



SYLLABUS 2024-2

I. GENERAL INFORMATION

Course name:	Microeconomics 2
Course code:	ECO 263
Credits:	5
Lecture hours per week	4
Practice hours per week:	2
Schedule key:	0621
Professor:	Pavel Coronado Castellanos
Mail (PUCP):	Pavel.coronado@pucp.edu.pe
Lectures:	Tuesday and Thursday 10am to 12m
Teaching Assistant:	Marcelo Gallardo
Mail (PUCP):	marcelo.gallardo@pucp.edu.pe ,
Practice Sessions Schedule:	Monday 8 am to 10 am

II. COURSE DESCRIPTION

It is a theoretical-practical course that is part of the core requirements for the Economics major. It specifically contributes to the development of competencies in theoretical analysis, quantitative analysis, and autonomous learning. The course content includes competitive general equilibrium (CGE), CGE welfare theorems and Arrow's theorems, moral hazard and the principal-agent model, adverse selection, externalities, and public goods, as well as non-competitive partial equilibrium models.

III. PRESENTATION

The course develops the fundamentals of pure and production-based competitive general equilibrium theory. The properties of competitive equilibrium will be discussed through the presentation of the welfare theorems. In the second part of the course, the focus will shift back to partial equilibrium to study the effects of market power, externalities, public goods, uncertainty, and imperfect information in economic analysis.

IV. LEARNING OUTCOMES

LO1: Explains the effects on competitive general equilibrium of changes in the



initial distribution of wealth, as well as changes in preferences and technologies, using the technical language of the discipline.

LO2: Explains the relationship between equilibrium and efficiency, and between efficiency and welfare within the framework of the competitive general equilibrium model, distinguishing the role played by the assumptions of perfect competition and complete markets in this relationship.

LO3: Applies the theoretical tools used in the course to evaluate, within the context of a specific phenomenon involving problematic civic practices or socio-environmental conflicts, which market failures may be present and what their consequences would be on efficiency and equity in the allocation of resources among the involved economic agents.

LO4: Explains under what conditions government intervention could improve the allocation of resources, presenting ideas in a structured manner and recognizing the institutional framework in which this takes place.

LO5: Recognizes how contributions from other disciplines, such as Psychology or Law, lead to the development of new theoretical models that improve the understanding of the outcomes of using markets for resource allocation.

V. COURSE CONTRIBUTION TO GRADUATION PROFILE COMPETENCIES

Graduation Profile Competencies		Learning Outcomes
Specific Competencies	Theoretical Analysis	LO1, LO 2, LO 3, LO 4, LO 5
	Quantitative Analysis	LO 1, LO 3
Generic Competencies	Efficient Communication	LO 1, LO 4
	Ethics, Citizenship, and Environmental Awareness	LO 3
	Critical and Creative Thinking	LO 3, LO 4

VI. COURSE CONTENT

General Equilibrium and Welfare

1. Pure Exchange Equilibrium: Edgeworth Box. Definition and existence. Welfare Theorems.
2. Production Equilibrium: Robinson Crusoe. Definition and existence. Welfare Theorems.



3. Equilibrium with Factors and Consumption. Definition and existence. Welfare Theorems.
4. Partial Equilibrium Model. Welfare.
5. General Case. Definition and existence. Welfare Theorems.

Market Power (Monopoly)

1. Definition.
2. Effect on Monopoly Efficiency.
3. Natural Monopoly and Regulation.
4. Price Discrimination.

Externalities

1. Definition and Types. Examples.
2. Externalities and Efficiency.
3. Taxes and Quotas.

Public Goods

1. Definition and Types. Examples.
2. Public Goods and Efficiency (Public and Private Provision).
3. Quotas and Subsidies. Lindahl Mechanisms.

Decision-Making under Uncertainty

1. Lotteries and Expected Utility.
2. Measures of Risk Aversion.
3. Portfolio, Insurance, and Contracts under Uncertainty.

