

DATA SCIENCE AND BUSINESS ANALYTICS DEPARTMENT

ECO 2023 – Principles of Microeconomics

Spring 2024

Course Information

• Course Number and Title: ECO 2023 – Principles of Microeconomics

Credit Hours: 3 credits (3 lecture)Academic Term: Spring 2024

Instructor Information

Instructor: Gazanfar Karimli
 Office Location: BARC-1188

• Office Hours: Mon (2:30 pm – 3:30 pm), Tue (12:30pm -1:30pm), Wed (2:30 pm – 3:30 pm), Thu (12:30pm -1:30pm) or by appointment

• Email address: gkarimli@floridapoly.edu

Course Delivery and Course Description

- **Delivery Mode**: The class will be delivered in a face-to-face format where students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as defined by the instructor.
 - o Date/Time: Tuesday, Thursday, 02:00 PM 3:15 PM
 - o Location: IST-1064
- Course Website: https://floridapolytechnic.instructure.com/courses/8011
- Official Catalog Course Description:
 - Theories of production, determination of prices and distribution of income in regulated and unregulated industries are discussed. Attention is also given to industrial relations, monopolies and comparative economic systems. This course meets communication/writing-intensive requirements (W).
 - Course Pre and/or Co-Requisites: None
 - o Communication/Computation Skills Requirement (6A-10.030): None
- Recommended Texts and Materials:
 - Microeconomics- Principles for a Changing World by Eric Chiang ISBN#: 9781319420055

Course Objectives and Outcomes

- Course Objectives:
 - o Become familiar with the concepts of supply and demand.
 - o Learn about consumer theory, budget constraints and preferences.
 - Understand firms' production decisions.
 - Contrast different market structures and their impact on firm competition.
- Course Learning Outcomes:
 - Define scarcity and opportunity cost and explain how they give rise to gains from trade through the principle of comparative advantage.
 - Describe determinants of supply and demand and identify factors that shift demand and supply curves.

- o Identify and explain various causes of market failure.
- Analyze by using supply and demand, the impacts of market conditions and government policies on outcomes in product markets, labor markets, and capital markets, and in the short run and in the long run.
- Describe the role of consumer preferences and the budget constraint in consumer decision making and the demand curve.
- o Describe and analyze monopoly, perfect competition, and oligopoly market structures.

• Data Science (DS) PLO/CLO alignment

PLO for DS	1	2	3	4	5	6
1. An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.					e	
2. An ability to formulate or design a system, process, procedure, or program to meet desired needs.					е	
3. An ability to develop and conduct experiments or test hypotheses, analyze, and interpret data and use scientific judgment to draw conclusions.	b	С	b	С	e	d
4. An ability to communicate effectively with a range of audiences.						
5. An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.	b	d	b	С	e	d
6. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.						

^{*} Learning level as described in Bloom's taxonomy and Anderson and Krathwohl's taxonomy. Each cell indicates the highest level of learning between each PLO and CLO pair.

• Business Analytics (BA) PLO/CLO alignment

PLO for BA	1	2	3	4	5	6
1. Apply current business analytics concepts, techniques, and practices to solve business problems.	b	b	b	b	С	С
2. Analyze a given business problem using appropriate analytics techniques to generate insights and solutions.					e	
3. Communicate effectively						

a = remember; b = understand; c = apply; d = analyze; e = synthesis

insights, analysis, conclusions, and			
solutions to a diverse audience.			

^{*} Learning level as described in Bloom's taxonomy and Anderson and Krathwohl's taxonomy. Each cell indicates the highest level of learning between each PLO and CLO pair.

• General Education (Gen Ed) PLO/CLO alignment

PLO for Gen Ed	1	2	3	4	5	6
1. Apply appropriate disciplinary methods and theories to the analysis of psychological, social, cultural, political, and economic issues or problems.	b	b	b	b	С	С
2. Describe how political, social, cultural, and economic institutions influence human behavior.				b	С	С
3. Describe how individuals interact and behave in political, social, economic, and psychological environments.	b	b	b	b	С	С

^{*} Learning level as described in Bloom's taxonomy and Anderson and Krathwohl's taxonomy. Each cell indicates the highest level of learning between each PLO and CLO pair.

