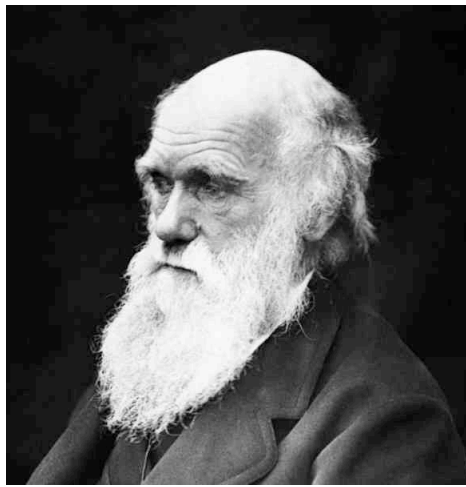


BIO 3

Tim Revell, Ph.D.
 Spring 2023
 CRN# 40685
 Lecture M 9:45-12:55
 Lab M 1:15-4:25



Field Biology &
 Ecology – Field trips
 outside (lots of them!)

Contact Information:

Email: trevell@mtsac.edu
 Phone: 909-274-4231
 Webpage: instruction.mtsac.edu/trevell
 Office location: building 60-2104
 OH: W (via zoom), 6-7 & 8:10-9:10pm
 Tuesday 2:40-4:40 (on campus)
Text: Elements of Ecology
Nat Hist of Orange County

Couse Description: Second semester Majors Biology Course that covers taxonomy, history, ecology, physiology, and the conservation of life.

Points Possible	
Quizzes (12x25 point)	250
2 dropped	
Lecture Exams (x2)	200
Lec Final	50
Lab Practicum Final	50
Lab Projects/Field notebook (8 x 25 points each)	200
TOTAL	750

Grading Scale	
≥90%	A
80-89%	B
70-79%	C
60-69%	D
<60%	F

Important Dates:		
FINAL EXAMS:		
Lecture	June 5	10:30AM
Lab	June 5	1:30PM
ADD/DROP DATES:		
Drop without W	March 5	
Drop with a W	April 28	
Field Trips/Other		
Beach	April 10	
Desert/Camping	April 23-24	
Cal Bot Garden	March 6	
Evey Canyon	May 15	

Week	Date:	Lecture Topic	Laboratory Topic	
1	20-Feb	Intro Biology, Intro Chemistry	Campus closed	
2	27-Feb	Intro Physio, Climate and Geo	Wildlife Sanctuary/ Intro to plants	
3	6-Mar	Ecology, Evolution, Tropic levels	California Botanical Garden field trip	
4	13-Mar	Eukaryotes, Fungi-Plants I	Plant collection, keys, and preservation	
5	20-Mar	Exam #1	Identification of Birds and Mammals	
6	27-Mar	Ecology-Porifera	Introduction to Invertebrates	
7	3-Apr	Mollusca	Insect collection, keys and preservation	
8	10-Apr	ALL DAY BEACH TRIP	Bolsa Chica field trip	
9	17-Apr	Chordates-Fish	Identification of Amphibians and Reptiles	Apr23-24
10	24-Apr	RETURNING FROM CAMPING	No lab - Return from camping	Camp Sun-MON
11	1-May	Exam #2	Line Transects in coastal sage scrub	
12	8-May	Amphibians & Reptiles	Data analysis/graphing - Plant/ insect practicum	
13	15-May	Birds & Mammals	Evey Canyon	
14	22-May	Population/Community Ecology	Practice practicum - Insects due	
15	29-May	Ecosystem Ecology	Campus closed	
16	5-Jun	Comprehensive Final	Final practicum	

Check your ML SAC email!!!

Keep Track of your Grade!

Exams-There will be two lecture exams. Each will be worth 100 points and will consist of Multiple choice, True/False, fill in-the blank, and essays, matching, and whatever else I can come up with. Information covered on these exams will come from my lectures, reading assignments, and homework assignments. It is to your advantage to take every exam and do as well as possible on each! **There are no make-up exams under any circumstances. Bring a scantron 886 for the lecture exams (1&2), an 882 will be needed for most quizzes and a 882 will be needed for the lab final and an 884 will be needed for the lecture final.**

The final exam will also include questions from all three field trips and some of the information from Practicum V (to prevent students from skipping the content).

Exams will take place during the first hour, 15 minutes of class only. If you are late to class, you will only be given the remaining time to finish the exam.

Final Exam-The Final exam will be in the same format as the regular class exams (although there will be no essay questions on the final). It will be cumulative and will therefore cover information from the entire semester. The final exam will be worth 200 points and there will be no mak- up exams for the final! Do not miss the final exam!

Check the Final Exam Schedule in the current Schedule of Classes for the day and time of your final exam.

Quizzes – There are 12 quizzes that will be taken throughout the semester. Quizzes will be given online. There are no make-up quizzes.

