

MCB 136 Advanced Physiology

Fall 2013 Syllabus

Date	Topic	Lecturer	Reading	Activities
30-Aug-Fri	Diffusion, Ion channels, transporters	Bautista#1	Ch. 4	
2-Sep-Mon	Labor Day	Holiday		
4-Sep-Wed	Ion channels, Nernst, GHK	Bautista#2	Ch. 5	
6-Sep-Fri	graded potentials, action potentials	Bautista#3	Ch. 5-6	
9-Sep-Mon	Quiz 1/ Review	Bautista#4	Ch. 5-6	Quiz 1
11-Sep-Wed	graded potentials, action potentials	Bautista#5	Ch. 5-6	
13-Sep-Fri	Synaptic transmission	Bautista#6	Ch. 5-6	
16-Sep-Mon	CNS/PNS	Bautista#7	Ch. 9a	
18-Sep-Wed	Techniques to study Neurobiology	Bautista#8	Ch. 9a	
20-Sep-Fri	Somatic/autonomic motor systems	Lishko#1	Ch. 9a	Quiz 2
23-Sep-Mon	Skeletal muscle contraction	Lishko#2	Ch. 6	
25-Sep-Wed	Skeletal muscle regulation	Lishko#3	Ch. 6	
27-Sep-Fri	Sensory 1	Bautista#9	Ch. 6	PS1 due
30-Sep-Mon	Midterm 1			
2-Oct-Wed	Sensory 2	Bautista#10		
4-Oct-Fri	CNS Diseases	Bautista#11	Ch. 7	
7-Oct-Mon	Channelopathies	Bautista#12	Ch. 7	
9-Oct-Wed	Smooth muscle/cardiac muscle	Lishko#4	Ch. 6-8	Quiz 3
11-Oct-Fri	The heart	Lishko#5	Ch. 9	
14-Oct-Mon	Blood vessels	Lishko#6	Ch. 12	
16-Oct-Wed	CV regulation	Lishko#7	Ch. 12	
18-Oct-Fri	CV regulation	Lishko#8	Ch. 12	Quiz 4
21-Oct-Mon	Respiration anatomy, mechanics and ventilation	Lishko#9	Ch. 12	
23-Oct-Wed	Gas exchange	Lishko#10	Ch. 13	
25-Oct-Fri	Gas transport and regulation of respiration	Lishko#11	Ch. 13	
28-Oct-Mon	Reproduction	Lishko#12	Ch. 17	PS2 due
30-Oct-Wed	Midterm 2			
1-Nov-Fri	Physiology of homeostasis	Hariharan#1	Ch. 1	
4-Nov-Mon	Ion Transport of epithelia	Hariharan#2	Ch. 15	
6-Nov-Wed	GI and anatomy and function	Hariharan#3	Ch. 15	
8-Nov-Fri	Digestion and absorption	Hariharan#4	Ch. 15	
11-Nov-Mon	Holiday	Holiday		
13-Nov-Wed	Regulation of GI function	Hariharan#5	Ch. 15	
15-Nov-Fri	Metabolism	Hariharan#6	Ch. 15	Quiz 5
18-Nov-Mon	Energy balance and body temperature	Hariharan#7	Ch. 16	
20-Nov-Wed	Basic principles of renal physiology	Hariharan#8	Ch. 14	
22-Nov-Fri	Regulation of ion and water balance	Hariharan#9	Ch. 14	Quiz 6
25-Nov-Mon	Regulation of pH	Hariharan#10	Ch. 14	
27-Nov-Wed	Special presentation			
29-Nov-Fri	Thanksgiving	Holiday		
2-Dec-Mon	Endocrinology 1	Hariharan#11	Ch. 11	
4-Dec-Wed	Endocrinology 2	Hariharan#12	Ch. 11	
6-Dec_Fri	Putting it all together	Hariharan#13		PS 3 due
9-Dec-Mon	RRR	Bautista		
11-Dec-Wed	RRR	Lishko		
13-Dec-Fri	RRR	Hariharan		
16-Dec-Mon	Midterm 3+ final exam (comprehensive) 11:30am			