### ECO 4104: Economics of Competitive Strategy

### **Instructor:** Ting Cao

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**Class Location:** MAT 112 **Class Meeting Time:** Tuesday and Thursday, 7<sup>th</sup> and 8<sup>th</sup> periods, 13:55 – 15:50

**Course Prerequisites**: ECO 2013, ECO 2023, ECO 3101 or ECP 3703, & (MAC 2233 or higher)

**Course Textbook (required):** *Introduction to Industrial Organization, 2 edition* by Cabral, Luis M.B. (2017 Massachusetts Institute of Technology)

**Course Description:** This course offers an introduction to the modern economics of industrial organization, focusing on the strategic behavior of firms within various market structures. We will explore how firms compete, cooperate, and innovate in markets, analyzing the implications of these strategies on market outcomes.

Course Objectives: Students that successfully complete this course will be able to:

1. Understand Market Structures: Students will learn to analyze different market structures, including perfect competition, monopolistic competition, oligopoly, and monopoly, and understand how these structures influence firm behavior and market outcomes.

2. Analyze Strategic Behavior: The course will provide students with the tools to critically evaluate firms' strategic decisions related to pricing, product positioning, entry and exit, and innovation within various competitive environments.

3. **Apply Economic Theories:** Students will apply key theories from industrial organization to real-world case studies, gaining practical insights into how businesses operate and compete in the market.

4. Evaluate the Role of Information: The course will explore the significance of information, advertising, and product differentiation in shaping consumer behavior and market power.

**Class Modality:** This is a fully in-person course. Lectures will not be streamed nor recorded. All midterm exams will take place in person, during our scheduled class times. The final exam will take place during the University-assigned final exam period during Final Exams Week (12/11/2024 @ 7:30 AM - 9:30 AM, MAT 112).

**Grading:** The course grade is determined by your performance on five homework assignments (4% each), two two-hour midterm exams (20% each), and a two-hour final exam (30%), 5 random attendance checks and 3 discussions together account for the remaining 10%. The final exam will cover 20% from Part 1, 20% from Part 2, and 60% from Part 3. Following the scale below:

А	92.00 - 100	С	72.00 - 77.99
A-	90.00 - 91.99	C-	70.00 - 71.99
B+	88.00 - 89.99	D+	68.00 - 69.99
В	82.00 - 87.99	D	62.00 - 67.99
B-	80.00 - 81.99	D-	60.00 - 61.99
C+	78.00 - 79.99	E	0 - 59.99

The scale listed above is firm. Final course grades will not be rounded. Students should assume that 91.99 is followed by an infinite number of nines and is an A-. The rest of the cut-offs follow accordingly.

Make-up assignments and exams will be arranged *only* for absences that are explicitly covered by the <u>UF Attendance Policy</u>. Whenever possible, you should reach out at least five business days in advance to arrange a make-up assignment or exam. Of course, this will not always be possible. Unforeseen absences and emergencies occur and can be excused without such advance notice. In most cases, you will be asked to provide evidence or documentation of an absence that is explicitly excused by the <u>UF Attendance Policy</u>. Absences related to religious holidays and worship do not require this documentation.

The above grading policies are consistent with UF policies regarding grade determination. This information can be found at: <u>https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</u>

**Exams:** There are three exams in this course, two midterm exams and a final exam. All three exams are closed book and will take place in our regularly assigned classroom. However, you are allowed to prepare an A4 sheet with formulas to assist you. Please note that concepts from the textbook should not be included on this sheet. You may use a basic four-function or scientific calculator. Graphing calculators are not permitted.

**Assignments:** There are five homework assignments in this course. You are encouraged to work with your classmates while completing these assignments. Working together can facilitate deeper learning of the course material and more efficient completion of the assignment itself. You must, however, turn in your own work. Submitting a classmates' work as your own is a violation of the UF Student Honor Code.

The complete schedule of homework assignments is listed below:

HOMEWORK	OPEN DATE AND TIME	CLOSE DATE AND TIME
Homework 1	Thursday, 08/22, 8:00am	Thursday, 09/05, 11:59pm
Homework 2	Thursday, 09/05, 8:00am	Thursday, 09/26, 11:59pm
Homework 3	Thursday, 09/26, 8:00am	Thursday, 10/10, 11:59pm

Homework 4	Thursday, 10/10, 8:00am
Homework 5	Thursday, 10/31, 8:00am

Thursday, 10/31, 11:59pm Thursday, 12/03, 11:59pm

Assignments are subject to the make-up policy described above. Late assignments (even a few minutes late) will only be accepted if you have an excused absence. In the case of expected absences, arrangements should be made at least five days in advance. Importantly, this policy means that you must arrive to class on time whenever an assignment is due.