Asymmetric Information

1. Adverse Selection. Akerlof's Model. Inefficiency. Discrimination.
2. Moral Hazard. Principal-Agent Model with Hidden Actions. Inefficiency. Incentives.

VII. METHODOLOGY

Theoretical Classes

Each week, in-person theoretical lessons will be delivered. For each class, corresponding readings from the textbooks will be assigned, and slides will be provided for each topic. At the beginning of the

theoretical classes, there may be short reading quizzes (30 minutes). The score from these quizzes will count for no more than 5 points towards the next graded practice.

Discussion Sessions

These sessions will take place on Mondays. No later than the previous Friday at noon (preferably earlier), a list of exercises corresponding to the topics covered will be provided to the students. Students should attempt to solve these exercises over the weekend. For each of these lists, a discussion forum will be created in PAIDEIA so that students can exchange ideas. During the guided practices, the TAs (Teaching Assistants) will address the questions that presented the greatest difficulty.

Graded Practices

Four graded practices will be administered on the dates indicated in the schedule. These practices will be completed individually by the students. The practices will be conducted during the practice session. The average of the three highest grades will account for 30% of the final course grade, meaning the lowest grade will be dropped.

VIII. ASSESSMENT

TYPE OF ASSESSMENT	QUANTITY	LEARNING OUTCOMES	DATES	TOTAL WEIGHT (EN %)
Graded Practice: An individual assessment conducted during the practice session. It will evaluate the mastery of theoretical models within the context of quantitative applications.	4*	LO1 LO 2 LO 3 LO 4	September 9th September 30th November 4rd November 18th	30%
Midterm Exam: A written exam covering the topics from the first part of the course. The exam will assess the mastery of the theoretical models developed throughout the course. Coherence and clarity in the writing and analysis of the results will also be taken into account.	1	LO 1 LO 2	October 15th	30%
Final Exam: A written exam covering the	1		December 3rd	40%

topics from the second part of the course. The exam will assess the mastery of the theoretical models developed throughout the course. Coherence and clarity in the writing and analysis of the results will also be taken into account.		LO 3 LO 4 LO 5		
--	--	----------------------	--	--

* *The lowest grade and/or absences are dropped.*

Grading Formula:

$$\text{Final Grade} = (30\text{GradedPractices} + 30\text{Midterm} + 40\text{Final Exam}) / 100$$

IX. REQUIRED BIBLIOGRAPHY

- Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). *Microeconomic Theory*. Oxford University Press.
- Varian, H. *Microeconomic Analysis*.
- Varian, H. *Intermediate Microeconomics*.

Supplementary Reading

- Aliprantis, C., et al. (1989). *Existence and Optimality of Competitive Equilibrium*. Springer.
- Chávez, J. & Gallardo, M. *Linear Algebra and Optimization for Economic Analysis*. Pre-published book.

- Echenique, F. Lecture Notes on General Equilibrium Theory: SS205. Caltech.
- Gallardo, J. (2018). Notes on Uncertainty Theory. Lima: PUCP Editorial Fund.
- Lugon, A. (2020). Equilibrium, Efficiency, and Market Imperfections. Manuscript.
- Macho, I., & Pérez, D. (1999). Introduction to the Economics of Information.
- Ostrom, E. (1990). Governing the Commons: The Evolution of Institutions for Collective Action (Political Economy of Institutions and Decisions). Cambridge: Cambridge University Press.
- Salanié, B. (2017). The Economics of Contracts. MIT Press.