Practical Exams - These exams are timed and are done station by station (each student gets a certain amount of time to answer questions at a particular station).

There are no make-up practical exams.. If you show up late to a practicum, you miss whatever station have already passed. It is VERY important to show up and to show up on time to practical exams on time.

Lecture Exam and Practical Replacement. The Lecture Final will count BOTH as a final as well as potential replacement exam and replacement practicum

Other information you need to know:

- 1)The attached lecture schedule is intended to assist you in planning your readings for this course. I will expect you to have read the appropriate text sections prior to class. I will make every effort to maintain this schedule. Modifications, however, may be necessary. It is your responsibility to attend all classes and be aware of any changes that I may announce.
- 2) Check your Mt. SAC email OFTEN!!!! I will not send email to any other account!
- 3)All assignments are due at the time and date stated in class and/or in emails or in the syllabus. If your assignment is late, 20% will be deducted for each day it is late (1 minute late counts as 1 day). Assignments turned in more than 5 days late will received a zero.
- 4)**Note:** It is the student’s responsibility to drop a course officially if the student wishes to avoid an “F”. The instructor MAY drop students for non-attendance, but this is discretionary. Students who do not drop but do not complete the work will receive an “F”.
- 5)**YOU need to show up to lab and lecture on time and pay attention;** I am not at all pleased when students show up late and demand that I repeat (over and over again) the same instructions, rules, or information. It is not my job to accommodate your basic educational needs whenever YOU decide.

Assignments:

- 7) **Note:** All papers will be returned to the student as soon as possible. It is the student’s responsibility to keep these records. No reconsideration of any grade is possible without evidence, and it is the student’s responsibility to demonstrate the basis of any grade change.
- 8) **Academic Honesty:** Mt San Antonio College regulations and guidelines regarding academic honesty will be followed and enforced. Cheating or plagiarism will result in an F for the entire course. I will also write a letter stating that you have cheated and it will become part of permanent Mt. SAC record. Do not cheat or plagiarize in any form! The possession of any cheating items (ie, notecards, cell phones, ect), during an exam will be interpreted as a cheating incident regardless of whether or not you actually “used” the item(s). All students must sign and return the Mt. SAC Biology Department Cheating Policy. All cheating incidents will be treated the same; it does not matter whether the cheating incident involves a quiz, exam or assignment.
- 9) The instructor reserves the right to make any necessary changes to this syllabus or to any part of the class without prior warning.
- 10) Fieldtrips are required for success in the class. Please inform your other instructors or employers of these regularly scheduled class fieldtrips AT LEAST three weeks before the trip so that we can clear up any conflicts if possible. **50 points will be deducted for each missed field trip unless a make-up assignment is completed** (students must complete the make-up assignment and are still responsible for the information given on the fieldtrips). The make-up assignment and due date will be assigned by the instructor. All Field trip material is “fair game” on lecture exams and practicums (including finals) Field trips cancelled due to Pandemic
- 11) **Attitude:** This course is extremely difficult and very demanding. Most people cannot do well in this course if they take on too many other responsibilities. Most (if not all) students that take this class have dreams of becoming some type of professional (medical doctor, dentist, veterinarian, researcher, pharmacist, clinical psychologist, etc.). This course is made to challenge the very best of you! Obviously, behaviors such as complaining about how hard or unfair the class is, showing up late, missing class, etc., are not acceptable. Remember, you will need letters of recommendations some day from your professors.....
- 12) **To succeed in this course:** Your study of biology will be an exciting and rewarding experience. We will cover a variety of topics that can be both interesting and useful in improving your life. However, do not make the mistake of taking your study of this course too lightly. To succeed in this course you MUST attend class regularly, study often AND effectively, and live a life that is conducive to learning (for example, you need to sleep, eat, work, etc. within your means!). Failure to meet these basic requirements will make success difficult for most.
- 13) **Incomplete** policy: It is the students responsibility to drop the class if that is their intention. An incomplete may be given if **all three** of the following conditions are met 1) The student has completed ALL course material (other than the final exam) 2) the student is passing with at least a “C” 3) the student can demonstrate they are unable to complete the remained of the semester. The instructor reserves the right to accept or reject a students request for an incomplete.
- 14) **Grades on Quizzes, Exams, etc.** - Students will be given all assignments and exams back in a timely manner. If there is a grading error of any sort, the student has one week to notify the instructor and solve the problem from the date in which the exam/quiz/assignment was handed back to the class. If you do not meet with the instructor within that one week period, the original grade is final. The one week period begins when I hand the exam/quiz/assignment back to the class; not necessarily when you receive it (i.e., if you are absent and do not pick up the exam for three weeks, you have missed you opportunity to negotiate your score.
- 15) **Again,** Biology is an exciting but challenging class. DO NOT just memorize your notes. I expect you to UNDERSTAND biology. To understand biology you need to ask questions, think, and analyze the material I give you. Forming study groups is often a beneficial method of attack.
- 16) **No cell phones or any other devices** that create distractions are allowed in class. Special considerations may be given by the instructor on an individual basis. No talking on your cell phone in the classroom or on any portion of a fieldtrip. Absolutely no cell phones are allowed out during a test or practicum. Any cell phone that is used, looked at, or even visible by the instructor during a quiz, exam or practicum will result in a zero on that assignment and a possible “F” in the entire course.
- 17) I keep ALL exam and quiz questions. YOU MAY NOT, under any circumstances, take one my exams or quizzes home with you. YOU MAY NOT zerox, copy, or photograph any of my exams or quizzes. Failure to follow these rules WILL result in an “F” in the course.
- 18) **Attendance and attitude.** I cannot stress enough the importance of attendance. I will be in class everyday and I expect you to be in class everyday. Missing class will almost certainly result in a lower grade. Also, I expect you to be on time to class EVERYDAY! You are expected to act as a mature, respectful, adult student in my course at all times. If you are behaving in a non-collegiate manner, I will ask you to leave the class.
- 19) **Competition.** If your career goal is to become a pharmacist, medical doctor, dentist, veterinarian or other professional, you have a chosen a very competitive field to study. You need to be thinking about grades AND things like letters of recommendation, scholarships, externships, internships and so forth. Start looking now. Good grades will probably not be enough.
- 20) Please notify me immediately if you have require special accommodations (for example, due to disabilities or health issues of any sort).
- 21) Please visit my website (clear.mtsac.edu/trevell/bio1) and read the section on “How to be an excellent student”.
- 22) I DO NOT have office hours during the weeks of finals. If you need to see me or look over an old an exam or quiz, you must do so BEFORE finals week. You may also look over your final exam the semester AFTER you have had the course (excluding summers and winters)
- 23) “It’s real simple, you can either do it or don’t do it” – Dr. Todd Newberry, UCSC professor emeritus and world famous invertebrate zoologist!