**Professionalism and Honor Code:** Students are bound to not cheat or plagiarize, and are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students 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.'"

You should familiarize yourself with the <u>UF Student Honor Code</u>. Cheating and plagiarism are not the only violations of this policy. Making false or misleading statements to procure an improper academic advantage, failing to properly cite quotations, and unauthorized collaboration or consultation of resources are also violations. Importantly, ignorance of a policy is not a valid reason for violating it.

**Generative Artificial Intelligence:** The Department of Economics faculty assume that all work that is submitted for grading is written by the student whose name it bears, and that it represents their ideas and work. Accordingly, students are not permitted to use generative AI when completing assignments, quizzes, exams, or other graded work unless their instructor has expressly granted that permission. Unauthorized use of generative AI may constitute cheating and/or plagiarism. Such violations of the UF Student Honor Code will be reported to the UF Dean of Students Office and will be subject to severe sanctions.

**Students Requiring Accommodations:** Students with disabilities requesting accommodations should first register with the Disabilities Resource Center (392-8565; <u>https://disability.ufl.edu/</u>), providing appropriate documentation. Once registered, students will receive an accommodation letter that can be presented to the instructor when requesting accommodations. Please register at the beginning of the course if seeking accommodations.

**Course Evaluation:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. 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 ufl.bluera.com/ufl/.

**UF Teaching Center:** The UF Teaching Center offers guidance on study skills and tutoring services. You can find more information at: <u>https://umatter.ufl.edu/office/teaching-center/</u>.

## Health Counseling and Emergencies:

### U Matter, We Care:

If you or a friend is in distress, please contact <u>umatter@ufl.edu</u> or 352 392-1575 so that a team member can reach out to the student.

**Counseling and Wellness Center:** <u>http://www.counseling.ufl.edu/cwc</u>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

**Sexual Assault Recovery Services (SARS)** Student Health Care Center, 392-1161.

**University Police Department** at 392-1111 (or 9-1-1 for emergencies), or <u>http://www.police.ufl.edu/.</u>

# **Tentative Course Schedule**

Week	Class Date	Class	Торіс	Reading	Assignments		
Part 1							
1	8/22/2024	Thursday	Syllabus and overview				
2	8/27/2024	Tuesday	Industrial organization	CH1			
	8/29/2024	Thursday	Basic Price	CH 3.2			
3	9/3/2024	Tuesday	Consumer side	CH 2.1 and CH 2.4			
	9/5/2024	Thursday	Producer side	CH 3.1 and CH 3.3	HW 1		
4	9/10/2024	Tuesday	Demand estimation	CH2.2 and CH 2.3			
	9/12/2024	Thursday	Discussion class				
5	9/17/2024	Tuesday	Review class and Q&A				
	9/19/2024	Thursday		In class midterm 1			
			Part 2				
6	9/24/2024	Tuesday	Price discrimination 1	CH 6.1 and CH 6.2			
	9/26/2024	Thursday	Price discrimination 1	CH 6.3 and CH 6.4	HW 2		
7	10/1/2024	Tuesday	Perfect competition	CH 4.1			
	10/3/2024	Thursday	Competitive competition	CH 4.2			
8	10/8/2024	Tuesday	Oligopoly 1	CH 4.3			
	10/10/2024	Thursday	Oligopoly 2	CH 8.1 and CH 8.2	HW 3		
9	10/15/2024	Tuesday	Entry and market structure	CH 10.1			
	10/17/2024	Thursday	Discussion class				
10	10/22/2024	Tuesday	Review class and Q&A				
	10/24/2024	Thursday		In class midterm 2			
			Part 3				
			Introduction of game theory				
11	10/29/2024	Tuesday	1	CH 7.1			
			Introduction of game theory				
	10/31/2024	Thursday	2	CH 7.2 and CH 7.3	HW 4		
12	11/5/2024	Tuesday	Vertical Merge	CH 13			
	11/7/2024	Thursday	Horizontal merge	CH 11			
13	11/12/2024	Tuesday	Market Failure	Class notes			
	11/14/2024	Thursday	Innovation	CH 15			
14	11/19/2024	Tuesday	Discussion class				
. –	11/21/2024	Thursday					
15	11/26/2024	Tuesday	Tha	anksgiving break: No class			
	11/28/2024	Thursday					
16	12/3/2024	Tuesday	Review class and Q&A		HW 5		
Cumulative Final Exam: 12/11/2024 @ 7:30 AM - 9:30 AM, MAT 112							

Note: Although 11/21/2024 is currently left blank, we still have class on that date. We might not be able to fully stick to our schedule, so this allows us the flexibility to add or extend content as needed.