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

COURSE: Linear Algebra		
DEGREE: Applied Mathematics and Computing	YEAR: 1	TERM: 1

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	Complex numbers	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	2	Exercises on complex numbers		X		Solving exercises suggested by the teacher	1,66	
2	3	Complex numbers	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	4	Exercises on complex numbers		X		Solving exercises suggested by the teacher	1,66	
3	5	Systems of linear equations	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	6	Exercises on systems of linear equations		X		Solving exercises suggested by the teacher	1,66	
4	7	Systems of linear equations	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	8	Exercises on systems of linear equations		X		Solving exercises suggested by the teacher	1,66	
5	9	Matrix algebra and the LU factorization	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	10	Exercises on matrix algebra and the LU factorization. MID-TERM EXAM ON THE MATERIAL EXPLAINED IN WEEKS 1-4		X		Solving exercises suggested by the teacher	1,66	
6	11	Matrix algebra and the LU factorization	X			Study and understanding of the topics explained in the lecture	1,66	6,5

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	12	Exercises on matrix algebra and the LU factorization		X		Solving exercises suggested by the teacher	1,66	
7	13	Determinants	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	14	Exercises on determinants		X		Solving exercises suggested by the teacher	1,66	
8	15	Vector spaces in applied settings	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	16	Exercises on vector spaces in applied settings		X		Solving exercises suggested by the teacher	1,66	
9	17	Vector spaces in applied settings	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	18	Exercises on vector spaces in applied settings		X		Solving exercises suggested by the teacher	1,66	
10	19	Linear transformations	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	20	Exercises on linear transformations. MID-TERM EXAM ON THE MATERIAL EXPLAINED IN WEEKS 5-9.		X		Solving exercises suggested by the teacher	1,66	
11	21	Inner product spaces: norms and orthogonality	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	22	Exercises on inner product spaces, norms and orthogonality		X		Solving exercises suggested by the teacher	1,66	
12	23	Inner product spaces: norms and orthogonality	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	24	Exercises on inner product spaces, norms and orthogonality		X		Solving exercises suggested by the teacher	1,66	
13	25	Orthogonal and unitary matrices	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	26	Exercises on orthogonal and unitary matrices		X		Solving exercises suggested by the teacher	1,66	
14	27	Least squares problems and the QR factorization	X			Study and understanding of the topics explained in the lecture	1,66	6,5
	28	Exercises on least squares problems and the QR factorization		X		Solving exercises suggested by the teacher	1,66	
	29	Review and solving supplementary exercises	X			Preparing final exam	1,66	3,25

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			LECTURES	SEMINARS		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
						Subtotal 1	**48**	**94**
						Total 1 *(Hours of class plus student homework)*	**142**	
15		Tutorials, handing in, etc				Preparing final exam	3,6	-
16		Assessment				Preparing final exam	4	10
17								
18								
						Subtotal 2	**8**	**10**
						Total 2 *(Hours of class plus student homework)*	**18**	
TOTAL (*Maximun 160 horas*)							**160**	