BERKELEY CITY COLLEGE
Biology 1B: Introduction to Biology #42071
Fall 2018
Lecture: MW 8:00-9.15 am in Room #032
Lab: MW 9:30-12:20 pm **#40233** in Lab #513
Instructor: Pieter de Haan
E-mail: pdehaan@peralta.edu
Office hours: M & W 7:30AM-8:00AM or **T & Th** 1:30PM-3:30PM in Room 511 or by appointment.

Course Description: This is the second semester of the lower division core biology sequence for life science majors. The course focuses on the structure, function, and reproduction of a variety of organisms, with emphasis on the plant kingdom. Special attention is given to principles of ecology, population genetics, and evolution.
Biology 1B is transferable to a campus of the University of California or California State University. Therefore, Biology 1B at BCC maintains the same academic standards as at a UC or CSU.

Student Learning Outcome:
1. Accurately explain the mechanisms of evolutionary change: natural selection, genetic drift, gene flow, random mating and mutations.
2. Explain the principles of population genetics, speciation and extinction.
3. Explain the exchange of biomass and energy at various ecological levels, and identify the diverse forms of plants, fungi, protista and microbes in the context of their ecological roles.
4. Explain the classification and life cycles of prokaryotes, protista, fungi and plants.
5. Explain the physiology, anatomy and development of plants.

Required Text:
https://openstax.org/details/books/biology-2e
Biology 1B Laboratory Notebook. **GOLD COVER** Fall 2018. Copy World, 1375 University Ave. 666-1000
You need four **Scantron forms (Form No. 882-E)** for the exams.

Grading: Final grades are based on lecture and laboratory. 60% of the final grade comes from the lecture and 40% from lab. The breakdown is as follows:

1. Three Midterm Exams (100 points each)	300 points
2. Final Exam	90 points
3. Ecology report + presentation	60 points
4. Lab manual	50 points
5. Lab Exams (50 points each)	150 points
TOTAL	650 points

Final grades will be assigned as follows:
A = 90% - 100% of the total points.
B = 80% - 89% of the total points.
C = 70% - 79% of the total points.
D = 60% - 69% of the total points.
NO Exams Scores will be dropped

No Makeup Examinations will be given without a written medical excuse. Vacation and/or travel plans do NOT qualify. Written notification is expected PRIOR to the date and time of the exam. A note to my E-mail address can accomplish this. Late Homework Assignments are not accepted. I am allergic to extra credit requests.
Attendance: Every student--just like the instructor--is expected to attend every class. Attendance means arriving at the beginning of class and remaining until the end!

Some Advice: Be familiar with the lecture syllabus you receive at the first lecture. Read the assigned chapter(s) before you come to the lecture and attend every lecture. **Study in groups.** The more you discuss the material, the better you will grasp it. Anyone caught cheating will receive an F for the course, and the incident will be reported to the administration. Don't even think about it!

Date	Lecture		Laboratory
M 8/20	Darwin + Natural Selection	Ch. 18.1 + 19.3	Simulating Natural Selection
W 8/22	Hardy & Weinberg	Ch. 19.1-19.2	Genetic Variation & Microevolution
M 8/27	Speciation	Ch. 18.2	Classification and Evolution
W 8/29	**Interactions**, Phylogeny & Systematics	Ch. 20	Introduction to Cladistics
M 9/3	**Labor Day**		
W 9/5	Cladistics	Ch. 20	Cladistics
M 9/10	Origin of Life Prokaryotes	Ch. 22	Lab review
W 9/12	Review		**Lab Exam-1**
M 9/17	**Lecture Exam-1**		
W 9/19	Origin of Eukaryotes	Ch. 23.1	Heterotroph Protista
M 9/24	Protista	Ch. 23.2-23.4	Autotroph Protista
W 9/26	Fungi	Ch. 24	Fungi
M 10/1	Flowering Plant Body	Ch. 30.1	Flowering Plant
W 10/3	Plant Cells + Tissues + Leaves	Ch. 30.2-30.4	Leaves, Roots, and Stems
M 10/8	Secondary Growth	Ch. 30.5	Secondary Growth
W 10/10	Transport in Plants	Ch. 30.5	Lab Review
M 10/15	Review		**Lab Exam-2**
W 10/17	**Lecture Exam-2**		
M 10/22	Seedless plants	Ch. 25	Seedless Plants
W 10/24	Heterospory	Ch. 26.1	Heterospory
M 10/29	Seed Plants	Ch. 26.2	Seed Plants: Gymnosperms
W 10/31	Angiosperms	Ch. 26.3 + 32	Seed Plants: The Angiosperms
M 11/5	Origin of Angiosperms*		Fruit Lab
W 11/7	Plant development	Ch. 39	UC Bot. garden
M 11/12	**No Classes**		
W 11/14	Review		**Lab Exam-3**
M 11/19	**Lecture Exam-3**		
W 11/21	Science of Ecology; Biomes	Ch. 44	On Studying Complex Ecosystems + introductory field trip

M 11/26	Population and Community Ecology	Ch. 45.1-45.6	Fieldwork
W 11/28	Ecosystems **Competition Report Due**	Ch. 46	Fieldwork
M 12/3	Conservation Biology	Ch. 47	Fieldwork
W 12/5	The Sixth Great Extinction + Review. **Lab Manual Due**		Presentations
M 12/10	**Final**		
-LAB MANUAL consists of answering the questions of the particular labs. The lab manual is due **Wednesday 12/5** **- LATE REPORTS ARE NOT ACCEPTED**			

*PDF version Chapter 26 Page 761 Question 19 "The Triassic period was marked by the increase in number and variety of angiosperms." It should read: "The CRETACEOUS period.....

Disclaimer: The course outline is tentative and subject to change.

Enrollment

A. The last day to add this course is: 8/26/18.
B. The last day to drop this course without a "W" appearing on your transcript is: 9/3/18.
C. The last day to withdraw from this course and receive a "W" is: 11/16/18.
D. You are responsible for your enrollment in this course. You will receive a grade for this course if you do not drop or withdraw on or before the deadline.
E. Attendance at lecture and lab is required.
F. I will drop students who miss the first class session without having notified me at least 24 hours in advance.