

BIOL 1010-004
CSU Stanislaus
Course Syllabus (Long Version)

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Office Hours: Tuesday 1:30-3:00, Wednesday 9:30-11:00, or by appt.

NOTE: When contacting me by phone, PLEASE speak slowly and clearly when leaving a message, and be sure to leave your name and a way to contact you. When emailing me, PLEASE put "BIOL 1010" in the subject line so I can better address your question/concern.

Lectures: Tu/Th 11:00-12:15, 102 Bizzini Hall (a.k.a C-102)

Text: *Biology: Concepts and Applications (without Physiology) 8e* by Starr, Evers and Starr. Make sure you get the custom version for BIOL 1010, not the full version which includes chapters on physiology.

Announcements: Check the course website on BlackBoard for announcements, schedule changes, due dates, discussion board, etc.

Course Objectives: This course is intended to...

1. Emphasize that, biologically, humans are mammals and are therefore subject to the same cycles and processes that govern all life;
2. Provide you with a conceptual framework of scientific thinking and methods;
3. Provide you with overview of current issues in biology from molecular to ecological scales;
4. Provide you ample opportunity to effectively communicate about biological topics;
5. Help you develop effective study strategies that will enable you to succeed in all your courses;
6. Encourage you to use multiple resources to retrieve information relevant to biology;
7. Demonstrate the relevance of all sub-disciplines of biology to each other and to other fields such as chemistry, physics, geology, anthropology, art, economics, etc.;
8. Demonstrate the dependence of humans on biological resources and biodiversity;
9. Enable you to live, work and play as an informed and responsible citizen of this planet.

My teaching philosophy: I want you to come away from every class knowing that I tried to make the material accessible and interesting for you. If I can make you laugh a little and say "wow" or "that's cool!" then I've helped you learn something you'll remember later. The bottom line is: I want to help you succeed in this class, and I will work hard to do it.

Class Participation: At this level, you are expected to arrive to class on time and ready to learn. You should expect to talk frequently in class about biology. Most times this will be in small groups, but occasionally I will ask you to speak to the whole class. Furthermore, you will be asked to answer several questions with an iClicker every lecture. I'll record your answers to each of these and will know if you

were in class or not. Don't cheat. Hold yourself accountable for your actions, and hold me accountable for mine.

Evolution: "Respect for data, comfort in faith." Someone much wiser than myself came up with this saying, and if you can live by it, then you'll be fine in this class. Evolution and natural selection are central tenets of biology, supported by data from many different sub-disciplines. As such, evolution and natural selection will be critical aspects of this course, openly discussed and referred to frequently. As your biology instructor it is my job to expose you to such data and thinking, not to editorialize or persuade you to accept any aspect of biological thinking as the gospel truth. If you feel I have done so at any time please talk with me personally and I will apologize.

Math: Every biologist uses math and statistics. While this is a survey course for non-majors, I still expect you to have some fundamental skills with math as they apply to biology. This means that you will need to be comfortable both interpreting and generating graphs and be able to distinguish if two or more samples are "significantly" different from each other or not. You'll need to be able to calculate averages from a sample and generate (or at least interpret) confidence intervals for measured averages. I will help you get to this level of math with lots of in-class examples and opportunities to practice. By the end of the term you'll be able to do these calculations in your sleep. NOTE: a calculator is good for this, but Excel is better.

iClickers: You will need to purchase/reuse/rent an iClicker remote, which you will use in every class session except exams. Register it at www.iclicker.com/registration. Complete the fields with your first and last names, student ID number, and the remote ID code on the bottom back of the iClicker remote. Be sure to include any/all preceding zeros of your ID number(s). Numerous studies have shown that iClickers help improve student performance, learning, and retention of course content. Numerous classes at CSUS have adopted the use of iClickers, so unless you are graduating after this semester you will probably use it again in another class. After the semester ends, however, you can sell your iClicker back to the CSUS bookstore or to another student.

