Biology 142
Introductory Biology II
Fall Semester 2001

Professor: Bruce Ostrow, Ph.D. **Office**: Pierce 104
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Office Hours: 11:30 - noon MWF, 10-10:30 TTh *and* by appointment

Lecture Hours: Mon., Wed., Fri. 10:40 - 11:30 a.m. **Room**: Pierce 101
Lab Hours: Wednesdays 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 science 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 for additional discussion.

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. Any student with a permanent or temporary disability is encouraged to contact the Office of Disability Services which offers and coordinates support services to ensure each person has an equal opportunity to participate in the Oxford College community.

7. 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.

8. 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 assistant will open the lab on select weekends.

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

10. No cell phones, pagers, or other noisome devices are allowed in class.

11. I do not provide back-tests for this class. If you know of any back-tests for this class, please let me know and then I will make them available for the whole class.

12. Grading

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.

Grading (continued)

3 lecture exams (90 points each)	42%	270 points
1 final exam	22%	145 points
4 lab Exams (45 pts. ea.)	28%	180 points
3 lab Investigations (15 pts. ea.)	7%	45 points
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 four lab practical exams (Tuesday mornings at 8:30 am).

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.

Your 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.

Late Policy

Late material is accepted but I deduct 10% per day late.

Class Participation

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

Biology 142 Course Schedule
Introductory Biology II with Laboratory - Fall 2001

Week	Day	Date	Topic	Book Pages
1	F	Aug. 31	Introductions; Evolutionary History	772-73
2	M	9/3	No Class (Labor Day Holiday)	
	W, F	9/5, 7	Kingdom Monera	Campbell Chap. 27
3	M, W	9/10, 12	Kingdom Protista	Chap. 16
	F	9/14	Kingdom Animalia	352-359
4	M	9/17	Porifera	Chap. 17
	W, F	9/19, 21	Muscle Physiology	156-164
5	M-F	9/24-28	Cnidaria / Ctenophora	Chap. 18
6	M-F	10/1-5	Development	318-331
	Tues.	10/2	**EXAM I 8:00 - 9:30 a.m. (through radiata)**	
7	M-F	10/8-12	Acoelomates / Pseudocoelomates	Chaps. 19, 20
8	M	10/15	No Class (Fall Break)	
	W, F	10/17, 19	Annelida	Chap. 22
9	M, W	10/22, 24	Molluscs	Chap. 21
	F	10/26	Neurophysiology	Chap. 11
10	M	10/29	Finish Nerves	Chap. 11
	Tues.	Oct. 30	**EXAM II 8:00 - 9:30 a.m. (through ?)**	
	W	10/31	Overview of Arthropods	Chap. 23
	F	11/2	Echinoderms I	542-556
11	M	11/5	Finish Echinoderms	542-556
	W	11/7	Early Chordates / Chordate Affinities	557-580
	F	11/9	Overview of Vertebrates	Chaps. 27-31
12	M	11/12	Skin and Bones	145-155
	W, F	11/14, 16	Digestion	Chap. 10

13	M, W	11/19, 21	Circulation	191-198
	Tues.	Nov. 20	**EXAM III 8:00 - 9:30 a.m. (through digestion)**	
	F	11/23	No Class (Thanksgiving Holiday)	
14	M	11/26	Respiration	199-207
	W, F	11/28, 30	Endocrine System	Chap. 12
15	M	12/3	Excretion	171-179
	W	12/5	Reproduction	Chap. 14
	F	12/7	Immunity	Chap. 9
16	M	12/10	Review for Final; Course Evaluations	
	W	12/12	No Class (Reading Day)	
	Fri.	Dec. 15	**FINAL EXAM 2:00 – 5:00pm (comprehensive)**	

Biology 142 Lab Schedule
Fall 2001

Date	Topic	Reading
9/5	Lab safety, techniques, & terms	Lytle, 8
	Monera	Morgan/Carter, 13
	Fungi	Morgan/Carter, 14.2
	Investigation #1	
9/12	Protista	Lytle, 5
9/19	Porifera	Lytle, 6
	Dissection: *Grantia*	
9/25 (Tuesday)	**8:30 AM**	**LAB EXAM 1**
9/26	Cnidaria	Lytle, 7
	Dissections: *Metridium, Aurelia, Gonionemus*	
10/3	Development	Lytle, 4 and Morgan/Carter, 24
	Investigation #2	
10/10	Platyhelminthes and Pseudocoelomates	Lytle, 9 and 10
	Dissection: *Ascaris*	
10/17	Annelida	Lytle, 12
	Dissection: *Lumbricus*	
10/23 (Tuesday)	**8:30 AM**	**LAB EXAM 2**
10/24	Mollusca	Lytle, 11
	Dissections: *Venus*, *Loligo*	
	Investigation #3	
10/31	Arthropoda	Lytle, 13
	Dissection: *Procambarus*	
11/7	Echinoderms	Lytle, 14
	Early Chordates	Lytle, 15
	Vertebrate Tissues	Lytle, 2
	Dissection: *Asterias*	

11/13 (Tuesday)	**8:30 AM**	**LAB EXAM 3**	
11/14	Shark Anatomy		Lytle, 16
	Frog Anatomy (skin, muscles, bones)		Lytle, 18
	Dissections: *Squalus, Rana*		
11/21	Open Lab		
11/28	Frog Anatomy (viscera, circulatory)		Lytle, 18
	Cow Heart		
	Dissection: *Rana*		
12/5	Fetal Pig Anatomy		Lytle, 19
	Dissections: *Sus*, sheep brain		
12/11 (Tuesday)	**8:30 AM**	**LAB EXAM 4**	