



<b>COURSE: Fundamental of tissue engineering and regenerative medicine (3º)</b>		
<b>DEGREE: Biomedical Engineering</b>	<b>YEAR: 2020-21</b>	<b>TERM: 2</b>

WEEKLY PLANNING									
Date	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)
<b>Feb4-5</b>	2	<b>Introduction (Justification/ structure)+ Organization of tissues &amp;organs</b>  Introduction to Virtual microscope (VM) and Histology		X			<b>UC3M ROOM</b>	1,6	3
<b>Feb 9</b>	3	<b>Epithelial Tissue</b>	X				Online Blackboard	1,6	6
<b>Feb 10</b>	4	VM Epithelium		X			Online Blackboard	1,6	

Feb 16	5	<b>Connective Tissue/Bone regeneration</b>	X				Online Blackboard	1,6	6
Feb 17	6	VM connective and Bone		X			Online Blackboard	1,6	
Feb 23	7	<b>Muscular Tissue</b>	X				Online Blackboard	1,6	6
Feb 24	8	VM Muscle		X			Online Blackboard	1,6	
Mar 2	9	<b>Blood and Circulatory system</b>	X				Online Blackboard	1,6	6
Mar 3	10	VM Blood and circulatory		X			Online Blackboard	1,6	
Mar 9	11	<b>Nervous Tissue &amp; Lymphatic system</b>	X				Online Blackboard	1,6	6
Mar 10	12	VM Nervous and lymphatic		X			Online Blackboard	1,6	
Mar 16	13	(Organ recognition)	X				Online Blackboard	1,6	6
Mar 18&22	14	VM exercises & doubts resolution		X			UC3M ROOM	1,6	
Mar 23	15	<b>Continuous Evaluation Test/Atlas test</b>	X				Online Blackboard	1,6	6
Mar 25&26	16	MOOC MOOC TUTORIAL and VIDEO assignment		X			UC3M ROOM	1,6	
Apr 6	17	<b>Cell culture (I)</b>	X				Online Blackboard	1,6	6
Apr 8&9	18	Lab Histological procedures: techniques and devices		X			UC3M ROOM	1,6	
Apr 13	19	<b>Cell culture (II): Bioreactors</b>	X				Online Blackboard	1,6	6
Apr 15&16	20	MOOC and Microscope (theory and use)		X			UC3M ROOM	1,6	
Apr 20	21	Redox signaling in regenerative medicine	X				Online Blackboard	1,6	6

Apr 22&23	22	MOOC & Practice test		X			UC3M ROOM	1,6		
Apr 27	23	Stem cells I	X				Online Blackboard	1,6		
Apr 29&30	24	MOOC		X			Online MOOC	1,6	6	
May 4	25	Stem cells II	X				Online Blackboard	1,6		
May 6-7	26	Continuous Evaluation Test: MOOC test	X				UC3M ROOM	1,6	6	
May 11	27	Histology as a diagnostic tool	28				Online Blackboard			Computer room
May 12	28	Video Exposition and Collective tutorial		X			Online Blackboard	1,6	6	
	29	Video Exposition and Collective tutorial		X			Online Blackboard	1,6	6	
<b>Subtotal 1</b>								<b>43,2</b>	<b>84</b>	
<b>Total 1</b> (Hours of class plus student homework hours between weeks 1-14)										

15		Tutorials, handing in, etc					Final review	3	
16		Assessment					Exam	3	
17									
18									
<b>Subtotal 2</b>								<b>6</b>	

LABORATORIES CLASSES PROGRAMMING (*)						
WEEK	SESSION	DESCRIPTION	LABORATORY	WEEKLY PROGRAMMING FOR STUDENT		
				DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
	1	Histology Staining Techniques: HE/E,	UC3M Bioengineering Labs		1,6	1

		<u>Immunohistochemistry and immunofluorescent</u>		Teams of 5 students		
	2	Tissue Recognition in the microscope	UC3M Bioengineering Labs	Teams of 5 students	1,6	1

<b>TOTAL B (Total 3)</b>	<b>26</b>
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<b>TOTAL (Total A + Total B. Maximum 180 hours)</b>	<b>159,2</b>
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*(\*) In EPS are given an additional 16 hours of laboratory practices along ten sessions.*