Academic Support Resources

- **Library**: Students can access the Florida Polytechnic University Library through the University website and Canvas, on and off campus. Students may direct questions to library@floridapoly.edu.
- Peer Learning Strategists (PLS): Are specially trained student leaders who help their peers strategize approaches to course content and work through solution methods. PLS work in collaboration with the courses they support so the content and methods are aligned with your instructors' expectations. Students can meet with a PLS in The Learning Center, which is located on the first floor of the Innovation, Science and Technology (IST) building in room 1019.
- Academic Success Coaches: All students at Florida Poly are assigned an Academic Success Coach. Your Academic Success Coach can assist you with academic success strategies. Please visit the Student Success Center on the second floor of the IST building to meet with an Academic Success Coach.
- Writing Center: Located on the second floor of the IST (2059/2061), the Writing Center helps students to
 develop their writing and presentation skills. Consultations are available in person and virtually. For more
 detail, visit https://floridapoly.edu/writingcenter.

Civility and Collegiality

Faculty and students come to the university for the same reason, which is to participate in a highly professional educational environment. To that end, both students and faculty are expected to treat each other with mutual regard and civility. Communication, written, oral and behavioral, between faculty and students must remain respectful. Within and outside of the classroom, students must refrain from derogatory comments toward the faculty member and their fellow students, and faculty as well must refrain from derogatory comments toward their students. Faculty and students should address each other with respect, in accordance with the wishes of the faculty and the students: for example, no one should be addressed by their last name alone.

Faculty from the outset of a course can and should specify what constitutes activities and behavior that take away from, that diminish, the educational environment. An individual student's distracting behavior impedes

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the education of fellow students, which itself is a form of disrespect. Civility and collegiality also include respecting each other's time: for example, neither students nor faculty should arrive late to class (unless unforeseen, pressing circumstances prevail); faculty should be present at the posted office hours; and students and faculty should be punctual when meeting times are scheduled. In more general terms, collegiality means respecting the right of both faculty and students to participate fully and fairly in the educational enterprise.

Course Policies

Attendance

- Students in face-to-face (this includes labs and C-courses) courses are expected "to attend all of their scheduled University classes and to satisfy all academic objectives as defined by the instructor" (University Policy, FPU-5.0010AP).
- If you know that you will miss a class for any reason discuss the situation with your instructor in a timely manner. If you know that you will miss a class for any reason discuss the situation with your instructor before the class is missed.

Participation

• Students are expected to participate in the classroom experience. The use of earbuds/headphones during class is specifically not allowed and students who engage in this behavior may be asked to leave the class for the day (noting exceptions for authorized accommodations). In addition, students who routinely do not bring materials to class that are required for participation, will not be given credit for class attendance, and if this becomes a pattern of behavior, may be asked to leave the class for the day. Persistent problems with participation may result in a code of conduct referral.

Late Work/Make-up work

 Each student must keep current on assignments. Late assignments are not graded unless permission has been obtained from the instructor in advance. Medical emergencies with valid documentation would be about the only exception.

Grading Scale

• Grades will be determined according to the following scale:

Α	93% – 100%	В	83% – 85.99%	С	73% – 75.99%	D	63% – 65.99%
A-	90% – 92.99%	B-	80% – 82.99%	C-	70% – 72.99%	D-	60% – 62.99%
B+	86% – 89.99%	C+	76% – 79.99%	D+	66% – 69.99	F	0% - 59.99%

Assignment/Evaluation Methods

Assignment	Percentage
Homework Assignment	10%
Attendance and Participation	5%
Quizzes	10%
Exam 1	25%
Exam 2	25%

Exam 3	25%
Total	100%

University Policies

Reasonable Accommodations

The University is committed to ensuring equal access to all educational opportunities. The University, through the Office of Disability Services (ODS), facilitates reasonable accommodations for students with disabilities and documented eligibility. It is the student's responsibility to self-identify as a student with disabilities and register with ODS to request accommodations.

If you have already registered with ODS, please ensure that you have requested an accommodation letter for this course through the ODS student portal and communicate with your instructor about your approved accommodations as soon as possible. Arrangements for testing accommodations must be made in advance. Accommodations are not retroactive.

If you are not registered with ODS but believe you have a temporary health condition or permanent disability requiring an accommodation, please contact ODS as soon as possible.

The Office of Disability Services (ODS):
DisabilityServices@floridapoly.edu
(863) 874-8770
The Access Point
ODS website: www.floridapoly.edy/disability

Accommodations for Religious Observances, Practices and Beliefs

The University will reasonably accommodate the religious observances, practices, and beliefs of individuals in regard to admissions, class attendance, and the scheduling of examinations and work assignments. (See <u>University Policy</u>.)

