Universidad Carlos III de Madrid
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COURSE: Air Navigation Systems		
DEGREE: Master in Aeronautical Engineering	**YEAR: 3rd**	**TERM: 2nd**

La asignatura tiene 29 sesiones que se distribuyen a lo largo de 14 semanas. Los laboratorios pueden situarse en cualquiera de ellas. Semanalmente el alumnos tendrá dos sesiones, excepto en un caso que serán tres

WEEKLY PLANNING

WEEK	SESSION	DESCRIPTION	GROUPS (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	Indicate YES/NO If the session needs 2 teachers	WEEKLY PROGRAMMING FOR STUDENT		
			LECTURES	SEMINARS			DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	Introduction to the Course	X			YES	Reading corresponding notes chapters	1,6	5
1	2	Social, economical, and legal framework I	X			NO	Study and personal work about the lecture	1,6	
2	3	Social, economical, and legal framework II	X			NO	Reading corresponding notes chapters Study and personal work about the lecture	1,6	5
2	4	Aircraft types and characteristics		X		NO	Solve the proposed exercises/group work	1,6	
3	5	The main aircraft manufacturers	X			NO	Reading corresponding notes chapters Study and personal work about the lecture	1,6	7
3	6	The Airlines		X	X	NO	Solve the proposed exercises/group work	1,6	

4	7	Airlines operational cost	X			NO	Reading corresponding notes chapters Study and personal work about the lecture	1,6	5
4	8	Airline fleet planning; Airline Schedule development; Route planning		X	X	NO	Solve the proposed exercises/group work	1,6	
5	9	Aircraft operational perfomances I	X			NO	Reading corresponding notes chapters Study and personal work about the lecture	1,6	5
5	10	Aircraft operational perfomances II		X	X	NO	Solve the proposed exercises/group work	1,6	
6	11	Airline schedule optimization: fleet assignment, schedule design, crew, maintenance.	X			NO	Reading corresponding notes chapters Study and personal work about the lecture	1,6	7
6	12	Optimal Control theory		X	X	NO	Prepare Midterm Exam	1,6	
7	13	Trajectory Optimization Lab I	X			NO	Reading corresponding notes chapters Study and personal work about the lecture	1,6	7
7	14	Trajectory Optimization Lab II		X	X	NO	Solve the proposed exercises/group work	1,6	
							Subtotal 1	**22.4**	**41**

Total 1 *(Hours of class plus student homework hours between weeks 1-14)*	63.4

15		Tutorials, handing in, etc							2.5
16		Assessment							15
17									
18									
							Subtotal 2		**17.5**

Total 2 *(Hours of class plus student homework hours between weeks 15-18)*	27.5

TOTAL *(Total 1 + Total 2. Maximum 180 hours)*	**80.9**