

Biology 142
Introductory Biology II
Fall Semester 2000

Professor: Bruce Ostrow, Ph.D.

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Office Hours: Tuesdays 9-12, Wednesdays 2-5, Fridays 1-4, *and* by appointment

Lecture Hours: Mon., Wed., Fri. 11:05 a.m. - 11:55 a.m.

Room: Pierce 101

Lab Hours: Monday 2:00 - 5:00 p.m.

Room: Pierce 119

Required Texts: (available at bookstore)

Biology of Animals, 7th ed. Hickman, Roberts, and Larson. McGraw-Hill Publishers. 1997.

Biology, 5th ed. Campbell, Reece, and Mitchell. Benjamin/Cummings Publishing Company, Inc. 1999.

Required Lab texts (available at bookstore) *Used lab manuals are not acceptable in this course.*

General Zoology Laboratory Guide, 13th ed. Charles Lytle. McGraw-Hill. 2000.

Investigating Biology, 3rd ed. Morgan, Judith Giles and M. Eloise Brown Carter. Benjamin/Cummings Publishing Company, Inc. 1999

Required Lab Material (available at bookstore).

Lab Dissection Kit. Put your name on it!

Course Plan:

1. This class is the second half of Introductory Biology at Oxford College. It serves as a foundation for all upper-level Biology classes and is intended for Biology majors. The objectives of this class are to explore Kingdoms Monera, Protista, Fungi, and Animalia, and to learn the core concepts of animal physiology. Biology 141 is the prerequisite for this course.
2. Attendance at all lectures and labs is required. The Biology Department Absence Policy is detailed at the end of the syllabus.
3. Your success in learning the material is dependent on attending class, taking good notes, and participating in discussion. You must work to understand the ideas, not just memorize the material. Open discussions that are informative and thought provoking will happen only if you come to class prepared. All lectures are structured to allow time for questions and discussion. You are encouraged to come to my office hours for additional discussion.

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4. Supplemental Instruction is not available this semester for this course. Therefore I will act in the SI capacity. At certain times throughout the semester we will arrange to meet for a review session. You can certainly approach alumnae of this course with questions. Also you are encouraged to form study groups and to work with your peers.

5. A LearnLink Conference has been set up for this class. You can access it by going to the following folders: Public Conferences/ Oxford College/Class Conferences/ Oxford: Biology/ 142 Ostrow. Put the conference on your LearnLink desktop. Check the conference daily for announcements and feel free to post class-related notices/questions to it!

6. Cheating is not acceptable. You must abide by the Honor Code. Your signature on items turned in for credit (examinations, homework, and lab work) attests to your upholding the Honor Code.

7. Open Lab: The lab room (Pierce 119) will be open for study and experiments from 8am to 5pm Monday through Friday. If it is not open during these times, call Security to open the lab for you. The lab teaching assistant will offer open lab times on evenings and weekends.

8. In the lab, we will be working with potentially infectious microbes, preserved specimens, and dangerous materials. **Food and drinks are absolutely prohibited!** It is imperative that you read the labs beforehand.

9. Beepers and cell phones are not allowed. Laptop computers are allowed if they are quiet.

10. Grading	3 lecture exams (90 points each)	42%	270 points
	1 final exam	22%	145 points
	3 lab Exams (60 pts. ea.)	28%	180 points
	<u>3 lab Investigations (15 pts. ea.)</u>	<u>7%</u>	<u>45 points</u>
	Total	100%	640 points

Tests

There will be three lecture exams, and a Final. Exams will include multiple choice questions, questions requiring short answers (fill-in-the-blank or one sentence), and longer essay questions. The Final exam will be comprehensive. Exams are held on Tuesday mornings at 8am. Tests will be taken at the scheduled time. If you are too sick to take a test or if there is a family emergency **you must let me know prior to the test**; otherwise you will receive a 0 for that test!

Lab Grade

There will be three lab practical exams (Tuesday mornings at 8am).

