uc3m | Universidad Carlos III de Madrid
Vicerrectorado de Estudios
Apoyo a la docencia y gestión del grado

COURSE: CALCULUS II		
DEGREE: BACHELOR IN INDUSTRIAL ELECTRONICS AND AUTOMATION ENGINEERING	YEAR: FIRST	TERM: SECOND

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	TEACHING (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
1	1	THE EUCLIDEAN SPACE RN, FUNCTIONS OF SEVERAL VARIABLES, LEVEL SETS, INTRODUCTION TO NOTION OF LIMIT	x		No	SECTIONS 14.1, 14.2, 14.3 AND 14.5 OF SALAS AND/OR SECTION 2.1 OF MARSDEN	1,66	6,5
	2	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 1.1	1,66	
2	3	LIMITS AND CONTINUITY	x		No	SECTION 14.6 OF SALAS AND/OR SECTION 2.2 OF MARSDEN	1,66	6,5
	4	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 1.1	1,66	
3	5	DIFERENTIABILITY AND PARTIAL DERIVATIVES, MATRIX OF DERIVATIVES AND GRADIENT VECTOR	x		No	SECTIONS 15.1 AND 15.4 OF SALAS AND/OR SECTION 2.3 OF MARSDEN	1,66	6,5
	6	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTIONS 1.2 AND 1.3	1,66	
4	7	CHAIN RULE, DIRECTIONAL DERIVATIVES	x		No	SECTIONS 15.2 AND 15.3 OF SALAS AND/OR SECTIONS 2.5 Y 2.6 OF MARSDEN	1,66	6,5
	8	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 1.4	1,66	

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5	9	HIGH ORDER DERIVATIVES AND LOCAL EXTREMA	x		No	SECTION 15.5 OF SALAS AND/OR SECTIONS 3.1 AND 3.3 OF MARSDEN	1,66	6,5
	10	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTIONS 2.1 AND 2.2	1,66	
6	11	CONSTRAINED EXTREMA, LAGRANGE MULTIPLIERS, GLOBAL EXTREMA	x		No	SECTION 15.5 OF SALAS AND/OR SECTION 3.4 OF MARSDEN	1,66	6,5
	12	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 2.3	1,66	
7	13	INTEGRALS IN RN	x		No	SECTIONS 16.2 AND 16.3 OF SALAS AND/OR SECTIONS 5.1, 5.2, 5.3 AND 5.6 OF MARSDEN	1,66	6,5
	14	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 3.1	1,66	
8	15	DOUBLE AND TRIPLE INTEGRALS, THEOREM OF FUBINI, APPLICATIONS	x		No	SECTIONS 16.3 AND 16.7 OF SALAS AND/OR SECTION 5.4 OF MARSDEN	1,66	6,5
	16	DISCUSSION AND SOLUTION OF PROBLEMS **FIRST PARTIAL EVALUATION.**		x	No	PROBLEMS IN SECTION SECCIÓN 3.1	1,66	
9	17	CHANGE OF COORDINATES, POLAR, CILINDRICAL AND SPHERICAL COORDINATES, APPLICATIONS	x		No	SECTIONS 16.8, 16.9 AND 16.10 OF SALAS AND/OR SECTION 6.2 OF MARSDEN	1,66	6,5
	18	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTIONS 3.2 AND 3.3	1,66	
10	19	PATH AND LINE INTEGRALS, CONSERVATIVE FIELDS	x		No	SECTIONS 17.1, 17.2 AND 17.3 OF SALAS AND/OR SECTIONS 7.1, 7.2 AND 8.3 OF MARSDEN	1,66	6,5
	20	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 4.1	1,66	

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11	21	PARAMETRIZATION OF SURFACES, SURFACE INTEGRAL	x		No	SECTIONS 17.6 AND 17.7 OF SALAS AND/OR SECTIONS 7.3, 7.4, 7.5 AND 7.6 OF MARSDEN	1,66	6,5
	22	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 4.2	1,66	
12	23	THEOREMS OF GREEN, STOKES AND GAUSS	x		No	SECTIONS 17.5, 17.9 AND 17.10 OF SALAS AND/OR SECTIONS 8.1, 8.2 AND 8.4 OF MARSDEN	1,66	6,5
	24	DISCUSSION AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 4.3	1,66	
13	25	LAPLACE TRANSFORM	x		No	SECTIONS 7.1, 7.2, 7.3 AND 7.4 OF NAGLE	1,66	6,5
	26	DISCUSSION AND SOLUTION OF PROBLEMS	x		No	PROBLEMS IN SECTIONS 5.1 AND 5.2	1,66	
14	27	LINEAR DIFFERENTIAL EQUATIONS		x	No	SECTIONS 7.5, 7.6 AND 7.7 OF NAGLE	1,66	6,5
	28	DISCUSSION AND SOLUTIION OF PROBLEMS **SECOND PARTIAL EVALUATION.**	x		No	PROBLEMS IN SECTION 5.3	1,66	
	29	REVIEW AND SOLUTION OF PROBLEMS		x	No	PROBLEMS IN SECTION 5.3	1,66	3,25
						Subtotal 1	**48**	**94**
						Total 1 *(Hours of class plus student homework)*	**142**	
15		Tutorials, handing in, etc	x		No		3,6	-
16		Assessment					4	10
17								
18								
						Subtotal 2	**8**	**10**
						Total 2 *(Hours of class plus student homework)*	**18**	

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TOTAL (*Maximun 160 horas*)								**160**