



<b>COURSE: BIOCHEMISTRY</b>		
<b>DEGREE: Biomedical Engineering</b>	<b>YEAR: 2019-2020</b>	<b>TERM: 1</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 (4/9)	<b>Introduction</b>	X					1,6	6
1	2 (6/9)			X			Solve the proposed problems and exercises	1,6	
2	3 (11/9)	<b>Protein analysis I</b>	X					1,6	6
2	4 (14/9)			X			Solve the proposed problems and exercises	1,6	
3	5 (18/9)	<b>Protein analysis II. Post translational modifications</b>	X					1,6	6

3	6 (20/9)			X			Solve the proposed problems and exercises Selected paper discussion	1,6	
4	7 (25/9)	<b>Enzymes</b>	X					1,6	6
4	8 (27/9)			X			Solve the proposed problems and exercises	1,6	
5	9 (2/10)	<b>Metabolic Routes I: Energy and Glycolysis</b>	X					1,6	6
5	10 (4/10)			X			Solve the proposed problems and exercises Selected paper discussion	1,6	
6	11 (9/10)	<b>Metabolic Routes II: Krebs cycle, Oxidative Phosphorylation</b> <b>First Continuous Evaluation Test OCTOBER 19<sup>TH</sup></b>	X					1,6	6
6	12 (11/10)	<b>HOLIDAYS</b>		X			Solve the proposed problems and exercises Selected paper discussion	1,6	
7	13 (16/10)	<b>Metabolic Routes III. Biosynthesis and degradation</b>	X					1,6	6
7	14 (18/10)			X			Solve the proposed problems and exercises	1,6	
8	15 (23/10)	<b>Signal Transduction I. Membrane receptors. Second messengers. Main signalling pathways</b>	X					1,6	6
8	16 (25/10)			X			Solve the proposed problems and exercises	1,6	
9	17 (30/10)	<b>Signal Transduction II. Membrane receptors. Second messengers. Main signalling pathways</b>	X					1,6	6
9	18 (1/11)	<b>HOLIDAYS</b>		X			Solve the proposed problems and exercises Selected paper discussion	1,6	
10	19 (6/11)	<b>Cancer.</b> <b>Second Continuous evaluation Test (November 25<sup>th</sup>)</b>	X					1,6	6
10	20 (8/11)			X			Solve the proposed problems and exercises Selected paper discussion	1,6	
11	21 (13/11)	<b>Clinical Biochemistry I</b>	X					1,6	6
11	22 (15/11)			X			Solve the proposed problems and exercises Selected paper discussion	1,6	

12	23 (20/11)	<b>Clinical Biochemistry II (Diabetes and obesity)</b>	X					1,6	6
12	24 (22/11)			X			Solve the proposed problems and exercises	1,6	
13	25 (27/11)							1,6	6
13	29/11							1,6	
14	04/11							1,6	
14	26 (6/12)		X				Holidays		

**Subtotal 1**

**40**

**78**

**Total 1** (Hours of class plus student homework hours between weeks 1-14)

15	28 (14/12)		X					4,6	
15	29 (16/12)			X			Tutorials, review		

**Subtotal 2**

**4,6**

**Total 2** (Hours of class plus student homework hours between weeks 15-18)

**TOTAL A** (Total 1 + Total 2)

**44,6**

**LABORATORIES CLASSES PROGRAMMING (\*)**

WEEK	SESSION	DESCRIPTION	LABORATORY	WEEKLY PROGRAMMING FOR STUDENT		
				DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)

1	Cell culture <b>First group starts on Monday September 12th</b>	Tissue culture Cell and Tissue Engineering	Teams of 10 students	3,0	1
2	Cell Harvesting. Lysate preparation	Molecular Biology	Teams of 10 students	3,0	0,5
3	Protein Quantification. Immunofluorescence	Molecular Biology	Teams of 10 students	3,0	0,5
4	Protein electrophoresis. Western Blotting	Molecular Biology	Teams of 10 students	3,0	0,5
5	Enzyme Kinetics	Molecular Biology	Teams of 10 students	3,0	0,5
1			<b>Subtotal 3</b>	<b>15</b>	<b>3</b>
<b>Total 3</b> (Hours of class plus student homework hours of ten sessions laboratories)				<b>18</b>	
<b>TOTAL B</b> (Total 3)					

<b>TOTAL</b> (Total A + Total B. <u>Maximum 180 hours</u> )	
---	--

(\* In EPS are given an additional 16 hours of laboratory practices along ten sessions.