

Date	Topic
9/6/17	Class Overview; History of Tissue Engineering, Sources of cells and cell culture techniques
9/11/16	Extracellular Signaling, Extracellular Matrix (ECM), and the Regulation of Cell Fate
9/13/16	Cell Migration and Invasion in Tissue Engineering and Cancer/ Perusall Assignment #1
9/18/16	Biomaterial Scaffolds as ECM Analogs - Natural Materials
9/20/16	Biomaterial Scaffolds as ECM Analogs - Synthetic Polymers
9/25/16	Stem cells and iPS cells in tissue engineering / Perusall Assignment #2
9/27/16	Biocompatibility, Immunology, and Wound Healing
10/2/16	Mass Transport, Therapeutic and Pathologic Angiogenesis
10/4/16	Engineering Gene and Protein Delivery Strategies
10/9/16	Engineering Gene and Protein Delivery Strategies / Perusall Assignment #3
10/11/16	REVIEW
10/16/16	Fall Break
10/18/16	Exam I (OSEH certificates are due)
10/23/16	LAB 1
10/25/16	Case study #1: Islet Transplantation and diabetes treatment
10/30/16	LAB 2
11/1/16	Case Study #2: Scaffoldless muscle engineering
11/6/16	LAB 3
11/8/16	Case Study #3: Immunomodulation/tolerance
11/13/16	LAB 4
11/15/16	Case Study #4: Neural regeneration
11/20/16	Case Study #5: Cancer engineering
11/22/16	Perusall assignment #4 as preparation for LAB 5
11/27/16	LAB 5
11/29/16	Case Study #6: Reproductive Tissue Engineering
12/4/16	LAB 6
12/6/16	Case Study #7: Bone Engineering
12/11/16	Review
12/15/16	Exam II (1:30-3:30pm)