

COURSE: Image processing and reconstruction (15551)

DEGREE: BIOMEDICAL ENGINEERING

YEAR: 2017/18

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			DATE	CLASS HOURS	HOMEWORK HOURS (Max. 7h week)
1	1	Course presentation. Elements of Visual Perception. Human Visual System.	X				Jan 24	1,6	7
1	2	Matlab refreshment		X		X	Jan 25 & Jan 26	1,6	
2	3	Image Sampling and Quantization. Hw1	X				Jan 31	1,6	7
2	4	Spatial and gray level resolution. Examples		X			Feb 1 & Feb 2	1,6	
3	5	Geometrical transformations. Hw2	X				Feb 7	1,6	7
3	6	Understanding Zooming, Shrinking and Transforming in digital images.		X			Feb 8 & Feb 9	1,6	
4	7	Point processing.	X				Feb 14	1,6	7
4	8	Image enhancement. Point processing II.		X			Feb 15 & Feb 16	1,6	
5	9	Color images.	X				Feb 21	1,6	7
5	10	Color images II. Image file formats.		X			Feb 22 & Feb 23	1,6	
6	11	Image filtering in spatial domain	X				Feb 28	1,6	7
6	12	Exercises on Spatial filtering		X			Mar 1 & Mar 2	1,6	
7	13	Spatial Filtering III	X				Mar 8	1,6	7
7	14	Exam exercises		X		X	Mar 9 & Mar 10	1,6	

8	15	PARTIAL EXAM	X				Mar 14	1,6	
8	16	Mathematical morphology		X			Mar 15 & Mar 16	1,6	7
9	17	Segmentation I.	X				Mar 21	1,6	
9	18	Segmentation II. Fourier III		X			Mar 22 & Mar 23	1,6	7
10	19	Image filtering in Fourier domain I	X				Apr 4	1,6	
10	20	Fourier II		X		X	Apr 5 & Apr 6	1,6	7
11	21	Segmentation III. Group practice description.	X				Apr 11	1,6	
11	22	Exercises on Fourier analysis		X			Apr 12 & Apr 13	1,6	7
12	23	Image compression	X				Apr 18	1,6	
12	24	Image compression II		X			Apr 19 & Apr 20	1,6	7
13	25	Medical Image Modalities I	X				Apr 25	1,6	
13	26	Medical Image Modalities II		X			Apr 26 & Apr 27	1,6	7
14	27	Group practice presentations		X			May 3 & May 4	1,6	
14	28	Tutorial. Exam exercises					May 7-11	1,6	7
14	29	Tutorial. Exam exercises					May 7-11	1,6	
Subtotal 1								46,4	98
Total 1 (Hours of class plus student homework hours between weeks 1-14)								144,4	

15		Tutorials, handing in, etc						2	
16		Assessment						3	8
17									
18									
Subtotal 2								5	8
Total 2 (Hours of class plus student homework hours between weeks 15-18)								13	
TOTAL A (Total 1 + Total 2)								155,8	

