

**BIS 1B: Introductory Biology - Winter 2008 (Sections A & B)
Kimsey/Rosenheim: Lecture and Reading Assignment Schedule**

Date	Topic	Reading Assignments
Jan 7 (M)	1. (JR) Introduction to evolution	pp. 104-114, 121-126
Jan 7 (M)	Discussion 1 (JR) Antibiotic resistance	Sci. Am.1998, pp. 46-55.
Jan 9 (W)	2. (JR) Mendelian genetics	pp. 76-90
Jan 11 (F)	3. (JR) Genetic variation; Hardy-Weinberg model	pp. 100, 127-130
Jan 14 (M)	4. (JR) Drift, selection & other evolutionary forces	
Jan 14 (M)	Discussion 2. (JR) The modern synthesis	
Jan 16 (W)	5. (JR) Quantitative genetics	pp. 131-132
Jan 18 (F)	6. (JR) Species concepts, speciation	pp. 200-205, 117-121
Jan 21 (M)	HOLIDAY	
Jan 23 (W)	7. (RBK) Classification and phylogeny	pp. 113-117, 200-216
Jan 25 (F)	8. (RBK) Metazoan phylogeny and development	pp. 162-170,185-191
Jan 28 (M)	9. (RBK) Porifera	pp. 247-259
Jan 28 (M)	Discussion 3. (JR) Burgess Shale animals (w/ video)	
Jan 30 (W)	10. (JR) Cnidaria	pp. 260-282, 286-287
Feb 1 (F)	Review for Midterm #1 Lectures 1-9 Discussions 1-3	
Feb 4 (M)	11. (JR) Platyhelminthes	pp. 289-290, 292-306
Feb 4 (M)	Discussion Midterm #1 (Lectures 1-9 Discussion 1-3)	
Feb 6 (W)	12. (RBK) Nematoda	pp. 385-401
Feb 8 (F)	13. (JR) Annelida	pp. 362-379
Feb 11 (M)	14. (JR) Annelida; sexual vs. asexual repro	pp. 137-142
Feb 11 (M)	Discussion 4. (RBK) Biogeography	
Feb 13 (W)	15. (RBK) Mollusca 1	pp. 331- 352

Feb 15 (F)	16. (RBK) Mollusca 2	pp. 353-361
Feb 18 (M)	Holiday	
Feb 20 (W)	17. (JR) Arthropoda 1	pp. 402-440
Feb 22 (F)	18. (JR) Arthropoda 2	pp. 441-468
Feb 25 (M)	19. (RBK) Echinodermata	pp. 472-490
Feb 25 (M)	Discussion 5. Lower Chordates and fishes (w/ video)	
Feb 27 (W)	20. (RBK) Chordata	pp. 496-513
Feb 29 (F)	Review for Midterm #2 Lectures 1-18, Discussions 1-4	
Mar 3 (M)	21. (RBK) Fishes	pp. 514-541
Mar 3 (M)	Discussion Midterm #2 (Lectures 1-18, Discussions 1-4)	
Mar 5 (W)	22. (RBK) Amphibians & Reptiles	pp. 543-562
Mar 7 (F)	23. (RBK) Reptiles including Dinosaurs	pp. 563-584
Mar 10 (M)	24. (RBK) Birds	pp. 585-611
Mar 10 (M)	Discussion (RBK) Amphibians and Reptiles (w/ video)	
Mar 12 (W)	25. (RBK) Mammals	pp. 612-631
Mar 14 (F)	26. (RBK) Extinctions	pp. 132-133
Mar 17 (M)	26. Review for Final Exam (Cumulative Lecture and Discussion)	
Mar 17 (M)	Discussion (RBK) Birds and Mammals (w/ video)	

RBK = Robert B. Kimsey
 JR = Jay Rosenheim

Readings are from Hickman, Roberts, Larson & l'Anson. 2008. *Selected chapters from Integrated principles of zoology*. 14th edition. New York: McGraw-Hill Primis Custom Publishing.

