#### AEDE 4001: Managerial Economics

#### Spring 2024

#### **Course Information:**

- Time and Location: Tuesdays and Thursdays 9:35 10:55am, Kottman Hall 112
- Credit hours: 3
- Mode of delivery: In-person

#### Instructor:

- Name: Shiqi Zhang
- Email: <u>zhang.10478@osu.edu</u>
   Office: 344 Ag. Admin. Building
- Office hours: Tuesday 1:00 3:00pm or by appointment, via Zoom
- Zoom link:
  - https://osu.zoom.us/j/96013681724?pwd=MWdZR3R2ZjEzeVRkZnk5WW1IaHNTdz09
- Password: 494876

#### Teaching Assistant:

- Name: Jingke Wu (Grader)
- Email: wu.5653@buckeyemail.osu.edu

#### Prerequisites:

AEDE 3000 and one of: AEDE 2001 or 2001H or ECON 2001 or 2001H.

#### Course Description:

This course provides intermediate-level applications of economic theory and methods to business decisions, with a particular focus on agribusiness decisions.

By the end of this course, students should successfully be able to:

- Explain what managerial economics is and describe how the application of managerial economics helps improve agribusiness decision making.
- Describe the role of the market forces of supply and demand and perform analyses of these forces.

- Describe the theory of individual behavior, and perform analyses based on this theory.
- Explain production functions and production costs and solve problems involving these functions and costs.
- Describe how competitive markets, monopolistic markets, and oligopolistic markets function.

### Course Materials, Fees, and Technologies:

#### Recommended Textbook:

William F. Samuelson and Stephen G. Marks (SM), Managerial Economics, 8th ed. (Wiley, 2014).

#### Required Equipment:

- Computer: current Mac (MacOS) or PC (Windows 10) with high-speed internet connection
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at <a href="mailto:go.su.edu/student-tech-access">go.su.edu/student-tech-access</a>.

#### Required Software:

**Microsoft Office 365:** All Ohio State students are now eligible for free Microsoft Office 365. Visit the installing Office 365 (go.osu.edu/office365help) help article for full instructions.

#### CarmenCanvas Access:

You will need to use BuckeyePass (<u>buckeyepass.osu.edu</u>) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the BuckeyePass - Adding a Device (go.osu.edu/add-device) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click Enter a Passcode and then click the Text me new codes button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Install the Duo Mobile application (go.osu.edu/install-duo) on all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.

#### Technology Skills Needed for This Course:

- Basic computer and web-browsing skills
- Navigating CarmenCanvas (go.osu.edu/canvasstudent)
- CarmenZoom virtual meetings (go.osu.edu/zoom-meetings

#### **Technology Support:**

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

Self Service and Chat: go.osu.edu/it

Phone: 614-688-4357 (HELP)Email: servicedesk@osu.edu

#### **How This Course Works**

**Mode of delivery:** This course is in-person. There is a synchronous (real-time) lecture each week on Tuesdays and Thursdays from 9:35-10:55 a.m. The rest of your work is found in Carmen and can be completed around your own schedule during the week.

**Pace of online activities:** This course is divided into modules. Students are expected to keep pace with weekly readings and meet deadlines but may schedule their efforts freely within that time frame. Please refer to the Reading Schedule for specific topics and pages to read; this will also be posted on Canvas.

**Credit hours and work expectations:** This is a 3 credit-hour course. According to Ohio State bylaws on instruction (go.osu.edu/credithours), students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of C average.

Attendance and participation requirements: Research shows regular participation is one of the highest predictors of success. With that in mind, I expect you to attend lectures as often as you are able. I also understand that we are in the midst of very stressful times, and other demands on your time will arise. Please do try and take advantage of my office hours or set up an appointment with me if the scheduled office hour times do not work for you.

## **Grading and Faculty Response**

#### **Grades Distribution:**

Assignment Category	Percent

Exams	45% (15% each)
Problem sets	30% (5% each)
Chapter reading quizzes	15%
Excel managerial decision project	10%

#### **Description of Course Assignments**

**Exams:** There will be 3 exams in the course, one for each of the units (see the Course Schedule). The exams will be open-note. There will be no make-up exams without a valid excuse, and documentation will be required. If you know ahead of time that you cannot make an exam, or have other issues, please reach out to me as soon as possible.

