

# ECON 461 - Industrial Organization

Prof. Shi Qi

**Office:** 246 Chancellor Hall

**Email:** sqi01@wm.edu

**Term:** Spring 2025

T TH, 9:30A-10:50A, Boswell Hall 39

**Office Hours:** Sign up using [Calendly](#)  
**Link on Blackboard**

Tue 1:00P-2:00P; Fri 1:00p-2:00P

## 1 Course Description

This course provides an introduction to the economic field of industrial organization. It examines market competition, the strategic behavior of firms, regulatory policies, and antitrust measures. The course focuses on understanding the decision-making processes of firms and their interactions with consumers and governments across specific industries.

We begin by exploring the classical model of firms, treating them as “black boxes” of production. From there, we move 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 scope extends to dynamic aspects of firm behavior and includes discussions on antitrust policies and industry regulations, such as mergers and predatory pricing. Key models and equilibrium concepts in business and economics will be explored in various contexts to deepen understanding.

## 2 Textbooks & Prerequisites

*Modern Industrial Organization, 4th Edition* by Carlton & Perloff. Owning a copy of the textbook is strongly recommended but not required.

Enrollment in this course requires successful completion of ECO 303: Intermediate Microeconomic Theory. Additionally, a solid understanding of calculus is essential, including proficiency in differentiation, integration, the chain rule, the quotient rule, and related concepts. Success in this course depends on the ability to solve various economic models, employing both algebraic and graphical analyses.

## 3 Course Format

The course is lecture-based. Class attendance is not mandatory, but attending **every** class is imperative for student success. Lecture slides will be made available on Blackboard, but

only after each class has concluded. While these slides serve as a helpful resource for studying and exam preparation, they do not cover all the essential class materials. Therefore, taking thorough notes during class is crucial for a comprehensive understanding of the content.

## 4 Assignments

There will be six assignments. Each assignment *\*must\** be submitted on Blackboard by the specified due date and time. Please refer to the course calendar for all submission deadlines. No late assignments will be accepted.

These assignments can be time-consuming and designed to deepen your understanding. They will involve calculations, derivations, or graphing with multiple steps. Homework assignments in this course are extensions of the lectures.

In other words, they are intentionally more challenging and detailed than lecture examples, allowing you to learn how to apply the concepts discussed in class.

Due to the nature of electronic submissions, please follow the homework template posted on Blackboard. 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.

For each assignment, you will be required to make two submissions on Blackboard.

1. The first submission is designed such that making a reasonable effort will guarantee a passing grade of 60%. In this context, “reasonable effort” implies attempting every problem within the assignment. If you encounter challenges with a question, you can still complete the problem by providing all your partial work and offering a detailed explanation of the difficulties you are facing. Simply stating “I don’t know how to do it” or “I am stuck” won’t be considered sufficient. It is important to understand that assignments containing parts that have not been attempted will not be accepted. If you miss the deadline for the first submission, you will be awarded zero points for the entire homework assignment – no exceptions.
2. On the day following the initial submission deadline, a solution will be accessible online. At this point, your task is to revise your homework. This entails two actions: (1) Identifying any errors you have made and (2) commenting on these mistakes while supplying the correct answers. If your answer is equivalent to the answer provided in the solution, please explain in your comments. If an error in one part leads to subsequent miscalculations, it is necessary to redo all calculations affected by that error.

This revision process is designed to enhance your comprehension of course materials by learning from your mistakes. Consequently, your comments carry more significance than merely copying down the correct solutions. The improved and annotated homework

should be submitted within a second specified deadline, typically 3-5 days after the initial submission. By addressing errors and offering comments, you will earn an additional 40% on your homework score. This means that achieving a perfect 100% on every assignment is well within reach, contingent upon you diligently putting effort into your assignment.

I will carefully review the revised homework submissions from the second round. If I identify any errors that remain uncorrected or have been addressed inaccurately, corresponding points for those sections will be deducted from your homework grade. The maximum deduction in points is limited to 40%. In exceptional circumstances, if a student does not approach the revision of an assignment with due seriousness or attempts to engage in dishonest practices, their submission for grading may be rejected. In such instances, the student will receive a zero-point score for the entire homework assignment.

