OEB275r: Frontiers of Ecology and Evolutionary Biology, Spring 2010

Lead Instructor: Scott Edwards
Teaching Fellow: TBA
All classes meet at 1:30 – 3:00 pm; Mon MCZ 101; Wed 1:30 - 3 pm room TBA

SYLLABUS

Week	Date	Presenter	Module topic
Course Scope and Introduction			
1	Fr Jan. 30	Scott Edwards	Course Introduction
Macroevolution and Evo-Devo			
2	Mon Feb. 2	Charles Marshall	Macroevolution and the fossil record
	Wed Feb. 4	Marshall – discussion	
3	Mon Feb 9	Arkhat Abzhanov	Vertebrate evolution and development
	Wed Feb. 11	Ann Pringle	Biodiversity outside the animal kingdom
4	Mon Feb. 16	**holiday**	
	Wed Feb. 18	Cassandra Extavour	Evo-devo: Invertebrates
	Fri Feb 20	Cassandra Extavour	Evo-devo: Invertebrates
Phylogenies and the Comparative Method			
5	Mon Feb. 23	Gonzalo Giribet	Foundations of systematics and biogeography
	Wed Feb 25	Gonzalo Giribet	Foundations of systematics and biogeography
	Mon Mar 2	Scott Edwards	Population genetics and phylogenetics
	Wed Mar 4	Scott Edwards	Population genetics and phylogenetics
6	Mon Mar 9	Chris Organ	Phylogenies and the comparative method
	Wed Mar 11	Chris Organ	Phylogenies and the comparative method
Natural Selection and Speciation			
7	Mon Mar. 16	Hopi Hoekstra	Natural selection
	Wed Mar 18	Hopi Hoekstra	Natural selection
8	Mar 21 – 29	**Spring break**	
	Mon Mar 30	Marcus Kronforst	Speciation

	Wed Apr 1	Marcus Kronforst	Speciation
Cooperation and Experimental Evolution			
9	Mon Apr 6	Chris Marx	New paradigms in microbial and experimental evolution
	Wed Apr 8	Chris Marx	“”
10	Mon Apr. 13	Kevin Foster	Cooperation and Conflict
	Wed Apr 15	Kevin Foster	Cooperation and conflict
The Ecology of Biodiversity			
11	Mon Apr. 20	Paul Moorcroft	The ecology of biodiversity
	Wed Apr 22	To be chosen by Paul	
12	Mon Apr 27	To be chosen by Paul	
	Wed Apr 29	To be chosen by Paul	
13	Sat May 2	**Field Trip to Boston Harbor Islands**	

Lectures and modules will be targeted to 1st year OEB grad students, but grad students from other years and departments, and advanced undergraduates, are encouraged to enroll.

The course will be graded.

Assignments will vary among modules. Their structure may take the form of reporting on a question in succinct (2-3 page) essay to defining a set of terms given by Professor, or linking a specific concept to the students' own study systems.

Second part of modules (non-lecture part) will consist of paper discussions, computer lab sessions in Science Center Macintosh Lab, and possible debates or intensive question/answer.