In addition to the tests, you will conduct three independent lab investigations. These will be started during the regular lab period and completed during open lab. For each

investigation, you will write a report (average 3 pages, typed, double-spaced) detailing your experiment and conclusions. The due date for these investigations will be announced in lab.

Lab grade will account for 35% of your total grade in class. Thus lab is a very important component of your work in this class.

Class Participation

The final grade you receive can be influenced by your attendance and class participation.

Your grade in the course will be based on a point system with an approximate total of 640 points. The scale is:

90-100% = A

80-89% = B

70-79% = C

60-69% = D

<60% = F

Plus and minus grades are given.

Biology 142 Course Schedule

Introductory Biology II with Laboratory - Fall 2000

<u>Week</u>	<u>Day</u>	<u>Date</u>	<u>Topic</u>	<u>Book Pages</u>
1	W F	Aug. 30 9/1	Introductions Evolutionary History, Systematics	772-73; Chap. 15
2	M W, F	9/4 9/6-8	No Class (Labor Day Holiday) Kingdom Monera	Campbell Chap. 27
3	M-F	9/11-15	Kingdom Protista	Chap. 16
4	M, W, F	9/18 9/20-22	Porifera Development	Chap. 17 318-331
5	M, W Tues. F	9/25-27 9/26 9/9	Cnidaria EXAM I 8:00 - 9:30 a.m. (through development) Ctenophora	Chap. 18 411-12
6	M-F	10/2-6	Acoelomates / Pseudocoelomates	Chaps. 19, 20
7	M, W F	10/9, 11 10/13	Annelida Molluscs I	Chap. 22 Chap. 21
8	M W, F	10/16 10/18, 20	No Class (Fall Break) Finish Molluscs	Chap. 21
9	M Tues. W, F	10/23 Oct. 24 10/25, 27	Overview of Arthropods EXAM II 8:00 - 9:30 a.m. (through molluscs) Echinoderms	Chap. 23 542-556
10	M W F	10/30 11/1 11/3	Chordates/ Chordate Affinities Early Chordates Overview of Modern Chordates	557-570 570-580 Chaps. 27-31
11	M W F	11/6 11/8 11/10	Skin and Bones Muscles Nutrition	145-155 156-164 Chap. 10
12	M, W F	11/13, 15 11/17	Circulation Respiration	191-198 199-207

13	M	11/20	Nerves	Chap. 11
	Tues.	Nov. 21	EXAM III 8:00 - 9:30 a.m. (through circulation)	
	W, F	11/22, 24	No Class (Thanksgiving Holiday)	
14	M	11/27	Finish Nervous System	Chap. 11
	W, F	11/29, 12/1	Endocrine System	Chap. 12
15	M	12/4	Excretion	171-179
	W	12/6	Reproduction	Chap. 14
	F	12/8	Immunity	Chap. 9
16	M	12/11	Review for Final; Course Evaluations	
	W	12/13	No Class (Reading Day)	
	Fri.	Dec. 15	FINAL EXAM 2:00 – 5:00pm (comprehensive)	

Biology 142 Lab Schedule

Introductory Biology II with Laboratory - Fall 2000

<u>Date</u>	<u>Topic</u>	<u>Reading</u>
9/7 (Thursday 3pm)	Intro to lab techniques & terms	Lytle, 8
9/11	Monera Fungi Investigation #1	Morgan/Carter, 13 Morgan/Carter, 14.2
9/18	Protista Porifera Dissection: <i>Grantia</i>	Lytle, 5 Lytle, 6
9/25	Development Investigation #2	Lytle, 4 and Morgan/Carter, 24
10/2	Cnidaria Dissections: <i>Metridium</i> , <i>Aurelia</i> , <i>Gonionemus</i>	Lytle, 7
10/9	Platyhelminthes and Pseudocoelomates Dissection: <i>Ascaris</i>	Lytle, 9 and 10
10/12 (Thursday)	8 AM LAB EXAM 1 through Cnidaria	
10/16	No lab (Fall Break)	
10/23	Annelida Dissection: <i>Lumbricus</i> Investigation #3	Lytle, 12
10/30	Mollusca Dissections: <i>Venus</i> , <i>Loligo</i>	Lytle, 11
11/6	Arthropoda Dissection: <i>Procambarus</i>	Lytle, 13
11/13	Echinoderms, Early Chordates, Vertebrate Tissues Dissection: <i>Asterias</i>	Lytle, 14 Lytle, 15 Lytle, 2
11/16 (Thursday)	8 AM LAB EXAM 2 through Arthropods	

