

Syllabus: Principles of Biology
Biology 1010 Section 004 Fall 2012
Lectures: MW 6:00 -7:15 in P-167.

Instructor: Ms. Tommi Lou Carosella **Office:** Naraghi Hall Rm 257
Office Hours: Tues, Wed 11-12, Fri 1-2:00, or by appointment.

Email: tcarosella@csustan.edu Email is the best way to contact me. Use it for setting up an appointment, for questions with short answers, or for emergencies. Put BIOL 1010 in the subject line. Please ask complex questions during the lecture or office hours. Read the syllabus and check announcements on BlackBoard before you ask.

Phone: 667-3596. If you leave a message speak slowly and clearly, and repeat your phone number at the end of the message. If I can't understand you, I can't return your call.

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. Details provided in first class.** You can use the 4th edition, but you will need to purchase access to the Mastering Biology Website in order to do the homework.

Announcements: Consult the announcements page on BlackBoard often for important, up to the minute information.

Course objectives: This course is intended to:

1. provide an understanding of science, and its methodologies.
2. provide an overview of the issues, principles, methodologies, and perspectives of biology.
3. develop an understanding to allow effective communication on biological issues.
4. provide a working background to critically evaluate biological issues and develop continuous inquiry and life-long learning.
5. provide the framework to understand, examine critically, and use information from various sources to answer questions relevant to biology.
6. provide an understanding of the accomplishments of selected individuals to biology.
7. demonstrate the relationships between the fields of biology, chemistry, physics, geology and the other sciences with an emphasis on how these fields are closely inter-related.
8. demonstrate the interdependence of humans on natural ecosystems and the diversity of life on earth.
9. develop more informed and responsible citizens with respect to issues concerning the living world.

Teaching philosophy: You are in control of your learning experience. You must take responsibility for your coursework. Come to class EVERY time prepared to listen and think, do the readings, do the homework. I am here to guide you, to encourage you, and to assess your progress.

iClickers: You are required to purchase an iClicker remote for in-class participation. iClicker is a response system that allows you to respond to questions posed during class, and you will be graded on those questions. In order to receive this credit, you need to register your iClicker remote online at: <http://www.iclicker.com/registration>. Complete the fields with your first name, last name, student ID, and remote ID. Be sure to include the preceding zeros, e.g., 000456123 of your ID number. The remote ID is the series of numbers and letters found on the bottom of the back of your iClicker remote. The iClickers will be used every day in class, and you are responsible for bringing your remote daily. Numerous studies have demonstrated that iClickers improve student learning. iClickers have been adopted within several departments on campus. So unless you are graduating you will probably use it

again for several classes. But after the term ends you may sell your iClicker back to the bookstore or to another student. Using another student's iClicker or two remotes in class is considered cheating. There will be 2- 3 graded iClicker questions per class.

iClicker grading: 1 pt. for the correct answer, 0 for incorrect answer. 1 participation pt. per lecture. Students will be allowed to miss four classes, before being penalized. The iClicker may also be used for anonymous polling, provoking discussions, and to gauge student comprehension of difficult topics. Information from these types of questions is not recorded, so your anonymity is guaranteed.

Mastering Biology Online Homework: You will be assigned online homework every week. This is to get you to read the textbook, help you understand the material, discover if there is some topic you don't understand, and to boost your grade by giving you points outside of the exams. To access the homework you must buy a textbook, either paper or an electronic version, and follow the directions at the publisher website. All of the BIOL 1010 instructors have made the decision to do this. Although a textbook is expensive, it is cheaper than repeating the class! Make sure you register at the www.masteringbiology.com website. Our course ID is **mbcarosella2012Fall**. Check weekly for assignments and get them done on time.

Student Conduct: This is college. Be on time. Pay attention. In such a large and crowded class it is essential that students respect the rights of others. **Turn off your cell phones.** Bring your textbook to class, so you can mark the diagrams that I talk about. DO NOT sit there fooling around on your laptop, answering e-mail, or checking Facebook. It distracts other students, does nothing to help your grade, and will result in my asking you to leave. Those who disrupt the class by talking or any other means will be asked to leave. Repeat offenders may have points deducted from their final grade and/or be turned over to the appropriate student disciplinary committee.

Cheating: There is a zero tolerance policy. Any cheating whatsoever will result in an automatic F in the class and the matter will be turned over to the appropriate student disciplinary committee. Taking out a cell phone during an exam is considered cheating, your exam will be confiscated, and you will receive a grade of F.

Order of Topics: We will attempt to do all the chapters in your text. It's a lot of material! I will post the power point lectures online. One successful strategy is to print them out beforehand, and take notes on them. You will not have time to copy everything that is on the power point slides, nor should you try to do that. You should listen to what I am saying- usually telling you why this information is important, or giving you examples. After class, within a day or two and before the next lecture, you should review your notes. Rewriting them helps solidify the information. Practice recalling the information. Try describing what you learned in class to another student.

