

BIOL 1010-004
CSU Stanislaus
Course Syllabus

Instructor: Dr. Ritin Bhaduri

Office: 263 Naraghi Hall

Phone: (209) 667-3485

Email: rbhaduri@csustan.edu

Credits: 3 lecture units

Lecture: TuTh 3:30 – 4:45 PM; C-102

Office Hrs: TuTh 11:00–1:00 or by appt.

Course (Catalog) Description: Introduction to basic biological phenomena common to all living organisms. Cellular and molecular levels of organization, genetics, and the mechanisms of heredity in organic evolution, environmental associations, structures as it relates to function, and reproduction from the molecular to gross structural levels. Satisfies G.E. area B2

Text: *Essential Biology CSUS Custom Edition* (a.k.a. *Campbell Essential Biology*, 5th ed.) by Simon, Reese and Dickey. Either version is fine; the one you get at CSUS bookstore says “Custom Edition” and has a mostly red cover. NOTE: if you are repeating this course you are eligible for a complimentary electronic version of the text.

Announcements: We will use Moodle as our learning management system. Create a Moodle account (code: biol1010004) and check for lecture slides, videos, animations, etc. on a regular basis.

Objectives: After completing this course you should be able to (1) demonstrate your ability to think like a biologist and (2) speak/write coherently about biology with biologists and non-biologists alike.

Teaching Philosophy: My philosophy is that I want to share as much knowledge and understanding of the subject with students as possible. To see my students excel and become empowered with the newly acquired knowledge is what I feel teaching is all about.

iClickers: You will need to purchase/reuse/rent an iClicker remote. Register it on Moodle and at www.iclicker.com/support/registeryourclicker. Expect to use it most days in class.

Assignments: Assignments will come in the form of Mastering Biology, in-class worksheets, concept reviews/discussion, and clicker questions. If you are absent from class on days we do in-class questions, you cannot make up the points.

Mastering Biology: With the textbook, you have access to the website Mastering Biology (www.masteringbiology.com). You must create a Mastering Biology (MB) account as you will access it regularly before and after each class. On the first day of class you will receive more information on this website including how to log in and create an account. You will need the instructor code (MBBHADURI 75594) to add to this course. I will track your access and use of MB, and points earned on the MB website will figure into your final grade.

Exams: There will be three regular exams and a final exam. The final will be comprehensive (about 50% old material, 50% new material since Exam 3). Exams will consist of multiple choice questions only. You will need a scantron form for all exams. Requests for early exams must be submitted *in writing* to the instructor prior to the scheduled exam. You will need to provide written (documented) evidence of hardship. **No makeup exams will be given after graded exams are discussed in class.**

Cheating and Plagiarism: Don't do it! Your work should reflect your own effort and words. Any verified instance of cheating and/or plagiarism will be unpleasant for all involved.

Assessment Methods and Grades: The best assessment measure for content-heavy courses is exams. Most of your grade will be based on lecture exams, quizzes, and home work.

Assessment	Percentage	Grading Scale
Exam 1	15	A = 90% or higher (A-= 90-92, A = 93 and higher)
Exam 2	15	B = 80 – 89% (B- = 80-82, B = 83-86, B+ = 87-89)
Exam 3	15	C = 70 – 79% (C- = 70-72, C = 73-76, C+ = 77-79)
Exam 4	20	D = 60 – 69% (D- = 60-62, D = 63-66, D+ = 67-69)
Quizzes	20	F = below 60%
Home Work (MB)	10	
Participation	5	
Total	100%	Note: CR/NC is an option in this course.

Important Dates:

- Mon Sept 2 – Labor Day holiday, University Closed (no classes)
- Thurs Sept 19 – Last day to drop the course
- Tues Oct 8 – Non-Instructional Day – no classes, but University offices/services are open
- Mon Nov 11 – Veteran's Day holiday, University Closed (no classes)
- Thurs-Fri Nov 28-29 – Thanksgiving Holiday, University Closed (no classes)
- Tues Dec 10 – Last day of classes

Study Skills: The following suggestions may help you succeed in this and other classes.

1. **Read** the chapter before class and bring questions you have from the chapter to class.
2. **Take notes in class.**
3. **Study** for the exams sooner than the night before or morning of the exam.
4. **Go to bed early** the night before and get up early the day of exams.
5. **Learn how you learn** and then stick with a style or process that is successful for you.
6. **Join a study group** with likeminded individuals. Students who study in groups tend to do better than those that study alone. Learning takes time and is difficult (impossible?) to do in a single session before an exam. **Form a study group that meets regularly** so you can talk about new concepts and review terminology with your colleagues. When studying for exams, focus primarily on lecture notes and concepts emphasized in class.

