

MCB 133L Course Schedule

Part I: Molecular Biology and Biochemistry				
Date	Day	Lab	Lecture	Other
Jan 22/23	Wed/ Th	Organization & Safety	Intro 4047 VLSB	GSI Presentations: Biosafety in Lab Intro. to PubMed
Jan 27/28	Mon/ Tu	0-Protein Assay Practical	1.1	
Jan 29/30	Wed/ Th	1.1-Cloning: Polymerase Chain Reaction (PCR) and Restriction Digest		Library Exercise Due
Feb 3/4	Mon/ Tu	1.2-Cloning: Agarose Gel Electrophoresis and Gel Purification	1.2	
Feb 5/6	Wed/ Th	1.3-Cloning: Ligation and Transformation		Journal Club 1
Feb 10/11	Mon/ Tu	1.4-Cloning: Mini-prep and Restriction Digest	2	
Feb 12/13	Wed/ Th	2.1-Protein Purification: Purifying NFAT by Affinity Chromatography		Journal Club 2
Feb 17/18	Mon/ Tu	Presidents Day		
Feb 19/20	Wed/ Th	2.2-Protein Purification: SDS-PAGE and Coomassie stain		Data Club: Lab 1
Feb 24/25	Mon/ Tu	3.1-Protein-Protein interactions: Affinity Capture of Calcineurin	3	
Feb 26/27	Wed/ Th	3.2-Protein-Protein Interactions: SDS PAGE and transfer		Data Club: Lab 2
Mar 3/4	Mon/ Tu	3.3-Protein-Protein Interactions: Western Blot	Microscopy 4047 VLSB	
Mar 5/6	Wed/ Th	Microscope Demo and Practice		
Part II: Cell Biology				
Mar 10/11	Mon/ Tu	4.1-Immunofluorescence of the cytoskeleton: Sample Preparation	4	Journal Club 3
Mar 12/13	Wed/ Th	4.2-Immunofluorescence of the cytoskeleton: Microscopy		Quiz: Part I
Mar 17/18	Mon/ Tu	5.1-Yeast Cell Cycle : Analysis of Yeast Cell Cycle Mutants	5	
Mar 19/20	Wed/ Th	5.2-Yeast Cell Cycle : Experimental Design to Cause Cell Cycle Arrests		Report 1 Due (Lab 3) Journal Club 4 Data Club: Lab4
Mar 24-27	Mon- Th	Spring Recess		
Mar 31 /April 1	Mon/ Tu	6.1-Subcellular localization: Hela cell Transfection	6	Data Club: Lab 5 Scope Practical

April 2/3	Wed/ Th	6.2-Subcellular localization: Vital Stains		
Part III: Physiology				
April 7/8	Mon/ Tu	7.1- Ion Channel Basics: Ca ²⁺ Imaging	7	Data Club: Lab 6
April 9/10	Wed/ Th	7.2- Physiological Roles of Ion Channels: Translocation of NFAT-GFP		Quiz: Part II
April 14/15	Mon/ Tu	7.3- Physiological Roles of Ion Channels: siRNA transfection		
April 16/17	Wed/ Th	7.4- Physiological Roles of Ion Channels: Ca ²⁺ Imaging and Translocation of NFAT-GFP in siRNA Treated Cells		Journal Club 5
April 21/22	Mon/ Tu	8.1-Somatosensation: Human Receptive Fields and Action Potential Stimulation	8	Journal Club 6
April 23/24	Wed/ Th	8.2-Somatosensation: Mechanosensation Screen in <i>C. elegans</i>		Data Club: Lab 7
April 28/29	Mon/ Tu	8.3-Somatosensation: Mechanotransduction and Proprioception in insects	9	Data Club: Lab 8.1
April 30 /May 1	Wed/ Th	9.1-Gustation		Quiz: Part III (Take Home)
May 5-8	Mon- Th	Reading Period		
May 12	Mon			Report 2 due (Lab 8.2)