

BIOLOGY 142

GENERAL BIOLOGY II WITH LABORATORY

PURPOSE

Biology 142 provides an introduction to the biology of the major animal phyla. It is the second course in a year-long sequence, consisting of Biology 141 and Biology 142, which is required of all biology majors and for students who are interested in certain of the pre-health science programs, e.g. pre-medical and pre-veterinary curricula.

The lecture and laboratory components of Biology 142 are closely coordinated in order to provide the student with principles regarding the evolution, ecology, morphology, embryology, and physiology of the major invertebrate phyla and the chordates. Approximately one-half of the semester is devoted to the study of the invertebrate taxa and one-half to the study of vertebrates.

EXPECTED RESULTS

The student is expected to become familiar with (1) the diagnostic characteristics of the taxa which are presented, (2) concepts associated with the evolution and ecology of the various groups, (3) anatomical (both microscopic and gross) and physiological mechanisms related to the survival and adaptation of animals, and, as a result of laboratory exercises, (4) demonstrable skills in observation and dissection.

EVALUATION PROCEDURES

Student evaluations are based on the following criteria:

- 1) four (4) one-hour tests,
- 2) a mid-term examination (a comprehensive test covering the invertebrate materials) = "invertebrate final"
- 3) three (3) laboratory practicals, and
- 4) an examination consisting of a comprehensive test covering the vertebrate material at the time designated for the final examination = "vertebrate final".

Tests which cover lecture material include "short-answer questions", e.g. multiple choice and matching, and a more subjective part consisting of "fill in the blanks," "completion," definition of terms, and questions related to the function of various structures. Some of the questions require answers a paragraph or so in length. Students are required to spell correctly, adhere to standard rules of grammar, and logically organize their answers.

The final grade for the course is based on the following:

1/3 average of lecture tests

1/3 average of laboratory practicals

1/3 average of the "invertebrate final" and the "vertebrate final."

EMORY UNIVERSITY



050000003526

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 in advance.

Students are responsible for all material which is covered in laboratory and lecture. When possible students will be allowed to make-up lab material missed due to an excused absence, however, most material in lab cannot be made-up.

PENALTIES

Students who exceed the 4 cut limit in lecture for whatever reasons or have unexcused absences in lab will have their final grade reduced 5 points per absence. Students who miss more than 2 labs without an excuse will fail the course.

EXCUSED ABSENCE - LABORATORY

If a student is absent for medical reasons, the College Nurse (even if treated by another medical person) must issue a statement of the instructor. The instructor must be notified by the student the day of the lab.

If an absence results from an emergency other than the student's health, the Associate Dean of Campus Life must be notified and issue a statement of explanation to the instructor. The instructor must be notified by the student the day of the lab.

If an absence is the result of a college-sponsored activity, a statement to that effect must be given to the instructor by the Dean of the College, the Associate Dean for Academic Affairs, the Associate Dean for Campus Life, or the appropriate coach. Arrangements must be made well in advance of the absence.

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

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 excused (see EXCUSED ABSENCES above) 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.

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.

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 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.

CLASSROOM AND LABORATORY GUIDELINES

Department of Biology

- I. Eating and drinking are not allowed in either classrooms or laboratories. Therefore, do not bring food items and beverages to class or laboratory. Remember that the use of tobacco in any form is forbidden in Pierce Hall.
- II. Students are expected to wear appropriate attire in classrooms and laboratories. This certainly includes the wearing of shoes.
- III. Students must be safety conscious at all times but especially in the laboratories. Special procedures will be reviewed during laboratory sessions as needed.
- IV. All students are requested to help with housekeeping in the classroom and laboratory.
- V. In Biology 142, 121, and 122 certain designated dissection specimens may be taken from the laboratory. The instructor will identify those specimens which may be removed for study elsewhere. These specimens must be returned on or before the date the instructor announces for their return.
- VI. Except for the exceptions noted above (V) materials may not be taken out of the laboratories. This includes microscopes, microscopic slides, demonstration notes and materials, charts, and all other items which are to be found in the laboratory.
- VII. Violation of any regulation noted in Sections V and VI above will be treated as a breach of academic integrity. Therefore, such violations will be immediately reported to the Honor Council.

Biology 142
Spring 1993
H.F. Sharp

Week	Date	Readings (Harris)	Lab Exercise and Readings (Harris)
1.	1/11-1/15	Ch. 18: Evolution (p.368-373) Ch. 21: Systematics	---
2.	1/18-1/22 (1/18 MLK Holiday)	Ch. 22: Protozoa	1.
3.	1/25-1/29	Ch. 23: (to pg. 496): Porifera Ch. 24: Cnidaria & Ctenophora	2.
4.	2/1-2/5	Ch. 25: Acoelomates	3.
5.	2/8-2/12	Ch. 26: Pseudocoelomates Ch. 29: Annelida	4.
6.	2/15-2/19	Ch. 28: Mollusca Ch. 33: Eclinodermata (to p. 725)	5.
7.	2/22-2/26	Arthropoda	6.
8.	3/1-3/5	Ch. 34: Intro. to Chordates	7.
9.	3/8-3/12	SPRING BREAK	---
10.	3/15-3/19	Ch. 6: Development Ch. 10: Skin, Bones, & Muscle	8. (Ch. 35)
11.	3/22-3/26	Ch. 13: Ingestion, Digestion, & Egestion Ch. 12: Gaseous Exchange	9. (Ch. 36)
12.	3/29-4/2	Ch. 11: Cardiovascular System Ch. 14: Excretory Systems	10. (Ch. 37)
13.	4/5-4/9	Ch. 16: Reproduction	11. (Ch. 38)
14.	4/12-4/16	Ch. 7 & 8: Neural Control	12. (Ch. 39)
15.	4/19-4/23	Ch. 9: Chemical Control	Review
16.	4/26-4/27	Ch. 9: Chemical Control(cont.)	

4/29-4/30, 5/3-5/5 **FINAL EXAMINATIONS**

I. TEXT: Concepts in Zoology. Harris. 1992. Harper Collins.

II. LABORATORY:

- a. Laboratory Manual for Biology 142. Sharp & Landt
- b. Dissection Kit
- c. Each laboratory exercise includes two parts:
 1. demonstrations of representative specimens of the major animal groups,
 2. observation and dissection of selected specimens

- III. Tests and Examinations:
- A. Hour Quizzes:
 - 1. January 28, Thursday
 - 2. February 18, Thursday
 - 3. March 25, Thursday
 - 4. April 15, Thursday
 - B. Laboratory Practicals:
 - 1. Feb. 23, Tuesday
 - 2. March 30, Tuesday
 - 3. April 27, Tuesday

NOTE: All quizzes and practicals on Tuesday and Thursday begin at 8:05 a.m. unless announced otherwise.

- C. "Mid-Term" (=1/2 Final Exam):
March 2, Tuesday
- D. "Final Exam" (=1/2 of Final Exam):