

Instructor: Michael Golden, M.A., Ecology and Systematic, San Francisco State University
Phone: 619.644.7332 e-mail: michael.golden@gcccd.edu
Homepage: <http://www.grossmont.edu/people/michael-golden/default.aspx> (**For LAB info.**)
CANVAS: <https://www.grossmont.edu/canvas/students/default.aspx> (**For LECTURE Info.**)
Office: 30-118 (Across the hall from the lab)
Office hours: (Other times are possible with prior arrangements)

Monday	Tuesday	Wednesday	Thursday
3:30pm-4:00pm	10:00am-11:00am	7:00pm-9:00pm	9:00am-9:30am/12:30pm-1:30pm

- 1) Text Required: Biology 110 Lab and Field Manual
 - 2) Text Required: Darwinian Snails workbook. Purchase on-line (see lab syllabus)
 - 3) Text Required: Biology: Concepts and Connections: CUSTOM. Campbell, et al.
(OR, any recent college-level general Biology textbook).
 - 4) Text Required: Dictionary of Word Roots and Combining Forms. Borror.
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Course Description:

Environmental Biology is basically an Ecology course. We will discuss Biological principles with an emphasis on local as well as global Ecology, Conservation, Evolution, Genetics, and the Principles of Inheritance. We will refer to examples found in California and specifically, San Diego County as much as possible as a means of providing evidence for these principles. Many labs will be experimental but we will also go on several field trips to local habitats and Museums.

Course SLO's (Student Learning Outcomes):

- Be able to distinguish between the Scientific Method and other ways of knowing 'things'.
- Understand the differences between Biotic (living) and Abiotic (non-living) 'things'.
- Understand the effects of temperature and precipitation on the distribution of life.
- Be able to state what the basic chemical building blocks of life are.
- Understand the basic properties of water and its importance to life.
- Be able to distinguish between organic and inorganic molecules and be able to give examples as to how each group contributes to life.
- Be able to read and evaluate basic graphs.
- Be able to do simple calculations and be able to graph data.
- Be able to give several lines of evidence for the Organic Theory of Evolution.
- Be able to explain several different scientific taxonomic classification systems of life.
- Be able to solve basic Mendelian genetics problems.

Teaching Philosophy:

You have decided to go to school for any number of reasons. Thus, you are accepting responsibility for your education. **DO NOT BE A PASSIVE STUDENT!** Get involved with the lectures, labs, your peers and me. Don't wait for the information to come to you. Read about the subject before you come to class. Ask questions in class. I guarantee other students benefit from EVERY QUESTION asked...as they say, the only dumb questions are those that were not asked. I encourage questions, ideas, observations, participation, etc. I'm not the boss; I'm more like your coach. You've come to school to gain an education and I'm here to help you attain that goal!
NO PHONES. USE OF PHONES: first offense: you give me your phone for the remaining time of class. Second offense: you will be asked to leave class. Third offense: Suspension.
 Fourth offense: Expulsion from the course. **NO PHONES!**

Pearson Custom Library: Bio 110, Grossmont College. This customized textbook (adapted from Campbell Biology. Concepts and Connections. 8th ed.) is on reserve at the limited-loan desk in the library. If you cannot afford to buy a book, you can check out the textbook at the reference desk in the library for up to three hours at a time. Alternatively, you can use an older edition of Campbell Biology. Concepts and Connections. The pages may not jive exactly with the 8th ed., but they will be close. You can use the index in the back of the book you are using to find the exact equivalent pages. All assignments can be accessed from Canvas.

TOPIC	READINGS (RA-reading assignments)	ASSIGNMENTS TBA
Introduction: Scientific method; Life defined; Emergent properties of life; Energy, entropy and life; Taxonomy; Reproduction; Phenotype and Genotype.	Ch.1 (all); Ch. 3 (54-55); Ch. 11 (239-241) Cell and Osmosis: Ch. 4 (62-67, 70); Energy: Ch.5 (82-85); Ch. 6 (104-107); Reproduction: Ch.7 (124-128,135-137, 145-147); Ch. 8 (161, 172-174); Evolution: Ch.9 (194, 206), Early Earth: Ch.11 (234-236, 239-241) Taxonomy: Ch.13 (skim chapter for key concepts covered in class), Population Growth: Ch.20 (486-489); H/O's	TBA: To Be Announced
Intro. Chemistry	Ch.2, H/O	
Organic Chemistry	Ch.3 (all); Ch. 15 (342-345, 350-351, 356-363), H/O	
Cell, membrane, diffusion, osmosis	Ch. 4 (62-67, 70-71, 75), H/O	
Energy	Ch.5 (82-85, 93); H/O	
Climate and Biosphere	Ch.19 (all); Ch.22 (528-531); H/O	
Ecology, trophic levels, ecosystems, chemical cycling, conservation	Ch. 20 (476-480, 485-489) Ch. 21 (all); Ch. 22 (all); H/O	
Genetics, reproduction	Ch. 3(54-55); Ch. 7 (124-126, 135-137,142, 145-147); Ch.8 (156-159, 161, 164-169, 172-173, 178-181)	
Evolution and Natural Selection	Evolution: Ch. 9 (all); Ch. 10 (all); Ch.11 (234-236, 239-245, 250-252, 254-256)	

