

# Course Schedule\*

## BME 416/516 Biomedical Imaging

Fall 2009, Tuesdays, Thursdays, 2:00 – 3:15 pm, ILC 141

#	Date	Topic (Instructor)
1	8/25	Introduction to Biomedical Imaging (Trouard)
2	8/27	Functions and Convolutions (Trouard)
3	9/1	Convolutions and Fourier Transforms (Trouard)
4	9/4	Fourier Transforms (Trouard)
5	9/8	Fourier Transforms (Trouard)
6	9/10	Systems (Trouard)
7	9/15	Point Spread Functions, Sampling (Trouard)
8	9/17	Sampling (Trouard)
9	9/22	Sampling (Trouard)
10	9/24	Image Quality I, (Trouard)
11	9/29	Image Quality II, Review (Trouard)
12	10/1	Exam I
13	10/6	Production and control of x-rays (Trouard)
14	10/8	Interactions of x-rays with tissue (Trouard)
15	10/13	X-ray CT – I (Trouard)
16	10/15	X-ray CT – II (Trouard)
17	10/20	Nuclear Magnetic Resonance (Trouard)
18	10/22	Magnetic Resonance Imaging – I (Trouard)
19	10/27	Magnetic Resonance Imaging – II (Trouard)
20	10/29	Magnetic Resonance Imaging – III (Trouard)
21	11/3	Special Topics, Review (Trouard)
22	11/5	Exam II
23	11/10	Geometrical Optics (Gmitro)
24	11/12	Radiometry (Gmitro)
25	11/17	Physical Optics (Gmitro)
26	11/19	Coherent and Incoherent Imaging (Gmitro)
27	11/24	Optical Microscopes (Gmitro)
28	11/26	Thanksgiving Break
29	12/1	Contrast Mechanisms in Optical Microscopy (Gmitro)
30	12/3	Advanced Optical Microscopy Techniques (Gmitro)
31	12/8	Endoscopy (Gmitro)
32	12/17	Final Examination (2:00 – 4:00 pm)

\*Current as of 9/16/2009