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Instructors

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Office hours (Rm. 1089 Science Lab Building)

Kimsey M 1:10-3:30 PM and W 1:10 -2:00 PM.
Rosenheim W 11:10-12:00 PM and F 11:10-12:30 PM.

Lecture times and places

Section A.

Lectures in 1100 Social Sciences, MWF, 9:00-9:50 AM
Discussion 1100 Social Sciences, M, 4:10-5:00 PM

Section B.

Lectures in 1100 Social Sciences, MWF, 10:00-10:50 PM
Discussion 1100 Social Sciences, M, 5:10-6:00 PM

FINAL EXAM

Section A Tuesday, March 18 3:30-5:30

Section B Friday, March 21 10:30-12:30

Administrative Assistant

Eddy Thomsen. Office: 1084 Science Lab Building
Email: (ekthomsen@ucdavis.edu). Phone: 754-5973
Office hours: 8:30-10:30 M-F for first 3 weeks. By appointment thereafter.

BIS 1B Course Coordinator

Dr. Pat Randolph Office: 1019 Science Lab Building
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Office hours: F 8:30-11:30 in Room 1090.

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Introduction

BIS 1B is the second in a three-quarter series designed to introduce you to the basic principles of biology, and to prepare you for upper-division coursework in the future. The course covers two major areas of emphasis: *(i) principles of evolution and (ii) patterns of animal diversity*.

The course has three components: 1) three lectures/week (MWF), 2) one discussion period/week (Monday PM), and 3) one lab/week. You will earn a single grade, worth 5 quarter-units, for all three.

Lecture & Discussion Periods

The lectures will follow the schedule outlined above (pages 1-2). The lectures provide you with the primary material for the course. Thus, it is important that you attend each lecture, take careful notes, and do the reading associated with each lecture. The textbook for this class—and the source of most reading assignments—is *Selected Chapters from Integrated Principles of Zoology, 14th Edition* (2008) by Hickman, Roberts, Larson, and l'Anson (New York: McGraw-Hill Custom Publishing). This is an excellent textbook, containing a wealth of information. We certainly don't expect you to learn it all! Focus on those topics in the textbook that are emphasized in the lectures, and reiterated in the lecture handouts, study questions, and lab. The weekly discussion periods are integrated with the lectures and serve several functions: 1) they provide time to present additional examples and explanatory material that help students understand the concepts presented in lectures, 2) they provide time for questions and review, and 3) they are used for giving midterm examinations. Understanding the material in the lectures and the discussions is critical if you are to perform well in the class, so it is important to attend both.

Laboratories

Each of you is enrolled in a laboratory section that meets once per week for three hours. **It is essential that you attend the first meeting of the lab in which you are enrolled. If you are not present at the beginning of the lab, your place will be assigned to a student on the waiting list for the course.** The *lab manual* is available only from the UCD Bookstore. Please read the lab manual *before* you attend the first session.

It is essential that you attend all the labs—they are an integral part of the course. You must attend your assigned lab. We do not allow lab make-ups, but your lowest lab quiz or written assignment will be dropped when calculating your final laboratory grade.

The labs are designed to extend the material in the lectures, discussion sections, and reading. In particular, our goals in the lab are to give you experience working with real organisms and real problems in biology, and to give you some sense of what it is like to learn things on your own. Many of the labs use live animals in the exercises; our feeling is that these animals provide a wealth of behaviors for you to watch, and we hope that you will use the full lab period to observe them even after you have finished with the more formal exercises. One final thought- all of the labs were developed by our own staff and faculty, and we are constantly trying to improve them.

If you have any thoughts on how we might do so, please let us know. We actually do make changes quite regularly to the labs.

