

BASIC DETAILS:

Subject:	BUSINESS WORKSHOP II		
Id.:	30452		
Programme:	GRADUADO EN ADMINISTRACIÓN Y DIRECCIÓN DE EMPRESAS (BOE 26/11/2010)		
Module:	MÓDULO TRANSVERSAL		
Subject type:	OBLIGATORIA		
Year:	3	Teaching period:	Primer Cuatrimestre
Credits:	6	Total hours:	150
Classroom activities:	68	Individual study:	82
Main teaching language:	Inglés	Secondary teaching language:	Inglés
Lecturer:	ROMAN ASO, JUAN ANTONIO (T)	Email:	jaroman@usj.es

PRESENTATION:

The aim of 'Business Workshop II' is for students to further develop their econometric techniques and to learn about forecasting in the business world.

To carry out the development of the stages of forecasting, the course provides the knowledge, skills and ability to analyze the opportunities that the regression methods, Time-Series Decomposition and ARIMA (Box-Jenkins) offer. According to the study plan, this course introduces students to scenarios where they develop skills necessary for business roles. The course is arranged to encourage team working by grouping approximately three students, using written and oral English as a common language.

PROFESSIONAL COMPETENCES ACQUIRED IN THE SUBJECT:

General programme competences	G01	Ability to analyse and summarise information from several sources.
	G02	Creative and efficient resolution of problems that arise in day-to-day, in order to ensure the highest levels of quality of professional work.
	G03	Ability to organise and plan the work in the context of continuous improvement
	G04	Use of information and communication technologies
	G05	Ability to work effectively in interdisciplinary teams, integrating and participating in scientific and professional teamwork, contributing ideas and respecting and valuing the diversity of views of other team members.
	G06	Ability to incorporate ethical principles into the professional culture, giving priority to ethical commitment to customers and society.
	G07	Ability to work in an international context and innovate and adopt new approaches used in other national contexts.
	G09	Oral and written communication in English in academic and professional contexts.
	G10	Ability to apply the acquired knowledge, adapting it to the needs and special features of each situation and person.
	G11	Ability to come up with new ideas (creativity).
	G12	Ability to incorporate scientific research and evidence-based practice as a professional culture, updating knowledge and skills continuously.
	G13	Ability to develop learning strategies throughout life to be able to acquire new knowledge, by developing their own academic and professional path.
	G14	Oral and written communication in native language and in English, according to the needs of their field of study and the demands of their academic and professional environment.
	G15	Ability to establish and meet the most appropriate quality criteria and apply methodologies and work strategies geared towards continuous improvement.
	G16	Ability to assimilate concepts of a social and humanistic nature into a comprehensive university education to enable the development of ethical values such as solidarity, multiculturalism, equality, commitment, respect, diversity, integrity, etc.
	Specific programme competences	E01
E02		Know and understand the local, national and international socio-economic context in which the companies operate and be able to interpret its impact on them.
E03		Ability to apply the acquired knowledge of the functional areas of the company and the socio-

		economic environment.
	E04	Ability to identify related variables and understand their impact on business organisations.
	E13	Know the decision making processes in terms of policy and business strategy.
	E14	Understand the principles of business ethics and be able to design scenarios in which these principles can be put into business practice.
	E15	Propose, plan and lead business innovation projects that ensure the competitiveness of the company.
Learning outcomes	R1	Awareness and familiarisation with problems.
	R2	Develop analytical skills.
	R3	Improve decision making skills.
	R4	Clear thinking.
	R5	Develop Communication and Interpersonal skills.

PRE-REQUISITES:

Strong knowledge of mathematics, statistics and econometrics.