Please note: This is a general guide to the topics to be discussed in class as well as the order of discussions. There are no dates listed as we will go at whatever pace the class and I set, e.g. sometimes there is more or less interest in a particular subject, etc. You are expected to read all of the assigned material unless otherwise noted.

EXAM SCHEDULE The exams will occur during the following dates:

EXAM	DATE
MT#1	OCTOBER 2 ND
MT#2	NOVEMBER 6 TH
MT#3	DECEMBER 4 TH
FINAL EXAM (COMPREHENSIVE)	DECEMBER 11 TH , 11:30AM-1:25PM

Please review the Class Schedule for final exam dates and times for your other classes.

MIDTERM EXAMS: USE DATALINK FORMS 26760

EXAMS will cover all Lecture and Laboratory material since the previous exam up to material designated by the instructor. I will give you a study guide. You may also use a 3x5 notecard, one side only and handwritten only. You must stay in the room to complete the exam. Hour Exams will be taken from materials presented in lectures, assignments, labs, field trips, and quizzes and from assigned readings.

DO NOT MISS HOUR EXAMS. YOU WILL NOT BE ABLE TO MAKE-UP MIDTERM EXAMS. I will drop your lowest midterm score.

If you are late for the Exam you may not be allowed to take the test.

I suggest you review your notes, practice writing out the answers on the study guide, and go over the summary at the end of each chapter reading. Same strategy for quizzes.

Study Guides: You will also have a study guide for each exam. I recommend you print it out ahead of time and use it as a checklist for studying.

Note card for exams: You may have one 3x5 card (one side only) where you can put notes for all exams (handwritten only).

COMPREHENSIVE FINAL EXAM:

The comprehensive final will contain material from the whole semester. Look at this as a way to bring-up your grade. The three study guides are your study guide for the Final Exam.

If you are late for the Final exam you may not be allowed to take the test.

LECTURE QUIZZES: USE DATALINK FORMS 28190 for in-class quizzes.

There will be graded and practice lecture quizzes in class (use datalink form 28190), on-line graded and practice quizzes (using Canvas).

Lecture quizzes will cover all material since the previous quiz. I will drop the lowest lecture quiz score.

LAB QUIZZES: USE DATALINK FORMS 28190

Lab quizzes will be given prior to THE BEGINNING OF THE LAB EXERCISE. See your Lab Syllabus for dates of lab quizzes. Questions will cover specific results and concepts from the previous lab and introductory material from the current lab. Questions from the current lab are to encourage you to be prepared BEFORE you come to lab. Missed lab Quizzes cannot be made up and will be scored as a zero (0). The lowest quiz score will be dropped. You will not be allowed to take the lab quiz if you are late. Please be on time every time.

Many Lecture and Lab quiz questions will be used on the midterm and final exams.

All Quizzes must have your Last Name, First Name, section number and quiz or exam number. Quizzes or exams not including this information may not be graded. Missed quizzes cannot be made up.

ASSIGNMENTS (Readings from your textbook, on-line, in-class, etc):

You will access the assignments from Canvas. I may also hand out assignments in class.

You are expected to complete all of the assignments. Please submit your own work.

Assignments must be LEGIBLY HANDWRITTEN (or typed), unless otherwise instructed. I will drop the lowest score. Late assignments are discouraged and will only be accepted on a case-by-case basis for half credit. **You cannot earn a grade higher than a C for the course if you have four (4) or more missing assignments.**

Please also make sure your email address on WebAdvisor is current, and check it daily. Computers and printing are available in the Tech Mall.

All assignments must have your Last Name, First Name, section number and assignment name written in the Upper right-hand corner of the assignment page please. Assignments not including this information may not be graded.

FIELD TRIPS: An essential component of learning Environmental Biology is going out into the field to see first-hand many of the physical processes and habitats we discuss in class. We will take several field trips to different habitats in San Diego County.

If you are unable to go on the off-campus field trips, you will not be able to complete the assignments necessary to successfully pass this course. Please refer to your lab syllabus for more information.

YOU MUST PASS BOTH THE LAB (68% or higher) AND LECTURE IN ORDER TO PASS THIS 4 UNIT COURSE

The Following textbook is available at the Limited loan desk in the library:

Pearson Custom Library: Bio 110, Grossmont College. Golden.

