

**Syllabus: Principles of Biology  
Biology 1010 Section 002 Spring 2012**

**Instructor:** Ms. Tommi Lou Carosella    **Office:** Naraghi Hall Rm257

**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.

**Office Hours:** Wed 12-1, Thur 11-12, Fri 1-2:00, or by appointment TWRP.

**Email:** [tcarosella@csustan.edu](mailto: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 or it will not be acknowledged by your instructor. Please ask complex questions during the lecture or office hours. Read the syllabus and check announcements on BlackBoard before you ask.

**Lectures:** TR 12:30 -1:45 in P-167.

**Text:** [Campbell Essential Biology, 4<sup>th</sup> edition With Mastering Biology](#), By Simon, Reece, Dickey

**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. If you have a legitimate excuse for missing more classes, be sure to contact your instructor and be prepared to provide documentation. 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](http://www.masteringbiology.com) website. Our course ID is **mbcarosella12165**. 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. Submitting a quiz for another student and/or using another student's iClicker **or using two remotes**, are also considered cheating. 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 80-100 points, and a final exam worth 120-130 points. If you are late, you will have less time to complete the exam. Traffic and/or car problems are not acceptable excuses for being late. Leave 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. You must turn off cell phones and remove baseball caps during exams. If your cell phone rings during an exam five (5) points will be deducted from your score. Failing to follow instructions written on your exam will result in two (2) points being deducted for **each** violation. No food or drinks are permitted during exams. Cell phones must be put away during exams. Taking out a cell phone during an exam is considered cheating, your exam will be confiscated, and you will receive a grade of F for that exam.

**Note:** the Scantron machine sometime makes mistakes, particularly when you change an answer and do not completely erase the other choice. In order to verify these mistakes you **must** also circle the correct answer on the **question** sheet. Challenges to the machine's accuracy will **not** be accepted if you did not do so. You have until the **next** class period, after the exam is returned, to challenge its accuracy.

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.

<b>Dates</b>		<b>Value</b>
Exam 1	Feb 21	80-100 pts.
Exam 2	Mar 15	80-100 pts.
Exam 3	April 19	80-100 pts.
Exam 4	May 22	120-130 pts.
Evolution Video Homework	Apr 5	30 points
Mastering Biology online homework	weekly	10% of your grade
iClicker	Everyday	5% of your grade

**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.

Week	DATE	TOPIC(S)	Read/Due:
	Thursday, Jan. 26	Intro, course structure/expectations	Ch. 1
2	Tuesday Jan 31	Biology today Thinking like a biologist	Ch. 1
	Thursday Feb 1	Water, Compounds	Ch. 2
3	Feb. 6	Biological Molecules	Ch. 3
	Feb. 8	Cells, Membranes, Organelles	Ch. 4
4	Feb. 14	Energy Concepts, ATP	Ch. 5
	Feb. 16	Enzymes, Transport Across Membranes	Ch. 5
5	Feb. 21	<b>Exam 1 Chapter 1-5</b>	
	Feb. 23	Aerobic Respiration, Fermentation, Photosynthesis	Ch. 6
6	Feb. 28	Mitosis – Asexual Reproduction	Ch. 7
	Mar. 1	Meiosis – Sexual Reproduction	Ch. 8
7	Mar. 6	Patterns of Inheritance	Ch. 9
	Mar. 8	Patterns of Inheritance	Ch. 9
8	Mar. 13	From DNA to Protein, Viruses and Infectious Agents	Ch. 10
	Mar. 15	<b>Exam 2 Chap 6-10</b>	
9	Mar. 20	How Genes are Controlled	Ch. 11
	Mar. 22	Genetic Basis of Cancer, Recombinant DNA	Ch 11, 12
10	Mar. 27	Genomics, Gene Therapy, Ethics	Ch. 12
	Mar. 29	Evidence for Evolution, Natural Selection	Ch. 13
11	Apr. 3	Mechanisms of Evolution, Species Concept	Ch. 13, 14
	Apr. 5	Evolution of New Traits, Extinctions, Classification	Ch. 14, 15
12	Apr. 10	☺ NO CLASS ☺	
	Apr. 12	☺ NO CLASS ☺	
13	Apr. 17	Origins of Early Life, Prokaryotes, Protists	Ch. 15
	Apr. 19	<b>Exam 3 Chap 11-15</b>	
14	Apr. 24	Plants and Fungi	16
	Apr. 26	Evolution of Animals	17
15	May 1	Ecology and Biomes	18
	May 3	Global Climate Change	18
16	May 8	Applied Population Ecology, Human Populations	Ch. 19
	May 10	Biodiversity, Communities	Ch. 20
17	May 15	Summing up, why should you care?	
	May 17	No class- exam week starts	
	May 22	<b>Exam 4 Chapters 16-20 11:15am-1:15pm</b>	

Syllabus may change. Please keep up to date through BlackBoard.