

BIOL 1010-003
CSU Stanislaus
Course Syllabus

Instructor: Dr. Michael Fleming

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Office Hours: Tuesday 11-12, Wednesday 2:30-3:30, or by appointment.

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Lectures: Monday/Wednesday/Friday 8-8:50am, 167 Demergasso-Bava Hall (a.k.a P-167)

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.

Announcements: Check BlackBoard and email 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, and 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. When you use it in class, I cannot identify your clicker to you, so it is an anonymous way to submit answers. Registration of clickers is easy and gives me a way to synch your clicker to you, and thus take attendance and assign point for correct clicker answers. 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 (or purchased separately if you already have a 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 1/3 old material, and 2/3 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.

Recording Lectures and Special Accommodations: Students with documented disabilities should seek special accommodations for all classes through the DRS office on campus. If DRS sends me a file on you that lists recording lectures as an acceptable accommodation, then you may record my lectures. Otherwise, you have to do it the old-fashioned way with pen and paper. If you record my lectures in any form (video, audio, still pictures, etc.) without accommodation from DRS, that constitutes intellectual property theft and it will be a bad situation 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 Feb. 22nd. 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. Apr. 29th 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 – 5pm 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! 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	Monday, Jan. 28	Intro, course structure/expectations	
	Wednesday, Jan. 30	Biology today	Ch. 1
	Friday, Feb. 1	Thinking like a biologist	Ch. 1
2	Feb. 4	Basic chemistry	Ch. 2 – SUMMARY #1 due
	Feb. 6	Water, Compounds	Ch. 2,3
	Feb. 8	Biological Molecules	Ch. 3
3	Feb. 11	Cells, Membranes, Organelles	Ch. 4 – SUMMARY #2 due
	Feb. 13	Energy Concepts, ATP	Ch. 5
	Feb. 15	Enzymes, Transport Across Membranes	Ch. 5
4	Feb. 18	Respiration Basics: Aerobic Respiration, Fermentation	Ch. 6 – SUMMARY #3 due
	Feb. 20	Photosynthesis Basics: Light and Dark Reactions	Ch. 7
	Feb. 22	MIDTERM #1 (Cells & Biochemistry)	
5	Feb. 25	Mitosis – Asexual Reproduction	Ch. 8
	Feb. 27	Meiosis – Sexual Reproduction	Ch. 8
	Mar. 1	Patterns of Inheritance 1 – Basic	Ch. 9
6	Mar. 4	Patterns of Inheritance 2 – Intermediate	Ch. 9 – SUMMARY #4 due
	Mar. 6	Patterns of Inheritance 3 – Advanced	Ch. 9
	Mar. 8	DNA Structure & Function, Mutations	Ch. 10
7	Mar. 11	From DNA to Protein, Viruses and Infectious Agents	Ch. 10 – SUMMARY #5 due
	Mar. 13	Regulation of Gene Expression	Ch. 11
	Mar. 15	Cloning and Cancer	Ch. 11
8	Mar. 18	DNA Technology, Profiling, Forensics	Ch. 12 – SUMMARY #6 due
	Mar. 20	Genomics, Gene Therapy, Ethics	Ch. 12
	Mar. 22	MIDTERM #2 (Genetics and Heredity)	
9	Mar. 25	Evidence for Evolution, Natural Selection	Ch. 13
	Mar. 27	Mechanisms of Evolution, Species Concept	Ch. 13, 14
	Mar. 29	Evolution of New Traits, Extinctions, Classification	Ch. 14
10	Apr. 1	☺ NO CLASS ☺	SPRING BREAK!
	Apr. 3	☺ NO CLASS ☺	SPRING BREAK!
	Apr. 5	☺ NO CLASS ☺	SPRING BREAK!
11	Apr. 8	Recapping Evolution	Review Chs. 13-14 – SUMMARY #7 due
	Apr. 10	Origins of Early Life, Prokaryotes, Protists	Ch. 15
	Apr. 12	Colonizing Land, Plant Diversity	Ch. 16
12	Apr. 15	Animal Diversity	Ch. 17 – SUMMARY #8 due
	Apr. 17	Vertebrates and Human Evolution	Ch. 17
	Apr. 19	MIDTERM #3 (Evolution and Natural Selection)	
13	Apr. 22	Animal Behavior: the beast in you (pt. 1)	Special topic, not in text
	Apr. 24	Animal Behavior: the beast in you (pt. 2)	Special topic, not in text
	Apr. 26	Diverse Environments	Ch. 18
14	Apr. 29	Biome Tour	Ch. 18 – SUMMARY #9 due
	May 1	Global Climate Change and Human Impacts	Ch. 18
	May 3	Population Basics	Ch. 19
15	May 6	Growth Models	Ch. 19 – SUMMARY #10 due
	May 8	Applied Population Ecology, Human Populations	Ch. 19
	May 10	Biodiversity Concept, Community Basics	Ch. 20
16	May 13	Ecosystems	Ch. 20 – SUMMARY #11 due
	May 15	Conservation Biology: Good News For a Change!	Ch. 20
	May 17	Summing Up: Why Should You Care?	
17	May 20, 8:30-10:30	FINAL EXAM (Ecology and old material)	