

MCB 130A - lecture schedule

Jan 22 (W)	IH1 Physical properties of the cell
Jan 24 (F)	IH2 Components of the cell
Jan 27 (M)	IH3 Dynamic nature of cellular processes
Jan 29 (W)	IH4 Properties of cellular macromolecules
Jan 31 (F)	IH5 Membranes - chemical and biophysical properties
Feb 3 (M)	IH6 Membrane transport of small molecules
Feb 5 (W)	IH7 Electrical properties of membranes
Feb 7 (F)	IH8 Translocation of macromolecules across membranes
Feb 10 (M)	IH9 Nuclear envelope and nuclear transport
Feb 12 (W)	IH10 Ligands and receptors
Feb 14 (F)	IH11 Signal transmission by receptors
Feb 17	President's day holiday
Feb 19 (W)	DD1 Sorting along the secretory pathway I - membrane budding
Feb 21 (F)	DD2 Sorting along the secretory pathway II - membrane fusion
Feb 24 (M)	IH12 Morphogens - intracellular (e.g. bicoid) and extracellular (e.g. dpp)
Feb 26 (W)	IH13 Review/Research talk
Feb 28 (F)	Midterm 1
Mar 3 (M)	DD3 Imaging cell structure and dynamics: cellular length scales
Mar 5 (W)	DD4 Systems cell biology: Significance of cell-to-cell variability
Mar 7 (F)	DD5 Dynamic structure of the microtubule cytoskeleton
Mar 10 (M)	DD6 Microtubule motors
Mar 12 (W)	DD7 Mechanics of mitotic chromosome segregation 1
Mar 14 (F)	DD8 Mechanics of mitotic chromosome segregation 2
Mar 17 (M)	DD9 Myosin ATPase cycle, single molecule studies and muscle contraction
Mar 19 (W)	DD10 Dynamic structure of the actin cytoskeleton
Mar 21 (F)	DD11 Cell motility: Brownian ratchets and myosin motors
Mar 24 - 28	Spring Break
Mar 31 (M)	DD12 Review
Apr 2 (W)	Midterm 2
Apr 4 (F)	MR1 Principles of cell cycle control
Apr 7 (M)	MR2 Graded and switch-like transitions
Apr 9 (W)	MR3 Mitotic exit and the importance of feedback
Apr 11 (F)	MR4 Biochemical oscillators I
Apr 14 (M)	MR5 Biochemical oscillators II
Apr 16 (W)	MR6 DNA damage signaling
Apr 18 (F)	MR7 Pulse-dependent signaling (p53)
Apr 21 (M)	MR8 Frequency-mediated signaling (transcription)
Apr 23 (W)	MR9 Signal amplification (spindle checkpoint)
Apr 25 (F)	MR10 Fold-change detection and paradoxical signaling (Wnt)
Apr 28 (M)	MR11 Paradoxical signaling II
Apr 30 (W)	MR12 Interconnected signaling modules (stem cells)
May 2 (F)	MR13 Interconnected signaling modules II (stem cells)

May 5-9 RRR week

May 13 (Tue) Final exam (based on last year - not yet scheduled)