

LS1, Section 1: Introduction to Evolution and Biodiversity

Professors: Henry Hespeneide

email: hahiii@ucla.edu

Office: Botany 129

Office Hours: MW 2-3, or by appointment

Course Information:

Lectures: MWF 12:00 noon - 12:50, La Kretz 110

Text: *Life: The Science of Biology*, Sadava *et al.*, Eighth edition

Other Materials: **Demonstration Manual (available from UCLA bookstore)**

Course Website: <http://www.lsic.ucla.edu/classes/>

Enrollment: All matters related to enrollment are handled by the LS Core office in the Life Sciences building room 2305 (phone: 310-825-6614), or by your TA.

Lectures: Lectures will cover materials in the book as well as ideas not covered by the book. You do not need to bring your book to class. Lecture materials will generally be presented on transparencies, and a summary will later be posted on the course website. Outlines of each lecture will be posted on the course website the evening before the lecture, including a list of terms to know. Students are encouraged to take notes in class and later check them against the posted notes.

Labs/Demonstrations: There are ten demonstration sections that you will attend, one each week. These are not optional. Each demonstration is two hours long. These demonstration sections are designed to: **1.** Help reinforce many of the topics you learn in class, **2.** Give you the opportunity to see many of the organisms discussed in lecture, and **3.** Give you the opportunity to ask questions and think about topics in small groups. Check your course listing to make sure that you are going to the correct demonstration room, either YH 2343 or SH 2870. You must attend the section in which you are enrolled. If there is an extenuating circumstance and you must attend another section once, then you must arrange this with your TA and the TA of the section you would like to attend. There are no make-up sections. Your TA will give you his/her contact information in class.

TA's: Creese, Christine
Curren, Jane
Kirkpatrick, Brian
Weaver, Westbrook

Course Grading:

Midterm 1	200 points
Midterm 2	200 points
Demonstrations	200 points
Final Exam	400 points
Total	1000 points

Review Sessions and Exams: We will have a review session before each midterm and the final. You will be notified in class, on the course website, and via e-mail of the room and time for each review. You have two midterms for the course. Both midterms are held in the evenings, so please plan accordingly. You **must** take the exams at the scheduled date as there are no make-up exams. Failure to appear, hand in, or take an exam will result in a zero for that exam. **There are no exceptions to this policy.**

Material for the exams will be taken from primarily from the lectures, but also from the text and demonstration. The exams consist of multiple choice questions and will cover the lectures as announced in class. Only numerical grades will be given on the midterm exams, although an indication of approximate letter grades will be announced. All grades will be posted onto the MyUCLA website as soon as they are calculated. An answer key will be posted after each exam so that you can refer to if you wish.

Regrading policy: Any request for a regrade must be made within one week of the exam being returned to you. If you think there was an error in grading or if you want an explanation for a particular answer please write a brief note explaining your point of view and e-mail Dr. Hespeneide. All exam regrades will be taken into account at the end of the quarter after we have calculated final grades.

Academic Dishonesty: The best advice is just don't do it!!! If you are caught cheating (*e.g.*, giving answers to or receiving answers from someone else) on any graded material in the course you will receive a zero as your score. In addition, you will be reported immediately to the Dean of Students – NO EXCEPTIONS – for further action.

Lab topics

Week	Activity	Assignment
1	Lab 1 Research tools and techniques	Library search
2	Lab 3 Horse evolution	In lab quiz
3	Lab 2 Population genetics	In lab quiz
4	Lab 4 Microbial world	In lab quiz
5	Lab 5 Photosynthetic world	In lab quiz
6	Lab 6 Botanical garden tour	Handout
7	Lab 7 Fungi and animal diversity I	In lab quiz
8	Lab 8 Conservation	In lab quiz
9	Lab 9 Animal diversity II	In lab quiz
10	Lab 10 Animal diversity III	In lab quiz

Schedule of lectures and readings*

DATE	LECTURE TOPIC	TEXT READINGS
Fri Sep 26	1. Introduction: Life	Ch. 1
Mon Sep 29	2. Introduction: Science	Ch. 1
Wed Oct 1	3. Molecules & Cells	Ch. 3: 38-60, Ch. 4:68-75
Fri Oct 3	4. Heredity	Ch. 9, esp. 193-195
Mon Oct 6	5. Mendelian Genetics	Ch. 10
Wed Oct 8	6. Population Genetics	Ch. 22
Fri Oct 10	7. Variability & populations	Ch. 22
Mon Oct 13	8. Selection, Mutation & Migration	Ch. 12: 274-278, Ch. 22
Wed Oct 15	9. Genetic Drift	Ch. 24: 525-531
Fri Oct 17	10. Species	Ch. 23
Mon Oct 20	11. Phylogeny	Ch. 25
Wed Oct 22	12. Biogeography	Ch. 52: 1128-1139
Thur Oct 23	FIRST MIDTERM EXAM: 5:00 PM	
Fri Oct 24	13. History of life	Ch. 1: 10-13, Ch. 3: 61-64, Ch. 21
Mon Oct 27	14. "Microbes":Prokaryotes,	Ch. 4:68-75, Ch. 26
Wed Oct 29	15. "Protista"	Ch. 27
Fri Oct 31	16. Fungi	Ch. 30
Mon Nov 3	17. Plant diversity I	Ch. 28
Wed Nov 5	18. Plant diversity II	Ch. 29
Fri Nov 7	19. Angiosperm success: reproduction I	Ch. 38
Mon Nov 10	20. Angiosperm success: reproduction II	Ch. 38
Tue Nov 11	VETERANS' DAY HOLIDAY NO CLASS	
Wed Nov 12	21. Sponges, cnidarians & Protostomes	Ch. 32
Thur Nov 13	SECOND MIDTERM EXAM: 5:00 PM	
Fri Nov 14	22. Ecdysozoans	Ch. 32
Mon Nov 17	23. Deuterostomes	Ch. 33
Wed Nov 19	24. Vertebrates	Ch. 33
Mon Nov 24	25. Social Behavior	Ch. 53
Wed Nov 26	26. Population Ecology, I	Ch. 54
Fri Nov 28	THANKSGIVING HOLIDAY NO CLASS	
Fri Nov 30	27. Population Ecology, II	Ch. 54
Mon Dec 3	28. Community ecology: other species	Ch. 55
Wed Dec 5	29. Energy and Ecosystems	Ch. 57
Fri Dec 7	30. Conservation	Ch. 57

FINAL EXAM: THURSDAY, DEC 11: 6:30-9:30 p.m.

*Note: Lecture topic schedule is approximate as Dr. Hespenheide has to reorganize the course this quarter somewhat from the last time it was given. Readings are for the topic given, not the date.