

<b>COURSE:</b>		
<b>DEGREE:</b>	<b>YEAR:</b>	<b>TERM:</b>

WEEKLY PLANNING								
WEEK	SESSION	DESCRIPTION	TEACHING (mark X)		SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)	WEEKLY PROGRAMMING FOR STUDENT		
			L E C T U R E S	S E M I N A R S		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
1	1	TEST OF PREVIOUS KNOWLEDGE. FUNDAMENTAL MECHANISMS. PASSIVE RESISTANCES. BEARINGS.	X		NO	Prior reading of the proposed topics. Fundamental mechanisms. Passive resistances. Pre-design of support elements	1,66	6,5
	2	PASSIVE RESISTANCE AND BEARINGS EXERCISES		X	NO	Application of knowledge related to the analysis of support elements and passive resistances	1,66	
2	3	CAM MECHANISMS I	X		NO	Prior reading of the proposed topics. Analysis and synthesis of cam-type mechanisms	1,66	6,5
	4	EXERCISES OF CAMS ANALYSIS AND SYNTHESIS		X	NO	Application exercises related to cam mechanisms	1,66	
3	5	CAM MECHANISMS II	X		NO	Application exercises related to cam mechanisms	1,66	6,5
	6	LAB 1. MECHANISMS AND MACHINES TOPOLOGY	X		LAB	lab practise number 1	1,66	
	7	TEST 1 CHAPTERS 1 AND 2 / RESOLUTION TESTS		X	NO	first test - topics 1 and 2	1,66	

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4	8	SPUR GEARS I. GEARS FUNDAMENTAL AND NOMENCLATURE	X		NO	Prior reading of the proposed topics. Introduction to gears. Types of gears. Fundamentals of spur gears	1,66	6,5
5	9	SPUR GEAR EXERCISES I		X	NO	Exercises of Analysis and selection of spur gears	1,66	6,5
	10	SPUR GEARS II. Spur gears cutting.	X		NO	Prior reading of the proposed topics. Interference. Cutting-types.	1,66	
6	11	SPUR GEAR EXERCISES II. Spur gears cutting.		X	NO	Advanced gear-cutting exercises with spur gears	1,66	6,5
	12	SPUR GEARS III. Spur gears assembling.	X		NO	Prior reading of the proposed topics. Types of Assembly and particularities	1,66	
7	13	SPUR GEAR EXERCISE III. Spur gears assembling.		X	NO	Advanced exercises of cutting and assembly of spur gears	1,66	6,5
	14	GEAR TRAINS I. Ordinary gear trains and simple planetary gear trains. TEST 2. CHAPTER 3	X		NO	Prior reading of the proposed topics. Introduction to gear trains. Types of trains. Ordinary and epicyclic gear trains. second test topic 3	1,66	
8	15	GEAR TRAINS II. Complex planetary gear trains.	X		NO	Prior reading of the proposed topics. Study of the complex epicyclic gear trains	1,66	6,5
	16	LAB 2. ANALYSIS AND SYNTHESIS OF MECHANISMS		X	LAB	lab practise number 2	1,66	
9	17	GEAR TRAIN EXERCISES I.		X	NO	Application of the analysis of complex epicyclic trains.	1,66	6,5
	18	LAB 3. CALCULATING THE PROFILE OF A CAM.			INF	lab practise number 3	1,66	
10	19	GEAR TRAIN EXERCISES II		X	NO	Exercises of ordinary and epicyclic gear trains	1,66	6,5
	20	Machine regulation: Flywheels. Balancing I	X		NO	Prior reading of the proposed topics. Concept and methods of regulation and balancing of machines. Inertia Flywheels .	1,66	
	21	Machine regulation EXERCISES I : Flywheels. Balancing.		X	NO	Application exercises for machine regulation	1,66	

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11	22	Machine regulation EXERCISES II : Flywheels. Balancing.	X		NO	Concept and methods of regulation and balancing of machines. Flywheels of inertia. Exercises	1,66	6,5
12	23	LAB 4.CHARACTERIZATION AND GENERATION OF GEAR TEETH.		X	LAB	lab practise number 4	1,66	6,5
	24	Shocks and percussions in kinematic pairs. TEST 3. CHAPTERS 4 AND 5	X		NO	Prior reading of the proposed topics. Concept and study of percussion. Study of energy in shocks. third test: topics 4 and 5	1,66	
13	25	EXERCISES OF APPLICATION OF PERCUSSIONS AND SHOCKS IN MULTI-BODY SYSTEMS		X	NO	Exercises for the application of shocks and percussions to multibody systems	1,66	6,5
	26	Analytical mechanics applied to mechanisms.	X		NO	Prior reading of the proposed topics. Study of analytical methods for the analysis of mechanisms.	1,66	
14	27	Analytical mechanics EXERCISES.		X	NO	Exercises of analysis of mechanisms through the use of analytical methods	1,66	6,5
	28	TEST 4. CHAPTERS 6 AND 7 / TEST SOLUTION	X		NO	fourth test: topics 6 and 7	1,66	
	29						1,66	3,25
<b>Subtotal 1</b>							<b>48</b>	<b>94</b>
<b>Total 1 (Hours of class plus student homework)</b>							<b>142</b>	
15		Tutorials, handing in, etc					3,6	-
16	17 18	Assessment					4	10
17								
18								
<b>Subtotal 2</b>							<b>8</b>	<b>10</b>
<b>Total 2 (Hours of class plus student homework)</b>							<b>18</b>	

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			L E C T U R E S	S E M I N A R S		DESCRIPTION	CLASS HOURS (1,66=50+50 min)	HOMEWORK HOURS (Max. Estim. 6,5h)
<b>TOTAL</b> ( <i>Maximun 160 horas</i> )						<b>160</b>		