

Biology 180 Class Schedule Winter Quarter 2010

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Text: *Biological Science, 3rd Edition*, Freeman

Lecture: M-Tu-W- F, 12:30 pm to 1:20 pm, KNE 130

Class Web Site: <http://protist.biology.washington.edu/biol180/>

Labs: Hitchcock 243, 247, 244, 246

Wk	Day	Date	Lecture Topic	Class Readings	Laboratory Topic
1	M	Jan 4	What is special about science?	Ch 1	1. Hypothesis Testing and Experimental Design
	T	Jan 5	Hypothesis testing and experimental design	Ch 1	
	W	Jan 6	What was Darwin trying to explain?	Ch 24	
	F	Jan 8	How did Darwin explain evolution?	Ch 24	
2	M	Jan 11	What could Mendel, but not Darwin, explain?	Ch 13	2. Data Analysis and Statistical Thinking (ABR Prep)
	T	Jan 12	What about multiple loci?	Ch 13	
	W	Jan 13	What is the cellular basis of inheritance in asexual and sexual organisms?	Ch 11.1-11.2; Ch 12	
	F	Jan 15	How can violation of Mendel's principles be explained?	Ch 13	
3	M	Jan 18	MARTIN LUTHER KING DAY – no class	Ch 13; Ch 16.6 Ch 13	3. Mitosis & Meiosis (ABR Prep)
	T	Jan 19	The nature of genes, alleles, and mutations		
	W	Jan 20	Human genetic disease		
	F	Jan 22	EXAM		
4	M	Jan 25	How can Mendelian genetics be extended to Darwinian populations?	Ch 25 Ch 24 Ch 25	4. Antibiotic Resistance
	T	Jan 26	Population genetics of human disease		
	W	Jan 27	Evolutionary forces – natural selection		
	F	Jan 29	Evolutionary forces – genetic drift, migration		
5	M	Feb 1	How do the evolutionary forces produce new species?	Ch 26	5. Advising
	T	Feb 2	How do we infer and describe the evolutionary relationships among species?	Ch 1; Ch 27	
	W	Feb 3	Large-scale patterns of evolution – extinction and adaptive radiation	Ch 27	
	F	Feb 5	What are the big unanswered questions in evolutionary biology?		
6	M	Feb 8	Innovations 1: Plant diversification	636-639, 646-647	6. Phylogeny I: Trilobites
	T	Feb 9	Innovations 2: Animal diversification	690-698	
	W	Feb 10	Innovations 3: Chordate diversification	741-744	
	F	Feb 12	EXAM		
7	M	Feb 15	PRESIDENT'S DAY – no class	520-523, 1152-1153, 1168-1170 1196-1202 1202-1205, 1211-1212	7. Phylogeny II: Reading Trees
	T	Feb 16	Behavioral ecology		
	W	Feb 17	Competition		
	F	Feb 19	Consumption		
8	M	Feb 22	Disease ecology	1205-1207, 491-493, 782, 784-785	NO LAB
	T	Feb 23	Mutualism, coevolution	1207-1209	
	W	Feb 24	Population growth	1177-1180	
	F	Feb 26	Life histories	914-916, 1176-1177	
9	M	Mar 1	Population regulation	1181-1188	8. Pond Community: Data Collection
	T	Mar 2	Human demography	1174-1175, 1187-1190	
	W	Mar 3	Communities 1: biomes, diversity gradients	1133-1134, 1218-1219	
	F	Mar 5	Communities 2: Disturbance, succession	1212-1216	
10	M	Mar 8	Ecosystems 1: energy flow, nutrient cycling	1222-1233, 572-573	9. Pond Community: Data Analysis
	T	Mar 9	Ecosystems 2: global climate change	1139-1143, 1238-1241	
	W	Mar 10	Conservation 1: threats, projections	1248-1256	
	F	Mar 12	Conservation 2: benefits, strategies	1256-1261	
11	Th	Mar 18	FINAL EXAM: Thursday 8:30 – 10:20 am		

Lab Manuals can be purchased at Professional Copy 'N' Print, 1414 NE 42nd Street, 634-2689.