Universidad Carlos III de Madrid

SUBJECT:	Emergent Technologies in Biomedicine		
MASTER DEGREE: MASTER IN BIOMEDICAL TECHNOLOGIES MANAGEMENT AND DEVELOPMENT		ECTS: 4.0	QUARTER: 1

TIMETABLE FOR THE SUBJECT

WEEK	SESSION	DESCRIPTION OF EACH SESSION	GROUP (X mark)		Indicate if a different lecture room is needed (computer, audiovisual, etc.)	HOMEWORK PER WEEK		
			1	2		DESCRIPTION	ATTENDING HOURS	HOMEWORK (Max. 7H/WEEK)
1	1 (21 sept)	Introduction to the course, synthetic and system biology	X				1.5	1.5
1	2 (21 sept)	Protein protein interaction networks	X				1.5	1.5
2	3 (28 sept)	Graph theory	X				1.5	1.5
2	4 (28 sept)	Metabolic networks	X				1.5	1.5
3	5 (05 oct)	Network analysis practice: Cytoscape and iGraph	X		Computer practice		1.5	1.5

3	6 (05 oct)	Network analysis practice: Cytoscape and iGraph	X		Computer practice		1.5	1.5
4	7 (19 oct)	Gene regulatory networks. Other networks	X				1.5	1.5
4	8 (19 oct)	Network analysis in disease	X				1.5	1.5
5	9 (26 oct)	Introduction to synthetic biology.	X				1.5	1.5
5	10 (26 oct)	The jaergon of synthetic biology	X				1.5	1.5
6	11 (09 nov)	Logic gates with biological devices	X		Computer practice		1.5	1.5
6	12 (09 nov)	Biological chassis and genetic tools	X		Computer practice		1.5	1.5
7	13 (16 nov)	Genetic editing: MAGE and CRISPR-Cas9	X				1.5	1.5
7	14 (16 nov)	Towards a non natural biology and its ramifications	X				1.5	1.5

8	15 (23 nov)	3D printing and tissue bioprinting	X				1.5	1.5
8	16 (23 nov)	3D printing and tissue bioprinting	X				1.5	1.5
9	17 (30 nov)	Microfabrication	X				1.5	1.5
9	18 (30 nov)	Biosensors and devices on a chip	X				1.5	1.5
		Exam preparation, tutorships, work group…	X					46
TOTAL HOURS							27	73