



COURSE: BIOMEDICAL MICRODEVICES		
DEGREE: BIOMEDICAL ENGINEERING	YEAR: 2017/2018	TERM: 2nd

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 (25/01)	1	Biomedical microdevices: Introduction to the course / Introduction to the microscale	M1				Reading of proposed topics	1,6	3
2 (29/01)	2	BioMEMS Materials I	M2				Reading of proposed topics & student activity	1,6	6
2 (01/02)	3	BioMEMS Materials II	M3				Reading of proposed topics & student activity	1,6	
3 (05/02)	4	Microfabrication Methods I	M4				Reading of proposed topics & student Activity	1,6	6
3 (08/02)	5	Microfabrication Methods II	M5				Reading of proposed topics &	1,6	

							student activity		
4 (12/02)	6	Microfluidics I	M6				Reading of proposed topics & student Activity	1,6	6
4 (15/02)	7	Microfluidics II	M7				Reading of proposed topics & student activity	1,6	
5 (19/02)	8	Microfluidics III, Seminar: Lab on a Chip	M8	X			Reading of proposed topics, Seminar Seminar: Alberto Escarpa UAH	1,6	6
5 (22/02)	9	Lab on a Chip and Micro Total Analysis	M9				Reading of proposed topics & student activity	1,6	
6 (26/02)	10	Scientific Paper Presentations 1-7					Scientific papers 1-9	1,6	6
6 (01/03)	11	Scientific Paper Presentations 8-14					Scientific papers 10-17	1,6	
7 (05/03)	12	Sensing and Detection Methods I	M10				Reading of proposed topic & student activity	1,6	12
7(08/03)	13	Sensing and Detection Methods II, Seminar: Optical Sensors	M11	X			Reading of proposed topics & seminar Seminar: Miguel Holgado CTB	1,6	
8 (12/03)	14	BioMEMS for analysis and diagnosis: Molecular Biology on a Chip I	M12				Reading of proposed topics & student activity	1,6	6
8 (15/03)	15	BioMEMS for analysis and diagnosis: Molecular Biology on a Chip II	M13				Reading of proposed topics & student activity	1,6	
9 (19/03)	16	PDMS III		X			Practice	1,6	6
9 (22/03)	17	Midterm exam I					Reading of proposed topics & student activity Exam		
10 (26/03)		Easter							

10 (29/03)		Easter							
11 (02/04)		Easter							
11 (05/04)	18	Glucometer III		X			Practice	1,6	3
12 (09/04)	19	Glucometer IV		X			Practice	1,6	6
12 (12/04)	20	BioMEMS for analysis and diagnosis: Flow cytometry exercise		X			Practice	1,6	
13 (16/04)	21	Cell-Based Chips I	M14				Reading of proposed topics & student activity	1,6	6
13 (19/04)	22	Cell-Based Chips II	M15				Reading of proposed topics & student activity	1,6	
14 (23/04)	23	Hybrid Technologies: BioMEMs for Cell Biology I	M16				Reading of proposed topics & student activity	1,6	6
14 (26/04)	24	Hybrid Technologies: BioMEMs for Cell Biology II	M17				Reading of proposed topics & student activity	1.6	
15 (30/04)		Labor Day Holiday							9
15 (03/05)	25	Midterm exam II , Seminar: Non-invasive white cell counts at the tip of your finger		X			Exam & Seminar Seminar: Carlos Castro, MIT&UPM	1,6	
16 (07/05)	26	BioMEMS Outdoor Class					Revision	1,6	3
Subtotal 1								41,6	90
Total 1 (Hours of class plus student homework hours between weeks 1-15)								131,6	

17		Tutorials, handing in, etc							3
18		Assessment							6
19									
20									

Subtotal 2	6	
Total 2 (<i>Hours of class plus student homework hours between weeks 16-19</i>)	9	
TOTAL A (<i>Total 1 + Total 2</i>)	140,6	

