

William and Mary

ECON-463 Entrepreneurial Choice and Industrial Policy

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Class Meets: T R, 2:00P-3:30P,
Chancellors Hall 121
Office Hours: Sign up on Calendly,
T 3:30P-4:30P
R 12:45P-1:45P

1 Course Description

This course aims to provide you with the theoretical foundations and empirical skills to evaluate Industrial policies that can profoundly affect entrepreneurial choices and competition. In particular, we look into policies that can affect entrepreneurial occupational choice, business formation, pricing strategies, legal forms, advertising, and innovation. This class builds upon the microeconomic theories (e.g., ECON 303) and applies these concepts using the econometric methodology (e.g., ECON 308).

The class will cover important theoretical topics and discuss policy issues relating to entrepreneurial choices. The course has roughly three parts covering three important aspects of being an entrepreneur. The first part focuses on the decision to start a business. We will discuss topics on occupational choices, small business job creation, entrepreneurial financing, firm entry and exits in specific industries. The second part deals with business strategies, such as advertising, innovation, brand proliferation, and product obfuscation. In the third part, we will discuss the roles of business regulations and various government policies. Throughout in-class discussions, you will learn how to apply theoretical models to predict the outcomes of industrial policies and evaluate their economic welfare consequences. In particular, you will learn the importance of using micro-foundation structural models in predicting the effect of an industrial policy.

Combining theoretical understanding and policy applications, we will also look into a real-world business survey dataset. In particular, we will use the dataset to study new business formation activity; characteristics of business strategies; the nature of business organizational arrangements; and the characteristics of entrepreneurs. By studying the data, you will learn how to interpret empirical evidence meaningfully and use them to make policy recommendations. You will also be asked to hone your effective communication skills, including writing reports, preparing graphs and figures, and presenting analysis results to an audience.

2 Prerequisites

Students should have completed Econ 303 Intermediate Microeconomic Theory, or an equivalent class. In addition, you must have basic calculus skills (differentiation, integration, chain

rule, quotient rule, etc.) To succeed in this class, we must understand the intuition behind many economic models, which require algebraic and graphic analyses. Students should also have completed Econ 308 Econometrics or an equivalent class. You will need to use statistical software, such as STATA or R, extensively in completing a group project.

The course is intended for juniors and seniors in the Economics Major and satisfies the COLL 400 requirement.

3 Course Materials

We will cover and discuss a series of relevant topics. For each topic, I will assign a variety of material for you to read and listen to. These include academic papers, news articles, and sometimes, Podcasts. I will post the PDFs or web links on Blackboard at least one week before the class. These course materials typically concern specific industry practices and policies. For academic papers, you do *not* need to understand all the technical details, but you are required to understand the industry/policy backgrounds and essential discussions in the paper. In particular, you should focus on identifying the following aspects of the article.

- What question is the author attempting to answer?
- Why is this an important question?
- What does previous research have to say about the question?
- What sort of evidence does the author provide?
- Are there any drawbacks or limitations to this evidence?
- What conclusions does the author reach?
- What are the implications of these conclusions for larger economic questions?

4 Class Format

A typical class has two parts. In the first 20-30 minutes, I will preview the upcoming topics next week. I will discuss relevant models which provide the necessary theoretical backgrounds. (The textbook is *Modern Industrial Organization. 4th Edition.* by Carlton & Perloff; but the textbook is not required.) The technical details are not as important as the implications and intuitions behind the models. You will be asked to understand the theoretical assumptions and how changing the assumptions might affect the predictions of these models.

We will then have a class discussion for the remainder of the class. For each class discussion, one or two students will be designated ahead of time to lead class discussion. When you are assigned to lead, you are expected to prepare for the discussion ahead of time. In class, the discussion leaders will detail the backgrounds of the paper, present any potential evidence

provided in the papers, and review the main results. You can provide summary handouts (in electronic formats), Powerpoint slides, or any format you think might aid your discussion. During the class, the discussion leaders will prepare and present a few discussion questions for the class. Then, we will go around the room to discuss the topic.

As a discussion leader, your performance is evaluated based on a 5-point scale. Knowledge of the content - 2 points; sufficient preparation (slides, handouts, etc.) - 2 points; discussion questions - 1 points.

If you are not leading a discussion, your class participation is mandatory. You **must** let me know ahead of time if you are going to miss a class. Engaging in class discussion is very important. You are allowed and even encouraged to relate the discussion to outside materials or even personal experiences.

Your class participation is evaluated based on a 5-point scale. Class attendance - 2 points; engage significantly in class discussion - 3 points. All discussion leaders with reasonable efforts will automatically get the 5 participation points for the session they lead.

5 Weekly Quizzes

I will post a list of study questions to guide you through the readings of each paper a few days before the actual seminar class. After going through the papers and attending the seminar classes, you will need to complete a quiz on Blackboard regarding the topics. These quizzes are designed to evaluate your understanding of the class materials. These quizzes, based on readings and in-class discussions, contain open-ended short answer questions regarding the topics covered in class. The quizzes will be graded based on completion (60%) and your understanding of the required course materials (40%).

