Universidad Carlos III de Madrid
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COURSE: Fundamental of tissue engineering and regenerative medicine (3º)		
DEGREE: Biomedical Engineering	YEAR: 2018-19	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 Jan29	2	**Introduction** (Justification/ structure)+ Organization of tissues &organs	X		yes		Room 7.1.J06	1,6	6
2 Jan31 &Feb1	3	Introduction to Virtual microscope (VM) and Histology		X			Computer room	1,6	
2 Feb 5	4	**Epithelial** Tissue	X		yes		Room 7.1.J06	1,6	6
3 Feb 7&8	5	VM Epithelium		X			Computer room	1,6	
3 Feb 12	6	**Connective** Tissue/Bone regeneration	X		yes		Room 7.1.J06	1,6	6
4	7	VM connective and Bone		X			Computer room	1,6	

Feb 14&15										
4 **Feb 19**	8	**Muscular** Tissue	X		yes		Room 7.1.J06	1,6	6	
5 **Feb 21&22**	9	VM Muscle		X			Computer room	1,6		
5 **Feb 26**	10	**Blood and Circulatory system**	X		yes		Room 7.1.J06	1,6	6	
6 **Feb 28&Mar1**	11	VM Blood and circulatory		X			Computer room	1,6		
6 **Mar 5**	12	**Nervous** Tissue & Lymphatic system	X		yes		Room 7.1.J06	1,6	6	
7 **Mar 7&8**	13	VM Nervous and lymphatic		X			Computer room	1,6		
7 **Mar 12**	14	**Continuous Evaluation Test/Atlas assigment**	X		yes		Date & Computer Rooms Previously noticed	1,6	6	
8 **Mar 14&15**	15	MOOC TUTORY and VIDEO assingment		X			Computer room	1,6		
8 **Mar 19**	16	**Organs Recognition**	X		yes		Room 7.1.J06	1,6	6	
9 **Mar 21&22**	17	**Histology as a diagnostic tool**		X			Computer room	1,6		
9 **Mar 26**	18	**Cell culture (I)**	X		yes		Room 7.1.J06	1,6	6	
10 **Mar 28&29**	19	MOOC		X			Computer room	1,6		
10 **Apr 2**	20	**Cell culture (II): Bioreactors**	X		yes		Room 7.1.J06	1,6	6	
11 **Apr 4&5**	21	MOOC		X			Computer room	1,6		
11 **Apr 9**	22	**Stem cells I**	X		yes		Room 7.1.J06	1,6	6	
12 **Apr 11&12**	23	MOOC		X			Computer room	1,6		
12 **Apr 23**	24	**Stem cells II**	X		yes		Room 7.1.J06	1,6	6	
13 **Apr 25&26**	25	MOOC		X			Computer room	1,6		

13 Apr 30	26	**Stem cells III**	X		yes		Room 7.1.J06	1,6		
14 May 7	27	**Continuous Evaluation Test/MOOC test**	X				Date & Computer Rooms Previously noticed	1,6	6	
14 May 9&10	28	MOOC→ End of classes		X	yes		Computer room	1,6	6	
							Subtotal 1	**43,2**	**84**	
		Total 1 *(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									
							Subtotal 2	**6**	
		Total 2 *(Hours of class plus student homework hours between weeks 15-18)*							

TOTAL A *(Total 1 + Total 2)*	**133,2**

LABORATORIES CLASSES PROGRAMMING (*)

WEEK	SESSION	DESCRIPTION	LABORATORY	WEEKLY PROGRAMMING FOR STUDENT		
				DESCRIPTION	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
	1	Basic knowledge of how work in a Histological Laboratory. Techniques and devices	UC3M Bioengineering Labs	Teams of 10 students	1,6	1
	2	Sampling fixed and mounts of samples. Paraffin tissue section procedure.	UC3M Bioengineering Labs	Teams of 10 students	1,6	1

	3	Microscope I: Theory and use	UC3M Bioengineering Labs	Teams of 10 students	1,6	1
	4	Microscope II: Theory and use	UC3M Bioengineering Labs	Teams of 10 students	1,6	1
	5	Histology Staining Techniques I: HE/E, Immunohistochemistry and immunofluorescent	UC3M Bioengineering Labs	Teams of 10 students	1,6	1
	6	Histology Staining Techniques II: HE/E, Immunohistochemistry and immunofluorescent	UC3M Bioengineering Labs	Teams of 10 students	1,6	1
	7	Tissue Recognition in the microscope I	UC3M Bioengineering Labs	Teams of 10 students	1,6	1
	8	Tissue Recognition in the microscope II	UC3M Bioengineering Labs	Teams of 10 students	1,6	1
	9	Tissue Recognition in the microscope III	UC3M Bioengineering Labs	Teams of 10 students	1,6	1
	10	Recognition of your tissue section	UC3M Bioengineering Labs	Teams of 10 students	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)*	**159,2**

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