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

WEEKLY PLANNING								
WEEK 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)
1	1	**Introduction (Justification/ structure)+ Organization of tissues &organs**	X		yes		SINCRONIC ONLINE MODALITY	1,6	6
2	2	Introduction to Virtual microscope (VM) and Histology		X			Presential room	1,6	
2	3	**Epithelial** Tissue	X		yes		SINCRONIC ONLINE MODALITY	1,6	6
3	4	VM Epithelium		X			Computer room	1,6	
3	5	**Connective** Tissue/Bone regeneration	X		yes		SINCRONIC ONLINE MODALITY	1,6	6
4	6	VM connective and Bone		X			Computer room	1,6	
4	7	**Muscular** Tissue	X		yes		SINCRONIC ONLINE	1,6	6

Week	No	Topic					Modality / Room	1,6	
							MODALITY		
5	8	VM Muscle		X			Computer room	1,6	
5	9	**Blood and Circulatory system**	X		yes		SINCRONIC ONLINE MODALITY	1,6	
6	10	VM Blood and circulatory		X			Computer room	1,6	6
6	11	**Nervous** Tissue & Lymphatic system	X		yes		SINCRONIC ONLINE MODALITY	1,6	
7	12	VM Nervous and lymphatic		X			Computer room	1,6	6
7	13	**Organ recognition**	X		yes		SINCRONIC ONLINE MODALITY	1,6	6
8	14	VM exercises & doubts resolution		X			Presential room	1,6	
8	15	**Continuous Evaluation Test/Atlas assigment**	X		yes		Date & Rooms Previously noticed	1,6	6
9	16	MOOC TUTORY and VIDEO assignment		X			Presential room	1,6	
9	17	**Cell culture (I)**	X		yes		SINCRONIC ONLINE MODALITY	1,6	
10	18	MOOC		X			ONLINE MODALITY	1,6	6
10	19	**Cell culture (II): Bioreactors**	X		yes		SINCRONIC ONLINE MODALITY	1,6	
11	20	MOOC		X			ONLINE MODALITY	1,6	6
Apr 6-13	21	Holidays							
11	22	**Stem cells I**	X		yes		SINCRONIC ONLINE MODALITY	1,6	6

Week	#	Activity	col1	col2	col3	col4	Modality/Room	Hours	Homework
12	23	MOOC		X			ONLINE MODALITY	1,6	
12	24	**Stem cells II**	X		yes		SINCRONIC ONLINE MODALITY	1,6	
13	25	MOOC		X			ONLINE MODALITY	1,6	6
13	26	**Stem cells III**	X		yes		SINCRONIC ONLINE MODALITY	1,6	
14	27	Histology as a diagnostic tool		X	yes		Presential room	1,6	
14	28	**2nd Continuous Evaluation Test: MOOC test**	X				Date & Rooms Previously noticed	1,6	6
15	29	Video Exposition and/or Collective tutorial		X	yes		Computer room	1,6	6
							Subtotal 1	**44,8**	**84**

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

Week		Activity						Hours
15		Tutorials, handing in, etc					Final review	3
16		Assessment					Exam	3
17								
18								
							Subtotal 2	**6**

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

TOTAL A *(Total 1 + Total 2)*	**134,8**

WEEK	SESSION	DESCRIPTION	LABORATORY	DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
				WEEKLY PROGRAMMING FOR STUDENT		
	1	Basic knowledge of how work in a Histological Laboratory. Techniques and devices	UC3M Bioengineering Labs	Teams of 6-7students	1,6	1
	2	Sampling fixed and mounts of samples. Paraffin tissue section procedure.	UC3M Bioengineering Labs	Teams of 6-7students	1,6	1
	3	Microscope I: Theory and use	UC3M Bioengineering Labs	Teams of 6-7students	1,6	1
	4	Microscope II: Theory and use	UC3M Bioengineering Labs	Teams of 6-7students	1,6	1
	5	Histology Staining Techniques I: HE/E, Immunohistochemistry & immunofluorescent	UC3M Bioengineering Labs Presential	Teams of 6-7students	1,6	1
	6	Histology Staining Techniques II: HE/E, Immunohistochemistry &immunofluorescent	UC3M Bioengineering Labs	Teams of 6-7students	1,6	1
	7	Tissue Recognition in the microscope I	UC3M Bioengineering Labs	Teams of 6-7students	1,6	1
	8	Tissue Recognition in the microscope II	UC3M Bioengineering Labs	Teams of 6-7students	1,6	1
	9	Tissue Recognition in the microscope III	UC3M Bioengineering Labs	Teams of 6-7students	1,6	1
	10	Recognition of your tissue section	UC3M Bioengineering Labs Presential	Teams of 6-7students	1,6	1
				Subtotal 3	**16**	**10**
			Total 3 (Hours of class plus student homework hours of ten sessions laboratories)			**26**
			TOTAL B (Total 3)			**26**
TOTAL (Total A + Total B. _Maximum 180 hours_)						**160,8**

(*) _In EPS are given an additional 16 hours of laboratory practices along ten sessions._