

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

WEEKLY PLANNING									
WEEK	SESSION	DESCRIPTION	GROUPS (mark x)		Special Room for Session	Indicate YES/NO if the session needs 2 teachers	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS			DESCRIPTION	CLASS HOURS	HOME- WORK HOURS (Max. 7 hs.)
1	1	THE EUCLIDEAN SPACE \mathbb{R}^n , 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
1	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
2	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
3	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
4	8	DISCUSSION AND SOLUTION OF PROBLEMS		x		NO	PROBLEMS IN SECTION 1.4	1,66	
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
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
6	12	DISCUSSION AND SOLUTION OF PROBLEMS		x		NO	PROBLEMS IN SECTION 2.3	1,66	
7	13	INTEGRALS IN \mathbb{R}^n	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

7	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	
8	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	
9	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	
10	20	DISCUSSION AND SOLUTION OF PROBLEMS		x		NO	PROBLEMS IN SECTION 4.1	1,66		
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	
11	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	
12	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	
13	26	DISCUSSION AND SOLUTION OF PROBLEMS	x			NO	PROBLEMS IN SECTIONS 5.1 AND 5.2	1,66		
13	27	LINEAR DIFFERENTIAL EQUATIONS		x		NO	SECTIONS 7.5, 7.6 AND 7.7 OF NAGLE	1,66		
14	28	DISCUSSION AND SOLUTIION OF PROBLEMS SECOND PARTIAL EVALUATION.	x			NO	PROBLEMS IN SECTION 5.3	1,66	7,5	
14	29			x		NO	PROBLEMS IN SECTION 5.3	1,66		
								Subtotal 1	48	92
								Total 1 (Hours of class plus student homework hours between weeks 1-14)	140	
15		Tutorials, handing in, etc.	x			NO	Tutorials	2	15	
16		Assessment.						3		
17										
18										
								Sutotal 2	5	15
								Total 2 (Hours of class plus student homework hours between weeks 15-18)	20	
								TOTAL (Total 1 + Total 2. Máx. 180 Horas)	160	