SUBJECT PROGRAMME:

Subject contents:

1 - UNIT 1. INTRODUCTION: THE ESSENTIALS OF FORECASTING
1.1 - Basic steps
1.2 - Forecasting research
2 - UNIT 2: FUNDAMENTAL ISSUES IN BUSINESS FORECASTING
2.1 - Statistics and econometrics
2.2 - Types and sources of data
2.3 - Forecasting accuracy.
2.4 - Types of forecasts
2.4.1 - Point or interval
2.4.2 - Absolute or conditional
2.4.3 - Alternative scenarios weighed by probabilities
2.4.4 - Short run or long range
2.5 - Integrated case 1
3 - Unit 3. FORECASTING WITH REGRESSION METHODS
3.1 - Forecasting with simple regression
3.2 - Forecasting with multiple regression
3.3 - Integrated case 2
4 - UNIT 4: TIME-SERIES DECOMPOSITION
4.1 - Time-series decomposition
4.2 - Non-parametric forecasting
4.3 - Quarterly forecasts
4.4 - Integrated case 3
5 - UNIT 5: ARIMA (BOX-JENKINS) - TYPE FORECASTING METHODS
5.1 - Introduction to the Box-Jenkins Models
5.2 - Forecasting with Autoregressive Models (AR)
5.3 - Forecasting with Autoregressive-Moving Average (ARMA) models
5.4 - Forecasting seasonal time series
5.5 - Integrated case 4
6 - UNIT 6: BUSINESS FORECASTING AND DATA MINING
6.1 - Data Mining and techniques
6.2 - Integrated case 5
7 - UNIT 7: FORECAST IMPLEMENTATION
7.1 - Economic forecasting
7.2 - Application to market research
7.3 - Application to financial economics
7.4 - Application to economic growth
7.5 - Integrated case 6

Subject planning could be modified due unforeseen circumstances (group performance, availability of resources, changes to academic calendar etc.) and should not, therefore, be considered to be definitive.

TEACHING AND LEARNING METHODOLOGIES AND ACTIVITIES:

Teaching and learning methodologies and activities applied:

There is no mark for attendance (asistencia) as it is obligatory and therefore unnecessary to evaluate. Many class activities are conducted in pairs and groups in the format of problem solving with (or without) software, simulations, presentations, debates, project preparation, etc. Students should check the PDU every week. During theoretical classes, where the lecturer explains concepts orally with technological support, students must also participate with questions. After theoretical classes, there follow up exercises and tasks to apply and students must practice new concepts. During these sessions, students can ask questions, clarify concepts and ask for additional bibliography.

The assessment criteria consists on 'written exams', 'individual assignment' and 'group assignment'.

-Written exams:

- a) Written tests
- b) Final exam

If students pass the written test 1, Units 1, 2 and 3 will not be evaluated in the final exam.

If students pass the written test 2, Units 4 and 5 will not be evaluated in the final exam.

Therefore, if students pass both written tests, the final exam will cover the Units 6 and 7. In order to pass 'Business Workshop II' students must achieve, at least, a score of **4.5 in the final exam**.

Student performance is evaluated in English.

-Individual portfolio: Assignments will be given to students to reinforce the theory discussed in class. Students are expected to complete all independent study tasks. These tasks are suited to individual study. Students should upload completed tasks onto the PDU before the deadline.

-Group assignment. Integrated cases refer to a grade awarded to all members of student groups after each presentation. Classroom contribution refers to active participation in all classroom activities with classmates and the professor. This methodology enables maximum student participation and talking time in class (case study exercises). It also encourages cooperative learning and meaningful interaction between students and the development of professional competences.

Work handed in after the deadline will not be accepted.

Subject materials are class notes, books (basic and recommended bibliography) and software.

Tutorial sessions: if students require further explanation about specific contents, they should contact the lecturer to arrange a time for a tutorial.

Student work load:

Teaching mode	Teaching methods	Estimated hours
Classroom activities	Master classes	28
	Other theory activities	11
	Practical exercises	4
	Practical work, exercises, problem-solving etc.	8
	Debates	4
	Coursework presentations	4
	Assessment activities	9
Individual study	Tutorials	8

Individual study	42
Individual coursework preparation	9
Group coursework preparation	6
Project work	8
Research work	5
Compulsory reading	4
Total hours:	150

ASSESSMENT SCHEME:

Calculation of final mark:

Written tests:	20 %
Final exam:	40 %
Individual portfolio :	10 %
Group assignment. Integrated cases:	30 %
TOTAL	100 %

*Las observaciones específicas sobre el sistema de evaluación serán comunicadas por escrito a los alumnos al inicio de la materia.

