

## COURSE PROGRAM

Academic Year: 2019/2020

Identification and characteristics of the course			
Code	500420	ECTS Credits	6
Course name (English)	ECONOMETRICS I		
Course name (Spanish)	ECONOMETRÍA I		
Degree programs	<ul style="list-style-type: none"> <li>- Bachelor's Degree in Economics (GECO)</li> <li>- Bachelor's Double Degree in Business Administration and Management, and Economics (DG ADE-ECO)</li> </ul>		
Faculty/School	Faculty of Economics and Business Administration		
Semester	4 <sup>th</sup> (GECO) / 6 <sup>th</sup> (DG ADE-ECO)	Type of course	Compulsory
Module	Quantitative Methods for Economics		
Matter	Statistics-Econometrics		
Lecturer/s			
Name	Office	E-mail	Web page
RAMAJO HERNÁNDEZ, JULIÁN	137 (Main Building)	<a href="mailto:ramajo@unex.es">ramajo@unex.es</a>	<a href="https://sites.google.com/site/julianramajo">https://sites.google.com/site/julianramajo</a>
RICCI RISQUETE, ALEJANDRO	69 (Department Building)	<a href="mailto:alericci@unex.es">alericci@unex.es</a>	<a href="https://sites.google.com/site/alericciunex">https://sites.google.com/site/alericciunex</a>
Subject Area	Quantitative Methods for Economics and Business		
Department	Economics		
Coordinating Lecturer (if more than one)	Julián Ramajo Hernández		

Contents
<b>Course outline</b>
<p><b>INTRODUCTION TO ECONOMETRICS. THE LINEAR REGRESSION MODEL: THE LEAST SQUARES ESTIMATOR AND ITS SAMPLING PROPERTIES; INTERVAL ESTIMATION AND HYPOTHESIS TESTING; PREDICTION, GOODNESS-OF-FIT, AND MODELING ISSUES; AND DIAGNOSTIC TOOLS. VIOLATION OF THE BASIC ASSUMPTIONS OF THE MODEL.</b></p> <p>I. The main objectives of Unit 1 (which serves as a course introduction) are to discuss the purpose and scope of Econometrics and to develop its conceptual framework.</p> <p>II. The main and secondary objectives of Unit 2 and Unit 3 (which constitute the course core) are the following:</p> <p>a) The main objectives are to perform a regression analysis, to examine the validity of an econometric model, and to interpret the econometric results from statistical and economic perspectives.</p> <p>b) The secondary objectives are to collect and manage economic data, to use the econometric software <i>gretl</i>, and to evaluate the econometric analyses conducted in different economic studies.</p>
<b>Course syllabus</b>
<p>Unit 1. Introduction to Econometrics</p> <p>Unit 2. The Linear Regression Model and its Assumptions</p> <p>Unit 3. Validation of the Linear Regression Model</p>

Bibliography (basic and complementary)
<p><b>Basic Bibliography</b></p> <p>Hill, R.C., Griffiths, W.E., and Lim, G.C. (2011). Principles of Econometrics, Fourth Edition. Wiley.</p> <p>Adkins, L.C. (2018). Using <i>gretl</i> for Principles of Econometrics, Fifth Edition. [<a href="http://www.learneconometrics.com/gretl/index.html">http://www.learneconometrics.com/gretl/index.html</a>]</p>
<p><b>Supplementary Bibliography</b></p> <p>Gujarati, D.N., and Porter, D.C. (2009). Basic Econometrics, Fifth Edition. McGraw-Hill.</p> <p>Wooldridge, J.M. (2016). Introductory Econometrics. A Modern Approach, Sixth Edition. Cengage Learning.</p>

Other resources and complementary educational materials
<p>Throughout the course, other suitable material (theoretical and practical pdf handouts) will be provided via the University of Extremadura's <i>Campus Virtual</i> [<a href="https://campusvirtual.unex.es/portal/">https://campusvirtual.unex.es/portal/</a>], and the professors of Econometrics' dedicated webpage [<a href="https://sites.google.com/site/rmneconometria/">https://sites.google.com/site/rmneconometria/</a>].</p>