

**Research Techniques in Economics**

Code: 40170  
ECTS Credits: 10

Degree	Type	Year	Semester
4313805 Economic Analysis	OT	2	2

**Contact**

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**Use of Languages**

Principal working language: english (eng)

**Teachers**

Jordi Caballé Vilella  
Albert Marcet Torrens  
Pau Milan Sole

**External teachers**

Abhay Abhyankar  
Ada Ferrer-i- Carbonell  
Evgenia Vella  
Hanna Wang  
Hannes Mueller  
Hugo Rodríguez Mendizabal  
Rigas Oikonomou  
Timothy Kehoe

**Prerequisites**

No specific prerequisites.

**Objectives and Contextualisation**

In this module students learn advanced research methods in Economics. These methods include frontier techniques in quantitative methods that allow the student to analyze complex datasets. These techniques use Econometric techniques for both aggregate and micro data, networks and experimental methods. The different methods presented are used and derived from their theoretical foundations. The student will also learn equilibrium models suitable for structural estimation.

**Competences**

- 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
- Capacity to identify basic statistical analysis and econometric techniques deriving them from the laws of probability and statistics
- Demonstrate an open , innovative and analytical attitude towards research questions
- Design, plan and carry out economic research
- 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
- Use new technology for the collection and organisation of information to solve problems in professional activities
- Use the main computer packages to program economic data analysis

## Learning Outcomes

1. Adapt microeconomic methodologies to specific fields such as the labour market or immigration or education policies
2. Apply the methodology of research, techniques and specific advanced resources to research and produce innovative results in a specific area of specialisation
3. Conceptualise the design of an experiment and the analysis of data to give a rigorous response to an economic question
4. Demonstrate an open , innovative and analytical attitude towards research questions
5. Describe the models of decision-making that include different assumptions from the neoclassical ones on the behaviour of economic agents
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. Program microeconomic methodologies in different applied contexts
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 new technology for the collection and organisation of information to solve problems in professional activities

## Content

- Applied Public Economics
- Asset Pricing
- Microeconometrics
- Money and Banking
- Networks
- Optimal Policy and Expectations
- Quantitative Macroeconomics
- Topics in Trade and International Finance

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

## Assessment

Final Exams	50%
Class attendance and active participation	20%

A module consists of different courses which are evaluated through final exams, problem sets and assignments and other class activities such as class attendance, presentations, etc.

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Class Attendance and Problem sets and assignments	50%	0	0	1, 2, 9, 3, 4, 5, 6, 8, 11, 12, 13, 10, 7, 14
Final Exams	50%	0	0	1, 2, 9, 3, 4, 5, 6, 8, 11, 12, 13, 10, 7, 14

## Bibliography

- Evans, G. and S. Honkapohja, 2001, *Learning and Expectations in Macroeconomics*, Princeton University Press. This reference focuses on the issues of convergence.
- Sargent, T., 1993, *Bounded Rationality in Macroeconomics*, Oxford University Press. Below there is a detailed description of each topic and some readings.
- Ljungqvist, L. and T.J. Sargent (2004), *Recursive Macroeconomic Theory*, 2nd edition MIT Press.
- Lucas, R.E., and N. L. Stokey (1989); *Recursive Methods in Economic Dynamics*, Harvard University Press.
- Chari, V.V. and P. Kehoe (1999): "Optimal Fiscal and Monetary Policy" in, *Handbook of Macroeconomics*, John Taylor and Mike Woodford, eds. (North Holland: Amsterdam)
- Cameron, A. C. and P. K. Triverdi (2005), *Microeconometrics: Methods and Applications*, Cambridge University Press
- Wooldridge, J. M. (2002), *Econometric Analysis of Cross Section and Panel Data*, MIT Press
- Angrist, J. D. and J.-S. Pischke (2009), *Mostly Harmless Econometrics, An Empiricist's Companion*, Princeton University Press.
- Jackson, Matthew O. *Social and economic networks*. Princeton University Press, 2010.
- Newman, Mark. *Networks: an introduction*. Oxford University Press, 2009.
- Galí, J. (2008): *Monetary Policy, Inflation and the Business Cycle*, Princeton University Press
- Walsh, C. E. (2010): *Monetary Theory and Policy* Cambridge, MA: MIT Press, 3<sup>rd</sup> edition
- Allen, F. and D. Gale (2007): *Understanding Financial Crises*, Oxford University Press
- Bindseil, U. (2004): *Monetary Policy Implementation: Theory, Past and Present*, Oxford University Press
- Benjamin, D.J., O. Heffetz, M. Kimball & A. Rees-Jones, 2012. What do you think would make you happier? What do you think you would choose? *American Economic Review* 102(5): 2083-2110.
- Boyce, C and A. Oswald, 2012. Do People Become Healthier After Being Promoted?. *Health Economics*, 21(5): 580-596.
- Caliendo, M., Cobb-Clark, D. and Uhlendorff, A., 2015. Locus of Control and Job Search Strategies, *Review of Economics and Statistics*, 97(1), 88-103
- Card, D., A. Mas, E. Moretti, and E. Saez. 2012. Inequality at Work: The Effect of Peer Salaries on Job Satisfaction. *American Economic Review*, 102: 2981-3003
- Clark, Doyle & Stanca, 2019. The Impact of Terrorism on Well-being: Evidence from the Boston Marathon Bombing, *Economic Journal*, forthcoming

