



<b>COURSE: CALCULUS III</b>		
<b>DEGREE: INDUSTRIAL TECHNOLOGIES ENGINEERING</b>	<b>YEAR: SECOND</b>	<b>TERM: FIRST</b>

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	CHAPTER 1: FIRST ORDER DIFFERENTIAL EQUATIONS. DEFINITION AND EXAMPLES. ELEMENTARY RESOLUTION METHODS: SEPARATION OF VARIABLES, HOMOGENEOUS EQUATIONS, EXACT EQUATIONS.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
1	2	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 1.1.	1,6	
2	3	ELEMENTARY RESOLUTION METHODS (CONTINUED): INTEGRATING FACTORS, LINEAR EQUATIONS, BERNOULLI EQUATIONS.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
2	4	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 1.2.	1,6	

3	5	APPLICATIONS.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
3	6	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 1.3.	1,6	
4	7	CHAPTER 2: HIGHER ORDER EQUATIONS. LINEAR EQUATIONS OF ORDER N WITH CONSTANT COEFFICIENTS.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
4	8	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 2.1.	1,6	
5	9	EQUATIONS WITH VARIABLE COEFFICIENTS. ORDER REDUCTION AND EQUIDIMENSIONAL EQUATIONS. RELATION WITH LINEAR SYSTEMS.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
5	10	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 2.2.	1,6	
6	11	CHAPTER 3: LAPLACE TRANSFORM. DEFINITION AND PROPERTIES. TRANSFORMING AND BACKTRANSFORMING.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
6	12	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 3.1. SELFEVALUATION 1	1,6	
7	13	APPLICATION TO THE RESOLUTION OF LINEAR EQUATIONS AND SYSTEMS.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
7	14	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 3.2.	1,6	
8	15	CONTROL EVALUATION 1	X			NO	CONTROL EXAM.	1,6	6,5
8	16	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 3.2.	1,6	

9	17	CHAPTER 4: METHOD OF SEPARATION OF VARIABLES. INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS. EXAMPLES OF PDE'S FROM MATHEMATICAL PHYSICS. DIFFERENT KINDS OF EQUATIONS AND DATA.  SEPARATION OF VARIABLES	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
9	18	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 4.1.	1,6	
10	19	RESOLUTION OF PDE'S BY SEPARATION OF VARIABLES	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
10	20	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 4.1.	1,6	
11	21	ODD, EVEN, AND PERIODIC EXTENSIONS OF A FUNCTION. TRIGONOMETRIC FOURIER SERIES. ORTHOGONALITY. CONVERGENCE. DIFFERENTIATION AND INTEGRATION.  COMPLEX FORM OF A FOURIER SERIES.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
11	22	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 4.2.	1,6	
12	23	CHAPTER 5: STURM-LIOUVILLE PROBLEMS. DEFINITION AND PROPERTIES.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
12	24	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 5.1.	1,6	
13	25	RESOLUTION OF STURM-LIOUVILLE PROBLEMS.	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5
13	26	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 5.2. SELFEVALUATION 2.	1,6	
14	27	RESOLUTION OF STURM-LIOUVILLE PROBLEMS. (CONTINUED)	X			NO	STUDY OF SUBJECT'S THEORY.	1,6	6,5

14	28	EXERCISES AND DISCUSSION.		X		NO	EXERCISES OF ASSIGNMENT 5.2.	1,6	
	29	REVIEW AND TUTORING.	X			NO		1,6	
<b>Subtotal 1</b>								<b>48,33</b>	<b>91</b>
<b>Total 1 (Hours of class plus student homework hours between weeks 1-14)</b>								<b>139,33</b>	

15		CONTROL EVALUATION 2. TUTORIALS, HANDING IN, ETC	X			NO		2	6
16		ASSESSMENT						3	6
17									
18									
<b>Subtotal 2</b>								<b>5</b>	<b>12</b>
<b>Total 2 (Hours of class plus student homework hours between weeks 15-18)</b>								<b>17</b>	

<b>TOTAL (Total 1 + Total 2)</b>								<b>156,33</b>	
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