Universidad Carlos III de Madrid
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COURSE: Mathematics for Economics I		
DEGREE: Economics, Law-Economics, International Studies-Economics	YEAR: 1	TERM: 1

WEEKLY PLANNING								
WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		Special room for session (computer classroom, audio-visual classroom…)	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS		DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	Chapter 1: Representations of sets in the plane.	X			Resolution of problems and/or realization of assigned works	1,5	
1	2	Chapter 1: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	4
2	3	Chapter 1: Open and closed sets. Interior and boundary of a set.	X			Resolution of problems and/or realization of assigned works	1,5	
2	4	Chapter 1: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	4
3	5	Chapter 1: Compact and convex sets.	X			Resolution of problems and/or realization of assigned works	1,5	
3	6	Chapter 1: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5

4	7	Chapter 2: Graphics of functions of several variables. Level curves and level sets.	X			Resolution of problems and/or realization of assigned works	1,5	
4	8	Chapter 2: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
5	9	Chapter 2: Limits of functions. Continuity. Extreme points. Fixed points.	X			Resolution of problems and/or realization of assigned works	1,5	
5	10	Chapter 2: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
6	11	Chapter 2: Theorem of Weierstrass. Theorem of Brouwer.	X			Resolution of problems and/or realization of assigned works	1,5	
6	12	Chapter 2: Exercises **TEST 1**		X		Resolution of problems and/or realization of assigned works	1,5	5
7	13	Chapter 3: Differential calculus. Partial derivatives. Directional derivatives	X			Resolution of problems and/or realization of assigned works	1,5	
7	14	Chapter 3: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
8	15	Chapter 3: Differentiability. Chain rule.	X			Resolution of problems and/or realization of assigned works	1,5	
8	16	Chapter 3: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
9	17	Chapter 3: Interpretation of the gradient. Tangent lines and tangent planes.	X			Resolution of problems and/or realization of assigned works	1,5	
9	18	Chapter 3: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
10	19	Chapter 3: Implicit differentiation.	X			Resolution of problems and/or realization of assigned works	1,5	
10	20	Chapter 3: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
11	21	Chapter 4: Second order derivatives. Hessian matrix. Taylor Polynomials.	X			Resolution of problems and/or realization of assigned works	1,5	
11	22	Chapter 4: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5

						Resolution of problems and/or realization of assigned works	1,5	
12	23	Chapter 4: Quadratic forms. Classification.	X			Resolution of problems and/or realization of assigned works	1,5	
12	24	Chapter 4: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
13	25	Chapter 4: Concave and convex functions.	X			Resolution of problems and/or realization of assigned works	1,5	
13	26	Chapter 4: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
14	27	Chapter 4: Characterizations of concave and convex functions. **TEST 2**	X			Resolution of problems and/or realization of assigned works	1,5	
14	28	Chapter 4: Exercises		X		Resolution of problems and/or realization of assigned works	1,5	5
						Subtotal 1	42	68
						Total 1 *(Hours of class plus student homework hours between weeks 1-14)*	110	

15		Tutorials, handing in exercises, etc					20	
16								
17		Assessment					3	17
18								
						Subtotal 2	3	17
						Total 2 *(Hours of class plus student homework hours between weeks 15-18)*	40	

TOTAL *(Total 1 + Total 2)*	150