

Universidad Carlos III de Madrid

UPDATED: 22 Mar 2017

COURSE: ALGEBRA										
DEGREE: BIOMEDICAL ENGINEERING						YEAR: 1		TERM: 1		
WEEKLY PLANNING										
			DESCRIPTION		TYPE		NOTES	НО	URS	
WEEK	SESSION	GROUP		LECTURE	PROBLEMS	EXAM		CLASS	WEEKLY TOTAL	
			PRESENTATION							
			• <u>CHAPTER 1</u> : COMPLEX NUMBERS							
1	1	Large	Numbers sets Necessity of complex numbers Binomial form of a complex number Graphical representation Operations Complex conjugate, modulus, argument Polar form of a complex number	x			New Chapter!	1.66	7	
			CHAPTER 1: COMPLEX NUMBERS						1	
	2	Small	Problems		x			1.66		
			• CHAPTER 1: COMPLEX NUMBERS						7	
2	1	Large	 Roots of complex numbers Exponential of a complex number Solving equations Mandelbrot set 	x				1.66		
	2	Small	CHAPTER 1: COMPLEX NUMBERS Problems		x			1.66		
			• CHAPTER 2: LINEAR EQUATIONS							
3	1	Large	 Introduction to Linear Equations Geometrical Interpretation Existence and Uniqueness Matrix Notation Gaussian Elimination Row Equivalence and Echelon Forms 	x			New Chapter!	1.66	7	
	2	Small	CHAPTER 2: LINEAR SYSTEMS Problems		x	x		1.66		
			• <u>CHAPTER 2</u> : LINEAR EQUATIONS						7	
4	1	Large	Solving Linear Systems Homogeneous Systems Simultaneous Solving Systems with parameters	x				1.66		
	2	Small	CHAPTER 2: LINEAR SYSTEMS Problems		x			1.66		
			• <u>CHAPTER 3</u> : THE VECTOR SPACE K ⁿ							
	1	Large	 Vectors Linear Subspace Linear Combinations Subspace Spanned by Vectors Column and Row Spaces 	x			New Chapter!	1.66	9	
5			• CHAPTER 3: THE VECTOR SPACE K ⁿ							
	2	Large	 The Matrix Equation Ax=b Null Space Revisiting Linear Systems 	x				1.66		
	3	Small	CHAPTER 3: THE VECTOR SPACE K ⁿ Problems		x	x		1.66		
			• <u>CHAPTER 3</u> : THE VECTOR SPACE K [®]							
6	1	Large	Linear Independence Basis for a Linear Subspace Dimension of a Linear Subspace Basis for Col <i>A</i> , Row <i>A</i> and Nul <i>A</i> Rank of a Matrix Coordinate Systems	x				1.66	7	
	2	Small	CHAPTER 3: THE VECTOR SPACE K ⁿ Problems		x			1.66		

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