EVOLUTIONARY BIOLOGY
Spring 2012

EEB 2245/2245W
Tu/Th 9:30-10:45 am
TLS 154

Instructors:

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Grading:

EEB 2245: **Your grade will be based on your performance in 4 lecture exams.** Your lowest score on the first 3 exams will be dropped. Your 2 remaining scores and your score on the final exam will each constitute one third of your final grade. University regulations require that students who miss the final exam without an excuse from the Dean of Students receive an F for that exam. Thus, **you are required to take the final exam and your score on that exam will count towards your grade.**

Note: because you are allowed to drop your lowest score, ***we will not give make-up exams***.

EEB 2245W: Your final grade in the **lecture** portion of the course will be calculated as above. If you are taking the W version of the course, that grade will constitute 75% of your final course grade. Your grade in the **W part** of the course, as determined by your "W" instructor, will constitute the remaining 25% of your final course grade, except that ***an F in the W part of the course will result in an F for the entire course. An F in the lecture part of the course will also result in an F for the entire course.*** Refer to the 2245W handout and website (**http://hydrodictyon.eeb.uconn.edu/eebedia/index.php/EEB2245W_Spring_2012**) for further information. **Dr. Elizabeth Jockusch (BioPharm 305B; tel: 486-4452; elizabeth.jockusch@uconn.edu)** is the coordinator of the W part of the course.

Text: Futuyma, D. J. 2009. ***Evolution***. 2nd ed. Sinauer Associates, Inc. (ISBN 978-0-87893-223-8)

Course website:
http://hydrodictyon.eeb.uconn.edu/eebedia/index.php/Evolutionary_Biology_Spring_2012

LECTURE SYLLABUS

(Please read assigned chapters, as indicated below, prior to class)

	Date (2012)		Topic	Text Readings
1.	T	Jan 17	Introduction to the Geological Time Scale; the Fossil Record	Ch. 4 (pgs 73-77)
2.	Th	Jan 19	Life in the Precambrian; evolution of the Metazoa	Ch. 5 (pgs 101-108)
3.	T	Jan 24	Cambrian explosion & Life in the Paleozoic	Ch. 5 (pgs 108-115)
4.	Th	Jan 26	Life in the Mesozoic	Ch. 5 (pgs 115-121)
5.	T	Jan 31	Life in the Cenozoic	Ch. 5 (pgs 121-131)
6.	Th	Feb 2	Evolution of primates	Ch. 4 (pgs 88-91) & Ch 6 (pgs 147–150)
7.	T	Feb 7	Evolution of biodiversity & extinction	Ch. 7
8.	Th	Feb 9	**EXAM #1** (covers Lectures 1-6)	
9.	T	Feb 14	Characters, homology & homoplasy	Ch. 3
10.	Th	Feb 16	Systematics & reconstructing evolutionary history	Ch. 2
11.	T	Feb 21	Evolution and development	Ch. 21
12.	Th	Feb 23	Biogeography & major patterns of distribution	Ch. 6
13.	T	Feb 28	Continental drift & Historical Biogeography	Ch. 6
14.	Th	Mar 1	**EXAM #2** (covers Lectures 7 & 9-13)	
15.	T	Mar 6	Populations, variation, & the Hardy-Weinberg principle	Ch. 1 (pgs 7-11), 9
16.	Th	Mar 8	Microevolution and the origin of variation: mutation	Ch. 8
	T	**Mar 13**	**SPRING BREAK- no class**	
	Th	**Mar 15**	**SPRING BREAK- no class**	
17.	T	Mar 20	Agents of evolutionary change: migration and genetic drift	Ch. 9 & 10
18.	Th	Mar 22	Charles Darwin and natural selection	Ch. 1; 11
19.	T	Mar 27	Natural selection and the genetics of natural selection	Ch. 11 & 12
20.	Th	Mar 29	Adaptation; life-history evolution	Ch. 14
21.	T	Apr 3	Sexual selection	Ch. 15
22.	Th	Apr 5	**EXAM #3** (covers Lectures 15-21)	
23.	T	Apr 10	Levels of selection and conflict between levels	Ch. 16
24.	Th	Apr 12	Cooperation, altruism and sociality	Ch. 16
25.	T	Apr 17	Macroevolution: speciation and species concepts	Ch. 17 & 18
26.	Th	Apr 19	Ecotypes, clines, and allopatric speciation	Ch. 17 & 18
27.	T	Apr 24	Allopatric & non-allopatric speciation	Ch. 18
28.	Th	Apr 26	Evolution above the species level	Ch. 22

Not yet scheduled **EXAM #4** (covers Lectures 23-28)