- 1) This class is tough and you need to take this class when you have the time and mindset and energy to give 100%.
- 2) **Attendance and attitude.** I cannot stress enough the importance of attendance. I will be in class everyday and I expect you to be in class everyday. Missing class will almost certainly result in a lower grade. Also, I expect you to be on time to class EVERYDAY! You are expected to act as a mature, respectful, adult student in my course at all times. If you are behaving in a non-collegiate manner, I will ask you to leave the class.
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- 4) Please notify me immediately if you have require accommodations (for example, due to disabilities or health issues of any sort). Our Accessibility Resource Center for Students (also called ACCESS) is also available to assist any needs you might have.
- 5) I DO NOT have office hours during the weeks of finals. If you need to see me or look over an old an exam or quiz, you must do so BEFORE finals week. You may also look over your final exam the semester AFTER you have had the course (excluding summers and winters)
- 6) “It’s real simple, you can either do it or don’t do it” – Dr. Todd Newberry, UCSC professor emeritus and world famous invertebrate zoologist!

BIO 2 Student Learning Outcomes (SLO’s) can be found at: <http://www.mtsac.edu/instruction/outcomes>

- Students will be able to construct cladogram. Students will be able to correctly analyze and construct a cladogram using shared and derived characteristics placing species and their characteristics in the proper positions.
- Students will be able to evaluate the impact of science on their daily lives (area B GEO being used as course level SLO)
- Students will be able to discuss evolutionary changes throughout the geological time scale including topics on systematics, taxonomy, and biological diversity.
- Students will be able to analyze the current taxonomic classification schemes and discuss how taxonomy is a work in progress.
- Students will be able to compare and contrast prokaryotic and eukaryotic organisms and describe how they are arranged in a classification hierarchy.
- Students will be able to compare and contrast the different taxonomic groups (bacteria, protists, plants, animals and fungi) and discuss evolutionary changes that led to their adaptive radiation throughout geological time.
- Students will be able to define the concept of alteration of generation, and analyze the modifications that have occurred in different organismal groups.
- Students will be able to describe the life cycles of the important phyla in detail emphasizing evolutionary trends through geological time.
- Students will be able to describe plant form and function emphasizing evolutionary trends throughout the plant kingdom (including structure, function, growth, transport, nutrition, control systems, reproduction and development.)
- Students will be able to describe animal form and function emphasizing evolutionary trends throughout the animal kingdom (including structure, function, nutrition, circulation, gas exchange, immune response, internal controls, chemical signals, reproduction, development, behavior, nervous and sensory systems).
- Students will be able to complete an analysis of plant and animal interactions in relationship to their biomes.
- Students will be able to classify plants to Family. Students will be able to correctly analyze plant characteristics and be able to place unfamiliar plants into their correct plant families.