



<b>COURSE: AIRCRAFT SYSTEM</b>		
<b>DEGREE: AEROSPACE ENGINEERING</b>	<b>YEAR: 3rd</b>	<b>TERM: 1st</b>

<b>WEEKLY PLANNING</b>									
<b>WEEK</b>	<b>SESSION</b>	<b>DESCRIPTION</b>	<b>GROUPS (mark X)</b>		<b>SPECIAL ROOM FOR SESSION (Computer class room, audio-visual class room)</b>	<b>Indicate YES/NO If the session needs 2 teachers</b>	<b>WEEKLY PROGRAMMING FOR STUDENT</b>		
			<b>LECTURES</b>	<b>SEMINARS</b>			<b>DESCRIPTION</b>	<b>CLASS HOURS</b>	<b>HOMEWORK HOURS (Max. 7h week)</b>
1	1	Introduction to the subject Hydraulic systems (1/2)	X			NO	Reading the corresponding book chapters Study and personal work	1,67	3
2	2	Basic hydraulics for aircraft systems design Head losses in ducts Piping networks		X		NO	Reading the corresponding book chapters Study and personal work Solve the proposed exercises	1,67	3
3	3	Hydraulic systems (2/2)	X			NO	Reading the corresponding book chapters Study and personal work	1,67	3
4	4	LABORATORY #1 Design of a hydraulic system for actuation		X		NO	Reading the corresponding book chapters Study and personal work Solve the proposed lab problems	1,67	5
5	5	Pneumatic systems ○ Engine bleed-air control ○ Use of bleed-air in aircraft systems	X			NO	Reading the corresponding book chapters Study and personal work	1,67	3

		Environmental control systems ○ Temperature/pressure control ○ Cabin pressurization							
6	6	Problems on pneumatic systems and cooling cycles		X		NO	Reading the corresponding book chapters Study and personal work Solve the proposed exercises	1,67	3
7	7	Electrical systems ○ Power generation ○ Power distribution ○ Electric motors ○ Power storage	X			NO	Reading the corresponding book chapters Study and personal work	1,67	3
8	8	Weather Protection System + exercises		X		NO	Reading the corresponding book chapters Study and personal work Solve the proposed exercises	1,67	3
9	9	QUIZ Flight control System (1/2) ○ Flight control surfaces ○ Actuation systems	X			NO	Reading the corresponding book chapters Study and personal work	1,67	3
10	10	LABORATORY #2 Design of a pressurization system		X		NO	Reading the corresponding book chapters Study and personal work Solve the proposed lab problems	1,67	5
11	11	Flight control System (2/2) ○ Fly-by-wire ○ Case studies	X			NO	Reading the corresponding book chapters Study and personal work	1,67	3
12	12	Emergency systems ○ Warning systems ○ Fire detection and suppression ○ Emergency power sources, oxygen, etc. Engine control system ○ The control problem ○ Engine Starting ○ Reverse thrust	X			NO	Reading the corresponding book chapters Study and personal work	1,67	3
13	13	Fuel control system (1/2) ○ Fuel systems components ○ Fuel systems operating modes ○ Fuel level measurement systems	X			NO	Reading the corresponding book chapters Study and personal work	1,67	3
14	14	Exercises on fuel control system		X		NO	Reading the corresponding book chapters Study and personal work Solve the proposed exercises	1,67	3

							<b>Subtotal 1</b>	<b>23.3</b>	<b>46</b>
							<b>Total 1</b> ( <i>Hours of class plus student homework hours between weeks 1-14</i> )		69.3
15		Tutorials, handing in, etc					3		
16		Assessment					3	8	
17									
18									
							<b>Subtotal 2</b>	<b>3</b>	<b>11</b>
							<b>Total 2</b> ( <i>Hours of class plus student homework hours between weeks 15-18</i> )		14
							<b>TOTAL</b> ( <i>Total 1 + Total 2. Maximum 90 hours</i> )		<b>83.3</b>