Conduct: You are expected to conduct yourself professionally while in class and on course business. Please do not disrupt the learning environment, rights and property of others. Of course, all cell phones/iPods/etc. should be turned off during class. If you have a grievance about the course in any capacity, please contact me personally and politely so we can discuss it.

Cheating and Plagiarism: I have a zero-tolerance policy for such conduct. Often you will work in small groups and submit one answer for the group, but most times your work should reflect your own effort and words. Any verified instances of cheating and/or plagiarism will result in an automatic F in the course and referral to the appropriate student disciplinary committee for all involved.

Grades: There are 600 points possible in this course. The breakdown of points is as follows:

MIDTERM EXAMS (x3)	= 300 pts.
FINAL EXAM	= 150 pts.
WEEKLY SUMMARIES (x11)	= 55 pts.

IN-CLASS ASSIGNMENTS (x11)	= 55 pts.
CLICKER QUESTIONS	= 40 pts.
TOTAL	= 600 pts.

I will calculate grades/GPAs in the following manner: I will use the average of the top three scores and set that to GPA=4.0. I will then set 60% of the total points possible as GPA=1.0 and, using a line equation with those two points, will calculate a Grade Point Average (GPA) which I will convert to a letter grade. Thus, the final grade scale is linear and will only be known after the final exam (I will show you an example of how this works with a sample class data set). I have found this method to be fair and equitable, and students have never complained about it. Note that **I will give + and – grades** in the following manner:

4.0-3.8 = A	3.7-3.6 = A-	3.5-3.3 = B+	3.2-3.0 = B	2.9-2.6 = B-	2.5-2.3 = C+
2.2-2.0 = C	1.9-1.6 = C-	1.5-1.3 = D+	1.2-1.0 = D	0.9-below = F	
CR = 2.0 or higher		NC = 1.9 or lower			

Assignments: Most Tuesdays you will be required to submit a summary of course content from the previous week. Content you may consider for summarizing can come from lectures, readings, BIOL 1020 labs, or appropriate sources you find on your own. Summaries are to be exactly one page and should incorporate diagrams, sketches, flow charts, bullet points, etc. You will want to avoid large amounts of text on these; rewriting notes is not the best way to summarize information! I'll discuss these more in class. Other assignments will come in the form of in-class activities, minute papers, and clicker questions. Thus, it behooves you to attend class; if you are absent from class on the day we have completed an in-class assignment, you cannot make up the points.

With the course textbook you have access to the website that accompanies the text. I will not *require* you to access this site, but I *heartily recommend it*. On that website you'll find reading quizzes, videos and animations, and other content design to supplement what we cover in the course. If it becomes evident that requiring you to use this site will help you succeed (i.e. improve your grade) in the course, then I will mandate some use of the textbook website.

Exams: There will be three midterms and a final exam, worth 100 and 150 points each, respectively. The final WILL be comprehensive, but weighted toward more recent material. Exams will consist of both multiple choice and short answer questions. You do NOT need a scantron for tests. Make-up exams can only be given with at least 3 days advance notice from you in the form of a doctor's appointment or some other major event. If you fail to appear on a test day without advance notice it is likely that you cannot make up the test. If such an event occurs because of a legitimate emergency (i.e. flat tire on the way to class, your child got sick at school, etc.) you must still notify me ASAP so we can talk about your situation and see what we can work out. Under no circumstances will any make-up exams be given once graded exams have been returned to students (usually within a week, sometimes sooner).

I will allow you the opportunity to submit your exam for regrade in the following manner: After seeing the exam answer key and you still feel like I have wrongly graded parts of your exam, you may choose ONE question for me to regrade. Please type a short explanation of your logic/reasoning behind your

request for more points, clearly specify the question you want me to regrade, attach this explanation to your ORIGINAL exam, and submit both to me within one week of receiving your graded exam back. Easy fixes like bad math on my part when totaling points are automatic and painless adjustments. I will always give a written explanation to your regrade request, whatever the outcome.

