

Biology 102 – Spring 2017
Course Information and Policies

Lectures: Leidy Labs room 10, MWF 1-2

Instructors: Dr. Tim Linksvayer (Course Director)
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TEXTS

Lecture: Life, The Science of Biology, 10th edition, Sadava, Hillis, Heller and Berenbaum, 2014. Reading assignments indicate chapters (or page numbers) to be used as a reference and background for each lecture. The syllabus is a tentative lecture schedule; actual topics covered and reading assignments may differ.

Lab: Biology 102 Laboratory Manual (downloaded by chapter from the course Canvas site)

CANVAS

The course Canvas site (at canvas.upenn.edu) will contain any announcements related to lecture or lab as well as copies of course documents, including lab manual chapters and sample exams from previous semesters. Lectures will be recorded and can be viewed from Canvas (go to “Modules” then “Lecture recordings”).

Student queries about lecture content, exam coverage and other topics should be posted on the course Canvas site by following the “Discussions” link, and not emailed individually to the instructors. The instructors will regularly visit the Canvas site and respond to posted questions. In this way, everyone will have equal access to the answers. You should make it a habit to visit this Canvas forum regularly to get answers to such questions.

GRADES AND EXAMS

1. There will be three 1-hour in-class exams during the semester (see Course Schedule below for dates). The exams will be multiple choice format, where answers are entered in a “bubble sheet” form that is scanned. The lowest exam grade will be dropped in computing your course grade. If you miss an exam, then that exam will automatically be the one that is dropped in computing your course grade. There will be no make-ups for missed exams.
2. The Final Exam (Friday May 5; 12:00 – 2:00) will be comprehensive and cannot be dropped.
3. The course grade will be computed from the two highest hour exam scores (2x100 points), the final exam (100 points) and the laboratory score (150 points) for a total of 450 points. Course letter grades will be assigned by assessing each student’s total score relative to the best total score attained by any student during the semester.
4. Exam regrades: The regrade policy will be posted on Canvas after each exam. Typed requests for a regrade will be accepted if the request contains specific, supporting information to show that the answer as given on the exam is correct.

LABS

Students must successfully complete the laboratory in order to receive credit for Biology 102. Your TA will review specific lab policies, including the policy for absences from lab, during the first lab session (the week of 23 Jan.). Instructions for each lab exercise must be read **before** coming to lab.

LECTURE ATTENDANCE

It is expected that you will attend all lectures. Should you miss a lecture for some reason, there is no need to contact the instructors about this or to report this through the Course Absence Reporting system (CAR). However, if a family emergency or serious personal illness causes you to miss five or more lectures in a row, please be sure to contact the Course Director (Linksvayer) and the College Office directly.

WEEKLY DISCUSSIONS (OPTIONAL)

Faculty-led discussions will be held 2-3pm on Wednesdays in Leidy 10 and will cover relevant lecture topics. The faculty member currently lecturing in the course will attend that week’s discussion. Discussions will be recorded and available online on Canvas for students who are unable to attend.

ACADEMIC INTEGRITY

The University of Pennsylvania's Code of Academic Integrity

Since the University is an academic community, its fundamental purpose is the pursuit of knowledge. Essential to the success of this educational mission is a commitment to the principles of academic integrity. Every member of the University community is responsible for upholding the highest standards of honesty at all times. Students, as members of the community, are also responsible for adhering to the principles and spirit of the following Code of Academic Integrity.

Academic Dishonesty Definitions

Activities that have the effect or intention of interfering with education, pursuit of knowledge, or fair evaluation of a student's performance are prohibited. Examples of such activities include but are not limited to the following definitions:

A. Cheating

Using or attempting to use unauthorized assistance, material, or study aids in examinations or other academic work or preventing, or attempting to prevent, another from using authorized assistance, material, or study aids. Example: using a cheat sheet in a quiz or exam, altering a graded exam and resubmitting it for a better grade, etc.

B. Plagiarism

Using the ideas, data, or language of another without specific or proper acknowledgment. Example: copying another person's paper, article, or computer work and submitting it for an assignment, cloning someone else's ideas without attribution, failing to use quotation marks where appropriate, etc.

C. Fabrication

Submitting contrived or altered information in any academic exercise. Example: making up data for an experiment, fudging data, citing nonexistent articles, contriving sources, etc.

