

EVOLUTION, BIO 370, Spring 2011, Syllabus

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<u>Date</u>	<u>Lecture Topic</u>	<u>Lecture Reading*</u> (F&H 3 rd Edition)	<u>Lecture Reading*</u> (F&H 4 th Edition)	<u>Discussion Readings</u>
Jan 18	The scope of evolutionary biology	Chapter 1, Nesse 2010	Chapter 1, Nesse 2010	<u>Week of Mon Jan 17</u>
Jan 20	Evidence for evolution	Chapter 2	Chapter 2	No discussion
Jan 25	Phenotype, genotype, & natural selection	Chapter 3 & 8 (289-308)	Chapter 3 & 9 (319-338)	<u>Week of Mon Jan 24</u>
Jan 27	Genetics and the origin of variation	Chapter 4	Chapter 5	Quammen
Feb 1	Theory of natural selection	Chapter 5	Chapter 6	<u>Week of Mon Jan 31</u>
Feb 3	Population structure & genetic drift	Chapter 6	Chapter 7	Awise
Feb 8	Interaction of evolutionary forces	Chapter 6	Chapter 7	<u>Week of Mon Feb 7</u>
Feb 10	First Exam			review
Feb 15	Evolution of sex	Chapter 7 (274-285)	Chapter 8 (302-313)	<u>Week of Mon Feb 14</u>
Feb 17	Sexual selection	Chapter 10	Chapter 11	Young, Weder
Feb 22	Adaptation	Chapter 9	Chapter 10	<u>Week of Mon Feb 21</u>
Feb 24	Units of selection	Chapter 11	Chapter 12 (447-462)	Wedekind, Piertney
Mar 1	Life-history evolution	Chapter 12	Chapter 13	<u>Week of Mon Feb 28</u>
Mar 3	Evolutionary medicine	Chapter 13	Chapter 14	Greaves, Nesse 2008
Mar 8	Second Exam			<u>Week of Mon Mar 7</u>
Mar 10	Review of second exam			review

SPRING BREAK

Mar 22	Molecular Evolution Part I	Chapter 4 & 6.3*	Chapter 5 & 7.3*	<u>Week of Mon Mar 21</u>
Mar 24	Molecular Evolution Part II	Chapter 4 & 6.3	Chapter 5 & 7.3	TBA**
Mar 29	Speciation Part I	Chapter 15	Chapter 16	<u>Week of Mon Mar 28</u>
Mar 31	Speciation Part II	Chapter 15	Chapter 16	TBA
Apr 5	Speciation Part III	Chapter 15	Chapter 16	<u>Week of Mon Apr 4</u>
Apr 7	Third Exam			TBA
Apr 12	Phylogenetics Part I	Chapter 14	Chapter 4	<u>Week of Mon Apr 11</u>
Apr 14	Phylogenetics Part II	Chapter 14	Chapter 4	TBA
Apr 19	History of Life on Earth Part I	Chapters 16 & 17	Chapters 17 & 18	<u>Week of Mon Apr 18</u>
Apr 21	History of Life on Earth Part II	Chapters 16 & 17	Chapters 17 & 18	TBA
Apr 26	Development and Evolution	Chapter 18	Chapter 19	<u>Week of Mon Apr 25</u>
Apr 28	Human evolution	Chapter 19	Chapter 20	TBA
May 3	Human evolution	Chapter 19	Chapter 20	<u>Week of Mon May 2</u>
May 5	Fourth Exam			TBA

Final Exam: The fourth exam (May 5) will serve as the final exam. No additional exam will be given during finals week.

* Either the 3rd edition (2004) or 4th edition (2007) can be used of S. Freeman & J.C. Herron. *Evolutionary Analysis*. Pearson Prentice Hall.

** Exact reading assignments for the second half of the course will be announced later in the course.