Collaboration among students on assignments is not only permitted but also encouraged. However, it is imperative that each student individually work out their own version of the solution. Additionally, your homework submission should acknowledge any fellow students you collaborated with. In cases where you have collectively solved a problem, I expect that you should be able to reproduce the solution independently without relying on group notes. Failure to do so indicates you have learned nothing from the exercise and are giving yourself a false sense of security about your understanding of the material. Furthermore, it is important to note that **identical assignments will result in a score of zero**.

## 5 On-line Data Tasks

You will undertake two online data tasks to assess your capability in collecting and analyzing data. I will provide data sources and concise instructions for these assignments. These instructions are designed to be easily understandable and guide you through accessing and navigating the required online data platforms. Consequently, I won't be discussing these instructions in class. However, please feel free to contact me if you require assistance with the data task. It is important to note that these tasks are to be completed independently.

## 6 Exams

There will be two midterms and one comprehensive final exam, all conducted as open-notes, in-class exams. For each midterm, you may bring two pages of notes (front and back) to the exam. For the final exam, you are allowed to bring four pages of notes. The question formats will be similar to those in the homework assignments and practice exams. During the tests, collaboration with others is not permitted. Any instances of dishonesty will be dealt with according to the College's regulations, with appropriate severity.

The midterms are NOT cumulative and will be administered during a regular class. You can find the scheduled exam dates on the class calendar. Before each midterm, a practice exam will be provided. You can find the date for the exam review class on the class calendar as well.

There won't be any make-up exams available for the midterm exams. If you miss a midterm exam for any reason, the points allocated to that exam will be automatically transferred to your final exam. This ensures that you won't miss out on earning those points. (College athletes with documented absences and students with a documented medical emergency during an examination period may be eligible for a special exception.)

The final is cumulative and will take place in the same classroom on the officially scheduled final exam date by the College. The exam duration will be 3 hours. 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) - 17%; Data tasks - 3%; Midterm 1 - 20%; Midterm 2 - 20%; Final - 40%.

If you disagree with an exam's grading, you can resubmit it for my review. I expect you to provide a written argument explaining why you believe you deserve additional points. Please submit such disputes within one week from the date the exam is returned.

### 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

Communication primarily occurs through email. I aim to respond to emails within 24 hours, although emails sent the evening before a homework due date or an exam might not receive a timely response. Please make sure you use your official W&M email for correspondence, as emails from other accounts will not be considered. To facilitate efficient communication, please

include your full name and class (ECON 461 - Industrial Organization) in the subject line.

Office hours are a valuable resource for getting help. To reserve a time slot, please use the Office Hours Calendly link available on Blackboard. Each appointment is 15 minutes, and students are allowed a maximum of 30 minutes per week. This time limitation might restrict my ability to review entire assignments or exams during office hours. Group meetings are welcome. If the provided office hours are unsuitable, feel free to email me to arrange an alternative meeting time.

Should you encounter difficulties with the course material, please use my office hours early and consistently throughout 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?”] Instead, please bring your work, show me where you are stuck, and explain the reasons for needing help.

## **9 Optional Online Discussion Forum**

I have set up a class discussion forum on Blackboard. Within this forum, you can initiate new threads to ask questions or discuss various class topics. It is a collaborative space where everyone can contribute their thoughts and engage in conversations about the subject matter. I’ll receive notifications for new threads and comments and participate in the discussions as promptly as possible. Additionally, I will occasionally share extra credit opportunities on the discussion board, so be sure to watch out for those if you are interested.

## **10 Academic Honor Policy**

You are required to adhere to the William & Mary Honor Code throughout the duration of this course. If there is any academic misconduct, I will take appropriate action by initiating an Honor Council proceeding and may recommend a failing grade for the course. If you have any inquiries concerning how the Honor Code pertains to this course, please don’t hesitate to contact me or consult the Student Handbook and the William & Mary Honor Council’s website for further guidance.