

BIM 202: Cell & Molecular Biology for Engineers, Fall 2016

University of California, Davis
Department of Biomedical Engineering

Schedule: Lectures: MW 2:10 – 4:00 PM, GBSF 2202

Instructor: Soichiro Yamada (syamada@ucdavis.edu)
Office: GBSF 2317, Phone: (530) 752-7251
Office hour: By appointment

Textbook: *Molecular Biology of the Cells*, Alberts et al., 6/e Garland Science

Grading: Homework problems will be assigned in canvas.ucdavis.edu. The exams will be closed book and notes. No make up homework or exams. The grade will be based on: homework (10%), midterm I (25%), midterm II (30%), and final exam (35%).

Course Schedule:

	Date	Topic	HW	MBC
1	Sept 21	Introduction to the cell		Ch1-3, 8
2	Sept 26	Manipulating genes and proteins		Ch1-3, 8
3	Sept 28	Imaging cells		Ch9
4	Oct 3	Regulation by GTPase: Nuclear transport		Ch10, 12
5	Oct 5	Membrane dynamics: Sorting in ER and Protein coats		Ch13
6	Oct 10	Membrane dynamics: Vesicle budding and fusion		Ch13
7	Oct 12	Midterm 1 (25%)	#1: Oct 11, 5pm	
8	Oct 17	<i>Recap of Midterm 1</i>		
9	Oct 19	Biochemistry of actin		Ch16
10	Oct 24	Listeria motility		Ch16
11	Oct 26	Regulation of cell motility I		Ch16
12	Oct 31	Regulation of cell motility II		Ch16
13	Nov 2	Actin-based motor proteins		Ch16
14	Nov 7	Midterm 2 (30%)	#2: Nov 6, 5pm	
15	Nov 9	<i>Recap of Midterm 2</i>		
16	Nov 14	Microtubule dynamics		Ch16
17	Nov 16	Microtubule-based motor proteins		Ch16
18	Nov 21	Mechanics of cell division		Ch17
19	Nov 23	Cell-extracellular matrix adhesion		Ch19
20	Nov 28	Cell-cell adhesion		Ch19
21	Nov 30	Final (35%)	#3: Nov 29, 5pm	