

**BIOL 1010-003
CSU Stanislaus
Course Syllabus**

Instructor: Dr. Michael Fleming

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Office Hours: Monday 11:30-1:00, Wednesday 10-11:30, or by appointment.

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Lectures: Tuesdays & Thursdays 11:00-12:15, 102 Bizzini Hall (a.k.a C-102)

Text: *Campbell 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.**

Announcements: Check BlackBoard for updates, lecture slides, study guides, etc.

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.

My Teaching Philosophy: I will work hard to help you succeed in this course, and hopefully we’ll have some fun while getting you there.

Class Participation: You should arrive to class on time and ready to learn. Assignments are due at the start of class or on your way out if we did it in class. You will talk frequently in small groups, and sometimes present your ideas to the entire class. Be honest, hold yourself accountable for your actions, and hold me accountable for mine.

Evolution: “Respect for data, comfort in faith.” Someone much wiser than me came up with this saying. If you can live by it then you’ll be fine in this class. Evolution and natural selection are central tenets of biology and will be critical aspects of this course, openly discussed and referred to frequently.

Math: Every biologist uses math and statistics. In this course you will use some math as it applies to biology. This mostly includes making and interpreting graphs, but may also include calculating averages and variation around an average. I will help you and there will be chances to practice. NOTE: a calculator is good for this class, and knowing how to use MS Excel effectively is better.

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

Assignments: Most Mondays you will submit a summary of course content from the previous week. See the document “Summary Rubric” on BlackBoard for more information on summaries. Other assignments will come in the form of Mastering Biology, in-class concept reviews/discussion, and clicker questions. If you are absent from class on days we do in-class assignments, 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 provided on the first day of class to add my specific 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 midterms and a final exam. The final will be comprehensive (about 30% old material, 70% new material since the last midterm). Exams will consist of multiple choice, fill in the blank, and short answer questions. You need a scantron form for all exams. Requests for early exams must be

submitted *in writing* prior to the scheduled exam. You will need to provide some evidence of hardship. If you miss an exam and have to make it up, you will need to provide some evidence of hardship. **No makeup exams will be given after graded exams are returned to the 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.

Grades: There are 700 points possible in this course:

MIDTERM EXAMS (x3)	= 300 pts.
FINAL EXAM	= 150 pts.
WEEKLY SUMMARIES (x11)	= 55 pts.
CONCEPT REVIEWS (x11)	= 55 pts.
MASTERING BIOLOGY	= 100 pts.
<u>CLICKER QUESTIONS</u>	= 40 pts.
TOTAL	= 700 pts.

I calculate grades as a function of grade point average (GPA) where A=4.0 and D=1.0 (I will show you an example of this in class). Students find this method fair and equitable. **I give + and – grades** as follows:

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 = 1.6 or higher		NC = 1.5 or lower			

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 and participate actively. 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 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.

Tentative Lecture Schedule:

WEEK	DATE	TOPIC(S)	Read/Due:
1	Tuesday, Aug. 21		
	Thursday, Aug. 23	Intro, course structure/expectations, data	
2	Aug. 28	Biology today	Ch. 1, 20
	Aug. 30	Thinking like a biologist	Ch. 1
3	Sept. 4	Basic chemistry, water	Ch. 2, Summary #1 due
	Sept. 6	Organic chemistry, biological molecules	Ch. 3
4	Sept. 11	Cells, membranes, organelles	Ch. 4, Summary #2 due
	Sept. 13	Energy concepts, ATP and biological work	Ch. 5
5	Sept. 18	Enzymes, membrane transport	Ch. 5, Summary #3 due
	Sept. 20	Energy flow, chemical cycling, respiration basics	Ch. 6
6	Sept. 25	Fermentation, photosynthesis	Ch. 7, Summary #4 due
	Sept. 27	MIDTERM #1 (Cells & Biochemistry)	
7	Oct. 2	Mitosis & meiosis (asexual & sexual reproduction)	Ch. 8
	Oct. 4	Patterns of inheritance 1	Ch. 9
8	Oct. 9	Patterns of inheritance 2, DNA structure/function	Ch. 9, Summary #5 due
	Oct. 11	Mutation, viruses, gene regulation and control	Ch. 10, 11
9	Oct. 16	Cloning, cancer, DNA technology, profiling, forensics	Ch. 11, 12, Summary #6 due
	Oct. 18	Evolution evidence, natural selection	Ch. 13
10	Oct. 23	MIDTERM #2 (Genetics)	
	Oct. 25	Mechanisms of evolution, species concept, extinction	Ch. 13, 14
11	Oct. 30	Evolution of new traits, classification	Ch. 14, Summary #7 due
	Nov. 1	Origins of early life, prokaryotes, protists	Ch. 15
12	Nov. 6	Plants & fungi	Ch. 16, Summary #8 due
	Nov. 8	Animal diversity	Ch. 16, 17
13	Nov. 13	Animal diversity, behavior	Ch. 17, Summary #9 due
	Nov. 15	Midterm #3 (Evolution)	
14	Nov. 20	Animal behavior	<i>Special topic not in text</i>
	Nov. 22	☺ NO CLASS ☺ Happy Thanksgiving!	
15	Nov. 27	Diverse environments, human impacts	Ch. 18, Summary #10 due
	Nov. 29	Populations, growth models	Ch. 19
16	Dec. 4	Applied population ecology, human populations, biodiversity	Ch. 19, 20, Summary #11 due
	Dec. 6	Communities, conservation	Ch. 20
17	Dec. 11	<i>Reading Day, no classes</i>	
	Dec. 13 - EXAM	FINAL EXAM 11:15am – 1:15pm (Ecology and old material)	