11/20	Shark Anatomy Frog Anatomy (skin, muscles, bones) Dissections: <i>Squalus</i> , <i>Rana</i>	Lytle, 16 Lytle, 18
11/27	Frog Anatomy (viscera, circulatory) Cow Heart Dissection: <i>Rana</i>	Lytle, 18
12/4	Fetal Pig Anatomy Dissections: <i>Sus</i> , sheep brain	Lytle, 19
12/11	Lab closed at 9am LAB EXAM 4 through <i>Sus</i>	

3 PM

ABSENCE POLICY - Biology Department

All students are expected to attend all lecture and laboratory sessions. However, emergencies may arise which will necessitate absences from class. Students are allowed 4 cuts in lecture and NO CUTS in lab. Students may only miss lab without penalty in cases of illness, family emergency or a school sponsored event which is cleared with the professor in advance. Students are responsible for all material which is covered in laboratory and lecture. When possible, students will be allowed to "make-up" laboratory material missed due to an excused absence, however, because of the nature of laboratory material, actual "make-up of missed activities is usually impossible.

PENALTIES

Students who exceed the 4 cut limit in lecture for whatever reasons or have an unacceptable absence from laboratory will have their FINAL grade reduced 5 points per absence. Students who miss 2 labs without acceptable reasons will fail the course (see below).

LECTURE ABSENCES:

THERE ARE NO EXCUSED ABSENCES FOR LECTURE. Each student may be absent four times without penalty. These four cuts may be used for any reason: illness, studying, travel, family emergency, etc. However, ANY additional cuts will result in grade reduction. USE YOUR CUTS JUDICIOUSLY, e.g. for sick leave only.

ACCEPTABLE LABORATORY ABSENCES

Although no discretionary absences, i.e. "cuts", are allowed regarding laboratory, on rare occasions, illness, family emergencies, or certain school sponsored events may make it necessary for a student to miss a laboratory session. The instructor MUST be notified prior to the day of the absence in all but the most extreme emergencies.

In all cases, the final decision regarding whether or not an absence is acceptable will be made by the instructor.

AN UNACCEPTABLE ABSENCE FROM LABORATORY RESULTS IN A FIVE POINT REDUCTION IN THE FINAL GRADE. TWO UNACCEPTABLE LABORATORY ABSENCES RESULT IN FAILURE OF THE COURSE.

MISSED TESTS

Ordinarily, tests cannot be made up, however, this is up to the instructor. If a student misses a test, and the absence is acceptable the missed test will not count either for or against the student. If the absence is not excused the grade will be a zero. Students are cautioned that any excuse for missing an exam will come under severe scrutiny by the instructor. THE INSTRUCTOR MUST BE NOTIFIED PRIOR TO THE TIME OF THE EXAM, AND THE INSTRUCTOR MAKES THE FINAL DECISION REGARDING WHETHER OR NOT AN ABSENCE IS ACCEPTABLE.

Laboratory tests which are missed for a reason that is excused MUST be made up. The instructor must be notified prior to the time of the test.

RELIGIOUS HOLIDAYS:

Students must notify the instructor one week in advance if they intend to be absent for a religious holiday.

TARDINESS

Being late to class is rude and distracting. Continued tardiness by any student will result in the assignment of absences and ultimately a reduction in the student's grade. Three tardies equal an absence. The tardy student is responsible for notifying the instructor that she/he entered the classroom late and, therefore, was not absent. The instructor reserves the option of excluding a person from further classroom or laboratory participation if the student is continuously tardy.

Falsification of information regarding absences from class or laboratory will be considered as a breach of academic integrity.