Universitat Autònoma de Barcelona

2018/2019

Advanced Microeconomics

Code: 40100
ECTS Credits: 10

Degree	Type	Year	Semester
4313805 Economic Analysis	OT	2	1

Contact

Name: Francisco Obiols Homs
Email: Francesc.Obiols@uab.cat

Use of languages

Principal working language: english (eng)

Teachers

Jordi Massó Carreras
Jesús David Pérez Castrillo
Jordi Brandts Bernad
Antonio Miralles Asensio
Joan Llull Cabrer
Amedeo Piolatto
Pau Milan Sole

External teachers

Laura Mayoral

Prerequisites

No specific prerequisits.

Objectives and Contextualisation

This module covers advanced theoretical models that are in the frontier of modern microeconomic analysis. Using rigorous mathematical analysis, this module provides the student with frontier knowledge in contract design and game theory, as well as in different applications. The models seen in this module are applied in novel research in Microeconomics and are instrumental to obtaining public policy implications. The student can acquire this knowledge from the fields of economics of information, industrial organization, corporate finance, health economics, development economics, microeconometrics, public economics, labor economics, asset pricing, political economics and experimental economics.

Skills

- Apply the methodology of research, techniques and specific advanced resources to research and produce innovative results in a specific area of specialisation
- Capacity to articulate basic economic theory, analytically deriving them from mathematical reasoning

- Conceptually analyse a specific economic problem using advanced analytical tools
- Demonstrate an open , innovative and analytical attitude towards research questions
- Design, plan and carry out economic research
- Express recommendations about economic policy at macro and micro levels
- Make independent judgements and defend them dialectically
- Possess and understand knowledge that provides a basis or opportunity for originality in the development and/or application of ideas, often in a research context
- Search for information in the scientific literature using the appropriate channels and integrate the information to propose and contextualise a research topic
- Student should possess the learning skills that enable them to continue studying in a way that is largely student led or independent
- Students should be able to integrate knowledge and face the complexity of making judgements based on information that may be incomplete or limited and includes reflections on the social and ethical responsibilities associated with the application of their knowledge and judgements
- Students should know how to apply the knowledge they have acquired and their capacity for problem solving in new or little known fields within wider (or multidisciplinary) contexts related to the area of study
- Students should know how to communicate their conclusions, knowledge and final reasoning that they hold in front of specialist and non-specialist audiences clearly and unambiguously

Learning outcomes

1. Analyse games theory to describe topics of industrial organisation
2. Apply the methodology of research, techniques and specific advanced resources to research and produce innovative results in a specific area of specialisation
3. Demonstrate an open , innovative and analytical attitude towards research questions
4. Describe decision-making in the most complex strategic contexts, including the relationship between the different economic agents and the information structure of the economic context
5. Distinguish between different principal-agent models
6. Make independent judgements and defend them dialectically
7. Possess and understand knowledge that provides a basis or opportunity for originality in the development and/or application of ideas, often in a research context
8. Recognise the deficiencies in the existing models in the field of information economics and industrial organisation and propose a strategy to be followed to shift the borders of knowledge.
9. Search for information in the scientific literature using the appropriate channels and integrate the information to propose and contextualise a research topic
10. Student should possess the learning skills that enable them to continue studying in a way that is largely student led or independent
11. Students should be able to integrate knowledge and face the complexity of making judgements based on information that may be incomplete or limited and includes reflections on the social and ethical responsibilities associated with the application of their knowledge and judgements
12. Students should know how to apply the knowledge they have acquired and their capacity for problem solving in new or little known fields within wider (or multidisciplinary) contexts related to the area of study
13. Students should know how to communicate their conclusions, knowledge and final reasoning that they hold in front of specialist and non-specialist audiences clearly and unambiguously
14. Use the principal-agent models and notions of games theory to draw conclusions about the appropriateness of certain policies