Important Dates: There is no class on September 8th, October 11th, and November 24th. Census Date is Sept. 19th. This is the last day to add/drop the course or change your grading option without my signature. Nov. 8th is the last day to change your grading option with my signature; it is your responsibility to submit this form to Admissions and Records by 5pm that day. I will strictly adhere to the grading option noted for you by Academic Records when I submit final grades. I will NOT change final grades once they have been submitted.

Getting Help: There are several useful avenues for you to get help with your biology class. First and foremost, take ownership of your learning and ask questions! Ask me. Ask another student in the class, or someone you know who took this class before you. Come to office hours. Join the Biology Club and ask those students. Tutoring Services in the Writing Center on the ground floor of the CSUS Library has drop-in tutoring help for many subjects, including biology. 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. Join or form a study group with other BIOL 1010 students. Seek out a private tutor if you can. The bottom line is: help is out there if you ask for it. PLEASE do not operate under the assumption that you are the only one who has questions about this course. There are 700 undergrads taking BIOL 1010 this semester. Talk to each other, make time to work for this class, and do that work seriously and diligently! If you take ownership of your learning and actively seek out help when you need it, you will not fail this course.

Tentative Lecture Schedule:

WEEK	DATE	TOPIC(S)	Read/Due:
1	Tuesday, Aug. 23	Intro, course structure/expectations	Ch. 1
	Thursday, Aug. 25	Thinking like a biologist	Ch. 1, 2
2*	Aug. 30	Chemistry of life	Ch. 2, 3
	Sept. 1	Biological molecules and cells	Ch. 3, 4
3*	Sept. 6	Why fat is good for you (sort of...), and moving stuff around	Ch. 5
	Sept. 8	NO CLASS , Dr. Fleming @ conference	Watch I.D. video
4	Sept. 13	Why Coruscant can never sustain life	Ch. 6; DUE: 1 pg. critique of ID video
	Sept. 15 - TEST	MIDTERM #1	
5*	Sept. 20	Ew! You have mitochondria!	Ch. 6, 7
	Sept. 22	Fermentation anyone?	Ch. 7, 11
6*	Sept. 27	How's that cut healing?	Ch. 11, 12
	Sept. 29	Why sex is good for our species	Ch. 12, 13
7*	Oct. 4	Why you (mostly) look like your parents	Ch. 13, 14
	Oct. 6	Genetic disorders	Ch. 14, 8
8	Oct. 11	☺ NO CLASS ☺ Columbus Day	
	Oct. 13 - TEST	MIDTERM #2	
9*	Oct. 18	Why is he colorblind?	Ch. 8, 9
	Oct. 20	We have assumed control!	Ch. 9, 10
10*	Oct. 25	Send in the clones	Ch. 10, 15
	Oct. 27	How to scandalized a continent	Ch. 15, 16
11*	Nov. 1	The "how" of evolution: processes and outcomes	Ch. 16, 17
	Nov. 3	Lightning in a bottle	Ch. 17, 18
12	Nov. 8	Astrobiology	Ch. 18
	Nov. 10 - TEST	MIDTERM #3	
13*	Nov. 15	The No Homers club	Ch. 26
	Nov. 17	Living together, Homers included	Ch. 26, 27
14	Nov. 22	The critters freeloading off of you	Ch. 27
	Nov. 24	☺ NO CLASS ☺ Happy Thanksgiving!	
15*	Nov. 29	Nature: one big restaurant	Ch. 27, 28
	Dec. 1	Moving stuff around...again	Ch. 28, 29
16*	Dec. 6	Hey! We live here, too!	Ch. 29, 30
	Dec. 8	So, why should I care?	Ch. 30
17	Dec. 13 - TEST	FINAL EXAM 11:15am – 1:15pm	
	Dec. 15	Happy holidays!	

* Summary due that Tuesday.