

BIOSC 0190 SYLLABUS FALL 2008

Reading assignments refer to Life: The Science of Biology, 8e, unless otherwise noted

BH = Basic Histology 11e. Available on-line through Health Sciences Library; Type "Basic Histology" into Quick Search window

Date	Topic	Instr.	Reading	Assignments
Monday, Aug 25	Introduction to Biology as an Experimental Science; Cell Theory and Disease	NK		
Friday, Aug 29	How do atoms form biomolecules? Biomolecules: What are the chemical structures and functions of lipids and carbohydrates?	NK	2.1-2.4, 3.1, 3.3-3.4	
Monday, Sep 01	LABOR DAY NO CLASS	----	LABOR DAY NO CLASS	
Friday, Sep 05	Biomolecules: What are the chemical structures and functions of nucleic acids and proteins? Hour 2: Case Study in Sickle Cell	NK	3.2, 3.5	Biochemistry Problem Set I
Monday, Sep 08	Biomolecules: What are the chemical structures and functions of proteins?	NK	Review 3.1-3.5	Biochemistry Problem Set II
Friday, Sep 12	Membranes: How do cellular membranes function as selectively permeable barriers? Hour 2: Comparing cystic fibrosis and sickle cell	NK	Chp 5 introduction; 5.1 "Stalking a lethal gene" http://www.hhmi.org/genetictrail/a100.html	

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Monday, Sep 15	Membranes: How do substances move across membranes?	NK	5.3-5.5	Membrane Problem Set
Friday, Sep 19	EXAM #1	NK	EXAM #1	
	Hour 2- Subcellular Structures I: The cytoskeleton	BR	Ch. 4 pp. 86-90	
Monday, Sep 22	Subcellular Structures II: How organelles cooperate to make proteins	BR	Ch. 4 pp. 74-83	Cytoskeleton Problem Set
Friday, Sep 26	Subcellular Structures III: more organelles	BR	Ch. 4 pp. 74-83	
Monday, Sep 29	Energy, bond chemistry, ATP	BR	6.1, 6.2	Organelles Problem Set
Friday, Oct 03	Enzymes	BR	6.3-6.5	
Monday, Oct 06	Glycolysis and Fermentation	BR	Ch. 7 pp. 139-144; 147-148	Energy and Enzymes Problem Set
Friday, Oct 10	Citric Acid Cycle and Oxidative Phosphorylation	BR	Ch. 7 pp. 144-147; 148-154	In class participation points
Monday, Oct 13	FALL BREAK NO CLASS		See Tuesday below	
Tuesday, Oct 14	Integration of Metabolism	BR	Ch. 7 pp. 154-157	Metabolism Problem Set
Friday, Oct 17	EXAM #2	BR	EXAM #2	
	Hour 2: Photosynthesis I- The color of plants on other worlds!	NK	Scientific American Article: The color of plants on other worlds	
Monday, Oct 20	Photosynthesis II	NK	34. 4; 8.1- 8.5 (skip 8.4)	Photosynthesis Problem Set

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Friday, Oct 24	Plant Structure and Transport: How do plants move water and sugars?	NK	(optional review 2.4 and 5.3-5.4) 35.2-35.4	
Monday, Oct 27	Biofuels Debate Should research into biofuels be funded? Which biofuels should or should not be funded?	NK	Rolling Stone Magazine Biofuels article.	
Friday, Oct 31	Cell Signaling	NK	15.1-15.4	
Monday, Nov 03	Tissue Types I: Epithelium	BR	Ch. 40 p. 857-860 BH: Ch. 4 (focus on images, not text).	Cell Signaling Problem Set
Friday, Nov 07	Tissue Types II: Connective Tissue, Muscle Tissue, Nervous Tissue	BR	Ch. 4 p. 91; Ch. 40 pp. 858-860 BH: Ch. 5-10 (focus on images, not text)	
<i>Monday, Nov 10</i>	EXAM #3 Hour 2: Neuromuscular Junction	BR/ NK	EXAM # 3 44.1-4	
Friday, Nov 14	Digestive System	NK	(Review 47.1, 47.2) 50.2-50.4	
Monday, Nov 17	Excretory System	NK	51.1-51.6	Physiology Problem Set I
Friday, Nov 21	Respiratory System and Circulatory System I	BR	Ch. 48 pp. 1025-1030; 1032-1039. BH: Ch. 17	
Monday, Nov 24	Circulatory System II	BR	Ch. 49 pp. 1050-1055; 1057; 1059-1061. BH: Ch. 11	Physiology Problem Set II
Wednesday, Nov 26	THANKSGIVING BREAK NO CLASS	----	THANKSGIVING BREAK NO CLASS	

Date	Topic	Instr.	Reading	Assignments
Friday, Nov 28	THANKSGIVING BREAK NO CLASS	----	THANKSGIVING BREAK NO CLASS	
Monday, Dec 01	Endocrine System	BR	Ch. 41 pp. 883-887	Physiology Problem Set III
Wednesday, Dec 03	Review for Fourth Exam and Final	NK/BR		
Friday, Dec 05	EXAM #4	NK /BR	EXAM #4	
Saturday, Dec 13 4-5:50 pm Final Exam	Saturday, Dec 13 4-5:50 pm Final Exam	FINAL	Saturday, Dec 13 4-5:50 pm Final Exam	