

Fall 2009: Animal Diversity BIOL 2003

Animal Diversity 1: Invertebrate and Vertebrates

CONTACT INFORMATION FOR INSTRUCTORS:

Lectures: Invertebrates: Dr. Tamara Romanuk, LSB (BIOL) Room 5089, tel. 494-4515, Office Hours: Monday 1pm-2pm or by appointment, romanuk@dal.ca (email is the best way to contact me)

Lectures: Vertebrates: Dr. Alan Pinder, LSB (BIOL) Room 4130, tel. 494-3822, Office Hours: MWF 1pm-2pm or by appointment, alan.pinder@dal.ca

Lab Instructor: Jen Gauthier, LSB (BIOL) Room 2124, tel. 494-7630, jfrail@dal.ca

WEB SITE: The course uses the Blackboard Learning System (BLS) site (previously WebCT 6.0) at <http://integratedlearningonline.academiccomputing.dal.ca/index.php> (ILO home page) and has its own blog! <http://biol2003.blogspot.com/>

LECTURES: Lectures are held in the ROWE Management Building 1028 on Mondays, Wednesdays and Fridays, 11:35 am -12:25 pm.

TEXTBOOKS:

Required: 1) Hickman, C. P. Jr; Roberts, L. S.; Keen, S. L.; Larson, A. & Eisenhour, D. J. (2009): *Animal Diversity*, McGraw Hill, Boston, 5th edition, 465pp. Previous editions are fine, 2) Houseman, *Digital Zoology CD*

Recommended ONLY for students taking BIOL/MARI 3301, *Biology of the Invertebrates*, Pechenik

LABORATORIES: The labs are held in Room 2102, next to the McCulloch Museum. The day and time of each lab are as follows:

B01	Tuesday am	11:30 – 2.30
B02	Tuesday pm	2:30 – 5:30
B03	Wednesday pm	2:30 – 5:30
B04	Wednesday pm	5:30 – 8:30
B05	Thursday am	8:30 – 11:30
B06	Thursday pm	2:30 – 5:30
B07	Friday pm	1:30 – 4:30

LAB MANUAL: The lab manual contains information concerning laboratory procedures, lab lessons, text readings, the term schedule and projects. It will be available unbound and three-hole punched. This is to keep everything accessible for the Lab Book you must create for the end of term.

NOTE: YOU WILL BE EXPECTED TO ATTEND EACH LAB AND TAKE THE LAB EXAM IN YOUR OWN LAB PERIOD. For your benefit, you **should arrive at each lab having read the lab material and any relevant text readings beforehand.** This will make more efficient use of your time in the lab and will give you an added advantage on tests and exams. Lab quizzes take information directly from the background material of each lab!

Fall 2009: Animal Diversity BIOL 2003

DATE	LECTURES	LABS	Lab Assessments
Sept. 11	1 Introduction		
Sept. 14 Sept. 16 Sept. 18	2 Fossil Record, pp.1-34 3 Animal Ecology, pp.35-54 4 Animal Architecture, pp.55-71	Sept. 15 - 18 1. Introduction to Laboratory	2 Drawings (sample marks only)
Sept. 21 Sept. 23 Sept. 25	5 Classification and Phylogeny, pp.72-88 6 Placozoans and Sponges, pp.112-122 7 Cnidarians and Ctenophores, pp.123-146	Sept. 22 - 25 2. Sponges, Cnidarians & Ctenophores SOL Movie: Origins/Life on the Move	Lab Quiz 1
Sept. 28 Sept. 30 Oct. 2	8 Acoelomates, pp.147-163 9 Pseudocoelomates, pp.164-177, 222-229 INVERTEBRATE TEST 1	Sept. 29 - Oct 2 3. Worms SOL Movie: The First Hunter/Explosion	Lab Quiz 2
Oct. 5 Oct. 7 Oct. 9	10 Annelids, pp.204-221 11 Molluscs, pp.178-203 12 Arthropods I: Crustaceans, pp.230-255	Oct. 6 - 9 4. Molluscs SOL Movie: The Survival Game	Lab Quiz 3
Oct. 12 Oct. 14 Oct. 16	NO CLASS: THANKSGIVING 13 Arthropods II: Insects, pp.255-278 14 Echinoderms I, pp.279-295	No official lab this week. Lab will be open throughout the week.	Work Ahead!
Oct. 19 Oct. 21 Oct. 23	15 Echinoderms II 16 Hemichordates, pp.295-299 INVERTEBRATE TEST 2	Oct. 20 - 23 5. Arthropods- Insect Diversity Analysis SOL Movie: Conquerors	Lab Quiz 4
Oct. 26 Oct. 28 Oct. 30	17 Feeding and moving in water 18 Urochordates, Cephalochordates (Ch. 15) 19 Hagfish, Lampreys, Chondrichthyes (Ch. 16)	Oct. 27 - 30 6. Echinoderms SOL Movie: The Ultimate Animal	Lab Quiz 5 Hand in lab 5 analysis
Nov. 2 Nov. 4 Nov. 6	20 Osteichthyes I (Ch. 16) 21 Osteichthyes II 22 Lissamphibia (Ch. 17)	Nov. 3 – 6 7. Fish and Amphibians SOL Movie: ½ of Bones, Brawn and Brains	Lab Quiz 6
Nov. 9 Nov. 11 Nov. 13	23 What is a "reptile"? (Ch. 18) REMEMBERANCE DAY 24 Squamata: lizards and snakes	NO LABS THIS WEEK- work ahead, Species At Risk due in 2 weeks, Lab Test in 3!	Work Ahead!
Nov. 16 Nov. 18 Nov. 20	25 How to fly I (Ch. 19) VERTEBRATE TEST 1 26 How to fly II	Nov. 17 -- 20 8. Reptiles, Birds and Mammals SOL Movie: ½ Bones, Brawn and Brains	Lab Quiz 7
Nov. 23 Nov. 25 Nov. 27	27 Ratites et al. 28 Dickey birds, AKA Passeriformes 29 Prototheria and Metatheria (Ch. 20)	Nov. 24 -- 27 3- min Species at Risk Presentations Bring snacks, coffee, etc! ☺	Presentations, Hand in Paper
Nov. 30 Dec. 2 Dec. 4	30 Average mammals: rodents 31 Carnivores and Ungulates 32 Primates	Dec. 1 -- 4 LAB TEST	LAB TEST Submission of Lab Book

