uc3m Universidad Carlos III de Madrid

Vicerrectorado de Estudios Apoyo a la docencia y gestión del grado

COURSE: Mechanical Technology DEGREE: Bachelor in Mechanical Engineering YE

	WEEKLY PLANNING								
	s	DESCRIPTION	TEACHING (mark X)			WEEKLY PROGRAMMING FOR STUDENT			
W E K	E S I O N		L E T U R E S	S E N A R S	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)	
	1	Course presentation. Manufacture systems and processes. General concepts of Metrology				Pre-reading class topic	1.66		
1	2	Presses. Punching and Shearing				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6.5	
2	3	Practice 1: Modeling by shape deformation I. Tools.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66		
	4	Sheet metal cutting: Other cutting processes. Roll forming. Bending				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5	
3 -	5	Problems related with: Presses, shearing processes + Tests				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	65	
	6	Deep drawing.Profiling. Tests				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5	

YEAR: 3

TERM: 2

	WEEKLY PLANNING							
W E K	s	DESCRIPTION	TEACHING (mark X)			WEEKLY PROGRAMMING FOR STUDENT		
	E S I O N		L E C T U R E S	S E N A R S	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
	7	Problems + Tests				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6 F
4	8	Extrusion. Forging. Sheet metal forming problems + Tests				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.0
r	9	TEST 1. Sheet metal forming problems				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6.5
5	10	Introduction to machining processes: Tool geometries. Cutting parameters.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	
c	11	Practice 2: Sheet metal forming. Numerical modeling approach.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6 F
0	12	Timing and costs. Taylos equation.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5
7	13	Works in group definition. Introduction to machining processes problems.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6 F
/	14	Turning.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5
8	15	Turning's problems.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6 F
	16	Turning				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5

	WEEKLY PLANNING							
	s	DESCRIPTION	TEACHING (mark X)		SPECIAL ROOM	WEEKLY PROGRAMMING FOR STUDENT		
W E K	E S I O N		L E T U R E S	S E N A R S	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
	17	Practice 3: Modeling by machining: Cutting tools and tool- machines CNC.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	65
9	18	Milling				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5
10	19	Milling problems. Deadline for the preliminary works.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6 F
10	20	Types of CNC programs. Reference systems. ISO Codes.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5
11	21	TEST 2. Drilling. Reaming.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	65
	22	CNC's problems I				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5
12	23	CNC's problems II				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	65
12	24	CNC , Fix cycles.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5
13	25	CNC's problems. Deadline for the final works.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6.5
	26	CNC tool Tables. CAD-CAM. Parametric programation.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5

	WEEKLY PLANNING							
	s	DESCRIPTION	TEACHING (mark X)			WEEKLY PROGRAMMING FOR STUDENT		
W E K	E S I O N		L E C T U R E S	S E M I N A R S	FOR SESSION (Computer class room, audio-visual class room)	DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
14	27	Manufacturing of plastic elements. Injection molding.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	6 F
14	28	Welding. Problems				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	0.5
	29	Practice 4: Tool-machines CNC programming.				Pre-reading class topics and reviewing the related concepts discussed in previous classes.	1.66	3.25
Subtotal 1						48	94	
	Total 1 (Hours of class plus student homework)							42

15		Tutorials, handing in, etc					3.6	-
16								
17		Assessment	1 '				4	10
18			<u> </u>				<u> </u>	
	Subtotal 2							10
		Total 2 (Hours of class plus student homework)				1	.8	

TOTAL (<u>Maximun 160 horas</u>)	160
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