

ECON 461 - Industrial Organization

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Term: Spring 2024
M W F, 1:00P-1:50P, Chancellor 133
Office Hours: Sign up on Google Calendar,
. M 2:00P-3:00P
. F 3:00P-4:00P

1 Course Description

This course serves as an introduction to the economic field of industrial organization. It explores market competition, the strategic behavior of firms, regulatory policies, and anti-trust measures. The focus is on understanding the decisions of firms and their interactions with consumers and governments within specific industries. We begin by examining the classical model of firms, treating them as "black boxes" of production. Subsequently, we delve into more complex and realistic market structures, including differentiated product firms, oligopolies, cartels, and monopolies.

Throughout the course, we analyze strategic business practices such as price discrimination, vertical integration, innovation, and advertising. The exploration extends to investigating dynamic aspects of firms and engaging in discussions on anti-trust policies and industry regulations, including mergers and predatory pricing. Work-horse models and equilibrium concepts in business and economics will be explored in various contexts to enhance understanding.

2 Textbooks & Prerequisites

Modern Industrial Organization. 4th Edition. by Carlton & Perloff. Owning a text is strongly recommended but not required.

Prerequisite for enrollment includes successful completion of ECO 303 Intermediate Microeconomic Theory. Additionally, a fundamental understanding of calculus is essential, encompassing skills such as differentiation, integration, chain rule, quotient rule, etc. Success in this class hinges on the ability to solve various economic models, necessitating both algebraic and graphic analyses.

3 Course Format

The course is lecture-based, and it is imperative for students to attend every class to ensure success. Lecture slides will be made available on Blackboard, but only after the class has concluded. While these slides serve as a helpful resource for studying and exam preparation, they do not encompass all the essential class materials. Consequently, taking thorough notes during

class is crucial for a comprehensive understanding of the content.

Although no class attendance is required, there will be a weekly on-line quiz on the materials learned in that week. These short quizzes consisting of multiple choice questions on economic concepts will be administered on the Blackboard. They will typically be posted on Friday morning, and the deadlines are typically at 11:59PM (midnight) on Sunday.

Students must complete these quizzes on their own. You will *not* be allowed to take the quiz once the deadline is passed, and you will *not* be able to earn the quiz credit for that week.

4 Assignments

There will be 6 assignments. Each assignment *must* be submitted on Blackboard by a specified due date/time. Please see all the submission deadlines on the course calendar. No late assignments will be accepted.

Different from the quizzes, questions on these assignments can be time-consuming, and they are designed to deepen your knowledge and will all involve some calculations, derivations, or graphing with multiple steps. Homeworks in this course are designed as extensions to the lectures. In other words, they are meant to be slightly more difficult and more involved than the lecture examples, so you can learn how to apply the concepts from the lectures.

Due to the nature of electronic submissions, typed solutions are preferred. However, if you must hand-write your assignments, please make sure all the words and equations are neatly written, and all the graphs are clearly labeled. In the case of hand-written assignments, please carefully scan or photograph your written assignments, and upload them online. Messy or low resolution homeworks will NOT be accepted and will be given zero points for that assignment.

You will need to submit each assignment twice on Blackboard. On the first submission, any reasonable effort will guarantee you a passing homework grade - 60%. "Reasonable" means you must have worked on every problem of a particular assignment. If you fail to submit the homework on the first submission date, you will receive zero point for that particular homework assignment, no exceptions. If you only submit a partial homework, you will be guaranteed 60% on the parts you have done.

Immediately after the first submission deadline, an answer sheet will be posted online. Then, you are tasked to go over your own homework. You must (1) identify any mistakes you have made; (2) comment or write down the correct answer. This is designed for you to relearn the course materials from your own mistakes. So please comment on your *original* homework. The corrected homework will be submitted on a second specified deadline, usually 3-5 days after the first submission. If you have corrected and commented on all your mistakes, then you will receive the additional 40% on your homework. This means that if you work diligently on homeworks, you should receive 100% on all your homework.

I will audit the corrected homeworks from the second submission. If I discover any mistakes not corrected or corrected wrong, the points of that part will be deducted from your homework. Your total loss of points is capped at 40%. In rare cases, if a student does not treat the grading assignments seriously or attempts to cheat, the grading would be rejected. He/she/they would receive zero points for the entire homework assignment.

You are permitted and even encouraged to work with other students on assignment. However, each student must write up their own version of a solution, and everyone who collaborated must be **acknowledged** in the homework. When you solve a problem jointly, I expect you to then be able to look away from the group notes and reproduce the solution on your own. If not, you have learned nothing from the exercise, and are giving yourself a false sense of security about your understanding of the material. Moreover, **identical assignments will receive a score of zero.**

5 On-line Data Tasks

You will complete two on-line data tasks. They are testing your ability to gather and analyze data. I will post data sources and short instructions for those assignments. These instructions should be very straightforward in helping you access and navigate the necessary on-line data websites, so I will *not* go over them in class. However, if you need help with the data, please do not hesitate to contact me. You must complete these tasks individually.

