## IDENTIFYING DATA

**Econometrics I**

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|---|---|
| Subject | Econometrics I |
| Code | V03G100V01501 |
| Study programme | Degree in Economics |

| Descriptors | ECTS Credits | | Choose | Year | Quadmester |
|---|---|---|---|---|---|
| | 6 | | Mandatory | 3rd | 1st |

| | |
|---|---|
| Teaching language | Spanish<br>English |
| Department | |
| Coordinator | Álvarez García, María Begoña<br>Fernandez-Jardón Fernandez, Carlos Maria |
| Lecturers | Álvarez García, María Begoña<br>Fernandez-Jardón Fernandez, Carlos Maria |
| E-mail | cjardon@uvigo.es<br>alvarez@uvigo.es |
| Web | http://faitic.uvigo.es/ |
| General description | This course is an introduction to multiple regression methods for analyzing data in economics and related fields. Students learn how to conduct empirical studies, as well as how to analyze and interpret results from other empirical works. |

## Competencies

| Code | |
|---|---|
| C1 | Understand the basic mathematical tools required to formalize economic behavior. |
| C10 | Ability to use technical tools to formulate simple models concerning economic variables. |
| D1 | Respect civic and ethical values. Strong commitment to work ethic. |
| D5 | Skill to make coherent and intelligible statements both in oral and written form. |
| D7 | Critical and self-critical thinking. |

## Learning outcomes

| Expected results from this subject | Training and Learning Results | |
|---|---|---|
| Understanding of technical wools *econométricas basic from a theoretical point of view and applied. | C1 | |
| I handle of technical wools and basic tools for wool quantification of wools relate between notable variables of him economic and business world. | C1<br>C10 | |
| Capacity to tackle of effective way problems of him economic field using he instrumental *econométrico suitable. | C1<br>C10 | D1<br>D7 |
| Skill to argue and obtain conclusions of rigorous form from wool empirical evidence. | | D5<br>D7 |

## Contents

| Topic | |
|---|---|
| TOPIC 1: Econometric Modeling | Definition of Econometrics. Steps in empirical economic analysis. The structure of economic data |
| TOPIC 2: The Classical Linear Regression Model | Model specification. Assumptions. Mechanics and interpretation of Ordinary Least Squares. Properties of estimators. Goodness-of-fit. Hypotheses testing. Confidence intervals. Prediction. Dummy variables. Specification and data problems (omitted variable bias; inclusion of irrelevant variables; proxy variables; multicollinearity). |
| TOPIC 3: Violations of the Classical Assumptions | Heteroskedasticiy. Autocorrelation. Stochastic explanatory variables. |

## Planning

| | Class hours | Hours outside the classroom | Total hours |
|---|---|---|---|
| Group tutoring | 5 | 0 | 5 |
| Autonomous troubleshooting and / or exercises | 8 | 20 | 28 |
| Practice in computer rooms | 15 | 30 | 45 |
| Master Session | 20 | 30 | 50 |
| Other | 2 | 20 | 22 |

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

## Methodologies

| | Description |
|---|---|
| Group tutoring | Tutorial sessions |
| Autonomous troubleshooting and / or exercises | Problems sets and tests. |
| Practice in computer rooms | Computer labs. The course will use the GRETL regression applications. |
| Master Session | Lectures |

## Personalized attention

| Methodologies | Description |
|---|---|
| Group tutoring | Interviews that the student has with the teacher for advice and development of activities |
| Autonomous troubleshooting and / or exercises | The teacher provides guidance to students in problem-solving exercises. |
| Practice in computer rooms | Students are given individual feedback on their work. |

## Assessment

| | Description | Qualification | Training and Learning Results | |
|---|---|---|---|---|
| Autonomous troubleshooting and / or exercises | Problem sets and tests. | 15 | C1 C10 | D5 |
| Practice in computer rooms | Exercises with real-world data. The course will use the econometric package GRETL. | 15 | C1 C10 | D1 D5 D7 |
| Other | Final exam. | 70 | C1 C10 | D5 |

## Other comments on the Evaluation

A minimum grade in the final exam may be required to pass the course.

Students who have participated during the term and failed the course can resit the final exam in July.

Exam schedules:

http://fccee.uvigo.es/calendario-exames-201718.html

## Sources of information

**Basic Bibliography**

Wooldridge, JM, **Introduction to econometrics: A modern approach**, 5th, Cengage Learning, 2013

Fernández-Jardón, C. M, Verdugo, V. Cal, I., **Econometría Estática Aplicada.**, 1, Torculo, 1997

Novales, A., **Econometría.**, 5, McGraw-Hill., 2010

Greene, W.H. ., **Análisis Econométrico**, Prentice-Hall, 1998

**Complementary Bibliography**

Dougherty, C, **Introduction to econometrics**, 5th, Oxford University Press, 2016

Stock, JH and Watson, MW, **Introduction to econometrics**, 3th, Pearson, 2014

## Recommendations

**Subjects that it is recommended to have taken before**

**Other comments**

Exam schedules: http://fccee.uvigo.es/calendario-exames-201415.html