Universidad Carlos III de Madrid

COURSE: Econometrics I		
Studies: Finance and accounting	**Year: 2**	**Term: Spring**

CHRONORAM

Week	Session	Topic	GROUP		Indicate Room	Session with two professors – (*)	Student´s Task		
			BIG	Small			DESCRIPTION	Compulsory Hours	Weekly working hours Maximal 7 H
1	1	Topic 1. Motivation and revision of basic concepts of the multiple regression model	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	4
1	2	Activity 0: Exercises on Lineal Algebra		X		NO	Consult the guide corresponding to the problem set.	1,5	
2	3	Topic 1.Sampling distributions of the OLS estimator. Testing hypotheses about a single population parameter. Examples.	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
2	4	Activity 0: Exercises on Lineal Algebra		X		NO	Consult the guide corresponding to the problem set.	1,5	
3	5	Topic 1.Sampling distributions of the OLS estimator. Testing hypotheses about a single population parameter. Examples.	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
3	6	Activity 1: Multiple regression exercises		X		NO	Consult the guide corresponding to the problem set. 1	1,5	
4	7	Topic 1. Confidence intervals. Testing linear combinations of variables. Testing multiple linear equations: The F-test	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
4	8	Activity 2: Inference in multiple regression		X		NO	Consult the guide corresponding to the problem set. 1	1,5	
5	9	Topic 2. Multiple regressions with dummy variables. Multiple regressions with dummy variables. Interactions with dummy variables. Examples.	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5

5	10	Activity 3: Introduction to the application of econometric software. Estimation and inference in the multiple regression model.		X	Computer room	NO	Consult the guide corresponding to the laboratory activity. 1	1,5	
6	11	Topic 2. A binary dependent variable: the linear probability model. Examples	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	4
6	12	Activity 4: Multiple regression with dummy variables.		X		NO	Consult the guide corresponding to the problem set. 2	1,5	
7	13	Topic 3. Multicolinearity. Perfect Colinearity. The effects of colinearity. Indicators of multicolinearity. Examples.	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
7	14	Activity 5: The regression model with binary variables.		X	Computer room	NO	Consult the guide corresponding to the laboratory activity. 2	1,5	
8	15	**Midterm exam**	X			NO	Studying for the exam	1,5	5
8	16	Activity 6: Multicolinearity		X		NO	Consult the guide corresponding to the problem set. 3	1,5	
9	17	Topic 4. Heteroskedasticity. Consequences of heteroskedasticity for the OLS estimator. Examples.	X			NO	Study of the material covered. **(presentation, recommended literature)**	1,5	5
9	18	Activity 7: Multicolinearity		X	Computer room	NO	Consult the guide corresponding to the laboratory activity. 3	1,5	
10	19	Topic 4. Robust estimation of heteroskedasticity. Testing for heteroskedasticity. Examples.	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
10	20	Activity 8: Heteroskedasticity.		X		NO	Consult the guide corresponding to the problem set. 4	1,5	
11	21	Topic 4. Testing for heteroskedasticity (continuation) . Generalized least squares. Examples	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
11	22	Activity 9: Testing for heteroskedasticity		X		NO	Consult the guide corresponding to the problem set. 4	1,5	
12	23	Topic 4. Generalized least squares (continuation). Examples.	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
12	24	Activity 10: Heteroskedasticity		X	Computer Room	NO	Consult the guide corresponding to the laboratory activity 4.	1,5	
13	25	Topic 5. Endogenous regressors. Causes of endogeneity. Examples	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
13	26	Activity 11: Endogenous regressors		X		NO	Consult the guide corresponding to the problem set. 5	1,5	
14	27	Topic 5. Instrumental Variables and testing endogeneity. Examples.	X			NO	Study of the material covered. (presentation, recommended literature)	1,5	5
14	28	Activity 12: Endogeneity		X	Computer Room	NO	Consult the guide corresponding to the laboratory activity 5.	1,5	
SUBTOTAL								**42 + 68 = 110**	
15		**Midterm exam with the computer**							10

16-18		Preparation for the final exam. Final exam.						3	27
TOTAL								**150**	

(*) El número máximo de sesiones con 2 profesores y/o de laboratorios experimentales será de 4.

CRONOGRAMA LABORATORIOS EXPERIMENTALES						
SE-SIÓN	**SE-MA-NA**	**DESCRIPCIÓN DEL CONTENIDO DE LA SESIÓN** (El grupo se subdivide en dos. En el horario se programan dos sesiones en el laboratorio indicado en esa semana)	**LABORATORIO EN EL QUE SE REALIZAN LAS SESIONES**	**TRABAJO DEL ALUMNO DURANTE LA SEMANA**		
				DESCRIPCIÓN	**HORAS PRESENCIALES**	**HORAS TRABJO Semana Máximo 7 H**
1					1,5	
2					1,5	
3					1,5	
4					1,5	
TOTAL						