Content

Corporate Finance

Industrial Organization

Microeconometrics

Matching and Mechanism Design

Networks

Experimental Economics

Structural Micro and Time Series tools for Policy Evaluation

Methodology

• Theory classes

• Practice classes

• Learning based on problem solving

• Tutorials

• Personal study

• Study groups

• Textbook reading

• Article reading

Activities

Title	Hours	ECTS	Learning outcomes
Type: Directed			
Theory classes	75	3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
Type: Supervised			
Practice classes, problems sets, tutorials	25	1	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
Type: Autonomous			
Learning based on problem solving, personal study, study groups,	150	6	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Evaluation

Final Exams	70%
Class attendance and active participation	10%

Evaluation activities

Title	Weighting	Hours	ECTS	Learning outcomes
Class Attendance and Problem sets and assignments	30%	0	0	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
Final Exams	70%	0	0	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

Bibliography

Al Roth's Game Theory and Experimental Economics Page,

Alvin E. Roth and Marilda A. Oliveira Sotomayor. Two-sided Matching: A Study in Game-theoretic Modelling and Analysis. Econometric Society Monograph No. 18 Cambridge University Press, 1990.

Amemiya, T. (1985), Advanced Econometrics, Blackwell

Banerjee, A. and E. Duflo, (2011), Poor Economics, Public Affairs. Brañas. P. (coordinador): Economía Experimental y del Comportamiento, Antoni Bosch editor 2011. (Also in English as: "Experimental Economics I: Economic Decisions.

Belleflamme, P. and Peitz, M., Industrial Organization: Markets and Strategies, Cambridge University Press, 2009.

Bolton, P. and Dewatripont, M., Contract Theory,MIT Press, 2004.

Camerer, C., G. Loewenstein and M. Rabin (2004), Advances in Behavioral Game Theory. Princeton University Press.

Cameron, A. C. and P. K. Triverdi (2005), Microeconometrics: Methods and Applications, Cambridge University Press

Chapter 10 in A Course in Game Theory by Martin J. Osborne and Ariel Rubinstein (MIT Press, 1994), for Implementation Theory

Chapters 21 and 23 in Mas-Colell A., Whinston M. and Green J. Microeconomic Theory, Oxford University Press, 1995, for Mechanism Design.

Dan Gusfield and Robert W. Irving. The Stable Marriage Problem: Structure and Algorithms. The MIT Press, Cambridge, 1989.

Davis, D. and C. Holt (1993), Experimental Economics, Princeton University Press.

Dhami, S. (2016), The Foundations of Behavioral Economic Analysis, Oxford University Press.

Frechette, G. and A. Schotter (2016), Handbook of Experimental Economic Methodology, Oxford University Press.

Friedman, D. and A. Cassar, Economics Lab: An Intensive Course in Experimental Economics, Routledge 2004.

Friedman, D. and S. Sunder (1994), Experimental Methods. A Primer for Economists. Cambridge University Press. Gneezy, U., List, J., The Why Axis, Public Affairs, 2012.(Also available in Spanish under "Lo que Importa es el el Porqué". Empresa Activa 2014.)

Hey, J. (1991), Experiments in Economics, Basil Blackwell, Cambridge, Massachusetts.

http://www.economics.harvard.edu/aroth/alroth.html , contains a wealth of interesting material. Thaler, R. (2016), Misbehaving. The Making of Behavioral Economics. W.W. Norton and Company, Inc.

Kagel, J. and A. Roth (editors) (2016), The Handbook of Experimental Economics, volume 2, Princeton University Press.

Kagel, J. and A. Roth, (editors) (1995), The Handbook of Experimental Economics, Princeton University Press.

Kahneman, D. (2012), Thinking, Fast and Slow. Farrar, Strauss and Giroux.

Macho-Stadler, I. and Pérez-Castrillo, D., An Introduction to the Economics of Information, Oxford University Press, 1997.

Palgrave Macmillan (2015). 6 Camerer, C. (2003), Behavioral Game Theory, Princeton University Press.

Shy, Oz, Industrial Organization: Theory and Applications, The MIT Press, 1997.

Tirole, J. (2006), "The Theory of Corporate Finance," Princeton University Press

Tirole, J., Theory of Industrial Organization, Cambridge, MIT Press, 1989

Wooldridge, J. M. (2002), Econometric Analysis of Cross Section and Panel Data, MIT Press