Getting Help: There is help on campus for students struggling with biology! The Central Valley Math & Science Alliance, located in 124 Naraghi Hall, is a free walk-in science and math tutoring center that does not require appointments. With both student and faculty tutors available from 8am – 6pm daily, there should be someone available to answer your questions. The Biology Club is a group of students who have gone through general biology courses and they are willing to offer advice and help, especially if you

buy them coffee or bring them cookies. Tutoring Services in the Writing Center on the ground floor of the CSUS Library (L-112) has drop-in tutoring for biology; check their office or website for their schedule. The Advising Resource Center, Student Support Services and the Program for Academic and Career Excellence (P.A.C.E.) in the MSR Building may be useful sources of aid for you. Of course, I will work hard to help you in class and out. Come to office hours, communicate with me and let me know your frustrations and I will respond.

Expectations of Students:

1. **Attend** all class meetings AND always be **punctual**. If you must miss a class meeting, it is your responsibility to make up any work missed and to obtain and learn all information you missed.
2. Evolution and natural selection are central tenets of biology and will be critical aspects of this course, openly discussed and referred to frequently.
3. Students are expected to take exams on days and times listed in the class schedule. If you have a legitimate excuse to miss a lecture exam, the instructor needs to know, before the beginning of the exam time, and other arrangements need to be made prior to the exam time. You should be prepared to provide documentation (doctor's note, etc.) for missing a lecture exam.
4. Cheating in any form is unacceptable in all classes, including BIOL 1010. It is the policy of the Department of Biological Sciences that anyone caught cheating will receive a grade of F for the course. The instructor reserves the right to request any student even suspected of cheating to take a second, different, exam from the rest of the class.
5. Participate fully and in a positive manner in all class activities.
6. Talking, whispering, and giggling among students during lectures is disruptive for both classmates and the instructor. It is expected that students will refrain from these activities during lecture. If this becomes a problem, student(s) will be asked to leave the class.
7. Cell phones **must be** turned off while anyone is lecturing at any time during lecture. Texting devices, palms, earphones, etc. must be turned off and placed out of sight of any student in the class during lectures and exams. No caps or hats may be worn during exams. Potty breaks are not allowed during lecture exams.
8. People learn best when they take responsibility for their own learning. You need to accept that responsibility.

Tentative Lecture Schedule:

WEEK	DATES	TOPIC(S)	Read/Due:
1	Aug. 22	Intro, course structure/expectations, data	
2	Aug. 27 - 29	Biology today	Ch. 1, 20
		Thinking like a biologist	Ch. 1
3	Sept. 3 - 5	Basic chemistry, water	Ch. 2
		Organic chemistry, biological molecules	Ch. 3
4	Sept. 10 - 12	Cells, membranes, organelles	Ch. 4
		Energy concepts, ATP and biological work	Ch. 5
5	Sept. 17 - 19	Enzymes, membrane transport	Ch. 5
		Energy flow, chemical cycling, respiration basics	Ch. 6
6	Sept. 24 - 26	Fermentation, photosynthesis	Ch. 7
		EXAM #1 (Cells & Biochemistry)	
7	Oct. 1 - 3	Mitosis & meiosis (asexual & sexual reproduction)	Ch. 8
		Patterns of inheritance 1, 2	Ch. 9
8	Oct. 10	DNA structure/function	Ch. 9
		Mutation, viruses, gene regulation and control	Ch. 10, 11
9	Oct. 15 - 17	Cloning, cancer, DNA technology, profiling, forensics	Ch. 11, 12
		Evolution evidence, natural selection	Ch. 13
10	Oct. 22 - 24	EXAM #2 (Genetics)	
		Mechanisms of evolution, species concept, extinction	Ch. 13, 14
11	Oct. 29 – Nov. 1	Evolution of new traits, classification	Ch. 14
		Origins of early life, prokaryotes, protists	Ch. 15
12	Nov. 5 - 7	Plants & fungi	Ch. 16
		Animal diversity	Ch. 16, 17
13	Nov. 12 - 14	Animal diversity, behavior	Ch. 17
		EXAM #3 (Evolution)	
14	Nov. 19 - 21	Animal behavior	<i>Special topic not in text</i>
15	Nov. 26 - 30	Diverse environments, human impacts	Ch. 18
16	Dec. 3 - 5	Applied population ecology, human populations, biodiversity	Ch. 19,20
		Communities, conservation	Ch. 20
17	Dec. 10	<i>Reading Day, no classes</i>	
	Dec. 17 (Tu)	EXAM 4/FINAL EXAM: 2:00 to 4:00 PM (on most recent and old material)	