

DATOS BÁSICOS DE LA GUÍA DOCENTE:

Materia:	BUSINESS WORKSHOP II		
Identificador:	32270		
Titulación:	GRADUADO EN ADMINISTRACIÓN Y DIRECCIÓN DE EMPRESAS (CA)		
Módulo:	MÓDULO TRANSVERSAL		
Tipo:	OBLIGATORIA		
Curso:	3	Periodo lectivo:	Primer Cuatrimestre
Créditos:	6	Horas totales:	150
Actividades Presenciales:	65	Trabajo Autónomo:	85
Idioma Principal:	Inglés	Idioma Secundario:	Inglés
Profesor:		Correo electrónico:	

PRESENTACIÓN:

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.

COMPETENCIAS PROFESIONALES A DESARROLLAR EN LA MATERIA:

Competencias Generales de la titulación	G01	Capacidad de análisis y síntesis de las informaciones obtenidas de diversas fuentes
	G02	Resolución creativa y eficaz de los problemas que surgen en la práctica diaria, con el objetivo de garantizar los niveles máximos de calidad de la labor profesional realizada
	G03	Capacidad de organización y planificación del trabajo en el contexto de la mejora continua
	G04	Uso de las tecnologías de la información y la comunicación
	G05	Capacidad de trabajar de forma eficaz en equipos interdisciplinares, participando e integrándose en los trabajos del equipo en sus vertientes científicas y profesionales, aportando ideas y respetando y valorando la diversidad de criterios de los miembros del equipo
	G06	Capacidad de incorporar a la cultura profesional los principios éticos y deontológicos, teniendo como prioridad de actuación el compromiso ético con los clientes y la sociedad.
	G07	Capacidad de trabajar en un contexto internacional y de aproximarse a las innovaciones y nuevos enfoques empleados en otros contextos nacionales
	G09	Capacidad para comunicarse en inglés en contextos académicos y profesionales.
	G10	Capacidad de aplicar los conocimientos adquiridos, adaptándolos a las exigencias y particularidades de cada situación y persona
	G11	Capacidad de generar nuevas ideas (creatividad)
	G12	Capacidad de incorporar la investigación científica y la práctica basada en la evidencia como cultura profesional, actualizando conocimientos y destrezas de manera continua.
	G13	Capacidad de desarrollar estrategias de aprendizaje a lo largo de toda la vida para que sea capaz de adquirir nuevos conocimientos, a través del desarrollo su propio itinerario académico y profesional
	G14	Capacidad de comunicación oral y escrita en el idioma materno y en inglés, según las necesidades de su campo de estudio y las exigencias de su entorno académico y profesional.
	G15	Capacidad de establecer y cumplir los criterios de calidad más apropiados y emplear metodologías y estrategias de trabajo orientadas a la mejora continua.
	G16	Capacidad de asimilar conceptos de naturaleza social y humanística dentro de una formación universitaria integral que permitan el desarrollo de valores éticos tales como solidaridad, interculturalidad, igualdad, compromiso, respeto, diversidad, integridad, etc.
	Competencias Específicas de la titulación	E01
E02		Conocer y comprender el contexto socioeconómico local, nacional e internacional en el que se desenvuelven las empresas y ser capaz de interpretar su impacto en las mismas
E03		Capacidad de aplicación de los conocimientos adquiridos sobre las áreas funcionales de la

		empresa y el entorno socioeconómico
	E04	Capacidad de identificar las variables relacionadas y entender su impacto sobre las organizaciones empresariales
	E13	Conocer los procesos de toma de decisiones en materia de política y estrategia comercial
	E14	Comprender los principios de ética empresarial y ser capaz de diseñar escenarios en los que dichos principios puedan llevarse a la práctica empresarial
	E15	Proponer, planificar y liderar proyectos de innovación empresarial que aseguren la competitividad de la empresa
Resultados de Aprendizaje	R01	Conocimiento y familiarización con los problemas
	R02	Desarrollo de habilidades analíticas
	R03	Mejora de la toma de decisiones
	R04	Racionalidad en la toma de decisiones.
	R05	Desarrollos de habilidades comunicativas e interpersonales.

REQUISITOS PREVIOS:

Strong knowledge of mathematics, statistics and basic econometrics.

