Universidad de Navarra

Econometrics I C_20

Guía docente 2023-24

PRESENTATION

Brief description: This is an introductory course aimed at providing the basic tools for empirical analysis of the relationships between economic variables. It is expected that students choose those more appropriate for a given economic/entrepreneurial problem, being aware of the advantages and disadvantages, as well as being able to interpret the results. In order to ease comprehension, a set of applications using data and software will be provided.

- **Degrees**: Gr.Eco+Data A.b-20; Gr.Eco+Int.Ec.b-20; Gr.EC Eco+DN(b)-20; Gr. Eco+Lead.b-20
- **Module/Subject**: Quantitative Methods / Basic econometrics
- **ECTS**: 6 ECTS
- **Timing:** 2º year, 2º semester (Gr.Eco+Lead.b-20: 3º year, 2º semester)
- **Type of course**: Compulsory
- **Professor**: M. Julieta Sammartino (msammartino@unav.es)
- **Language**: English
- **Time and place of classes**: Mondays 10:00-12:00 (Room 02 Amigos), Thursdays 10:00-12:00 (Room 5 FCom)

COMPETENCES

- General:

CG4 - Autonomous and critical reasoning in relevant topics within economics and management.

CB1 - Students should demonstrate knowledge and comprehension of basic concepts learnt at high school, which are enlarged towards state-of-the-art developments in the field through advanced bibliography

CB3 - Students should demonstrate ability to gather and interpret relevant data within their area of study, in order to reflect and provide judgement on topics related to social sciences and ethics

CB5 - Students should demonstrate learning abilities that are needed to continue with further studies with high degree of autonomy

- Specific:

CE5 - Ability to apply mathematical reasoning and quantitative tools to the analysis of the economic environment

CE6 - Ability to apply software tools to the quantitative and qualitative analysis of economic and management matters

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CE8 - Ability to apply economic logic and econometric techniques to specific topics in Economics

CE14 - Ability to apply economic logic and econometric techniques to specific topics in Finance

PROGRAM

Chapter 1: Economic questions and data

Chapter 2: Probability and statistics review

Chapter 3: Linear regression with one regressor

Chapter 4: Hypothesis testing and confidence intervals

Chapter 5: Linear regression with multiple regressors

Chapter 6: Hypothesis tests and confidence intervals in multiple regression

Chapter 7: Non-linear regression functions: logarithms and polinomials

Chapter 8: Non-linear regression functions: interactions

Chapter 9: Studies based on multiple regression

- Applications with software tools

EDUCATIONAL ACTIVITIES

- Theoretical and practical classes (56 hours)
- Individual and group projects (28 hours)
- Individual study (60 hours)
- Tutoring (2 hours)
- Exams (4 hours)

ASSESSMENT

CONVOCATORIA ORDINARIA

- Class participation: 10%
- Individual and/or group projects: 15%
- Midterm exam: 25%
- Final exam: 50%

A minimum grade of 4/10 in the final exam is required to pass the subject.

CONVOCATORIA EXTRAORDINARIA

- Final Exam C.Ord.: 10%
- Midterm exam: 20%
- Final Exam C.Ext.: 70%

A minimum grade of 4/10 in the final exam (C.Ext.) is required to pass the subject.

OFFICE HOURS

M. Julieta Sammartino (msammartino@unav.es)

- Place: Office 3050 (3rd floor, Tower, Amigos)
- Time: Tuesdays 3:00 - 4:30 p.m.
- Confirm your attendance here: https://calendar.app.google/QAzDuMz2Bpzz1GBj9
- If students should find obstacles to attending, please write an email

BIBLIOGRAFÍA

- Stock, J. H., and M. W. Watson. 2015. *Introduction to Econometrics, Third Update, Global Edition*. Pearson Education Limited. Find it in the Library.
- Wooldridge, J. M. (2015). *Introductory econometrics : a modern approach* (6th ed.). South-Western/Cengage Learning. Find it in the Library.
- Hanck, C., Arnold M., Gerber A., and Schmelzer, M. 2023. *Introduction to Econometrics with R. Open access.*
- Florian Oswald, Vincent Viers, Jean-Marc Robin, Pierre Villedieu, Gustave Kenedi. (2020). *Introduction to Econometrics with R. Open access.*