



<b>COURSE: Informatics and Biotechnology to Support Tissue Engineering</b>		
<b>DEGREE: Biomedical Engineering</b>	<b>YEAR: 2014/2015</b>	<b>TERM: 2nd semester</b>

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	1	Gene and protein sequencing	x				Reading of proposed topics. Bibliographic research	1,6	6
1	2	Presentation and discussion of some practical examples, problems and articles		x				1,6	
2	3	Gene expression analysis	x				Reading of proposed topics. Bibliographic research	1,6	6
2	4	Presentation and discussion of some practical examples, problems and articles		x				1,6	
3	5	Protein expression analysis	x				Reading of proposed topics. Bibliographic research	1,6	6
3	6	Presentation and discussion of some practical examples, problems and articles		x				1,6	
4	7	Protein interactions	x				Reading of proposed topics.	1,6	6

							Bibliographic research		
4	8	Presentation and discussion of some practical examples, problems and articles		x				1,6	
5	9	Genomic analysis	x				Reading of proposed topics. Bibliographic research	1,6	6
5	10	Presentation and discussion of some practical examples, problems and articles		x				1,6	
6	11	Proteomic analysis	x				Reading of proposed topics. Bibliographic research	1,6	6
6	12	Presentation and discussion of some practical examples, problems and articles		x				1,6	
7	13	Systems biology	x				Reading of proposed topics. Bibliographic research	1,6	6
7	14	Presentation and discussion of some practical examples, problems and articles		x				1,6	
8	15	Synthetic biology	x				Reading of proposed topics. Bibliographic research	1,6	6
8	16	Presentation and discussion of some practical examples, problems and articles		x				1,6	
9	17	Quantitative imaging in Cell Biology and analysis techniques	x				Reading of proposed topics. Bibliographic research	1,6	6
9	18	Presentation and discussion of some practical examples, problems and articles		x				1,6	
10	19	Quantitative analysis in tissue engineering	x				Reading of proposed topics. Bibliographic research	1,6	6
10	20	Presentation and discussion of some practical examples, problems and articles		x				1,6	
11	21	Digital fabrication of tissues	x				Reading of proposed topics. Bibliographic research	1,6	6
11	22	Presentation and discussion of some practical examples, problems and articles		x				1,6	
12	23	Automatic systems for quality control					Reading of proposed topics. Bibliographic research	1,6	6
12	24	Presentation and discussion of some practical examples, problems and articles						1,6	
13	25	Analysis data techniques and clinical interfaces						1,6	3
<b>Subtotal 1</b>								<b>40</b>	<b>75</b>

<b>Total 1</b> ( <i>Hours of class plus student homework hours between weeks 1-14</i> )	115
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15		Tutorials, handing in, etc						1,5
16		Assessment						3
17							6	
18								

**Subtotal 2**      **3**      **7,5**

<b>Total 2</b> ( <i>Hours of class plus student homework hours between weeks 15-18</i> )	10,5
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<b>TOTAL</b> ( <i>Total 1 + Total 2</i> )	<b>125,50</b>
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