BIBLIOGRAPHY AND DOCUMENTATION:

Basic bibliography:

GUJARATI, Damodar. Econometrics by example. Palgrave Macmillan, 2012
MILLS, Terence. Palgrave handbook of econometrics. Volume 2: Applied Econometrics. Palgrave Macmillan, 2011
BOLVIKEN, Erik. Computation and modelling in Insurance and Finance. Institute and Faculty of Actuaries. Cambridge, 2014
STOCK, James. Introduction to econometrics. Pearson, 2015
Hyndman, R.J and Athanasopoulos, G. (2018) Forecasting: principles and practice, 2nd edition, OTexts: Melbourne, Australia. OTexts.com/ fpp2
EVANS, Michael K. Practical business forecasting. Blackwell Publishers, 2003
Aaron D. Smith J. Edward Taylor Essentials of Applied Econometrics. Oakland, California : University of California Press. Disponible a través de la plataforma Ebook Collection Ebsco de la Universidad San Jorge
Aslanidis, Nektarios. Applied macroeconometrics. Publicacions Universitat Rovira i Virgili. Disponible a través de la plataforma Ebook de la Universidad San Jorge

Recommended bibliography:

WOOLDRIDGE, Jeffrey. Econometric analysis of cross section and panel data. Massachusetts Institute of Technology, 2010.
GUJARATI, Damodar. Econometría. McGraw Hill, 2009.
URIEL, Ezequiel. Introducción al análisis de series temporales. Editorial AC, 2005
GREENE, William. Análisis econométrico (3a edición). Prentice Hall, 2008
PÉREZ, César. Estadística aplicada a través de Excel. Pearson, 2002
PÉREZ, César. Econometría básica : aplicaciones con EVIEWS, STATA, SAS y SPSS. Ibergaceta, 2012
PEÑA, Daniel. Fundamentos de estadística. Alianza editorial, 2008
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HAIR, Joseph F. Essentials of Marketing Research. McGraw Hill, 2013
HAIR, Joseph F. Análisis Multivariante. Pearson, 2007
WOOLDRIDGE, Jeffrey. Introducción a la econometría. Paraninfo, 2008
HITCHNER, James. Financial valuation : applications and models. Wiley, 2011
PILBEAM, Keith. International Finance. Palgrave Macmillan, 2013
DORNBUSCH, Rudiger. Macroeconomía. McGraw Hill, 2009
VARIAN, Hal. Microeconomía intermedia. Antoni Bosch Editorial, 2011.
ELLET, William. The Case Study Handbook. Harvard Business School Press, 2007
CHASE, Charles. Demand-Driven Forecasting: A Structured Approach to Forecasting, 2nd Edition. Wiley, 2013
SYDSAETER, Knut. Matemáticas para el análisis económico. Pearson, 2011.

CAMPBELL, Michael. Statistics at square one. John Wiley. 2009
SPIEGEL, Murray. Probabilidad y estadística. McGraw Hill, 2010
HANKE, John. Business Forecasting. Pearson, 2008.
MAKRIDAKIS, Spyros. Forecasting: Methods and Applications. Wiley, 1998.
RENDER, B. Quantitative Analysis for Management. Pearson, 2015
SOLLIS, Robert. Empirical Finance for Finance and Banking. Wiley, 2012
WILSON, J. Holton. Business Forecasting with ForecastX. McGraw Hill, 2009

Recommended websites:

Instituto Nacional de Estadística	www.ine.es
Eurostat (statistical office of the European Union)	epp.eurostat.ec.europa.eu
International Monetary Fund	www.imf.org/external/index.htm
World Trade Organization	www.wto.org/index.htm
Instituto Aragonés de Estadística	www.aragon.es/Temas/Estadistica
Ministerio de Industria, Energía y Turismo	www.minetur.gob.es/
The World Bank	data.worldbank.org