**Problem sets:** There will be 6 problem sets in the course, each designed to cover about one to two modules or topics and each worth 5% of your final grade. All problem sets will be graded on Carmen. Group work is allowed, but everyone must turn in an individual write-up of the assignment. Answers should not be screenshots of or copy/pasted from another student's work. It is in your best interest to be able to complete all questions on the problem sets, as they will be the foundations for the exams. Barring any extenuating circumstances, problem sets that are late will incur a 5-point penalty per day. Problem sets that are late for one week will not be accepted.

**Weekly reading quiz:** In addition to the problem sets and exams, and in place of discussion or participation points, there will be a short reading quiz for each chapter to ensure you are actively engaging with the material and keeping up with the readings. These will not have a due date or "late" penalty, but you are encouraged to keep up with them to provide the background for the problem sets and exams.

**Excel managerial decision project:** For this assignment, you will be asked to provide analysis of different decisions, including graphical representations of those decisions, using Excel. This assignment will be due at the end of the course, but students can turn it in whenever is convenient for them and are encouraged to be on the lookout for relevant articles throughout the course. More information on this assignment will be provided in the assignment rubric, which will be posted on Canvas starting in Week 2.

#### Instructor feedback and Response Time:

**Preferred contact method:** If you have a question, please contact me first through my Ohio State email address or a direct message on Canvas. I will reply to emails/Canvas messages within 24 hours on days when class is in session at the university.

**Class announcements:** I will send all important class-wide messages through the Announcements tool in Carmen Canvas. Please check your notification preferences (go.osu.edu/canvas-notifications) to ensure you receive these messages.

**Grading and feedback:** For assignments submitted on or before the due date, I will try to provide feedback and grades within seven days, with the exception of assignments due the week before the exam; these will be returned before the next class period so that students have access to all assignments related to exam topics before the exam. Note that assignments submitted after the due date may have reduced feedback, and grades may take longer to be posted.

# Grading Scale:

<u>Percentage</u>	<u>Grade</u>	<u>Percentage</u>	<u>Grade</u>
93-100	Α	73-76.9	С
90-92.9	A-	70-72.9	C-
87-89.9	B+	67-69.9	D+
83-86.9	В	60-66.9	D
80-82.9	B-	<60	Ε
77-79.9	C+		

# **Course Schedule**

Week	Dates	Unit	Readings	Topic	Due
1	Jan. 9		Ch. 1	Introduction and Review	
	Jan. 11	Demand	Ch. 2. 1-2	Marginal Analysis (I)	
2	Jan .16		Ch. 2. 3	Marginal Analysis (II)	PS 1
	Jan. 18		Ch. 3. 1-2	Determinants of Demand and Elasticities (I)	
3	Jan. 23		Ch. 3. 1-2	Determinants of Demand and Elasticities (II)	
	Jan. 25		Ch. 3. 3	Demand Analysis	
4	Jan. 30		Ch. 4. 1-2	Demand Estimation	PS 2
	Feb. 1			Exam (I)	
5	Feb. 6		Ch. 5. 1	Production in short-run	
	Feb. 8		Ch. 5. 2	Production in long-run	
6	Feb. 13		Ch. 5. 3-4	Different Production Functions & Decisions	
	Feb. 15	ply	Ch. 6. 1-2	Cost of Production	
7	Feb. 20	Supply	Ch. 6. 3	Return to Scale and Scope	PS 3
	Feb. 22		Ch. 6. 4	Cost Analysis and Optimization	
8	Feb. 27		Ch. 7. 1	Supply and Demand Analysis	
	Feb. 29		Ch. 7. 2	Competitive Equilibrium	PS 4
9	Mar. 5			Review	
	Mar. 7			Exam (II)	
10	Mar. 12	Spring Break			
	Mar. 14				
11	Mar. 19	n.e	Ch. 7. 3-4	Market Efficiency	Project
	Mar. 21		Ch. 8. 1	Pure Monopoly	
12	Mar. 26		Ch. 8. 2	Perfect Competition vs Monopoly	
	Mar. 28	uct	Ch. 8. 3	Monopolistic Competition	PS 5
13	Apr. 2	Market Structure	Ch. 9. 1	Oligopoly	
	Apr. 4	rket	Ch. 9. 2-3	Price and Quantity Competition	
14	Apr. 9	Ma	Ch. 10	Introduction to Game Theory	
	Apr. 11		Ch. 10 & 12	Game Theory and Uncertainty (I)	
15	Apr. 16		Ch. 10 & 12	Game Theory and Uncertainty (II)	PS 6
	Apr. 18			Review	
16	Finals:	Final Exam			
	Apr. 24-				
	Apr.30				

#### **Other Course Policies**

#### Discussion and Communication Guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

**Writing style:** While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling, and punctuation. A more conversational tone is fine for non-academic topics.