D. Multiple Submissions

Multiple submissions: submitting, without prior permission, any work submitted to fulfill another academic requirement.

E. Misrepresentation of academic records

Misrepresentation of academic records: misrepresenting or tampering with or attempting to tamper with any portion of a student's transcripts or academic record, either before or after coming to the University of Pennsylvania. Example: forging a change of grade slip, tampering with computer records, falsifying academic information on one's resume, etc.

F. Facilitating Academic Dishonesty

Knowingly helping or attempting to help another violate any provision of the Code. Example: working together on a take-home exam, etc.

G. Unfair Advantage

Attempting to gain unauthorized advantage over fellow students in an academic exercise. Example: gaining or providing unauthorized access to examination materials, obstructing or interfering with another student's efforts in an academic exercise, lying about a need for an extension for an exam or paper, continuing to write even when time is up during an exam, destroying or keeping library materials for one's own use, etc.

- If a student is unsure whether his action(s) constitute a violation of the Code of Academic Integrity, then it is that student's responsibility to consult with the instructor to clarify any ambiguities.

(Source: The University Honor Council and the Office of Student Conduct, 2008, University of Pennsylvania's Code of Academic Integrity, http://www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html, (December 18, 2015))

What happens if I am caught cheating?

Our policy in BIOL102 is to send all cases of suspected Academic Integrity violations to the Office of Student Conduct (OSC). This is not negotiable. In addition, alleged violations of the Code of Academic Integrity are never referred for resolution by mediation. More information about the OSC can be found on its website:

<http://www.upenn.edu/osc/>.

What are the penalties for Academic Integrity violations?

Penalties can include suspension from the University and a notation indicating an academic integrity infraction in your academic record. If you think about it, this is an awful outcome for students and families. In addition, you will fail this course and receive an F on your transcript. Yes, we take this very seriously.

What procedures are used to detect cheating in this course?

All graded exams will be scanned before being returned to you. Any discrepancy between the returned exam and one resubmitted for a regrade is considered a violation. No materials such as a smartphone are allowed to be used during an exam. Any use of a smartphone during an exam (for any reason) is considered a violation.

STRATEGIES FOR SUCCESS

A great deal of material will be covered in this course; thus it is important to keep up with the work on a regular basis. Some advice: go over your lecture notes later **THE SAME DAY** - the material will still be fresh in your mind so this will help you solidify what you have learned and understand and identify what you should ask questions about during the next lecture or at the weekly review session.

Note that exams will focus primarily on the lecture content. For this reason, you should definitely *not* try to memorize all of the reading material assigned for each lecture. Instead, use the reading as reference and background to aid in your understanding of the processes, concepts, and facts covered in lecture.

The optional faculty-led discussion sessions are your best resource for additional help in the lecture component of the course. These sessions provide a regular opportunity to ask questions, hear difficult topics explained again, and listen to other students' questions and ideas.

You can also turn to your TA or the instructor (during office hours or by appointment) for help with the subject matter or for more general advice.

In addition, you may wish to contact the Learning Resource Center (<http://www.vpul.upenn.edu/lrc/lr/>) or the Department of Academic Support Programs (<http://www.vpul.upenn.edu/tutoring/>) for tutoring help.

