Research Techniques in Economics

2015/2016

Code: 40170
ECTS Credits: 10

Degree	Type	Year	Semester
4313805 Economic Analysis	OT	2	2

Contact

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Teachers

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Use of languages

Principal working language: english (eng)

Prerequisites

No specific prerequisits.

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 Econometrics, Networks and Experimental Methods. The different methods presented are used and derived from their theoretical foundations and are applied to data.

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
- 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 microeconometric 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 microeconometric 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

1. Macroeconometrics

2. Microeconometrics

3. Dynamic models of optimal policy and expectations

4. Experimental economics

5. Networks

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 Exam	70%
Class attendance and active participation	10%
Problem sets and assignments	20%

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 Exam	70%	0	0	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14

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