Title IX

Florida Polytechnic University is committed to ensuring a safe, productive learning environment on our campus that prohibits sex discrimination and sexual misconduct, including sexual harassment, sexual assault, dating violence, domestic violence and stalking. Resources are available if you or someone you know needs assistance. You may speak to your professor, but your professors have an obligation to report the incident to the Title IX Coordinator. Please know, however, that your information will be kept private to the greatest extent possible. You will not be required to share your experience. If you want to speak to someone who is permitted to keep your disclosure confidential, please seek assistance from the Florida Polytechnic University Ombuds Office, BayCare's Student Assistance Program, 1-800-878-5470 and locally within the community at Peace River Center, 863-413-2707 (24-hour hotline) or 863-413-2708 to schedule an appointment. The Title IX Coordinator is available for any questions to discussion resources and options available.

Academic Integrity

The faculty and administration take academic integrity very seriously. Violations of <u>academic integrity regulation</u> include actions such as cheating, plagiarism, use of unauthorized resources (including but not limited to use of Artificial Intelligence tools), illegal use of intellectual property, and inappropriately aiding other students. Such actions undermine the central mission of the university and negatively impact the value of your Florida Poly degree. Suspected violations will be fully investigated, possibly resulting in an academic integrity hearing and sanctions against the accused student if found in violation. Sanctions range from receiving a zero on the exam or assignment, to expulsion from the university. Repeat offenders are subject to more severe sanctions and penalties.

Any "special" instructions that are appropriate for academic integrity and the course should go here. (It is essential that a heading and a statement on what constitutes, includes, academic integrity be included in the syllabus, and that the students be made aware of academic integrity at the beginning of a course.)

Recording Lectures

Students may, without prior notice, record audio of a class lecture for a class in which the student is enrolled for their own personal educational use. Recordings may not be used as a substitute for class participation or class attendance. Recordings may not be published or shared in any way, either intentionally or accidently, without the written consent of the faculty member. Failure to adhere to these requirements is a violation of state law (subject to civil penalty) and the student code of conduct (subject to disciplinary action).

Recording class activities other than class lectures, including but not limited to lab sessions, student presentations (whether individually or part of a group), class discussion (except when incidental to and incorporated within a class lecture), and invited guest speakers is **prohibited**.

Course Schedule

- The following is a tentative course outline. Details may change as we progress through the course, the instructor will alert you to these changes as they happen. This is a general outline, refer to CANVAS for specific assignment details, due dates, and times.
- Important Dates: https://floridapoly.edu/academics/academic-calendar/index.php

WEEK	TOPIC	Assigned Reading	HW/Quiz
WEEK 1	Introduction – Exploring Economics: Types of graphs, Changes in graphs, Functions	Ch 1	HW1/Q1
WEEK 2	Demand, Supply and Market Equilibrium: Law of Demand and Supply Change in Demand and Supply Equilibrium, Shortage and Surplus	Ch 3	HW2/Q2
WEEK 3	Markets and Government: Consumer and Producer Surplus Disequilibrium, Price Ceiling and Floor Tax and Deadweight Loss Asymmetric Information, Externalities	Ch 4	HW3/Q3
WEEK 4	Elasticity: Price and Income Elasticity Measuring Demand Elasticity Elasticity of Supply Incidence of Tax and Deadweight Loss	Ch 5	HW/Q4
WEEK 5	Exam 1		
WEEK 6	Externalities and Public Goods: Positive vs Negative Elasticities Public Goods, Private Goods, and Common Goods Market Policies	Ch 13	HW5/Q5
WEEK 7	Comparative Advantage and International Trade: Factors of production and efficiency Production Possibility Frontier Comparative vs Absolute advantage Trade and trade constraints	Ch 2, Ch16	HW6/Q6
WEEK 8	Consumer Choice and Demand: Budget Constraint Utility analysis Behavioral Economics	Ch 6	HW7/Q7
WEEK 9	Production and Costs: Profit Maximization Production in Short-run and Long-run	Ch 7	HW8/Q8

	Cost of Production		
WEEK 10	Exam 2		
WEEK 11	Perfect Competition:	Ch 8	HW9/Q9
	Market Structure		
	Perfect competition		
	Monopoly, Oligopoly, Monopolistic Competition		
	Marginal Revenue and Cost		
WEEK 12	Monopoly:	Ch 9	HW10/Q10
	Market Power		
	Monopoly Profit		
	Types of Price Discrimination		
WEEK 13	Monopolistic Competition:	Ch 10	HW11/Q11
	Monopolistic Competition		
	Profit Maximization		
WEEK 14	Oligopoly and Game Theory:	Ch 10	HW12/Q12
	Oligopoly		
	Types of Games		
	Nash Equilibrium		
WEEK 15	Exam 3 (Final)		
WEEK 16	Grades Finalized		