

Department of Biology Course Outline

SC/BIOL 2030 4.00 Animals
Winter 2016/2017

Course Description

A study of the diversity of animals, their structure, physiology and evolution. Three lecture hours, three laboratory hours. One term. Four credits.

Prerequisites

SC/BIOL 1010 6.00 or SC/BIOL 1000 3.00 and SC/BIOL 1001 3.00. Course credit exclusions: SC/BIOL 2030 5.00, SC/BIOL 2031 4.00, SC/BIOL 2031 3.00.

Course Instructors and Contact Information

Course Director

Dr. Andrew Donini
205 Lumbers Building
adonini@yorku.ca

Lab Coordinator

Andrea Durant, PhD Candidate
wb2030@yorku.ca

Technical Staff

Krystina Strickler

Schedule

Lecture Times: Mondays and Wednesdays: 11:30AM to 1PM in Vari Hall A

Lab Times: Tues, Weds, Thurs, Fri: 2:30-5:30pm in Lumbers 126
 Tues, Weds, Thurs 6:30 – 9:30pm in Lumbers 126
 Tues, Thurs. 10:00am to 1:00pm in Lumbers 126
 (Please attend only the lab section that you are registered for)

Evaluation

Laboratory Work (quizzes, lab performance, graded dissections):	25%
Laboratory Exam:	15%
Mid-term Exam:	20%
Final Exam (In April Exam Period)	40%

Important Dates

Mid-term Exam: Wednesday February 15th, 2017
Laboratory Exam: March 28, 29, 30, 31
(Lab sections will be assigned to take the lab exam on one of these 4 days)

NOTE: for additional important dates such as holidays, refer to the "Important Dates" section of the Registrar's Website at <http://www.yorku.ca/yorkweb/cs.htm>

Resources

Textbook: Hickman, CP; LS Roberts, SL Keen, A Larson, D Eisenhour. Animal Diversity, 6th (2012) or 7th (2015) Editions. McGraw Hill, Toronto.

Laboratory Manual: YORK SC/BIOL 2030 4.0 Animals Winter 2016/2017 Laboratory Manual
Course Director: Dr. Andrew Donini
Lab Coordinator: Andrea Durant

Course Website: Moodle

Learning Outcomes

Upon successful completion of this course, students should be able to:

1. Have a factual and conceptual knowledge of animals with a better appreciation of the evolution and adaptive radiation reflected by species in the kingdom Animalia.
2. Have improved skills of observation, interpretation and note-taking.
3. Have improved skills of dissection with a better appreciation for the inner and outer workings of animals.

Course Content

The purpose of this course is to introduce you to the diversity of animals. We discuss the lifestyles of animals, relationships between structure and function, and the evolutionary history of the kingdom Animalia. In this course, we consider both living and fossil forms, surveying the basic approaches to living, across a range of phyla. General topics for consideration include phylogeny and development, as well as the systems involved in support, locomotion, feeding, digestion, circulation, communication, osmoregulation, gaseous exchange, reproduction and sensory operations.

Tentative Lecture Schedule:

Jan. 9th: Introduction/Classification
Jan. 11th: Animal Architecture
Jan. 16th: Unicellular Eukaryotes
Jan. 18th: Unicellular Eukaryotes/Porifera
Jan. 23rd: Cnidaria
Jan. 25th: Cnidaria/Acoelomate Bilateria
Jan. 30th: Acoelomate Bilateria
Feb. 1st: Pseudocoelomates
Feb. 6th: Mollusca
Feb. 8th: Annelida
Feb. 13th: Review Session
Feb. 15th: MIDTERM EXAM
Feb. 20 to 24: READING WEEK NO CLASSES
Feb. 27th: Arthropoda I
Mar. 1st: Arthropoda II
Mar. 6th: Echinodermata
Mar. 8th: Vertebrate Beginnings
Mar. 13th: Fishes I
Mar. 15th: Fishes II
Mar. 20th: Amphibians
Mar. 22nd: Reptiles
Mar. 27th: Birds
Mar. 29th: Mammals
Apr. 3rd: Review Session
Apr. 5th: Free Period/No Class

