

LS1 Sections 1 and 2: Introduction to Evolution and Biodiversity

Professors: Henry Hespenehde Patricia Halpin
email: hahiii@ucla.edu halpin@ucla.edu
Office: Botany 129 Botany 413
Office Hours: MW 2-3, or by appt. TW 2-3, or by appt.

Course Information:

Lectures: MWF **1:** 11:00 am - 11:50, **2:** 12:00 noon - 12:50, Moore 100
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. The TA's are:

1: Sid Kannan	2: Peter Adam
Yonghong Ren	William Kim
Marc Rodriguez	Xiaoyan Liao
Jonathan Valencia	Brent Llanos

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

FINAL EXAM: MONDAY, DEC 10: 6:30-9:30 p.m.

***Note:** Lecture topic schedule is approximate as Drs. Hesperheide and Halpin reorganize the course this quarter. Readings are for the topic given.