Grading

We grade on an absolute scale rather than a curve. This is done in part to encourage you to study and work together- because the course is graded on an absolute scale, everyone can get an A if they earn it. We hope that you will work in teams and study groups, since they often produce the best results for everyone. In general, we adhere to the following guidelines:

A > 90% B > 80% C > 70% D > 60% F < 60%

We will never raise these cutoffs, but we may lower them if we feel that an exam was overly challenging

Your TOTAL COURSE GRADE is based on 500 points. A detailed breakdown for the lecture and lab is provided at the end of this handout.

All of the Lecture/Discussion exams are comprehensive, with an emphasis on the material since the last exam. Exams may be a combination of multiple choice, fill in the blank, label-the-figure, matching, or similarly formatted questions. There may be unique contexts of questions and material that you have not seen before, requiring you to apply your knowledge to a new situation.

Midterm makeup exams: ***Our basic policy is “no makeup exams”.*** They are given only with the consent of the instructors, and only for extraordinary circumstances. Such circumstances include: hospitalization, serious (and documented) illness, or a documented personal crisis. In addition, you must contact us ***at least 2 days before the exam*** (unless the crisis occurs at the last minute). We will contact you as soon as possible to reschedule a new exam, and we reserve the right to give an oral makeup exam in place of a written one.

Final exam: We do not reschedule final exams, as per University Policy.

BIS 1B Web Page

The BIS 1B Web Page has organizational material, BLC office hours, and other important information. The study questions are posted on the web site along with the answers. It is a constantly evolving site, so you should check it periodically for relevant material. It is available at:

<http://bis1b.ucdavis.edu>

The BLC:

The Biological Learning Center (BLC) is located in Rm. 1089 Science Lab Building. This is where we hold office hours, and where additional reference and study materials are kept. There is a wealth of study aids and demonstrations in the BLC. You will also find lab practice tests, books, computers with access to the 1B web page, and other helpful materials. It is designed as a resource specifically for BIS 1B students, and is a great place to talk to a TA, meet with other students, look at materials for the course, and generally keep on top of the course material. Hours are posted on the door and on the course web page.

Lecture recordings

Each lecture is digitally recorded and is available online at the BIS 1B Web Page.

Study Questions

Study questions for each lecture will be posted on the BIS 1B web site. You can use these to test your knowledge of issues presented in lecture. We post *answers to the study questions* so that you can check your responses. We provide these to you as study aids to help you focus.

Some Study Guides and Hints

1. Take careful notes- they are the most important single study tool that you have.
2. Make sure that your notes make sense *soon after class*, while they are still fresh in your mind.
If they don't make sense try:
 - a) discussing them with another student
 - b) talking to your TA
 - c) coming to our office hours.
3. Use the lecture handouts, information on the web site and answer the study questions- these are important study tools.
4. Try to do the reading assignments *before* each lecture. One effective strategy is to briefly go over the readings before the lecture to familiarize yourself with the material. Then go over it again after the lecture, making sure that you emphasize those parts of the reading that were covered in lecture.
5. Use the BLC for access to TAs, study materials, demonstrations, or just as a place to meet and study with friends.
6. Spend all of the time available for the lab **in the lab**.
7. This course requires a combination of memorization and conceptual understanding. Identify conceptual issues in the lectures and ensure that you can apply them. Try to understand the material, not just memorize it.
8. Keep up with the course. This is a very tough course to cram in your brain at the last minute. There is too much material for this strategy to work.
9. An effective study strategy is to try to look at each lecture and identify 3 to 5 major points that were covered in the lecture. You can almost count on getting an exam question on one of them.
10. Seek to understand what you got wrong on each exam, and why it was wrong. Learn the right answer (the course is cumulative).

A Word of Advice:

If you find that you are having trouble in this course, please see us (Bob and Jay) early. ***Do not*** wait until the last week of class and hope to salvage a poor grade. Be aware that we are not going to cut special deals with individual students for last minute grade improvement. Make it a habit

to visit the BLC on a regular basis to talk with us, other instructors, and other students about the course. Our job is to help you in whatever ways we can to make your experience in this class productive, interesting and enjoyable. However, we cannot seek you out, you must make the effort to contact us! Have a good quarter.