PROGRAMACIÓN DE LA MATERIA:

Observaciones:

Subject programme includes 7 topics: The essentials of forecasting, Business Forecasting, Time series, Forecasting with linear regressions (structural models), Forecasting with ARIMA models, Data mining, Logit and discriminant analysis

Contenidos de la materia:

1 - The essentials of forecasting
1.1 - Introductory issues
1.2 - Key Concepts
1.3 - Basic steps
1.4 - Sources of problems
1.5 - Types of forecasts
2 - Business Forecasting
2.1 - Types and sources of data
2.2 - Introduction to graphics analysis
2.3 - Components
2.4 - Autocorrelation
2.5 - Forecast Error
3 - Time Series
3.1 - Time-series decomposition
3.2 - Non-parametric forecasting
3.3 - Quarterly forecasts
4 - Forecasting with linear regressions (structural models)
4.1 - Forecasting with simple regression
4.2 - Forecasting with multiple regression
5 - Forecasting with ARIMA models
5.1 - Introduction to the Box-Jenkins Models (non-structural models)
5.2 - Forecasting with Autoregressive Models (AR)
5.3 - Forecasting with Moving average (MA)
5.4 - Forecasting with Autoregressive-Moving Average (ARMA) models
5.5 - Forecasting seasonal time series
6 - Data mining
6.1 - Data Mining and techniques
7 - Logit and discriminant analysis
7.1 - Logit model
7.2 - Discriminant analysis

La planificación de la asignatura podrá verse modificada por motivos imprevistos (rendimiento del grupo, disponibilidad de recursos, modificaciones en el calendario académico, etc.) y por tanto no deberá considerarse como definitiva y cerrada.

Previsión de actividades de aprendizaje:

Semana	Unidad/Bloque/Tema	Sesiones presenciales	Horas	Actividades de trabajo autónomo	Horas
1	12/09/2022 1.The essentials of forecasting 1.1.Introductory issues	Presentation: learning, teaching methods, evaluation, assignment deadlines, use of the PDU. - Introducing Unit 1: class activities. Individual Portfolio : exercise.	4	Reviewing material. Individual study. Exercise	2
2	19/09/2022 1.2.Key Concepts	Lecture and class activities. Individual portfolio: exercise	4	Preparing notes. -Individual study	2
3	26/09/2022 2. Business Forecasting 2.1.Types and sources of data 2.2.Introduction to graphics analysis	Lecture and class activities	4	Individual study. Preparation of individual portfolio	2
4	03/10/2022 2.3.Components 2.4.Autocorrelation	Lecture and class activities Individual portfolio: exercise Integrated case 1	4	Individual study Prepare individual portfolio Solve the questions of Integrated case 1	4
5	10/10/2022 3. Time Series 3.1.Time-series decomposition	Lecture and classroom activities. Practical exercises	4	Exercises Preparation of individual portfolio	4
6	17/10/2022 3.2.Non-parametric forecasting 3.3.Quarterly forecasts	Lecture and class activities. Individual portfolio Intregrated case 2	4	Individual study Exercises Solve Integrated case 2	4
7	24/10/2022 1.The essentials of forecasting 2. Business Forecasting 3. Time Series 4. Forecasting with linear regressions (structural models)	Written Exam I: Units 1,2 and 3 Lecture and class activities. Start Unit 4	4	Individual study. Preparation of individual portfolio	6
8	31/10/2022 4. Forecasting with linear regressions (structural models) 4.1.Forecasting with simple regression	Lecture and class exercises.	2	Prepare Integrated case 3 Individual study	4
9	07/11/2022 4. Forecasting with linear regressions (structural models) 4.2.Forecasting with multiple regression	Lecture and class activities. Integrated case 3	4	Individual study Prepare integrated case 3	4
10	14/11/2022 5. Forecasting with ARIMA models 5.1.Introduction to the Box-Jenkins Models (non-structural models) 5.2.Forecasting with Autoregressive Models (AR)	Class activities. Theoretical explanation Practical exercises Individual portfolio	4	Individual study Exercises and readings related to the content presented in class Preparation of individual portfolio	4
11	21/11/2022 5.3.Forecasting with Moving average (MA) 5.4. Forecasting with Autoregressive-Moving Average (ARMA) models	-Lecture and class activities. - Practical exercise Integrated case 4	4	-Exercises of individual portfolio Individual study Prepration of the integrated case 4	4
12	28/11/2022 4. Forecasting with linear regressions (structural models) 5. Forecasting with ARIMA models	Written Exam 2: Units 4 and 5 Review exam	4	Individual study	4
13	05/12/2022 6. Data mining	Lecture and class activities. Integrated case 5	2	Individual study Exercises and readings Prepare Integrated case 5	4
14	12/12/2022 6. Data mining 6.1.Data Mining and techniques 7. Logit and discriminant analysis	Lecture and class activities. Practical exercises Integrated case 5 Start Unit 7	4	Individual study Prepare integrated case 5	4
15	19/12/2022 7. Logit and discriminant analysis 7.1.Logit model	Lecture and class activities. individual portfolio	4	Exercises Individual study Preparation of individual portfolio	5
16	26/12/2022	Christmas holidays.	0	Individual study	4