X. SCHEDULE

		Theory (lectures)	Discussion sessions	
Week 1	Tue. Aug. 20	Introduction. Review of static optimization.	Monday. Aug. 19 Lagrange, KKT.	PD1
	Thur. Aug. 22	Review and previous concepts. Consumer theory.		
Week 2	Tue. Aug. 27	Pure Exchange economies and Edgeworth box.		
	Thur. Aug. 29	Efficiency in the Edgeworth box.		
Week 3	Tue. Sep. 3	Economy with one producer and one consumer (Robinson Crusoe)	Monday Sep. 2 2x2 model and pure exchange economies.	PD2
	Thur. Sep. 5	Economy with one producer and one consumer (Robinson Crusoe)		
Week 4	Tue. Sep. 10	Economy 2x2. Examples Part 1.	Monday. Sep. 9 General equilibrium without production.	PC1
	Thur. Sep. 12	Economy 2x2. Examples Part 2.		
Week 5	Tue. Sep. 17	Efficiency and Welfare Theorems.	Monday. Sep. 16 General equilibrium with production. Additional topics in general equilibrium.	PD3
	Thur. Sep. 19	Extensions and discussion. Existence, uniqueness.		
Week 6	Tue. Sep. 24	Monopoly 1.	Monday 23. Sep.	PD4

			General equilibrium with production. Additional topics in general equilibrium.	
	Thur. Sep 26	Monopoly 2.		
Week 7	Tue. Oct. 1 st	Public Good 1.	Monday Sep. 30 General equilibrium with production and power market.	PC2
	Thur. Oct 3 rd	Public Good 2.		
Week 8	Tue. Oct. 8	No lecture. "Combate de Angamos" holiday.	Monday Oct. 7 Power market (monopoly) and externalities. Second order price discrimination.	PD5
	Thur. Oct. 10 th	Midterm exam recap.		
Week 9	Midterm	Tuesday, October 15 th		
Week 10	Tue. Oct. 22	Externalities 2.	No PD	
	Thur. Oct. 24	Uncertainty 1.		
Week 11	Tue. Oct 29	Uncertainty 2.	Monday October 28. Choice under uncertainty, basics of probability theory and references. Risk aversion.	PD6
	Thur. Oct. 31	Uncertainty 3.		
Week 12	Tue. Nov. 5	Uncertainty 4.	Monday Nov. 4. Public goods, externalities and uncertainty.	PC3
	Thur. Nov. 7	Moral Hazard 1.		
Week 13	Tue. Nov. 12	Moral Hazard 2.	Monday Nov. 11. Moral Hazard.	PD7
	Thur. Nov. 14	Moral Hazard 3.		
Week 14	Tue. Nov. 19	Adverse Selection 1.	Monday Nov. 18 Moral hazard.	PC4
	Thur. Nov 21	Adverse Selection 2.		
Week 15	Tue. Nov 26	Adverse Selection 3.	Monday Nov. 25 Moral Hazard and Adverse Selection. Introduction to contract theory.	PD8
	Thur. Nov 28	Final exam recap.		
Week 16	Final Exam	December 3 rd		

The Faculty of Social Sciences is committed to combating sexual harassment. Therefore, according to the faculty council's agreement on Thursday, July 22, 2021, teachers are required to show the



video available at the following link during the first class of the semester (https://www.youtube.com/watch?v=A_f8-j4B3zw). Additionally, the link must be posted on the PAIDEIA platform for their courses.

All submitted work will be evaluated with consideration for copyright laws. In this context, any indication of plagiarism will result in a grade of zero. This measure is independent of the disciplinary process that the Academic Office of the faculty may decide to initiate in each case. For more information on citation guidelines, please visit the following website: www.pucp.edu.pe/documento/pucp/plagio.pdf

Attention to Diversity and Equity: Our university and its classrooms are safe spaces for all students. In that sense, if any student has a need or concern, please communicate it as soon as possible to the instructor and/or the faculty's wellness office through the email: bienestarsociales@pucp.edu.pe.

If any student has a disability, whether visible, non-visible, or neurodiverse, and therefore requires reasonable adjustments for their academic development, they can contact the University's Support Program for Student Inclusion (PAIE) at the following email: paie@pucp.edu.pe. The information provided will be kept confidential.

If the name listed in the Virtual Campus does not correspond to your gender identity, you can contact the instructor so that they use your preferred name. You can also contact the General Secretariat (secgen@pucp.edu.pe) so that the Central Registry Office (OCR) includes your preferred name in the PUCP's information system. This ensures that the preferred name is considered in attendance lists, internal communications, award ceremonies, and recognitions, as well as in all areas and services of the PUCP.