Dec. 7	VERTEBRATE TEST 2		
--------	-------------------	--	--

ASSESSMENT & EVALUATION

50% of your grade is from Lectures, 50% from Labs

LECTURE TESTS: These 4 tests will be held during your regular lecture period in the ROWE Management Building 1028 throughout the term (See schedule). They are worth 50% total and divided up equally between Invertebrates and Vertebrates. There is no Registrar-Scheduled Final.

LAB TEST: This stationed lab exam will happen during the last lab, the week of November 30. All material covered in the lab is testable, so it is very important you look at and makes notes of everything displayed in the lab.

Lab Evaluation

Each student will produce and hand in a collection of **all lab material** including drawings, tables, charts, and answers to questions in a **Lab Book**. It is worth 15% of your total mark. You will compile all information collected throughout the lab to be graded. Two main focuses for grading the lab book will be scientific drawings and overall organization, neatness, effort and most importantly, **completeness** (i.e. everything is completed to its entirety in each lab).

In addition to the lab book, each lab and the taxa covered in it will be reviewed through a short answer **lab quiz** at the beginning of each lab 2-8. During the Arthropod lab, you will conduct a short **Analysis of Insect Diversity**, which you will hand in the following lab. Lab 9 will consist of the short Species at Risk **oral presentations** that you will work on throughout the term (see complete description in Chapter 1). There will be **two weeks without labs** throughout the term, and you will be expected to work on your project and catch up on your lab book. The lab will be concluded by a **stationed lab test** during lab 10, where everything you have been asked to look at throughout the term is fair game for identification and other short answer questions.

As you can see from above, new aspects have been added to 2009. The biology curriculum suggests that each course contains an oral presentation, written work, and math/analytical work. Because you have no formal paper for the lecture component, all these aspects will be covered in the lab.

Evaluation

ASSESSMENT	% Value
Invertebrate Midterm	12.5
Invertebrate Final	12.5
Vertebrate Midterm	12.5
Vertebrate Final	12.5
Lab Book	15
Pre-Lab Quizzes (7)	10
Lab Test	10
Species At Risk Project	10
Insect Diversity Analysis	5
TOTAL	100

Fall 2009: Animal Diversity BIOL 2003
COURSE POLICIES

ACADEMIC INTEGRITY: Please familiarize yourself with the policy at: <http://academicintegrity.dal.ca/>. Senate regulations require faculty members to report suspected infractions. Academic dishonesty is a serious offence which may lead to the assignment of a failing grade, suspension or expulsion from the University, or even the withdrawal of a degree previously awarded.

TAXA: In all exams, students are expected to know and be able to spell the names of taxa **discussed in the class**. Please refer to the relevant text books and the lab manual.

CELL PHONES/PAGERS/ELECTRONICS: Use of any electronic equipment in class is prohibited except for the following: 1) recording AUDIO of lectures with a personal recording device, 2) laptops (must not use any chat function or check email while in class).

ABSENCES: Special arrangements for examinations, tests and assignments in the event of ILLNESS or other EXCEPTIONAL CIRCUMSTANCES:

At the discretion of the instructor, alternate arrangements will be considered, provided that:

- The student who misses class work because of illness notifies his or her physician at the time of the illness, notifies the instructor on the day in question, and provides a medical certificate signed by a physician within one week of the onset of the illness.
- A student who for medical reasons, e.g. scheduled surgery, physiotherapy, etc. anticipates missing class work, notifies the instructor at least one week in advance.
- A student who is absent due to other exceptional circumstances, notifies the Instructor on or before the day in question, and is willing to provide appropriate documentation on request.

Important Notice from Student Accessibility Services:

"Students with disabilities are encouraged to register as quickly as possible at the Student Accessibility Services if they wish to receive academic accommodations. To do so please phone 494-2836, drop in at the new Mark A. Hill Accessibility Centre or visit our website www.studentaccessibility.dal.ca . Students are also reminded that, for your convenience, all forms are now available on our website. "