Exams: There will be three midterm exams, each worth about 100 points, and a final exam worth 120-150 points. If you are late, you will have less time to complete the exam. Leave home early on exam days to ensure you will be on time. Always bring a #2 pencil and Scantron form **882** to the exams. Purchase the proper scantron form well in advance of exams. No excuses, including the bookstore runs out of them, will be accepted for not having the proper form. You must not leave the room during an exam without the instructor's permission. That includes trips to the restroom. You must turn off cell phones and remove baseball caps during exams. Cell phones must be put away during exams. No food or drink is permitted during exams. Please leave drink cups, with the exception of water bottles, outside.

It is **your** responsibility to notify the instructor **prior** to missing an exam and to supply her with a valid, **written** excuse. There will be **no** extra credit nor makeup exams. All requests to take exams at other than scheduled times must be in writing to the instructor at least **one week** prior to the scheduled exam. If you miss an exam for a **legitimate** emergency it is still your responsibility to notify the instructor immediately. Under no circumstances will you be allowed to take an exam once it has been handed back.

Exams may consist of multiple choice, matching, short answers, diagrams, and short or long essays. **The instructor reserves the right to give unannounced quizzes or in class exercises if it becomes apparent that students are not keeping up with the material and/or there are an unacceptable number of absences.** If you happen to be absent that day or you fail to follow instructions, you will receive a grade of 0 for that quiz/exercise.

Dates		Value
Exam 1	Sept 24	100 pts.
Exam 2	Oct 22	100 pts.
Exam 3	Nov 14	100 pts.
Exam 4	Dec 17	150 pts.
Evolution Video Homework	Nov 5	30 points (5% of your grade)
Mastering Biology online homework	Weekly	15% of your grade
iClicker	Everyday	5% of your grade

Important Dates: Census Date is Sept. 19th. This is the last day to add/drop the course or change your grading option without my signature; it is your responsibility to submit the grade change form to Admissions and Records by 5pm that day. Nov. 8th is the last day to change your grading option with my signature. I strictly adhere to the grading option Academic Records has on file for you when I submit final grades. I will NOT change grades once final grades have been submitted.

Getting Help & 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. **Attend** class. 3. **Complete all assignments** and turn them in on time. 4. **Take notes** in a way that is intuitive to you, even if you have to use a lot of paper. 5. **Join a study group** with likeminded individuals. Students who study in groups tend to do better than those that study alone. 6. **Study** for the exams sooner than the night before or morning of the exam. 7. **Go to bed early** the night before and get up early the day of exams. 8. **Learn how you learn** and then stick with a style or process that is successful for you.

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, concepts emphasized in class, and the assigned text readings.

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.

WEEK	DATE	TOPIC(S)	Read/Due:
1	Mon Aug. 20	No Class	
	Wed, Aug. 22	Intro, course structure/expectations, data	
2	Aug. 27	Biology today	Ch. 1
	Aug. 39	Chemistry!	Ch. 2
3	Sept. 3	No Class	
	Sept. 5	Molecules of Life	Ch. 3
4	Sept. 10	Tour of the cell	Ch. 4
	Sept. 12	The Working Cell	Ch. 5
5	Sept. 17	The Working cell	Ch. 5
	Sept. 19	Cellular respiration	Ch. 6
6	Sept. 24	Exam #1 (chapters 1-5)	
	Sept. 26	Photosynthesis	Ch. 7
7	Oct. 1	Mitosis & meiosis (asexual & sexual reproduction)	Ch. 8
	Oct. 3	Patterns of inheritance	Ch. 9
8	Oct. 8	DNA structure/function	Ch. 10
	Oct. 10	No class	
9	Oct. 15	Mutation, viruses, gene regulation and control	Ch. 11
	Oct. 17	Cloning, cancer, DNA technology, profiling, forensics Evolution evidence, natural selection	Ch. 12
10	Oct. 22	Exam 2 Chapters 6-12)	
	Oct. 24	Mechanisms of evolution, species concept, extinction	Ch. 13, 14
11	Oct. 29	Evolution of new traits, classification	Ch. 14
	Oct. 31	Origins of early life, prokaryotes, protists	Ch. 15
12	Nov. 5	Plants & fungi Evolution Video Assignment due	Ch. 16
	Nov. 7	Animal diversity	Ch. 16, 17
13	Nov. 12	Animal diversity, Human evolution	Ch. 17
	Nov. 14	Exam 3 (Evolution) (chapters 13-17)	
14	Nov. 19	Ecology and the Biosphere	Ch 18
	Nov. 21	Ecology and the Biosphere	Ch 18
15	Nov. 26	Population ecology	Ch. 19
	Nov. 28	Population ecology	Ch. 19
16	Dec. 3	Communities and ecosystems	Ch. 20
	Dec. 5	Communities and ecosystems	Ch. 20
17	Dec. 10	Catch up and wrap up.	
	Dec. 17 - EXAM	FINAL EXAM 6-8 pm (Ecology and old material)	

One last thing: Please realize that Evolution is one of the cornerstones of modern biology. It will be critical to my presentation and your understanding. I am sensitive to the fact that some of you have religious concerns or conflicts with the theory of evolution. I try to be respectful of those differences. It is not my intention to challenge your religious beliefs or change your mind. However, I do expect you to learn the material and understand how it informs the study of biology.