

Biology 213: Diversity and Ecology

Spring 2004

Instructor: Laura I. Gonzalez
Office hours: T, TH 15-16:30¹
Office: Bio Lab 114 CB
E-mail: ligg@mail.utexas.edu
Phone: 471-5368

Teaching Assistant: Krushnamegh Kunte
Office Hours: E-mail/call me and drop by
Office: Patterson 627
E-mail: krushnamegh@mail.utexas.edu
Phone: 471-4506

Course website: www.sbs.utexas.edu/gonzalez/bio213.htm

Course description: Bio 213 is a required course for students pursuing a Major in the Natural Sciences. It provides an introduction to the general patterns of biological diversity and the mechanisms behind it. The course explores the development, diversification and ecology of the Earth's biota, specifically how it is classified into major lineages and its past and current interactions with its environment.

Recommended Text: Campbell, N. A. and J. B. Reece. 2002. Biology, 6th Edition. Benjamin Cummings, San Francisco.

Lectures: T, TH: 11:00-12:00 at TAY 2.006. *I strongly recommend attending all lectures, as exams will be solely based on lecture material.*

Discussions: Attendance is *HIGHLY* recommended. Scientific articles and lecture material will be discussed. Grading will be based on weekly participation (11 participations worth 3 points/each for a total of 33 points) and article reading/discussion (7 articles worth 6 points each for a total of 42 points). The participation will consist of 2-3 questions about each week's lectures designed to identify your grasp of the course contents. You will get points even if your answers are wrong.

Unique number	Bldg & room	Time
46575	GEA 127	M: 8:00-9:00
46580	JES A217A	F: 8:00-9:00
46585	CBA 4.326	W: 12:00-13:00
46590	RLM 7.124	F: 12:00-13:00
46595	CBA 4.324	W: 13:00-14:00

Exams: There will be 4 lecture exams worth 100 points each. They will consist of multiple choice/matching and short essay questions (see sample on course web site). No short essays will be given on the fourth exam. Exam I is scheduled for Feb 10th, Exam II for March 11th, Exam III for April 13th, and Exam IV for May 6th. All exams will be

¹ If my office hours do not adjust to your schedule please call or e-mail me to set an appointment when needed.

conducted during regular lecture hours. No restrooms/water/etc breaks will be permitted during exams. Student ID will be required.

Grading: A total of 475 points will be available in the course (400 for lecture and 75 for discussion). Final letter grades will be assigned at the end of the semester following a curve. There is no extra credit.

Important Notice: Missed exams or discussion evaluations will **ONLY** be made-up in extreme situations: family emergency (verified by University), health issues (with written doctor's excuse), or a religious holiday (must notify 14 days in advance).

Important Date: Last day to drop a course without a possible academic penalty is Feb 16th.

Tentative Lecture and Discussion calendar

WEEK	DATE	TOPIC	CHAPTERS	DISCUSSION
1	20-Jan	Scope and organization of course		1, Participation; article
1	22-Jan	Introduction to Evolution	23	on evolution
2	27-Jan	Development of Evolutionary Theory	22	2, Participation; article
2	29-Jan	Evolution of Populations	23	on microevolution
3	3-Feb	Speciation	24	3, Participation;
3	5-Feb	Origins of life	26	Exam I review
4	10-Feb	EXAM I		4, Participation
4	12-Feb	Phylogeny and systematics	25	
5	17-Feb	Evolution and diversity of Prokaryotes	27	5, Participation; article
5	19-Feb	Some aspects of early Eukaryotes: Protists	28	on disease evolution
6	24-Feb	Evolutionary trends in plants	29,30	6, Participation; article
6	26-Feb	An introduction to Fungi	31	on plant evolution
7	2-Mar	Evolutionary trends in animals	32	7, Exam II review
7	4-Mar	An introduction to invertebrates	33	
8	9-Mar	Vertebrate evolution and diversity	34	8, Participation
8	11-Mar	EXAM II		
9	Mar 16&18	SPRING BREAK		
10	23-Mar	The physical and biological environment	50	10, Participation; article
10	25-Mar	Life histories and dispersal	52	on life histories
11	30-Mar	Sex, sociality and behavior	51	11, Participation; article
11	1-Apr	Population growth and regulation	52	on sexual selection
12	6-Apr	Population demography	52	12, Exam III review
12	8-Apr	Species interactions	53	
13	13-Apr	EXAM III		13, Participation
13	15-Apr	Food webs	53	
14	20-Apr	Primary and secondary production	54	14, Participation; article
14	22-Apr	Nutrient cycling	54	on food webs
15	27-Apr	Adaptive radiation and mass extinctions		15, Exam IV review
15	29-Apr	Spatial biodiversity patterns	53	
16	4-May	Biodiversity in crisis	55	16, No discussion
16	6-May	EXAM IV		