- De Neve, J-E and A. Oswald, 2012. Estimating the influence of life satisfaction and positive affect on later income using sibling fixed effects. *Proceedings of the National Academy of Sciences of the USA*, 109(49): 19953-19958.
- De Neve, J-M, G. Ward, F. De Keulenaer, and B. Van Landeghem, 2018. The Asymmetric Experience of Positive and Negative Economic Growth: Global Evidence Using Subjective Well-Being Data. *Review of Economics and Statistics*, forthcoming.
- Ferrer-i-Carbonell, A. and P. Frijters, 2004. How Important is Methodology for the estimates of the determinants of Happiness? *Economic Journal*, 114(497), 641-659.
- Frijters, P., J.P. Haisken-DeNew, and M.A. Shields, 2004. The Value of Reunification in Germany: An Analysis of Changes in Life Satisfaction. *Journal of Human Resources*, 39 (3), 649-674
- Lekfuangfu, Powdthavee, Warrinnier, & Cornaglia, 2018, Locus of Control and Its Intergenerational Implications for Early Childhood Skill Formation. *Economic Journal*, 128: 298-329.
- Luechinger, S., S. Meier, and A. Stutzer, 2010. Why does unemployment hurt the employed? evidence from the life satisfaction gap between the public and the private sector. *Journal of Human Resources*, 45(4), 998-104.
- Perez-Truglia, R., 2018. The Effects of Income Transparency on Well-Being: Evidence from a Natural Experiment. (Download from SSRN).
- Pezzini, S., 2005. The Effect of Women's Rights on Women's Welfare: Evidence from a Natural Experiment. *Economic Journal*, 115: C208-C227
- Powdthavee, Plagnol, Frijters & Clark, 2019 Who Got the Brexit Blues? The effect of Brexit on subjective wellbeing in the UK. *Economica*, forthcoming.
- on Intentions to Quit. *Journal of Health Economics*, 2001, 20(5), 677-801
- C. Bajona and T. J. Kehoe, "Trade, Growth, and Convergence in a Dynamic Heckscher-Ohlin Model," *Review of Economic Dynamics*, 13 (2010), 487-513.
- F. Rodriguez and D. Rodrik, "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence," in B. Bernanke and K. Rogoff, editors, *Macroeconomics Annual 2000*, MIT Press, 2001, 261-325.
- J. Asturias, S. Hur, T. J. Kehoe, and K. J. Ruhl, "The Interaction and Sequencing of Policy Reform," Federal Reserve Bank of Minneapolis Staff Report 521.
- J. Eaton, S. Kortum, and F. Kramarz, "An Anatomy of International Trade: Evidence from French Firms," *Econometrica*, 79 (2011), 1453-1498.
- J. Markusen, "Explaining the Volume of Trade: An Eclectic Approach," *American Economic Review*, 76 (1986), 1002-1011.
- J. Ventura, "Growth and Interdependence," *Quarterly Journal of Economics*, 112 (1997), 57-84. A. Young, "Learning by Doing and the Dynamic Effect of International Trade," *Quarterly Journal of Economics*, 106 (1991), 369-405.
- K. J. Ruhl, "Solving the Elasticity Puzzle in International Economics," University of Texas at Austin, 2008.
- K.-M. Yi, "Can Vertical Specialization Explain the Growth of World Trade?" *Journal of Political Economy*, 111 (2003), 52-111.
- M. J. Gibson, "Trade Liberalization, Reallocation, and Productivity," University of Minnesota, 2006.
- M. J. Melitz, "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71 (2003), 1695-1725.
- M. Roberts and R. Tybout, "The Decision to Export in Colombia : An Empirical Model of Entry with Sunk Costs." *American Economic Review*, 87 (1997), 545-564.
- P. J. Kehoe and T. J. Kehoe, "A Primer on Static Applied General Equilibrium Models," *Federal Reserve Bank of Minneapolis Quarterly Review*, 18:2 (1994), 2-16.
- R. Bergoeing and T. J. Kehoe, "Trade Theory and Trade Facts," Federal Reserve Bank of Minneapolis, 2003.
- T. Chaney, "Distorted Gravity: Heterogeneous Firms, Market Structure, and the Geography of International Trade," *American Economic Review* 98 (2008), 1707-1721.
- T. J. Kehoe and K. J. Ruhl, "Are Shocks to the Terms of Trade Shocks to Productivity?" *Review of Economic Dynamics*, 11 (2008), 804-819.
- T. J. Kehoe and K. J. Ruhl, "How Important is the New Goods Margin in International Trade?" *Journal of Political Economy*, 121 (2013), 358-392.

- T. J. Kehoe, "An Evaluation of the Performance of Applied General Equilibrium Models of the Impact of NAFTA," in T. J. Kehoe, T. N. Srinivasan, and J. Whalley, editors, *Frontiers in Applied General Equilibrium Modeling: Essays in Honor of Herbert Scarf*, Cambridge University Press, 2005, 341-77.
- T. J. Kehoe, C. Polo, and F. Sancho, "An Evaluation of the Performance of an Applied General Equilibrium Model of the Spanish Economy," *Economic Theory*, 6 (1995), 115-141.
- T.J. Kehoe, J. M. Roszbach, and K. J. Ruhl, "Using the New Products Margin to Predict the Industry-Level Impact of Trade Reform," Federal Reserve Bank of Minneapolis, 2013
- *Open Economy Macroeconomics* by Martin Uribe and Stephanie Schmitt-Grohe, Princeton University Press March 2017