

Biology 100A—Introductory Biology I
Fall Quarter 2010—Call # 10269-01
MW 8:25-9:30am BIOS-144

Instructor:

Dr. Elizabeth Torres
 Office—La Kretz Hall 313
 Office Hours: W 1:30 p.m. – 2:30 p.m
[e-mail—etorre11@calstatela.edu](mailto:etorre11@calstatela.edu)

Text—Freeman, Scott. 2008. *Biological Science*. Volume 2: Evolution, Diversity, and Ecology. 3rd ed. San Francisco. Benjamin / Cummings.
 Lab Manual—Gamon et.al. 2005. *Diversity of Life*. 2nd Ed. Student Book Mart (1725A N Eastern, LA).

COURSE OVERVIEW AND LEARNING OBJECTIVES: Biology 100A is a course required for students majoring in Biology. This course provides an overview of the history and diversity of life on Earth from an ecological and evolutionary perspective. Students will be exposed to examples of living taxa from all domains and kingdoms using a phylogenetic approach. By the end of the course, students should be familiar with historical and current classification schemes, representative examples of the diversity life, and basic evolutionary and ecological principles. Additionally, students will learn how to interpret phylogenetic trees and will be introduced to systems ecology concepts (biomes, ecosystems, global ecology) and will understand how living and non-living components of the Earth's system have interacted, and how human activities are now altering species diversity and Earth System processes.

Date	Lecture Topics	Reference Chapters	Lab Dates	Lab Exercise
9/27	History of the Earth	Ch. 50, 52	9/27; 9/28	Lab introduction; Enrollment check; Complete safety forms.
9/29	Evolution I	Ch. 1, 27	9/29; 9/30	#1 Microscopy & Life in Pond Water #2 Winogradsky Column I
10/04	Bacteria & Archaea	Ch. 28	10/04; 10/05	#3 Bacteria Around Us (Part I) Activity I: Graphing (Bioskills 1, 3)
10/06	Evolution II	Ch. 24	10/06; 10/07	#3 Bacteria Around Us (Part II) #4 Microorganisms in the Termite Hindgut
10/11	Transition to Eukaryotes; Photosynthetic Protists	Ch. 29	10/11; 10/12	#5 Algal Protists Activity II: Phylogeny Exercise I **Quiz 1 on labs 1-4
10/13	Heterotrophic Protists: (Animal-Like Protists & Fungal Protists)	Ch. 29	10/13; 10/14	#6 Protozoans: Animal-Like Protists #7 Fungi (Part I: 7/1-7.3) **Quiz 2 on lab 5
10/18	Midterm Exam I		10/18; 10/19	Activity III: Library Worksheet #2 Winogradsky Column II
10/20	Introduction to Plants Bryophytes & Seedless Vascular Plants	Ch. 30	10/20; 10/21	#8 Bryophytes & Seedless Vascular Plants **Quiz 3 on labs 6 & 7.1-7.3
10/25	Gymnosperms	Ch. 30	10/25; 10/26	#9 Seed Plants I: Gymnosperms

Date	Lecture Topics	Reference Chapters	Lab Dates	Lab Exercise
10/27	Angiosperms	Ch. 30	10/27; 10/28	#10 Seed Plants II: Angiosperms Activity III: Phylogeny Exercise II **Quiz 4 on labs 8 & 9
11/01	Fungi & Their Ecological Roles	Ch. 31	11/01; 11/02	#7 Fungi (Part II: 7.4-7.14) **Quiz 5 on lab 10
11/03	Introduction to Animals Sponges & Cnidarians	Ch. 32	11/03; 11/04	#11 Porifera and Cnidarians **Quiz 6 on lab 7 (Part II) Writing Assignment I Due
11/08	Protostomes: Lophotrochozoa I (Rotifers, Flatworms, Annelids)	Ch. 33	11/08; 11/09	#12 Platyhelminthes, Nematoda, and Rotifers #2 Winogradsky Column III **Quiz 7 on lab 11
11/10	Midterm Exam II		11/10; 11/11	NO LABS (Veterans Day Holiday)
11/15	Protostomes: Lophotrochozoa II (Molluscs)	Ch. 33	11/15; 11/16	#13 Protostomes: Annelida and Molluscs **Quiz 8 on lab 12
11/17	Protostomes: Ecdysozoa (Arthropods, Nematodes) Deuterostomes: Echinoderms	Ch. 33 Ch. 34	11/17; 11/18	#14 Protostomes: Arthropods #15 Deuterostomes: Echinoderms **Quiz 9 on lab 13
11/22	Deuterostomes: Chordates I	Ch. 34	11/22; 11/23	#16 Vertebrata Part I: Fishes, Amphibians, Reptiles Phylogeny Exercise III **Quiz 10 on labs 14 & 15
11/24	Deuterostomes: Chordates II	Ch. 34	11/24; 11/25	NO LABS (Thanksgiving Break)
11/29	Human Evolution	Ch. 34	11/29; 11/30	#17 Vertebrata Part II: Birds **Quiz 11 on lab 16 Writing Assignment II Due
12/01	Ecology & Conservation Biology	Ch. 50; 55	12/01; 12/02	#18 Vertebrata Part III: Mammals #2 Winogradsky Column IV **Quiz 12 on labs 17 and 18
12/06	FINAL EXAM	Monday—8:00-10:30a.m. in the lecture room		

