



COURSE: TECHNOLOGY OF COATINGS AND SURFACE TREATMENTS		
POST-GRADUATED DEGREE: MASTER IN MATERIALS SCIENCE AND ENGINEERING	ECTS: 3	TERM: 1
Professor: Francisco Javier Velasco López		

WEEKLY PLANNING								
WEEK	SESSION	DESCRIPTION	GROUPS		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	WEEKLY PROGRAMMING FOR STUDENT		
			1	2		DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (max 7)
1	1	INTRODUCTION TO COATINGS AND SURFACE TREATMENTS					1.5	2
1	2	SURFACE PREPARATION OF METALS AND POLYMERS: ADHESION AND PERFORMANCE					1.5	2
2	3	ORGANIC COATINGS				Exercise 1: surface preparation	1.5	4
2	4	HOT-DIP COATINGS					1.5	2
3	5	PLATING I				Exercise 2: hot-dip coatings	1.5	4
3	6	PLATING II					1.5	2
4	7	AUTOCATALYTIC COATINGS				Exercise 3: plating	1.5	4
4	8	ANODIZING			1.S.A04 (Split session)	Exercise 4: organic coatings	1.5	3
5	9	LAB PRACTICE 1: MANUFACTURING METALLIC COATINGS. ORGANIC COATINGS (I)				Questions related to lab practice	1.5	4



5	10	THERMAL SPRAY. APPLICATION TO THERMAL BARRIERS				Exercise 5: Selection and comparison of coatings	1.5	3
6	11	LAB PRACTICE 2: CHARACTERIZING METALLIC COATINGS			1.S.A04 (Split session)	Questions related to lab practice	1.5	3
6	12	WEAR AND CERAMIC COATINGS					1.5	3
7	13	LAB PRACTICE 3: CHARACTERIZING ORGANIC COATINGS			1.S.A04 (Split session)	Questions related to lab practice	1.5	4
7	14	LAB PRACTICE 4: SELECTION OF COATINGS			To be determined	Questions related to lab practice	1.5	2
VISIT TO COMPANY OR RESEARCH CENTRE, RELATED TO COATINGS							3	
COLLECTIVE TUTORIAL: RESOLUTION OF EXERCISES RELATED TO COATINGS							1.5	
PREPARING EXAM								7.5
TOTAL HOURS							25.5	49.5