

FULLERTON COLLEGE

ENVIRONMENTAL SCIENCES 105 LF
 ENVIRONMENTAL BIOLOGY LABORATORY

MORRIS
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MISSION

The mission of this course is to help you refine your abilities to see and understand the workings of basic biological processes in natural environments. I hope to do this while visiting a variety of natural settings where we can observe and evaluate the prevailing and underlying living processes. My efforts are intended to demystify biology by linking it to natural phenomena we all can regard in the environment.

Environmental Biology Lab is a field oriented course. We will be spending a substantial part of the course at off-campus locations.

INTENDED STUDENT LEARNING OUTCOMES

1. Upon successful completion of ENVS 105 LF Environmental Biology Lab, the student will be able to identify and list common, conspicuous and distinctive species associated with local ecological communities.
2. Upon successful completion of ENVS 105 LF Environmental Biology Lab, the student will be able to identify meaningful traits in species from different environmental settings, and propose sensible arguments that explain how such traits could yield improved fitness.
3. Upon successful completion of ENVS 105 LF Environmental Biology Lab, the student will be able to identify and characterize distinct ecological communities in various environmental settings, and explain their geographic distribution in terms of physical factors, and biological traits.

CREDIT:

Exercises, quizzes and notes	140 points
Final Exam	40
TOTAL	180 points

GRADING

Grades will be awarded according to the following schedule:

90 - 100%	=	A
80 - 89	=	B
65 - 79	=	C
55 - 64	=	D
< 55	=	F

ATTENDANCE

I expect you to attend all eight class meetings. I allow you only one absence. At the minimum, you are required to sufficiently attend and participate in at least seven of the eight class meetings. ***I will drop you*** after your second absence. Why? This is an *experiential* course. By definition, this means that you must be physically *here* in order to benefit from this course.

MAKEUP OPTIONS

After first absence – eligible for Makeup Options A and B.

After second absence – eligible only for Makeup Option A – subject to very limited availability.

Quiz Make ups: One make up quiz per student. Take immediately after the Final Exam. You **MUST** make arrangements to take the make up quiz before the final class meeting. This option may be available at my discretion for students who attend a substantial portion of a meeting but must leave before the quiz.

IF YOU MISS

If you miss a lab meeting, you must contact me as soon as possible – in order to confirm plans for the following meeting, and to finalize arrangements for making up the missed meeting. Follow-up contact is your responsibility.

DROP POLICY

You must drop yourself! The drop date for this course is sooner than for full-semester length courses.

Makeup Options	
A	Attend an equivalent meeting at another time with another lab section, taught by the same instructor, during the current semester. This option is subject to limited availability – and <i>in many cases will not be possible.</i>
B	Participate in an alternative, independent field outing of your choice, consistent with written guidelines provided by me.

TENTATIVE LAB SCHEDULE		
Meeting		Activity
Date		Draw a Tree to get Your Degree
Time		Download "Draw a Tree to get Your Degree" from course website: http://morriscourse.com/ (Quiz – 10 pts.; Drawings and Field Notes – 10 pts.)
Date		FIELD TRIP: Fullerton Arboretum: Opportunities and Threats at the Fullerton Arboretum (\$2.00 donation – cash only)
Time		Download "Fullerton Arboretum: Opportunities and Threats at the Fullerton Arboretum" from course website: http://morriscourse.com/ (Quiz – 10 pts.; Drawings and Field Notes – 10 pts.)
Date		FIELD TRIP: Oak Canyon Nature Center – Part 1: Plant Distribution Study (\$2.00 fee – cash only)
Time		Download "Oak Canyon: Plant Distribution at Oak Canyon Nature Center" from course website: http://morriscourse.com/ (Quiz – 20 pts.)
Date		FIELD TRIP: Oak Canyon Nature Center – Part 2: Plant Distribution Study (\$2.00 fee – cash only)
Time		Download "Oak Canyon: Plant Distribution at Oak Canyon Nature Center" if you haven't already done so (Topographic Map and Field Notes – 20 pts.)
Date		FIELD TRIP: Upper Newport Bay – Community Mapping and Community Survey
Time		Download "Upper Newport Bay 1: Upper Newport Bay Community Mapping" from course website: http://morriscourse.com/ (Quiz – 10 pts; Map and Field Notes – 10 pts.)
Date		FIELD TRIP: Upper Newport Bay – Analysis of Community Distribution
Time		Download "Upper Newport Bay 2: Analysis of Community Distribution" from course website: http://morriscourse.com/ (Field Notes – 20 pts.)
Date		FIELD TRIP: Monday 11:45 AM section and Wednesday 8:00 AM section only
Time		Orange County Sanitation District, wastewater treatment plant, Fountain Valley Download "Orange County Sanitation District" from course website: http://morriscourse.com/ (Quiz – 20 pts.)
Date		FIELD TRIP: Wednesday 11:45 AM section only
Time		San Jose Creek Water Reclamation Plant, Whittier Download: Instructions to be provided by instructor prior to trip. (Quiz – 20 pts.)
Date		FINAL EXAM: Based on all previous lessons. Format: short answer questions based on previous quizzes and exercises; may include physical props such as plants, maps, drawings.
Time		(40 pts.)