Lab Schedule:

Week of Jan 16th: Protista (Protozoa)
Week of Jan 23rd: Porifera, Cnidaria
Week of Jan. 30th: Nematodes, Platyhelminthes
Week of Feb. 6th: Mollusca
Week of Feb. 13th: Annelida (Marked Dissection #1)
Week of Feb. 20th: READING WEEK, NO LABS
Week of Feb. 27nd: Arthropoda
Week of Mar. 6th: Echinodermata & Chordata I
Week of Mar. 13th: Chordata II
Week of Mar. 20th: Chordata III
Week of Mar. 27th: LAB EXAM

Experiential Education and E-Learning

Accessory Laboratory materials (images, videos) on Moodle

Other Information

Who do I ask what?

The Course Director (Dr. Andrew Donini) will be teaching the course and is the person to ask any questions pertaining to the lectures. Dr. Donini can also help with lab material related questions BUT students are encouraged to first ask your TA about lab related material.

The Lab Coordinator (Andrea Durant) organizes the labs, lab scheduling, lab marking, TA meetings ahead of labs, student Attendance in labs.

Take note of your TA's name! Your TA runs your lab section, administers and marks your quizzes, decides your lab performance grade, marks your graded dissections. Your TA is the first person you should ask lab material related questions to.

Course Policies

Missed Midterm Exam: Students with a documented reason for missing the midterm exam, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (e.g. Attending Physicians Statement) may be permitted to write a make-up exam **no later than 2 weeks after the normally scheduled midterm exam (February 15th)**. **The make-up exam will be short answer style questions**. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

Missed Laboratories: **Laboratory Attendance is Mandatory**. It is expected that you attend and complete each and every laboratory in this course. Please refer to the laboratory manual for complete policies, regulations and procedures for missed laboratories. **NOTE:** There is NO guarantee that you will be able to write and receive credit for a missed quiz and NO guarantee that you will be able to make-up a missed graded dissection.

Missed Final Exam: You must provide a valid reason with supporting documentation in order to be permitted to apply for Deferred standing if you miss the final exam.

University Policies

Academic Honesty and Integrity

York students are required to maintain the highest standards of academic honesty and they are subject to the Senate Policy on Academic Honesty (<http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>). The Policy affirms the responsibility of faculty members to foster acceptable standards of academic conduct and of the student to abide by such standards.

There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve students' research and writing skills, and cope with University life. Students are expected to review the materials on the Academic Integrity website at - <http://www.yorku.ca/academicintegrity/>

Access/Disability

York University is committed to principles of respect, inclusion and equality of all persons with disabilities across campus. The University provides services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University.

Student's in need of these services are asked to register with disability services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs. Please note that registering with disabilities services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs.

Additional information is available at the following websites:

Counselling & Disability Services - <http://cds.info.yorku.ca/>

Counselling & Disability Services at Glendon - <http://www.glendon.yorku.ca/counselling/personal.html>

York Accessibility Hub - <http://accessibilityhub.info.yorku.ca/>

Ethics Review Process

York students are subject to the York University *Policy for the Ethics Review Process for Research*

Involving Human Participants. In particular, students proposing to undertake research involving human participants (e.g., interviewing the director of a company or government agency, having students complete a questionnaire, etc.) are required to submit an *Application for Ethical Approval of Research Involving Human Participants* at least one month before you plan to begin the research. If you are in doubt as to whether this requirement applies to you, contact your Course Director immediately.

Religious Observance Accommodation

York University is committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course director immediately. Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete an Examination Accommodation Form, which can be obtained from Student Client Services, Student Services Centre or online at

http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf (PDF)

Student Conduct in Academic Situations

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom and other academic settings, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class. The policy and procedures governing disruptive and/or harassing behaviour by students in academic situations is available at - <http://secretariat-policies.info.yorku.ca/policies/disruptive-andor-harassing-behaviour-in-academic-situations-senate-policy/>