

HST 164 – Principles of Biomedical Imaging
Syllabus, Jan 2019, MIT E25-17

DATE	DETAILS	TIME
WED JAN 9, 2019	Biomedical Imaging in Clinical Care - Sosnovik	1:30pm to 2pm
	Basics of Fourier Transform - Sosnovik	2pm to 3pm
	Introduction to Magnetic Resonance - Huang	3pm to 4:30pm
	Session 1 Problem Set	4:30pm to 5:30pm
THU JAN 10, 2019	Tabletop MRI Lab Part 1 - Huang & Sosnovik	1:30pm to 5:30pm
WED JAN 16, 2019	Sampling of Biomedical Signals - Sosnovik	1:30pm to 2:30pm
	X-Ray in Medical Imaging - Huang	2:30pm to 3:30pm
	Computed Tomography - Huang	3:30pm to 4:30pm
	Session 3 Problem Set	4:30pm to 5:30pm
THU JAN 17, 2019	Image Formation in MRI Part 1 - Sosnovik	1:30pm to 2:30pm
	Image Formation in MRI Part 2 - Sosnovik	2:30pm to 3:30pm
	Session 4 Problem Set & k-space Jeopardy	3:30pm to 5:30pm
WED JAN 23, 2019	Tabletop MRI Lab Part 2 - Huang & Sosnovik	1:30pm to 5:30pm
THU JAN 24, 2019	Ultrasound - Sosnovik	1:30pm to 2:30pm
	Motion and Flow 1: Doppler - Sosnovik	2:30pm to 3:30pm
	Motion and Flow 2: Phase Contrast - Sosnovik	3:30pm to 4:30pm
	Session 6 Problem Set	4:30pm to 5:30pm
WED JAN 30, 2019	SPECT and PET - Huang	1:30pm to 3pm
	Energetics and Metabolism - Huang	3pm to 4pm
	Session 7 Problem Set	4pm to 5:30pm
THU JAN 31, 2019	Degeneration and Inflammation - Huang	1:30pm to 2:30pm
	Session 8 Problem Set	2:30pm to 3:30pm
	Case Review in Ultrasound and MSK	3:30pm to 5:30pm