

BIO 324 CELL BIOLOGY, Lecture Schedule, Fall 2010 (subject to change – check online notes)

#	Day	Date	Topic	Reading (Becker 7 th)	Homework Due
1	M	8/23	Introduction and The Cell Theory	1-6, 11-13, Box 1B	
2	W	8/25	Cellular chemistry and evolution/Amino Acids	18-31, 41-44	
3	F	8/27	Proteins	43-54	
4	M	8/30	Polysaccharides	60-66	Homework #1
5	W	9/1	Nucleic Acids & The RNA World	54-60	
6	F	9/3	Lipids & the first cells	66-71	
	M	9/6	No Class – Labor Day		
7	W	9/8	Bioenergetics 1	106-119	Homework #2
8	F	9/10	Bioenergetics 2	119-125	
9	M	9/13	Enzymes	129-138	
10	W	9/15	Enzyme kinetics and regulation	138-152	Homework #3
11	F	9/17	Microscopy	A1-A29	
	M	9/20	Exam 1: Days 1-11		
13	W	9/22	Cellular organization	75-103	
14	F	9/24	Membrane lipids	156-173	
15	M	9/27	Membrane proteins	173-190	Homework #4
16	W	9/29	Membrane transport: Carriers & pumps	194-215	
17	F	10/1	Membrane transport: Energetics	216-220	
18	M	10/4	Carbohydrate metabolism: Glycolysis	224-237	Homework #5
19	W	10/6	Gluconeogenesis and TCA cycle	239-243, 252-263	
20	F	10/8	Integration of metabolism	263-266	
21	M	10/11	Respiration: Electron transport	269-275	Homework #6
	W	10/13	Exam 2: Days 12-21		
23	F	10/15	Respiration: ATP synthesis	275-289	
24	M	10/18	Photosynthesis: Energy transduction	293-309	
25	W	10/20	Photosynthesis: Carbon assimilation	309-315	
26	F	10/22	Intracellular trafficking	324-362	Homework #7
27	M	10/25	Channels and Membrane Potential	365-373	
28	W	10/27	Electrical signaling: Action potentials	373-389	
29	F	10/29	Chemical signaling 1: cAMP pathway	392-400	Homework #8
30	M	11/1	Chemical signaling 2: Inositol pathway	400-404	
31	W	11/3	Chemical signaling 3: cGMP, kinases	404-415	
32	F	11/5	Chemical signaling 4: Hormones	415-423	Homework #9
	M	11/8	Exam 3: Days 23-32		
34	W	11/10	Cytoskeleton: Microtubules	425-437	
35	F	11/12	Cytoskeleton: Microfilaments	437-449	
36	M	11/15	Muscle contraction and Motility	452-477	
37	W	11/17	Extracellular Matrix & Cell junctions	480-500	Homework #10
38	F	11/19	Nuclear Transport & The Cell Cycle	538-546, 572-582	
39	M	11/22	The Cell Cycle	582-594	
40	W	11/24	Translation 1: Protein synthesis	679-694	Homework #11
	F	11/26	No Class – Thanksgiving Break		
41	M	11/29	Translation 2: Protein targeting	695-707	
42	W	12/1	Genomic equivalence and cloning	721-725	
43	F	12/3	Cancer cells	757-790	Homework #12
44	M	12/6	Final Exam: Days 34-43, cumulative	Brooks 203, 8 AM	