TENTATIVE COURSE SCHEDULE

Date		Lecturer	Topic	Readings
11-Jan-17	Wednesday	TL	Introduction	
13-Jan-17	Friday	TL	Evolutionary forces I	Ch. 21
16-Jan-17	Monday		MLK Day, no class	
18-Jan-17	Wednesday	TL	Evolutionary forces II	Ch. 21
20-Jan-17	Friday	TL	Evolutionary forces III	Ch. 21
23-Jan-17	Monday	TL	Phylogenetic analysis	Ch. 22
25-Jan-17	Wednesday	TL	Species concepts and how species originate	Ch. 23
27-Jan-17	Friday	TL	Evolution of genes and genomes I	Ch. 24
30-Feb-17	Monday	TL	Evolution of genes and genomes II	Ch. 24
1-Feb-17	Wednesday	TL	History of life I: age of Earth, major patterns of diversification and extinction	Ch. 25
3-Feb-17	Friday	TL	History of life II: major transitions in evolution	Ch. 25
6-Feb-17	Monday	TL	Diversity of life I: microbial life	Ch. 26
8-Feb-17	Wednesday	TL	Diversity of life II: macrobial life (plants, animals, fungi)	Ch. 27
10-Feb-17	Friday	PS	Major themes in development of multicellular organisms	Ch. 19, 34, 44
13-Feb-17	Monday		FIRST MIDTERM EXAM	
15-Feb-17	Wednesday	PS	Introduction to organismal biology: overview of organisms and their challenges	No readings
17-Feb-17	Friday	PS	Big ideas I: size and scale; physical considerations; temperature	Ch. 5.1; 6.3-6.5; 40
20-Feb-17	Monday	PS	Big ideas II: overview of homeostasis and integration	Ch. 39, 40
22-Feb-17	Wednesday	PS	Water balance I: cells	Ch. 6.3, 35.1, 52.1
24-Feb-17	Friday	PS	Water balance II: multicellular organisms	Ch. 35, 52
27-Feb-17	Monday	PS	Energy I: fundamentals	Ch. 8, 9, 10
1-Mar-17	Wednesday	PS	Energy II and nutrition: organismal strategies	Ch. 10, 36, 51
3-Mar-17	Friday	PS	Handling metabolic waste I	Ch. 52
6-Mar-17	Monday		Spring Break	
8-Mar-17	Wednesday			
10-Mar-17	Friday			
13-Mar-17	Monday	PS		Handling metabolic waste II
15-Mar-17	Wednesday	PS	Signaling within organisms	Ch. 37, 41, 45
17-Mar-17	Friday	PS	Sensing and responding to the external environment	Ch. 35.3, 37, 39.3, 46
20-Mar-17	Monday	PS	Reproduction I: plants, fungi	Ch. 30, 38
22-Mar-17	Wednesday		SECOND MIDTERM EXAM	
24-Mar-17	Friday	PS	Reproduction II: animals	Ch. 43
27-Mar-17	Monday	PS	Movement and dispersal I: major strategies	No readings
29-Mar-17	Wednesday	PS	Movement and dispersal II: muscle power	Ch. 48
31-Mar-17	Friday	PS	Dealing with pathogens and parasites I: microbes; plants	Ch. 39
3-Apr-17	Monday	PS	Dealing with pathogens and parasites II: animals	Ch. 42
5-Apr-17	Wednesday	PS	Overflow lecture time/In-class discussion	No readings
7-Apr-17	Friday	TL	Behavior	Ch. 53
10-Apr-17	Monday	TL	Introduction to ecology	Ch. 54
12-Apr-17	Wednesday	TL	Population ecology	Ch. 55
14-Apr-17	Friday	TL	Species interactions	Ch. 56
17-Apr-17	Monday	TL	Community ecology I	Ch. 57
19-Apr-17	Wednesday	TL	Community Ecology II	Ch. 57
21-Apr-17	Friday	TL	Ecosystems	Ch. 58
25-Apr-17	Wednesday		THIRD MIDTERM EXAM	
5-May-17	Friday		FINAL EXAM, 12pm-2pm	

Biology 102 Lab Schedule - Spring 2017

Week of:	Lab Manual Chapter and Activity
Jan 11	No labs (classes begin on Wednesday)
Jan 16	No labs (Martin Luther King, Jr. Day on Monday)
Jan 23	Chapter 1 - Bacterial Mutagenesis, Part 1
Jan 30	Chapter 2 - Leaf metagenomics - session 1
Feb 6	Chapter 3 - Leaf metagenomics - session 2 Chapter 1 - Bacterial Mutagenesis, part 2
Feb 13	Chapter 4 - Invertebrate Diversity Chapter 5 - California Bucket
Feb 20	Chapter 6 - Mammalian Anatomy
Feb 27	Chapter 7 - Plant Anatomy
March 6	No labs (Spring Break)
March 13	Chapter 8 - Neural Function
March 20	Chapter 9 - Plant Physiology
March 27	Chapter 10 - Renal Function
April 3	Chapter 11 - Decision-Making in Ants and Humans
April 10	Chapter 12 - Leaf metagenomics - session 3
April 17	Chapter 13 - Leaf metagenomics - session 4
April 24	No labs (classes end on Wednesday)