					Final exam preparation.	
17	02/01/2023		Christmas holidays.	0	Individual study Final exam preparation.	8
18	09/01/2023	7. Logit and discriminant analysis 7.2.Discriminant analysis	Class activities Practical exercises Integrated case 6	4	-Compulsory readings. Research and preparation for class exercises. Integrated case 6 Preparation of individual portfolio	7
19	16/01/2023	1.The essentials of forecasting 2. Business Forecasting 3. Time Series 4. Forecasting with linear regressions (structural models) 5. Forecasting with ARIMA models 6. Data mining 7. Logit and discriminant analysis	Final exam and tutorials	4	Individual study	6
20	23/01/2023	1.The essentials of forecasting 2. Business Forecasting 3. Time Series 4. Forecasting with linear regressions (structural models) 5. Forecasting with ARIMA models 6. Data mining 7. Logit and discriminant analysis	Final exam and tutorials	1	Individual study.	2
21	30/01/2023		Final exam	0	Revision	1
HORAS TOTALES PRESENCIALES:				65	HORAS TOTALES T. AUTÓNOMO:	85

Observaciones para alumnos exentos a la asistencia obligatoria por circunstancias justificadas:

Those students who are unable to attend 80 % of classes during the semester due to justified reasons (previously communicated to the Programme Coordinator) will have to get in contact with the lecturer by 26st of September. They will be required to follow the progress of the subject by doing the reading and case work (both individual and group work) which will be indicated on the PDU. Failure to pass this coursework with a minimum mark of 5 out of 10 will imply not being able to sit the final exam. The remaining % will be determined by sitting the final exam. The mark of the final exam will have to be of at least 5 to be able to average out with the practical part (continuous assessment). Students who fail the subject will have to retake the exam in July for the whole subject (practical and theoretical). Students will sit exams on the same day and time as all other students of the subject.

Each particular case will be analysed to design a learning strategy and related individualized activities that guarantee the achievement of the stated objectives. In these cases, the student will have to attend the tutorials previously agreed with the lecturer. In the event that the student does not contact the lecturer on the indicated date, he or she may lose the right to be evaluated on first call by having exceeded the absences allowed (20 %).

Those students who have been exempt from compulsory attendance will be assessed with the same criteria as attending students. Students will only be allowed to be exempt from class attendance when absence has been justified and agreed.

METODOLOGÍAS Y ACTIVIDADES DE ENSEÑANZA Y APRENDIZAJE:

Metodologías de enseñanza-aprendizaje a desarrollar:

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, the student must conduct a follow-up of the exercises and tasks to apply. 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 : Written exam 1, Written exam 2 and Final exam.

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

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

Therefore, if students pass both written exams, the final exam will cover the Units 6 and 7. In order to pass 'Business Workshop II, the students must achieve, at least, a score of 4 in the final exam.

Student performance is evaluated in English.

-'Individual portfolio': consists of a set of exercises related to the content presented in class. Students are expected to complete all tasks proposed. 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.

Works submitted late 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.

Integración de lengua inglesa en la materia:

The subject will be taught in English. The material provided and the lectures will also be in English.

Internationalization is one of the main objectives of CESUGA. The teaching staff will be gradually introducing materials, texts, audio-visual media and other content through English in the subjects they teach. This course of action is included in the principles of the European Area of Higher Education (EAHE). The aim is for students to naturally and effectively use English in authentic situations while studying subjects included in their degree programs. Exposure to the English language forms an intrinsic part of each degree programme's plan of studies.

All activities in this subject will be carried out in English. These activities can be seen in the provisional activity plan and are marked: basically oral presentations, writing abstracts, use of sources in English, etc.

Volumen de trabajo del alumno:

Modalidad organizativa	Métodos de enseñanza	Horas estimadas
Actividades Presenciales	Clase magistral	30
	Otras actividades teóricas	7
	Casos prácticos	8
	Resolución de prácticas, problemas, ejercicios etc.	8
	Debates	2
	Exposiciones de trabajos de los alumnos	4
	Actividades de evaluación	6
Trabajo Autónomo	Asistencia a tutorías	8
	Estudio individual	42
	Preparación de trabajos individuales	13
	Preparación de trabajos en equipo	10
	Realización de proyectos	4
	Tareas de investigación y búsqueda de información	4
	Lecturas obligatorias	4

Horas totales: 150

SISTEMA DE EVALUACIÓN:

Obtención de la nota final:

Prueba final:	30	%
Individual portfolio :	10	%
Group assignment. Integrated cases:	30	%
Written Exam I:	15	%
Written Exam II:	15	%
TOTAL	100	%

Observaciones específicas sobre el sistema de evaluación:

A) 'Written exams'

Written Exam 1 (15%): if the student obtain a score above 5, units 1, 2 and 3 will not be included in the final exam. Otherwise, units 1, 2 and 3 will be evaluated again in the final exam. The score will be that obtained in the questions corresponding to these units if it is above to that obtained in the Written Exam 1.