Special Note on the Above Schedule: The above schedule is subject to change. So, if you should miss a meeting, please check with me immediately to confirm the latest schedule. If you go to the wrong site after an absence, it counts as another absence.

Submittal Deadlines:

All submittals are due at the end of the laboratory session, or as otherwise indicated by your instructor.

Lab Manual: NOTAVAILABLE IN STORES – **DOWNLOAD ONLY**

You must get the lab exercises from Tom Morris's Fullerton College web site at:

1. <http://morriscourse.com>
2. Click on the link for the Environmental Biology Lab
3. Find the lab exercise you need.
4. Open and print the document (*.pdf file). **BRING IT WITH YOU.**
- 5. Students are required to supply their own copies of the week's lab exercise.**
6. Students without the week's lab exercise may obtain them from the instructor in the field for a minimum five (5) point convenience fee.

FIELD TRIP POLICY

Transportation

School Van Option: I drive one school vehicle to field trips. Usually, the vehicle is a van that can transport 11 students plus myself. This method of transportation has nearly always been sufficient for transporting students who wish to ride.



Personal Vehicle Option: You may drive your own vehicle to field sites if you like.

Rideshare Option: You may ride with other students driving their own vehicles to field sites.

Public Transit Option: You may use public transportation to some locations.

Limousine Option: You may have a friend, family member or limo driver drop you off and pick you up.

Maps and Routes

Maps and directions for all the field sites are provided on the course website at the following link:

http://morriscourse.com/environmental_bio_lab.html Look for the “Field Trip Location Maps” link.

The maps show the location of the field site relative to Fullerton College, and give general directions. Normally I will go over this map with the class and give some guidelines on how to locate the site, and where to park. Sometimes I will describe the route I will take from Fullerton College. This route is described only as one example of the many possible routes you can take. It is not meant to be the required, or even the recommended route. You may choose any route that best suits your particular circumstances and preferences.

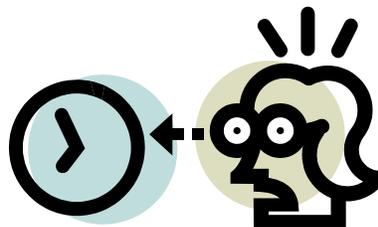
What Happens if You are Late?

If you are late, you are late. I do not take points away or penalize you for being late. Sometimes, it can't be helped. Just don't make it into a habit. **If your tardiness develops into a pattern, I may drop you for failure to adequately participate.** I have done it before.

In any case, please drive safely. This class is not worth taking dangerous risks – just to be on-time.

How Not To Be Late: You can minimize the chances of being late to field trips by doing the following kinds of planning:

- Write down the planned meeting location and meeting time.
- Print and read the description of the exercise a day or two before the scheduled trip.
- Familiarize yourself with the map, and instructions before you start out.
- Give yourself enough time to safely drive to the field site.
- Make sure you have enough gas in your car to get you to the field site. If not, give yourself enough time to stop for gas.
- Give yourself enough time to eat before the field trip, or plan on taking your lunch with you.
- Pack your lab exercise, map, notebook, and all other field materials the night before.



MORE..

Staying comfortable, safe and healthy while working in the field

- Dress for the weather.
- Wear comfortable walking shoes – we do a great deal of walking and standing and standing and walking.
- Bring a bottle of water – especially on hot days.
- Bring a snack.
- Bring a clipboard for a writing surface – yes they are nerdy, but clipboards are much lighter than a binder notebook full of paper.
- Other useful options include sunglasses, hat, sunblock.



What if it Looks Like Rain – or Fire?

If it is a rainy day or if it looks like it might rain, I might cancel the field trip and meet in the lab room instead. Sometimes, brushfires or RED FLAG WARNINGS cause me to cancel field trips. If there is a fire in the vicinity of our outing, or if there is a RED FLAG WARNING for southern California, I might have to cancel the outing. In case of cancellations, we will do an alternate exercise in the lab. I will make the decision to go or not about 30 minutes before the section's official meeting time. To find out what I have decided, **stop by my office or call** my office, or email me BEFORE the scheduled meeting time. **Do not rely on the course website for information regarding canceled field trips.**

What Happens if You show Up at the Field Site but I Don't?

If I don't show up to the field site within 15 or 20 minutes of the designated meeting time, it could mean:

- That you are at the wrong site (especially if there are no other students waiting with you)
- That I have cancelled the field trip because of rain, or fire
- That I am delayed for some reason (happens sometimes)
- That I have not reported to work that day (happens very rarely)

To find out, call one or both of the following telephone numbers:

- My office telephone: (714) 992-7447 – the outgoing message might have the info you need
- The Natural Sciences Division Office: (714) 992-7043 – they can tell you if I have called in sick that day.

If I am Absent – VERY IMPORTANT

If I am absent, I will send out an email blast to the class (through mygateway) to confirm the schedule for the following week. Make sure the email address in your mygateway profile is correct. By default, the destination schedule will not change. Do not assume that we will make up the missed exercise the following week. Make sure you have gotten positive information from me about the updated schedule following my absence.

End of Class Policy

1. After the last class meeting, the class will be permanently terminated.
2. After the last class meeting, there will be no more opportunities for you to achieve points or improve your grade.
3. If you are disappointed with your grade, I encourage you to reflect on its causes, learn from your experience, and wisely plan for a more successful future.

End.