Universidad Carlos III de Madrid

DENOMINACIÓN ASIGNATURA: Radiofrequency Subsystems and Antennas.		
MÁSTER: Ingeniería de Telecomunicación	CURSO: 1º	CUATRIMESTRE: 1º

CRONOGRAMA ASIGNATURA

WEEK	SESSIONN	CONTENTS	Indicar espacio necesario distinto del aula (aula informática, laboratorio, etc..)	Indicar SI es una sesión con 2 profesores o desdoblada (Nota)	STUDENT WORK FOR THE WEEK		
					DESCRIPTION	HOURS	WORKING HOURS
1	1 5-6 sep.	**Chapter 1: Fundamentals on semiconductors and devices**	NO		Diodes and semiconductors	1,66	7
2	2 10-9 sep.	**Chapter 1: Fundamentals on semiconductors and devices**	NO		BJTS and MESFETS	1,66	
	3 10-9 sept. Recuperación clase semana 1	**Chapter 2: Linear and power amplifiers**.	NO		Linear amplifier design.	1,66	7
	4 12-13 sept.	**Chapter 5: Radiation fundamentals**	NO		Radiation parameters.	1,66	
3	5 17-16 sept. ª	**Chapter 2: Linear and power amplifiers**.	NO		Linear amplifier design.	1,66	
	6 19-20 sept.	**Chapter 5: Radiation fundamentals** **Chapter 6: Radiation integrals and potential functions.**	NO		Radiation parameters.	1,66	
4	7 24-23 sept.:	**Chapter 2: Linear and power amplifiers**.	NO		Linear amplifier design.	1,66	7
	8 26-27 sept.	**Chapter 6: Radiation integrals and potential functions.**	NO		Near and far field concepts	1,66	

5	9 1 oct -30 sep	**Chapter 2: Linear and power amplifiers**: Problems and exercises	NO		Polarization networks. Exercises	1,66	7
	10 PT: 4 oct. Leg: 3 oct.	Lab work: Design of an active antenna	YES	2 teachers	**Simulation software**	1,66	
6	11 8-7 oct.	**Chapter 2: Linear and power amplifiers**: Problems and exercises	NO		Exercises	1,66	7
	12 10 oct 11oct	**Chapter 7:Elementary antennas**	NO		theory.	1,66	
7	13 15-14 oct.	**Chapter 7:Elementary antennas, exercises**	NO		Exercises and theory.	1,66	7
	14 PT: 18 oct. Leg: 17 oct.	Lab work: Design of an active antenna	YES	2 teachers	**Simulation software**		
8	15 22-21 oct.	**Chapter 5, 6 and 7: exercises**	NO		Exercises.	1,66	7
	16 PT: 25 oct. Leg.: 24 oct.	Lab work: Design of an active antenna	YES	2 teachers	**Simulation software**	1,66	
9	17 29 octubre y 28 de octubre.	**First exam: amplifiers and radiation fundamentals**	SI			1,66	7
	18 PT: recupera 29 oct. Leg. 31 oct..	**Chapter 8: antenna arrays**	NO		Theory and exercises	1,66	
10	19 5-4 nov.	**Chapter 3: Microwave oscillators**.	NO		Oscillators.		
	20 8-7 nov. .	**Chapter 8: antenna arrays**	NO		Theory and exercises	1,66	
11	21 11-12 nov..	**Chapter 3: Microwave oscillators: exercises**	NO		Exercises		7
	22 15-14 nov.	Lab work: Design of an active antenna	YES	2 teachers	**Simulation software**	1,66	
12	23 19-18 nov.	**Chapter 8: antenna arrays, exercises**	NO		Theory and exercises	1,66	7
	24 22-21 nov.	Lab work: Design of an active antenna	YES	2 teachers	**Simulation software**	1,66	
13	25 26-25 nov.	**Chapter 4: Mixers and detectors**	NO		Mixers	1,66	7
	26 29-30 nov.	**Chapter 8: antenna arrays, exercises** **Chapter 9: apertura antennas**	NO		Exercises.	1,66	
14	27 3-2 dic.	**Chapter 4: Mixers and detectors**	NO		Mixers		7

	28 PT: 4 dic. Recup Leg: 7 dic..	**Chapter 9: apertura antenna**	NO		Aperture antennas		
15	29 10-dic. PT recupera 11	**Chapter 9: apertura antenna**			Aperture antennas	1,66	
	30 13-12 dic. .	**Chapter 9: apertura antenna, exercises**	NO		Aperture antennas.	1,66	
16	31 17-18 diciembre	**Second exam**			All the contents explained till then		
SUBTOTAL						**51,66 +105(**) = 156,66**	
16		Preparación de examen					23
17							
TOTAL						**180**	

(*) El número de sesiones con 2 profesores o de laboratorios experimentales en grupos de 20 alumnos estará comprendido entre un mínimo de 2 y un máximo de 6. Además, al menos 2 de estas sesiones se celebrarán fuera del horario regular, para lo cual se debe rellenar la tabla que aparece más abajo CRONOGRAMA LABORATORIOS EXPERIMENTALES.

(**) 105 horas de trabajo del alumno como máximo en 15 semanas, suponiendo 30 horas por crédito ECTS.

Course organization and assesment

1) Lab work: 5 sessiones, final mark percentage 15%
2) First exam on amplifiers and radiation parameters 15% (final week of October)
3) Second exam: december 16th, 15%
4) Final exam: 55%, 45/100 is the mínimum mark to be achieved