All quizzes are **open booked**, and you will have sufficient time to complete them. No cooperation and no ChatGPT is allowed on any quizzes, and any attempts of dishonesty will be punished with as much severity as the College permits.

6 Group Project

This project provides you with an opportunity to apply the theories of this course to actual data. The project, which is worth 50% of your overall class grade, will be completed in **Four stages**.

You will be assigned to a group of 2-4 people. Please let me know any special needs/concerns regarding group works/meetings.

You must complete all Four parts of the project with your group members.

Stage 1: Data replication exercise:

You will be introduced to a business survey datasets, the *Survey of Small Business Finance* (SSBF). This dataset is publicly available. I will present to you a detailed instruction on how to access and use the data. You will use the data complete a replication exercise. This is to help you getting used to navigating the dataset and finding potentially interesting insights for coming up with your own research topics.

Stage 2: Project proposal:

Sub-stage 2.1: Find an interesting entrepreneurial decision to study. At the same time, identify a potential/real-world policy that can affect the entrepreneurial decision/outcome of your choice. This entrepreneurial decision/outcome MUST be identifiable in a dataset of your choice. You must also choose a list of independent variables that can potentially be affected by an industrial policy. You must first get my approval on your choices of the entrepreneurial decision/outcome and industrial policy, and no two groups can have the same research topic. In the rare cases, if you choose to use a dataset other than the SSBF, you must also get approval from me first.

Sub-stage 2.2: Develop and submit a short proposal, which must address the following:

1. What is the entrepreneurial decision/outcome you are studying?
2. What is policy issue that can affect this entrepreneurial decision/outcome? How does it work?
3. Brief description of your dataset, including a table of summary statistics.
4. What are the main variables from the dataset you will use in your research?
5. Why are these variables chosen?

I will meet with your group after your submission to discuss your proposal.

Stage 3: In-class presentation:

Sub-stage 3.1: Find empirical evidence similar to what you have done in Phase 1, and identify the important (i.e. economically significant) factors that can affect the entrepreneurial decision/outcome of your choice. Then you will develop a simply model, preferably using the tools and methods we discuss in class. This model must clarify the causal relationship identified from your regression analysis. You will then use this model to make predictions on the effects of policy experiments of your design. I will ask you to give me a project update in the second half of the semester.

Sub-stage 3.2: Your group will present your findings to the class at the end of the semester. The presentation should answer the following questions:

1. What are you studying? Why is the topic interesting from an economic perspective?
2. What are the empirical evidence? Any summary statistics, regressions, etc.?

3. How to interpret these empirical evidences: intuition, model, previous literature?
4. Based on your interpretation, what are the predictions, policy recommendations?

There is no fixed structure or format to the presentation. I will give you some general guidelines later on in the semester, but these should be treated as suggestions rather than rules.

Stage 4: Final report:

During and soon after the presentation, your group will get feedbacks from me and your classmates. After getting the feedbacks, you will prepare a final written report to be submitted on the day of the final exam. This report must contain two parts. The first part is a **research paper**, about 10 pages long, containing all the analyses and technical details. The second part is a letter to the regulators or an **Op-Ed**, 2-3 pages long, in accessible language (i.e. no maths, only intuitions), suggesting a policy stance based on your findings. If you only turn in one part, your final report will not be graded, and you will earn zero point for the final project.

6.1 Group Performance Reporting

To update me on the progress of your group projects, and to prevent *free-riding*, please log each individual member's role in and contribution to the project in each stage.

Please send me two emails for each stage of the project (8 in total). The first email is a group email, which is sent after your first group meeting for a particular stage. This email should record the date and attendance of the meeting, assignment of responsibilities, and scheduled times in completing the individual tasks. This serves as a binding group contract.

The second email is an individual email, sent after the completion of every stage. In the email, please assess your own and your partners' performance, in terms contribution to ideas, communication, effectiveness, and timeliness.

7 Grading

A total of 100 points are possible for the course. They are distributed as follows:

- In-class participation - 12% (0.5% per class)
- Leading class discussion - 20% (5% per discussion);
- Weekly Quizzes - 18% (2% per quiz);
- Group Project - 50%.
 - Data Replication Exercise - 5%;
 - Project Proposal - 5%;

- In-class Presentation - 10%;
- Final Report - 25% (Must Contain Two Parts);
- Logs of responsibilities - 5%.

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 note that 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

Emails will be the primary way of communicating with me. Emails will generally be answered within 24 hours. However, emailing me the evening before a homework due date or an exam will not guarantee you a response. When emailing, please use your official W&M email account, and emails from any other accounts will be disregarded! The email subject line must clearly state your name and class (ECON 463).

Office hours are an important way to get help. Please use <https://calendly.com/shiqi-econ> 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. 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 outside the office hours.

9 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.