Universidad Carlos III de Madrid
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COURSE: CALCULUS II		
DEGREE: INDUSTRIAL TECHNOLOGY	**YEAR: FIRST**	**TERM: SECOND**

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	Indicate YES/NO If the session needs 2 teachers	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	CHAPTER 1: THE R^N SPACE, TOPOLOGICAL STRUCTURE , MULTIVARIATE FUNCTIONS: LEVEL SETS	X		NO	NO	SECTIONS 14.1, 14.2, 14.3 AND 14.5 OF SALAS'S BOOK AND/OR SECTION 2.1 OF MARSDEN'S BOOK	1,66	6,5
1	2	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST : SECTION 1.1	1,66	
2	3	LIMITS AND CONTINUITY OF MULTIVARIATE FUNCTIONS	X		NO	NO	SECCION 14.6 OF SALAS'S BOOK AND/OR SECTION 2.2 OF MARSDEN'S BOOK	1,66	6,5
2	4	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST: SECTION 1.1	1,66	
3	5	PARTIAL DERIVATIVES AND DIFFERENTIABILITY. GRADIENT VECTOR. JACOBIAN MATRX	X		NO	NO	SECTIONS 15.1 AND 15.4 OF SALAS'S BOOK AND/OR SECTION 2.3 OF MARSDEN'S BOOK	1,66	6,5

3	6	DISCUSSION AND RESOLUTION OF PROBLE*M*S		X	NO	NO	PROBLEM LIST: SECTIONS 1.2 AND 1.3	1,66	
4	7	CHAIN RULE, DIRECTIONAL DERIVATIVES, DIFFERENTIAL OPERATORS FIRST SELFEVALUATION	X		NO	NO	SECTIONS 15.2 AND 15.3 OF SALAS'S BOOK AND/OR SECTIONS 2..5 AND 2.6 OF MARSDEN'S BOOK	1,66	6,5
4	8	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST: SECTION 1.4	1,66	
5	9	CHAPTER 2: HESSIAN MATRIX. LOCAL EXTREMA	X		NO	NO	SECTION 15.5 OF SALAS'S BOOK AND /OR SECTIONS 3.1 AND 3.3 OF MARSDEN'S BOOK	1,66	6,5
5	10	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST: SECTIONS 2.1 AND 2.2	1,66	
6	11	CONSTRAINED EXTREMA, LAGRANGE MULTIPLIERS, GLOBAL EXTREMA SECOND SELFEVALUATION	X		NO	NO	SECTION 15.5 OF SALAS'BOOK AND/OR SECTION 3.4 OF MARSDEN'S BOOK	1,66	6,5
6	12	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST: SECTION 2.3	1,66	
7	13	CHAPTER 3: INTEGRALS IN R^N FIRST PARTIAL TEST	X		NO	NO	SECTIONS 16.2 AND 16.3 OF SALAS'BOOK AND/OR SECTIONS 5.1, 5.2, 5.3 AND 5.6 OF MARSDEN'S BOOK	1,66	6,5
7	14	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST : SECTION 3.1	1,66	
8	15	ITERATE INTEGRATION, FUBINI'S THEOREM, APPLICATIONS	X		NO	NO	SECTIONS 16.3 AND 16.7 OF SALAS' BOOK AND/OR SECTION 5.4 OF MARSDEN'S BOOK	1,66	6,5
8	16	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST: SECTION 3.1	1,66	
9	17	CHANGE OF VARIABLE, POLAR, CILINDRICAL AND SPHERICAL COORDINATES	X		NO	NO	SECTIONS 16.8, 16.9 OF SALAS'BOOK AND/OR SECTION 6.2 OF MARSDEN'S BOOK	1,66	6,5
9	18	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST: SECTIONS 3.2	1,66	
10	19	APPLICATIONS OF THE INTEGRAL	X		NO	NO	SECTION 16.10 SALAS' BOOK AND/OR SECTION 6.3 OF MARSDEN'S BOOK	1,66	6,5
10	20	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST: SECTIONS 3.3	1,66	

11	21	CHAPTER 4: LINE INTEGRALS, CONSERVATIVE FIELDS THIRD SELFEVALUATION	X		NO	NO	SECTIONS 17.1, 17.2 AND 17.3 OF SALAS'BOOK AND/OR SECTIONS 7.1, 7.2 AND 8.3 OF MARSDEN'S BOOK	1,66	6,5
11	22	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST : SECTION 4.1	1,66	
12	23	SURFACE INTEGRALS	X		NO	NO	SECTIONS 17.6 AND 17.7 OF SALAS' BOOK AND/OR SECTIONS 7.3, 7.4, 7.5 AND 7.6 OF MARSDEN'S BOOK	1,66	6,5
12	24	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST: SECTION 4.2	1,66	
13	25	GREEN THEOREM	X		NO	NO	SECTION 17.5 OF SALAS' BOOK AND/OR SECTION 8.1 OF MARSDEN'S BOOK	1,66	6,5
13	26	DISCUSSION AND RESOLUTION OF PROBLEMS FOURTH SELFEVALUATION		X	NO	NO	PROBLEM LIST : SECTION 4.3	1,66	
14	27	STOKES AND GAUSS THEOREMS	X		NO	NO	SECTIONS 17.9 AND 17.10 OF SALAS' BOOK AND/OR SECTIONS 8.2 AND 8.4 OF MARSDEN'S BOOK	1,66	6,5
14	28	DISCUSSION AND RESOLUTION OF PROBLEMS		X	NO	NO	PROBLEM LIST : SECTION 4.3	1,66	
15	29	SECOND PARTIAL TEST	x		NO	NO		1,66	6,5
							Subtotal 1	**48,14**	**97,50**
		Total 1 *(Hours of class plus student homework hours between weeks 1-14)*						**145,64**	
15		TUTORIALS, HANDING IN						1,66	
16		TRAINING FOR THE FINAL EXAM						3	7
17									
18									
							Subtotal 2	**3**	**7**
		Total 2 *(Hours of class plus student homework hours between weeks 15-18)*						**11,66**	

TOTAL *(Total 1 + Total 2)* ***157,30***	