



SUBJECT: Analogue Electronics 1										
GRADO: Grado en Ingeniería Electrónica Industrial y Automática						COURSE: 3º		TERM: 1 2013/2014		
PLANIFICACIÓN SEMANAL DE LA ASIGNATURA										
DATE	WEEK	SESSION	SESSION DESCRIPTION	GROUP (marcar X)				STUDENT HOMEWORK		
				THEORY	PRACTICE			DESCRIPTION	CLASS HOURS	HOME HOURS
11-sep	1	1	Section 0. Introduction. Section 1.1. Reviewing diodes. Section 1.2.1 to 1.2.3. Reviewing n-channel MosFet. Completing to the rest of the FETs. Section 1.3. Reviewing BJT Transistors .	X				Reviewing the 2º course subject "Fundamentos de Ingeniería Electrónica", particularly Diodes and n-channel MosFets, its applications (rectifiers and voltage limiters) and biasing circuits	2,5	7
12-sep	1	2	Reviewing Session 1 through solving exam level problems:: <ul style="list-style-type: none"> <li>Section 1.4.1.: Diodes applications.</li> <li>Section 1.2.4.: Biasing circuits</li> </ul>		X			Solving similar exam level examples	1,66	
18-sep	2	3	Section 2.1 Reviewing the Small Signal Concept. Section 2.2. Small Signal Models of Diodes, BJTs and FETs Section 2.3.1. Reviewing the amplification concept. Section 2.3.2.Reviewing the coupling capacitors. Linear Systems and Superposition Theorem.	X				Studying Section.	2,5	7

19-sep	2	4	Section 1.4.2. DC analysis with BJTs and Mosfets examples Section 1.4.3. Current Sources examples.		X			Solving similar exam level examples	1,66	
25-sep	3	5	<b>Lab Session 1: The Transistor and the Diode. DC Analysis.</b>		X			Lab material.	1,66	7
26-sep	3	6	Section 2.3.3. Analysis of a Common-Drain amplifier. Section 2.3.3.1. Analysis of a Common-Emitter amplifier, CE with emitter capacitor, and common-collector and amplifier.	X				Reviewing Session 3 and analysis of the rest of the configurations, both for BJTs and FETs.	1,66	
02-oct	4	7	Reviewing Section 2 through the solving of exam level problems.		X			Solving similar exam level examples	1,66	7
03-oct	4	8	Section 2.3.4 Static and dynamic lines. Dynamic range. Section 2.3.5. Multistage amplifiers.	X				Studying Section	1,66	
09-oct	5	9	<b>Lab Session 2: Electronic Amplifiers: Small Signal.</b>		X			Lab material.	1,66	7
10-oct	5	10	(Sections 1 and 2) <b>Exam 1: Solving an exam level problem of DC and small signal analysis.</b> Section 3.1. Basic concepts of frequency response. Examples.	X				Solving similar exam level examples	1,66	
16-oct	6	11	Application exercises of Section 3.1.: transfer functions of RC circuits and Bode Diagrams.		X			Solving similar exam level examples	1,66	7

17-oct	6	12	Section 3.2.2. Time constants method and its application to CE and CC configurations.	X				Application of the Time constants method to CB configuration.	1,66	
23-oct	7	13	(Section 3.2.2.) Exam level problems of CE and CC configurations frequency response.		X			Solving similar exam level examples	1,66	7
24-oct	7	14	Section 3.2.3. Time constants method and its application to CS and CD configurations	X				Time constants method and its application to CG configuration	1,66	
30-oct	8	15	<b>Lab Session 3: Electronic Amplifiers: Frequency Response.</b>		X			Lab material.	1,66	7
31-oct	8	16	(Section 3) <b>Exam 2: Solving an exam level problem of Frequency Response.</b> Section 4.1. Basic concepts of feedback systems. Examples.	X				Solving similar exam level examples	2,5	
06-nov	9	17	(Section 4.1.) Obtaining the Equivalent Quadropole. Solving simple feedback circuits.		X			Solving similar exam level examples.	1,66	7
07-nov	9	18	Section 4.2. y 4.3. Ideal Series-Parallel feedback amplifier. Expanding to a real case with load effects.	X				Analysis of ideal feedback amplifiers Series-Series, parallel-parallel and parallel-series.	1,66	
13-nov	10	19	(Section 4.2.) Exercises of Series-Parallel feedback amplifiers.		X			Solving similar exam level examples	1,66	7

14-nov	10	20	Section 4.3. Analysis of a real series-series and parallel-parallel feedback amplifier.	X				Analysis of a real parallel-series feedback amplifier.	1,66	
20-nov	11	21	(Section 4.3.) Exercises of feedback amplifiers of the rest of the topologies.		X			Solving similar exam level examples	1,66	7
21-nov	11	22	(Section 4) <b>Exam 3: Solving an exam level problem of feedback amplifiers.</b> Section 5.1. Reviewing of Operational Amplifiers and its basic configurations.	X				Studying Section and reviewing the 2º course subject "Fundamentos de Ingeniería Electrónica", particularly the OA concepts and problems in both open circuit and feedback configurations.	1,66	
27-nov	12	23	<b>PRÁCTICA 4: Feedback electronic Amplifiers.</b>		X			Lab material	1,66	7
28-nov	12	24	Section 5.2. Integrating and Derivative configurations based on AO. Examples. Section 5.3. Differential Amplifiers. Section 5.4. OA as a multistage Amplifier. Analysis of the AO-741.	X				Studying Section	2,5	
04-dic	13	25	Exercises of DA and OA.		X			Studying Section y solving examples	1,66	7
05-dic	13	26	Section 6.1 Stabilized Sources. Section 6.2 Regulated Sources.	X				Studying Section	1,66	
11-dic	14	27	(Sections 5 and 6) Mixed Examples of both Sections		X			Solving similar exam level examples	1,66	7

	14	28	(Sections 5 and 6) Exam 4: Differential amplifiers. Operational Amplifiers. Sources						0,83	
									<b>Subtotal 1</b>	
									<b>49,16</b>	<b>98</b>
									<b>Total 1 (Class Hours and working hours of the student during 1<sup>st</sup> to 14<sup>th</sup> weeks)</b>	
									145,5	
18-dic	15	29								
	16									
	17									32,833
	18									
									<b>Subtotal 2</b>	
									<b>Total 2 (Class Hours and working hours of the student during 15<sup>th</sup> to 18<sup>th</sup> weeks)</b>	
									32,833	
<b>TOTAL (Total 1 + Total 2. <u>Máximo 180 horas</u>)</b>									<b>180</b>	