

Course Schedule*

BME 416/516 Biomedical Imaging

Fall 2011, Tuesdays, Thursdays, 2:00 – 3:15 pm, Psych 206

#	Date	Topic (Instructor)
1	8/23	Introduction to Biomedical Imaging (Trouard)
2	8/25	Functions and Convolutions (Trouard)
3	8/30	Convolutions and Fourier Transforms (Trouard)
4	9/1	Fourier Transforms (Trouard)
5	9/6	Fourier Transforms (Trouard)
6	9/8	Systems (Trouard)
7	9/13	Point Spread Functions, Sampling (Trouard)
8	9/15	Sampling (Trouard)
9	9/20	Sampling (Trouard)
10	9/22	Image Quality I, (Trouard)
11	9/27	Image Quality II, Review (Trouard)
12	9/29	Exam I
13	10/4	Production and control of x-rays (Trouard)
14	10/6	Interactions of x-rays with tissue (Trouard)
15	10/11	X-ray CT – I (Trouard)
16	10/13	X-ray CT – II (Trouard)
17	10/18	X-ray CT – III (Trouard)
18	10/20	Nuclear Magnetic Resonance - I (Trouard)
19	10/25	Nuclear Magnetic Resonance – II (Trouard)
	10/??	<i>CT Demonstration, Radiology (Trouard)</i>
20	10/27	Magnetic Resonance Imaging – III (Trouard)
	10/??	<i>CT Demonstration, Radiology (Trouard)</i>
21	11/1	Magnetic Resonance Imaging – IV (Trouard)
22	11/3	Magnetic Resonance Imaging – V (Trouard)
23	11/??	<i>MRI Demonstration, Radiology (Trouard)</i>
24	11/8	Exam II
25	11/10	Geometrical Optics (Utzinger)
26	11/15	Geometrical Optics/Physical Optics (Utzinger)
27	11/17	Physical Optics (Utzinger)
28	11/22	Coherent and Incoherent Imaging (Utzinger)
29	11/24	Thanksgiving – No Class
30	11/29	Optical Microscopes (Utzinger)
31	12/1	Contrast Mechanisms in Optical Microscopy (Utzinger)
32	12/6	Advanced Optical Microscopy Techniques (Utzinger)
33	12/9	Final Examination (1:00 – 3:00 pm)

*Current as of 08/22/2011. Dates subject to change.