 12)
- V. Regulatory environment (Module Group B)

Tentative weekly Schedule:

| Week | Dates | Content | |
|------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 | 8/23 | 23 Course introduction | |
| 2 | 8/26, 8/28, 8/30 | Fundamentals of managerial economics (Ch. 1) | |
| 3 - | 9/2 | Labor Day – No class | |
| | 9/4, 9/6 | Market forces: demand and supply (Ch. 2) | |
| 4 | 9/9, 9/11, 9/13 | Market forces: demand and supply (cont'd) (Ch. 2); quantitative demand analysis (Ch. 3) | |
| 5 | 9/16, 9/18, 9/20, | Theory of individual behavior (Ch. 4) | |
| 6 | 9/23, 9/25, 9/27 Production processes and costs (Ch. 5) | | |
| | 9/30 | Review for midterm exam I | |
| 7 | 10/2 | Midterm Exam I | |
| | 10/4 | No class | |
| 8 | 10/7, 10/9, 10/11 | Organization of the firm (Ch. 6); Nature of industry (Ch. 7) | |
| 9 | 10/14, 10/16, 10/18 | | |
| 10 | 10/21, 10/23, 10/25 | Managerial decisions in competitive markets (continued) (Ch. 8); Managerial decisions in monopolistic and competitively monopolistic markets (Ch. 8, 11) | |
| 11 | 10/28, 10/30, 11/1 | Basic oligopoly models (Ch. 9) | |
| 12 | 11/4, 11/6, 11/8 | Game theory (Ch. 10) | |
| 13 | 11/11 | Veterans' Day – No class | |
| | 11/13, 11/15 | Economics of information and uncertainty (Ch. 12) | |
| 14 | 11/18, 11/20, 11/22Economics of information and uncertainty (continued) (Ch. | | |
| 15 | 11/25, 11/27, 11/29Thanksgiving holiday – No class | | |
| 16 | 12/2, 12/4 | Regulatory environment (Module Group B) | |
| | 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!!