6 Exams

There will be two midterms and one comprehensive final exam, all of which will be open-booked take-home exams. The question formats will be similar to those in the homework assignments. The midterms are non-cumulative, and you will have a 48-hour window to complete each exam. For example, on Monday, March 4th, we will conduct a review for Exam 1 during the class, providing an opportunity for you to seek clarification on any hypothetical questions. At the end of the class, you can collect the exam booklet. Subsequently, the completed exam must be returned **in person** during the class on Wednesday, March 6th. The review/pickup of Exam 2 will take place on Wednesday, April 14, and it is due in person on Friday, April 19th. **Electronic submission of exams is not permitted.** Please note that the classes scheduled for March 6th and April 19th will be canceled.

Throughout the 48-hour exam periods, it is expected that you work independently on the exam, and you are free to refer to any course materials as needed. It is important to note that I will not be available to respond to questions during the take-home exam periods, except for clarification questions on the exams. Collaboration with others and seeking external assistance, including AI, is strictly prohibited during exam periods. Any instances of dishonesty will be

addressed in accordance with the College's regulations, and appropriate measures will be taken.

There won't be any make-up exams available for the midterm exams. For College athletes with documented absences and students with a documented medical emergency during an examination period, you may be eligible to allocate the points of that exam to your final exam. This ensures that you won't miss out on earning those points.

The final is cumulative, and it is also an open-booked take-home exam. You will need to collect the exam booklet on May 3rd, which is the last day of class. The completed final exam must be submitted in person in our regular classroom by 5:00 pm on Tuesday, May 7th, the officially scheduled final exam date set by the College.

In situations where a student needs to request a makeup final exam, only the following reasons will be considered valid: (1) A documented College-sponsored event; (2) A documented medical emergency; (3) Other documented extraordinary circumstances. If any of these situations apply to you and you require a rescheduled final exam, the first step is to submit a request to the office of the Dean of Undergraduate Studies. Subsequently, my approval will be needed for your request.

7 Grading

Your final class grade is based on your performance in assignments, data tasks, and exams. A total of 100 points are possible for the course. They are distributed as follows: Homework assignments (each 100 points) - 12%; Online quizzes - 5%; Data tasks - 3%; Midterm 1 - 20%; Midterm 2 - 20%; Final - 40%.

If you disagree with the grading of an exam, you may resubmit it for my review. I will expect you to have a written argument for why you should be awarded more points. Also, please submit these disputes within one week of the exam return date.

Grading Scale:

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
	92.9%	89.9%	86.9%	82.9%	79.9%	76.9%	72.9%	69.9%	66.9%	62.9%	
\geq	to	to	to	to	to	to	to	to	to	to	<
93%	90%	87%	83%	80%	77%	73%	70%	67%	63%	60%	59.9%

Please carefully note that I do *not* curve grades, and the grade scales above are ABSOLUTELY firm. This means, for example, if you get a class score of 89.99, you will absolutely get a B+, not a A-.

8 Class Communication and Office Hours

E-mails will be the primary way of communicating with me. Emails will generally be answered within 24 hours. However, emailing me the evening before the homework due date or an exam will not guarantee you a response. When emailing, please use your official WM email, emails from any other accounts will be disregarded! Also, please clearly state your name and your class (ECON 461) in the subject line, or your email will generally be ignored.

Office hours are an important way to get help. Please use the weblink on Blackboard to sign up for office hours. Please also be aware that office hours are a shared resource. So every student can meet with me for **at most** 30 minutes per week. That means I won't be able to go over an entire homework or exam with you during office hours. However, you can come as a group for the meeting. In addition, if none of the office hours work for you, please email me to schedule a meeting with me.

If you find course materials challenging, please come to my office hours early and often in the semester. Please come well-prepared with precise questions to ask. [I will not answer a vague request like: "I don't know how to do Question X on Homework Y, could you help?"] For example, please bring your own work to show me exactly where you are stuck and explain the precise reasons for needing help.

9 Optional Online Discussion Forum

I have created on Blackboard a class discussion forum. You can create a new thread to ask questions on any class topic, and everyone can share their comments and discuss the same topic. I will get a notification on any new threads/comments posted and join in the discussion as soon as I can. I will also occasionally post extra credit opportunities on the discussion board, so please be on the lookout for those if you are interested.

10 Academic Honor Policy

You are expected to follow the William & Mary Honor Code. If I discover any academic misconduct, I will initiate an Honor Council proceeding and recommend failure of the course. If you have any questions about how the Honor Code relates to this course, feel free to talk to me or refer to the Student Handbook and the William & Mary Honor Council's website.