

THIS SYLLABUS IS AN **ESTIMATE OF THE SCHEDULE WE'LL FOLLOW THIS QUARTER. IT CAN'T BE A CONTRACT BECAUSE THE STUDENTS IN THE CLASS WILL DETERMINE THE RATE AT WHICH WE CAN PROCEED.**

Lecture	Date	Topic	Reading in Eckert, 5th edition
		<i>Section: Statement of the problem</i>	
1	Jan. 7	Animal phylogeny	-
2	9	Homeostasis (relating the internal and external environments) and the importance of surfaces	pp. 3-14
		<i>Section: Acquiring and distributing "commodities"</i>	
3	11	Who needs a distribution system? How do some animals get by without one?	pp. 471-481, 488-495
4	14	Circulatory function	-----
5	16	Open and closed circulatory systems	-----
6	18	Regulation of cardiovascular function	pp. 519-523
	21	MARTIN LUTHER KING HOLIDAY (no lecture)	
7	23	Respiration: the interface between the inner and outer environment	pp. 525-539, 545-562
8	25	Regulation of respiration	pp. 564-568
9	28	Respiration: life under unusual circumstances	pp. 568-572
	30	FIRST HOUR EXAM (7:00 – 8:20 p.m.; NO LECTURE)	
		<i>Section: Maintaining internal conditions</i>	
10	Feb 1	The challenges of high altitude	-----
11	4	Regulating pH	pp. 539-544
12	6	Body fluids: regulating osmolarity and water content in the body	pp. 579-593
13	8	Body fluids: regulating volume	-----
14	11	Body fluids: the vertebrate kidney	pp. 593-607, 611-615

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Lecture	Date	Topic	Reading
15	13	Body fluids: other vertebrate regulatory mechanisms	pp. 615-621
16	15	Body fluids: invertebrate mechanisms	pp. 621-624
	18	PRESIDENTS' DAY HOLIDAY (no lecture)	
17	20	Handling nitrogenous wastes	pp. 624-628
		<i>Section: Energy relationships with the environment</i>	
18	22	Acquiring energy: feeding, "farming," digestion	pp. 637-648, 659-665
19	25	Acquiring energy: digestion and absorption	
	27	SECOND HOUR EXAM (7 - 8:20 p.m., NO LECTURE)	
20	Mar. 1	What does it take to be a successful parasite or a successful host? Guest speaker: Dr. Deborah Kristan	
21	4	Using energy: basal metabolism and the effects of body size	pp. 667-681
22	6	Temperature: environmental diversity	pp. 700-707
23	8	Temperature: regulation vs. conforming	pp. 707-725
24	11	Temperature: adaptations to special circumstances	pp. 730-735
25	13	Locomotion: mechanisms of muscle contraction	pp. 360-375, 379-387
26	15	Locomotion: properties of muscles	pp. 394-411

The FINAL EXAM is Wednesday, March 20, 8 a.m. to 11 a.m.