Tutoring: Students are referred to tutoring center: 619-644-7387. Room 70-202

LEGAL STUFF:

Quiz and Test-Taking Policies:

1. Use of DATALINK FORMS.
 - a. Quizzes require DATALINK FORMS 28190 (16 total for lab and lecture).
 - b. Exams require DATALINK FORMS 26760 (you need 4).
 - c. No substitutions accepted.

Only one DATALINK FORM can be used per exam. If I see more than one, I will confiscate it and either give you an F for the exam or expel you from the class depending on what our cheating-inquiry uncovers. All exams are my property and you are not allowed to keep them. Possession of an exam outside of class is considered cheating and theft. You are welcome (encouraged) to look at your exams in my office.

2. ERASURES.

Any incompletely erased answer may be interpreted by the DATALINK machine as an intended answer. I will only adjust one erasure error per exam. If you have several erasures, I suggest you recopy the DATALINK form. You must notify me of what you are doing and bring me the datalink form you are not turning in with the exam

3. All DATALINK and quiz/exam papers must show the student's name, class section, quiz or exam number, date, and version. Quizzes or exams missing this information WILL NOT be graded.

4. Students arriving late to class on the day of a Quiz or Exam may not be allowed to take the test and will not be given additional time to complete their Quiz/Exam.

5. OTHER PARTICULARS: Students are solely responsible for retaining all graded DATALINK FORMS, exams, and other assignments returned by the instructor. In the event of grading discrepancies (see below) the actual DATALINK FORM, exam, or other assignment must be submitted for regarding.

Examples where graded assignments might be resubmitted:

- a. A grading error resulting from a mis-marked key.
- b. A grade adjustment due to a successful student challenge of a quiz/exam question.
- c. A computer failure i.e. computer loses your grade.
- d. Instructor has no record of assignment. e.g. it was lost

6. ATTENDANCE AND WITHDRAWAL:

Attendance to all Lectures is mandatory. You are expected to attend every day, so don't schedule anything else in your life during class time. To be successful in school you need to get in the habit of attending EVERY CLASS. STUDENTS MISSING MORE THAN THREE (3) CLASSES ARE SUBJECT TO BEING DROPPED BY THE INSTRUCTOR REGARDLESS OF THEIR GRADE STATUS. PLEASE READ THE COLLEGE CATALOG IN REGARDS TO THE WITHDRAWAL POLICY.

Students who stop attending class should not assume that the instructor would withdraw them. Students who do not officially withdraw from the course may receive the grade earned most likely an 'F'. **LAST DAY TO DROP WITH A 'W' IS NOVEMBER 9TH**

Tardy: Please arrive to class on time. If you are tardy more than once, each additional tardy will be counted as an absence (three absences and you are dropped). There are NO MAKEUPS of missed exams, assignments, etc.! Do not be tardy to class.

7. PLEASE NOTE: You may want to exchange phone numbers with other group members. If someone gives you a phone number it is to be used for class related purposes only unless you have PRIOR permission from the student to phone for other personal reasons. Abuse of this policy will result in your immediate expulsion from the class with no possibility of reinstatement.

8. Plagiarism and Cheating: Don't even think about it. First of all, you will be found-out. More importantly however, you aren't going to acquire the skills necessary to be a successful student if you think you need to cheat. Cheating and plagiarism (using as one's own ideas writings, materials, or images of someone else without acknowledgement or permission) can result in any one of a variety of sanctions. Such penalties may range from an adjusted grade on the particular exam, paper, project, or assignment (all of which may lead to a failing grade in the course) to, under certain conditions, suspension or expulsion from a class, program or the college. For further clarification and information on these issues, please consult with your instructor or contact the office of the Associate Dean of Student Affairs.

9. Cell Phones: PLEASE! No phones in the classroom...including no text messaging. Turn them off and put them away! It distracts other students AND ME. If I see a phone during an exam, I will take the exam away and you will receive a grade of zero. If you answer a cell phone during class, you will be dropped! Keep the phone out-of-sight. You will be asked to leave if you pull out a cell phone during lecture. DID I MENTION 'NO PHONES'?

10. You may have a paper-based dictionary to consult during the exam. I will come around and inspect each dictionary while students take the exam. NO ELECTRIC-BASED DICTIONARIES,

TRANSLATORS, PDA'S, CALCULATORS, OR PHONES ALLOWED IN CLASSROOM DURING EXAMS! NO EXCEPTIONS! If you use any of these devices while an exam/quiz is on your desk, you will receive a zero on the test and you may be dropped from the course.

11. Computers: As a rule, computers are not allowed in class. I will however discuss your possible use of a computer in class on a case-by-case basis.