**Tone and civility:** Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.

**Citing your sources:** When we have academic discussions, please cite your sources to back up what you say. For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.

**Email etiquette:** Emails can be conversational, as long as they remain professional. Here are a couple quidelines:

- The subject line should be a descriptive statement, not something like "Hey" or "Question".
- Use proper salutations, be concise in the body of the email, and if the email is a reply, be sure to include the original email.
- Do not ask about specific grades via email; these can only be discussed in office hours.
- Do not use all capital letters; this conveys anger and is the digital version of shouting.
- Remember that tone is difficult to convey via email, so try to be careful about your choice of words so that your actual meaning is conveyed.

#### Academic Integrity Policy

See <u>Descriptions of Major Course Assignments</u> for specific guidelines about collaboration and academic integrity in the context of this class.

#### Ohio State's Academic Integrity Policy:

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university's Code of Student Conduct (studentconduct.osu.edu), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university's Code of Student Conduct and this syllabus may constitute "Academic Misconduct."

The Ohio State University's Code of Student Conduct (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university or subvert the educational process." Examples of academic misconduct include (but are not limited to)

plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university's Code of Student Conduct is never considered an excuse for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct. If I suspect that a student has committed academic misconduct in this course, I am obligated by university rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the university's Code of Student Conduct (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the university. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me. Please familiarize yourself with the Eight Cardinal Rules of Academic Integrity (go.osu.edu/cardinal-rules).

#### Copyright for Instructional Materials

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

# Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

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 Oct. 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 Ohio State University. In cases of sexual harassment or violence, Ohio State will:

- Respond promptly and effectively to sexual assault, relationship violence, and stalking
- Provide interim measures as necessary
- Provide confidential and non-confidential support resources,
- Conduct a thorough, reliable, and impartial investigation
- Provide remedies as necessary.

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:
  - Counseling and Consultation Service Available 24/7 through the Office of Student Life: ccs.osu.edu, 614-292-5766
  - Medical services through the Office of Student Life Wilce Student Health Center: shs.osu.edu,
     614-292-4321
  - Legal services through Student Legal Services: studentlegal.osu.edu, 614-292-5853

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

- Online reporting form at equity.osu.edu,
- Call 614-247-5838 or TTY 614-688-8605,
- Or email <a href="mailto:equity@osu.edu">equity@osu.edu</a>

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly
  identified as a confidential reporter, have an obligation to report incidents of sexual assault
  immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

#### Mental Health

I take issues related to your health and wellbeing, mental and physical, very seriously. That would be true in "normal" times, and it is doubly true now. I would like to be a resource for you in terms of both your academic and personal success. Please do not hesitate to reach out, and I will do my best to help or direct you to someone who can.

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. No matter where you are engaged in distance learning, The Ohio State University's Student Life Counseling and Consultation Service (CCS) is here to support you. If you find yourself feeling isolated, anxious or overwhelmed, on-demand mental health resources (go.osu.edu/ccsondemand) are available. You can reach an on-call counselor when CCS is closed at 614- 292-5766. 24-hour emergency help is available through the National Suicide Prevention Lifeline website (suicidepreventionlifeline.org) or by calling 1-800-273-8255(TALK). The Ohio State Wellness app (go.osu.edu/wellnessapp) is also a great resource.

# Accessibility Accommodations for Students with Disabilities

#### Requesting Accommodations

The university strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability including mental health, chronic or temporary medical conditions, please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services (SLDS). After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services.

#### Disability Services Contact Information

Phone: 614-292-3307Website: slds.osu.eduEmail: slds@osu.edu

• In person: Baker Hall 098, 113 W. 12th Avenue

#### Accessibility of Course Technology

This course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations as early as possible.

- CarmenCanvas accessibility (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- CarmenZoom accessibility (go.osu.edu/zoom-accessibility)