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	Introduction to the course, synthetic and system biology	X				1.5	1.5
1	2	Protein protein interaction networks	X				1.5	1.5
2	3	Graph theory	X				1.5	1.5
2	4	Metabolic networks	X				1.5	1.5
3	5	Introduction to synthetic biology.	X				1.5	1.5

3	6	The jaergon of synthetic biology	**X**				1.5	1.5
4	7	Network analysis practice: Cytoscape and iGraph	**X**		Computer room		1.5	1.5
4	8	Network analysis practice: Cytoscape and iGraph	**X**		Computer room		1.5	1.5
5	9	Gene regulatory networks. Other networks	**X**				1.5	1.5
5	10	Network analysis in disease	**X**				1.5	1.5
6	11	Logic gates with biological devices	**X**				1.5	1.5
6	12	Towards a non natural biology and its ramifications	**X**				1.5	1.5
7	13	Human machine interaction	**X**				1.5	1.5
7	14	Human machine interaction	**X**				1.5	1.5

8	15	Biological chassis and genetic tools	**X**				1.5	1.5
8	16	Genetic editing: MAGE and CRISPR-Cas9	**X**				1.5	1.5
9	17	Microfabrication	**X**				1.5	1.5
9	18	Biosensors and devices on a chip	**X**				1.5	1.5
		Exam preparation, tutorships, work group…	**X**					46
TOTAL HOURS							27	73