12. Any recording of lectures (sound or video) must be approved by me PRIOR to recording.

13. POINTS:	Percent of total points (%):
3-Hour exams (Drop the lowest score)	25%
1-Comprehensive Final	25
Lecture quizzes (in-class and on-line) (Drop the lowest score)	10
Other Assignments (Readings, In-class, On-line, HW)	15
Laboratory Grade	25
	TOTAL 100%

GRADES:	A:	89-100%
	B:	79-88%
	C:	68-78%
	D:	60-67%
	F:	less than 60%

VERY IMPORTANT SUMMARY:

-You cannot pass the course with less than 68% in lab.

-You cannot EARN A GRADE HIGHER THAN A C in this class if you miss more than any of the following:

2 labs, 4 assignments (homework or reading), 3 lab quizzes, 3 lecture quizzes,

2 midterms, the Final exam or any combination of 6 classes (lab plus lecture).

Missing three (3) or more labs will result in failing the lab and therefore failing the course.

In other words, it's best to do all of the work, show up everyday on time and be prepared to participate.

LAST DAY TO DROP WITH A 'W' IS NOVEMBER 9TH

14. Finally, by enrolling in this course you agree to all of the terms stated in the syllabus.

Good luck, have fun, and don't be afraid to ask questions or come see me for more information, guidance, etc.

Students with disabilities who may need accommodations in this class are encouraged to notify the instructor and contact the Accessibility Resource Center (ARC) early in the semester so that reasonable accommodations may be implemented as soon as possible. Students may contact ARC at (619) 644-7112 (voice) or (619) 644-7119 (TTY for deaf). You must be physically able to hike in order to attend the field trips, which will include walking on uneven surfaces and hills at an average pace. You will also need transportation.

MORE ON NEXT PAGE

TIPS: How to do well in this class:
WORK HARD FOR YOURSELF. TREAT THIS AS A JOB. DON'T BE LATE. DON'T MISS ANYTHING. DEVELOP A STRONG WORK ETHIC. NOW MORE THAN EVER!
FORM A STUDY GROUP WITH OTHER MEMBERS. It's easy to spot the students that are in study groups (2-4 members is the best size), they are the people getting an 'A' or 'B'.

*Attend ALL lectures, complete all assigned readings. 80% of success in life is just showing-up.

*Take notes and review them daily for questions, clarifications, etc. Make a list of questions you may have after reviewing your notes or the book. Ask each other in the study group, ask me in class, or come see me in my office. Recopy your lecture notes within 24 hours of the lecture.

*Skim readings before coming to class. Thoroughly read chapters AFTER lecture.

*You should study at least two hours EVERY week per unit (this is a 4 unit class, so 8+ hrs/week). Study on a regular basis. Make a weekly calendar that has study times. Try to study away from distractions (the library is a good place).

*Print out the study guide early. Use it as a checklist for topics covered and what to study that week. Once you feel you know the material, go to a quiet place. Take out a few blank piece of paper. Close your notes. Answer the study guide questions as if you were taking an exam. Repeat until you master the material. By doing this without your notes, you will be able to better determine what you do and do not understand.

*If you are having difficulties, come see me immediately. We can often work something out if YOU give yourself enough time.

*Attend class and participate, review your notes every day, meet with your study group, and accept responsibility for you education.

Time management: I'm aware that most of you must work to support yourselves and you might also be a caregiver. I'm sensitive to that because I was my own sole support as I earned my degrees. However, no matter what distractions you may have in life, the bottom line is you must learn the material. Make sure you set aside the minimum amount of time necessary outside of class to learn the material. (2-3 hours per unit per week)...so if you are taking 12 units, you need to set aside 24-36 hours per week for studying!

You will be expected to spend at approximately 8 hours a week outside of class time studying for lecture and lab and completing assignments.

HINT: Remember that the degree(s) you earn do not guarantee you a job, only the right to compete for a job. Focus your educational process (which will continue your whole life) on gaining skills and experiences, not getting grades. This perspective will make learning more enjoyable and give you more options for that satisfying life you seek.

QUICK REFERENCE ON NEXT PAGE

QUICK REFERENCES (2234/2235):

Lecture information can be found on Canvas: <https://www.grossmont.edu/canvas/default.aspx>

Lab information including Field Trips and lab assignments can be found on the Instructor's homepage:

<https://www.grossmont.edu/people/michael-golden/default.aspx>

Exams need Datalink Form#: 26760

Lecture and Lab quizzes need Datalink Form#: 28190

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Students facing food or housing insecurity are encouraged to contact a Grossmont College Basic Needs Liaison (their names are listed in the web link provided below) or you can send an e-mail to Grossmont.BasicNeeds@gcccd.edu to request information or assistance. I also encourage you to speak with me, if you feel comfortable doing so, so that I may provide additional support to ensure your success in this course.

Additional information on basic needs resources, including Gizmo's Kitchen (Grossmont College's food pantry) is available at: <https://www.grossmont.edu/student-services/offices-and-services/basic-needs>.