

LECTURE SCHEDULE

Skim the assigned pages before lecture and then study them for comprehension after lecture.

Lecture #	Topic	Reading: Campbell, N. and J. Reece. <i>Biology</i> , San Francisco: Benjamin/Cummings.	
		7th ed.	8 th ed.
1	Introduction		
2	Cell theory	Ch. 1	Ch. 1
3	Cell evolution	pp. 512-524, 497-507	pp. 507-517
4	Tree of Life	pp. 529-531, 538-541	Ch. 26
5	Microscopy	Appendix C	Appendix D
6	Cell structure	Ch. 6	Ch. 6
7-9	Membranes	pp. 124-129	pp. 125-130
10	Transport across membranes	pp. 130-138	pp. 130-138
	TEST		
12-13	Organic molecules	Ch. 5	Ch. 5
14	Energy	pp. 141-150	pp. 142-151
15-16	Enzymes	pp. 150-157	pp. 151-159
17	Catabolism	Ch. 9	Ch. 9
18	Electron transport chains	pp. 170-174	pp. 172-176
19-21	Photosynthesis	Ch. 10	Ch. 10
22	Anabolism	pp. 176-178	pp. 180-182
	TEST		
24-25	DNA synthesis	Ch. 16	Ch. 16
26-27	Protein synthesis	pp. 309-327	Ch. 17
28	Control of gene expression	pp. 352-356	Ch. 18
29	Mutation	pp. 328-330	pp. 344-346
30	Recombination	pp. 346-352	p. 435; 561-564
31	Biotechnology	Ch. 20; p. 623	Ch. 20, p. 651
	TEST		
33-34	Ecology	pp. 1195-1206	pp. 1231-1242
35-36	Growth	pp. 238-233	pp. 238-243
37	Development	pp. 415-433	Ch. 21
38	Cell communication	Ch 11	Ch. 11
39	Cancer	pp. 232-233, 370-374	pp. 242-243; 373-377
40-41	Viruses	pp. 334-346	Ch. 19
42	Immunity	Ch. 43	Ch. 43
	FINAL		

Cell Behavior and Slime Molds	pp. 99 (Fig. 6.7), 564-
Fern Development	566
Lab Safety, pp. v-vi	pp. 584-588
Lab check-in	
Cell Structure and Microscopy	Ch. 6
<i>How are your ferns doing?</i>	
Tissue Printing	pp. 720-727
Muscle Cells	pp. 1066-1072
Biologically Important Organic Molecules	Ch. 5
Gel Filtration	Fig. 5.7
Diffusion and Osmosis	pp. 130-136
<i>How are your ferns doing?</i>	
<i>Read about Aseptic Techniques on the BIOL 230 web site.</i>	pp. 406-407, 415, 702, 782-786
Genetic Engineering of Plants	
Membrane Receptors	p. 129
<i>Fern Development due</i>	
<i>You should be starting your research.</i>	
Lactate Dehydrogenase Isoenzymes	Fig. 9.17b
Cellular Metabolism	Ch. 9
Bioremediation	pp. 405, 546-547, 1226
Enzyme Kinetics	Ch. 8
Photosynthesis	Ch. 10
<i>Bioremediation due</i>	
Mitochondria	pp. 168-173
Industrial Fermentation	Fig. 52.11; Fig. 52.12
<i>Transfer clones</i>	
Isolation of DNA	Fig. 19.2
DNA fingerprinting	pp. 392-393, 405
Transformation	pp. 384-388