



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 (F Velasco)					1.5	2
1	2	SURFACE PREPARATION OF METALS AND POLYMERS: ADHESION AND PERFORMANCE (F Velasco)				Exercise 1: surface preparation	1.5	2
2	3	ORGANIC COATINGS (A Bautista)					1.5	4
2	4	LAB PRACTICE 1: CHARACTERIZING ORGANIC COATINGS (F Velasco)			1.S.A04 (Split session)	Questions related to lab practice	1.5	2
3	5	HOT-DIP COATINGS (F Velasco)				Exercise 2: hot-dip coatings	1.5	4
3	6	THERMAL SPRAY. APPLICATION TO THERMAL BARRIERS (F Velasco)					1.5	2
4	7	DIFFUSION COATINGS (F Velasco)					1.5	4
4	8	WEAR AND CERAMIC COATINGS (F Velasco)				Exercise 3: organic coatings	1.5	3



5	9	PLATING (A Bautista)				Exercise 4: plating	1.5	4
5	10	LAB PRACTICE 2: SELECTION OF COATINGS (F Velasco)			To be determined	Questions related to lab practice	1.5	3
6	11	AUTOCATALYTIC COATINGS (A Bautista)					1.5	3
6	12	LAB PRACTICE 3: MANUFACTURING METALLIC COATINGS. (F Velasco)			1.S.A04 (Split session)	Questions related to lab practice	1.5	3
7	13	ANODIZING (A Bautista)				Exercise 5: Selection and comparison of coatings	1.5	4
7	14	LAB PRACTICE 4: ANODIZING (A Bautista)			1.S.A04 (Split session)	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