Universidad Carlos III de Madrid

SUBJECT: Wireless and Mobile Networks		
MASTER DEGREE: Grado en Ingeniería en Tecnologías de Telecomunicación/Grado en Ingeniería de Sistemas de Comunicaciones/Grado en Ingeniería de Sistemas Audiovisuales	ECTS:3	QUARTER: 2

TIMETABLE FOR THE SUBJECT								
WEEK	SESSION	DESCRIPTION OF EACH SESSION	GROUP (X mark)		Indicate if a different lecture room is needed (computer, audiovisual, etc.)	HOMEWORK PER WEEK		
			1	2		DESCRIPTION (**)	ATTENDING HOURS	HOMEWORK Max. 7H/WEEK
1	1	Introduction. Presentation and introduction of the course. Introduction to Wireless networks				Read the documents associated with session 2	1,66	1
2	2	Fundamentals of wireless channels and wireless communications.				Review the concepts of session 2	1,66	1
3	3	The IEEE 802.11 family of standards, network topologies, frame format, addressing				Review the concepts of session 3 Read the documents for session 4 and 5	1,66	1
4	4	IEEE 802.11 Medium access control protocol				Review the concepts of session 4 Review the whole set of documents for the first week.	1,66	2
5	5	IEEE 802.11 advanced topics				Review the concepts of session 5	1,66	1

6	6	Lab: IEEE 802.11 basic configuration			LAB 4.1B01/2	Review all concepts associated with 802.11 Read the documents associated with the first lab.	1,66	3
7	7	Lab: IEEE 802.11, performance evaluation			LAB 4.1B01/2	Review all concepts associated with 802.11 Read the documents associated with the second lab.	1,66	3
8	8	Lab: IEEE 802.11, advance features			LAB 4.1B01/2	Review all concepts associated with 802.11 Read the documents associated with the third lab.	1,66	3
9	9	4G Networks (I) Introduction, terminology, architecture, access.				Read the documents associated with session 9	1,66	1
10	10	4G Networks (II) Core network, elements, interconnection.				Read the documents associated with session 10	1,66	1
11	11	5G Networking (I) Introduction, motivation, use cases				Review the documents of session 11.	1,66	1
12	12	Lab: 4G Networks			LAB 4.1B01/2	Work on the lab project	1,66	3
13	13	Lab: Project Development			LAB 4.1B01/2	Work on the lab project	1,66	3

14	14	Lab: Project Development			LAB 4.1B01/2	Work on the lab project	1,66	3
15	15	Lab: Project Development			LAB 4.1B01/2	Work on the lab project	1,66	3
16	16	Lab Presentation/Exam					1,66	-
TOTAL HOURS							26,56	30

(**) The documents associated with the session will be, depending on the session, slides with lecture notes, short articles or selected parts of the recommended books.