COURSE REQUIREMENTS:

Two midterm exams—100 points each	200pts.
Final exam	125pts.
Twelve lab quizzes—5 points each—two lowest scores dropped	50 pts.*
Two writing assignments—25 points each	50 pts.
Five lab computer activities – 5 points each	25 pts.
Lab manual questions – 1 point each	<u>50 pts.</u>
Total	500 pts.

There will be twelve lab quizzes given throughout the quarter on the dates indicated above. Each quiz will cover the preceding lab exercise(s) as indicated. *The two lowest scores will be dropped. **NO MAKEUP QUIZZES WILL BE GIVEN.** Missed quizzes will count as low scores. Five computer activities will be completed during lab on laptops (supplied by course). Students will be assigned some of the lab manual questions to be completed during lab.

To meet the writing requirement of the course, two short papers will be assigned and are due on the dates indicated above. The topics for each paper will be announced during the quarter, and will be posted on the WebCT.

Each exam will cover only the material preceding that exam. Exam format will be objective including multiple choice, matching, and true/false questions. Exam questions will be based on material covered in the lectures, labs, and course reading assignments.

OTHER REQUIREMENTS:

Students are required to purchase a **LAB COAT, which is required to participate in the lab exercises.**

Students must have web and e-mail access. **All students are required to register for the course on the WebCT**

The syllabus, lectures, writing assignments, and grades will be posted on the WebCT.

GRADING:

Grades will be determined by the following grading scale and based on final scores achieved in both lecture and lab:

A=93% (500-465), A- =90% (464-450), B+ =86% (449-430), B=82% (429-410), B- =80% (409-400), C+ =76% (399-380), C=70% (379-350), C- =68% (349-340), D+ =65% (339-325), D=60% (324-300), D- =58% (299-290), and F= below 58% (below 290).

A grade of C or better is required to pass the course, and proceed to Biology 100B.

Incomplete Grade Policy—Incomplete grades can only be assigned when the majority of the coursework has been completed (essentially all work except the final exam), and the student is passing the course. The submission of an Incomplete Grade Form is required.

Drop Policy—Within the W drop period, students may drop a course only for “serious and compelling reasons”. Acceptable documentation is required verifying the reason for the withdrawal, and the signatures of the course instructor and Department Chair are required. Drops during the emergency withdrawal period must meet all conditions required during the W drop period; in addition, ordinarily, complete withdrawal from the University is required. The signatures of the course instructor, Department Chair and the Dean are also necessary.

ACADEMIC HONESTY: Students are expected to read and abide by the University's Academic Honesty Policy, which can be found at <http://www.calstatela.edu/academic/senate/handbook/ch5a.htm> and in the Fall 2010 Schedule of Classes. Students who violate this policy will be subject to disciplinary action, and may receive a failing grade in the course for a single violation.

Reasonable Accomodation:

Reasonable accomodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation.

Lab Sections: The Teaching Assitant for each lab section and their email addresses are listed below. They will provide each section with their office hours and locations on the first day of lab.

12623	02	MW	9:40am-12:10pm	BIOS-132	Dr. Elizabeth Torres	etorre11@calstatela.edu
12624	03	MW	12:20pm- 2:50pm	BIOS-132	Phoebe Gimple	phoebe.csula@gmail.com
12625	04	MW	3:00pm- 5:30pm	BIOS-132	Phoebe Gimple	phoebe.csula@gmail.com
12626	05	TR	9:40am-12:10pm	BIOS-132	Lauren Tingco	lftingco@gmail.com
12627	07	TR	3:00pm- 5:30pm	BIOS-132	Rebecca Flegel	blflegel@yahoo.com
12632	06	TR	12:20pm- 2:50pm	BIOS-132	Rebecca Flegel	blflegel@yahoo.com