Written Exam 2 (15%): if the student obtain a score above 5, units 4 and 5 will not be included in the final exam. Otherwise, units 4 and 5 will be evaluated again in the final exam. The score will be that obtained in the questions corresponding to these units if it is above to that obtained in the Written Exam 2.

If the student passes both written exams, the final exam will only include units 6 and 7 (30%).

The 'Final exam' is at the end of January. In order to pass 'Business Workshop II' students must achieve, at least, a score of 5 in the final exam. If the student gets a mark higher than 5 as an average of the entire subject, but has obtained a score under 4 in the final exam, the final mark of the subject will be the same mark to that obtained in the final exam.

These exams will be developed in class. Except under exceptional circumstances, absences from these exams will mean a score of 0. Student performance is evaluated in English.

B) 'Individual portfolio' (10%): throughout the course, the student must complete a portfolio with different exercises proposed in class. These assignments are explained in class and must be uploaded on the PDU

C) 'Group assignment. Integrated cases' (30%) There are six group assignments. These projects test the students ability to understand and use the contents studied in each unit.

Students caught plagiarizing work will automatically receive a 0 on that assignment/ exam.
Works submitted late will not be accepted.

Second call: The evaluation system on second call will be identical to that of first call, with the same percentages. It is compulsory to pass the theoretical exam of this call. The scores obtained in B) and C) will be kept if they have been passed, keeping the same percentages on the final mark. If you have passed the final exam but have not passed the exam by adding it with the marks obtained in the coursework, because you have failed your work or any of them, you must redo the one or those indicated by the lecturer and resubmit them in the second call. The percentages to be applied to these works will be the same as those indicated in the first call. Therefore, the student must attend the exam revision of the first call to know exactly what to submit in the second call. It is the student's responsibility to contact the lecturer for this purpose.

Spelling: Within the evaluation criteria, the University considers spelling a priority issue. Under the protection of the changes in the language standard in the Spanish language included in the Spelling of the Spanish Language (2010), published by the Real Academia Española, CESUGA has established some correction criteria related to this work that will be applied in all tests of the matter. The document that includes the set of criteria and its sanction is published in the

University Teaching Platform (PDU) of the subject. The same applies if English is the main language. Refer to unacceptable grammar errors.

Plagiarism: Likewise, and in accordance with the University's Good Practices manual, the commission of plagiarism in any of the work carried out will be considered a very serious offense, since it violates the deontological code of any profession.

Electronic devices that disturb the attention and the correct development of the subject will not be allowed in class, unless expressly mentioned by the lecturer and those provided by the University.

Absences: Failure to attend class more than 20 % of the stipulated hours without authorization may lead to the loss of the evaluation on first call.

Métodos de evaluación:

Instrumento de evaluación	Resultados de Aprendizaje evaluados	Criterios de evaluación	%
Written exam I	R01 R02 R03 R04	Assimilation and appropriate application of the contents of Units 1,2 and 3. Correct answers to questions and correct analysis.	15
Final exam	R01 R02 R03 R04	Correct answers to questions and correct analysis of different issues. Students have to achieve a 4 in the exam in order to pass the course.	30
Individual portfolio	R01 R02 R03 R04	Accurate analysis of the practical exercises developed in class	10
Group assignment. Integrated cases	R01 R02 R03 R04 R05	Asimilation of contents and concepts. Application of theory to practice The ability to collaborate in English as part of a group in order to produce a well prepared project. The ability to make effective group presentations. Evidence of collaboration and organisational planning.	30
Written exam II	R01 R02 R03 R04	Assimilation and appropriate application of the contents of Units 4 and 5 Correct answers to questions and correct analysis.	15
Peso total:			100

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BIBLIOGRAFÍA Y DOCUMENTACIÓN:

Bibliografía básica:

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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

Bibliografía recomendada:

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GUJARATI, Damodar. Econometría. McGraw Hill, 2009.
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VARIAN, Hal. Microeconomía intermedia. Antoni Bosch Editorial, 2011.
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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

Páginas web recomendadas:

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

OBSERVACIONES: