Department of Biology Course Outline

SC/BIOL 2030 4.00 Animals
Summer 2019

Course Description

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

Prerequisites (strictly enforced)

Prerequisite: SC/BIOL 1010 6.00 or SC/BIOL 1000 3.00 and SC/BIOL 1001 3.00.
Previously offered as: SC/BIOL 2030 5.00.

Course Instructors and Contact Information

Course Director:	Dr. Kyle Belozerov vbelozer@yorku.ca Office Hours: Wed and Fri, 1:30 – 3:00 pm (CB358)
Laboratory Coordinator:	Dr. Kyle Belozerov vbelozer@yorku.ca
Laboratory Teaching Assistants (TAs):	Section 1 (Tue) – Emma Kite Section 2 (Tue) – Nour Barazi Section 3 (Wed) – Helen Moshe Section 4 (Wed) – Nahid Vagharfard Section 5 (Thurs) – Jonathan Seni Section 6 (Thurs) – Cindy Tran **(contact only the TAs for your own lab section. Each TA will provide you with their email address)**

Schedule

Lectures: Tuesdays/Thursdays 5:30 – 7:00 pm, CLH A

Laboratories: Tues, Wed, and Thurs – check schedule for room assignments

LABORATORIES BEGIN DURING THE WEEK OF MAY 13th.

- You must attend the lab section in which you are registered. If you would like to switch into a different tutorial section, you MUST arrange it through the Undergraduate Biology Office (LSB102).
- I WILL NOT be able to process individual requests for lab section changes.
- Please very carefully read the section on Lab Administration in the lab manual (pp. 11 – 15). You must become familiar with all the lab rules explained in this section of the manual before you come to the first lab.

Evaluation

Lecture component - 60%		
Midterm 1*	15%	**Tues, May 28** (during lecture period, CLH A)
Midterm 2*	15%	**Tues, July 9** (during lecture period, CLH A)
10 Mini-quizzes**	5%	**Every Thursday**, except May 30 and July 11
Final Exam	25%	**Cumulative.** Between July 31 and Aug 9. The exact date will be scheduled by the Registrar's Office and published sometime in June.
Lab component - 40%		
9 Labs	30%	
Lab exam	10%	**Week of July 22**

***** Please see IMPORTANT information on missed midterm and final exam policy under "Course Policies". You do not need to provide any documentation to support your missing a midterm. Midterms and final exam will be composed of both multiple-choice and short-answer questions. Both midterms and the final will be processed using Crowdmark, and marked midterms will be made available to you for viewing online. Please see instructions on how to submit re-marking requests under "Course Policies". Final exam will be available for viewing in the my office, but will not be sent to your directly via Crowdmark.

****** Mini-quizzes will be 5 min long and will test the material covered in the previous (Tuesday) lecture. Mini-quizzes will take place in the beginning of each Thursday lecture, so please don't be late. **Only best 8 of the 10 quizzes will count toward your grade.** You can opt out of the mini-quizzes by emailing me **before May 10th**. After this deadline no opt-out requests will be granted. If you opt out of the mini-quizzes, 5% will be added to the weight of the final exam.

Important Dates

Classes start:	April 29
Laboratories start:	The week of May 13 (consult the schedule in the lab manual)
Drop Deadline:	June 28 (Last day to drop the course without receiving a grade)
Course withdrawal:	July 29 (Course still appears on transcript, but no grade is shown)
End of classes:	July 29
Final Exam:	TBA, during the August exam period

For additional important dates such as holidays, refer to the "Important Dates" section of the Registrar's Website.

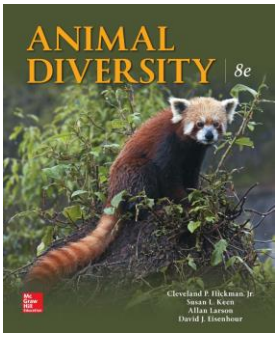
Resources

1. Textbook (REQUIRED):

Animal Diversity, Hickman et al. 8th edition.
ISBN 978-1-259-75688-7

Available new at the York university bookstore:

- Available as softcover (can be re-sold) or e-book.
- Assigned readings will be posted on Moodle.



2. Laboratory manual (REQUIRED): Available new at the York university bookstore.

3. Moodle Site: Announcements, grades, and other course information are communicated through the course Moodle site. All lecture slides and other relevant material will be posted on Moodle as the course proceeds.

Learning Goals & Outcomes

Upon successful completion of BIOL2030, 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:

Lectures 1 and 2: Introduction/Classification
Lecture 3: Animal Architecture
Lecture 4 and 5: Unicellular Eukaryotes
Lecture 6: Unicellular Eukaryotes/Porifera
Lecture 7: Cnidaria
Lecture 8: Cnidaria/Acoelomate Bilateria
May 28: MIDTERM 1
Lecture 9: Acoelomate Bilateria
Lecture 10: Pseudocoelomates
Lecture 11: Mollusca
Lecture 12: Annelida
Lecture 13: Arthropoda I
Lecture 14: Arthropoda II
Lecture 15: Echinodermata
Lecture 16: Vertebrate Beginnings
Lecture 17: Fishes I
July 9: MIDTERM 2
Lecture 18: Fishes II
Lecture 19: Amphibians
Lecture 20: Reptiles
Lecture 21: Birds
Lecture 22: Mammals

Lab Schedule:

Week of May 13th: Lab 1 Unicellular Eukaryotes
Week of May 20th: Lab 2 Porifera, Cnidaria
Week of May 27th: Lab 3 Nematodes, Platyhelminthes
Week of June 3rd: Lab 4 Mollusca
Week of June 11th: READING WEEK, NO LABS
Week of June 17th: Lab 5 Annelida (Marked Dissection #1)
Week of June 24th: Lab 6 Arthropoda
Week of July 1st: Lab 7 Echinodermata & Chordata I
Week of July 8th: Lab 8 Chordata II (Marked Dissection #2)
Week of July 15th: Lab 9 Chordata III
Week of July 22nd: Lab Exam

Experiential Education and E-Learning

E-Learning components:

- Moodle Website
- Crowdmark

Other Information

You must very carefully read the section on Lab Administration in the lab manual (pp. 11 – 15). You should become well familiar with all the lab rules explained in this section of the manual, especially **safety rules, lab grading rules, and missed lab policies**. All of these rules and policies are not negotiable and no exceptions to these policies will be made for individual students, no matter what the circumstances.

Course Policies

1. E-MAIL ETIQUETTE:

- Use your Yorku email address as other email addresses (e.g., Hotmail) are filtered out by the university's email system and do not always reach their intended recipient. **Please do not use the Moodle email function or respond to course announcement emails.**
- I will try to respond within 2 business days, but this is not always possible. I typically do not check email between 5 pm and 9 am, nor on the weekends.
- **Subject line:** your name, student number and a brief indication of topic (*e.g.,* 'Question regarding gene regulation). I receive a lot of email and this practice helps me sort emails efficiently. **Emails without the required information will not receive a response.**
- **Please include your NAME at the end of each email.**
- Tutorial-related queries should be directed to Mojtaba Ahmadi (at genes@yorku.ca), not to me.
- Due to the size of the class, I will not be able to offer individual tutoring by e-mail. If you need help, please consider attending my office hours.

2. **MISSED MIDTERMS/FINAL:**

- No makeup midterms will be offered. If you cannot make it to a midterm, you DO NOT need to provide any documentation for your absence. The weight of the missed midterm will be automatically transferred to your final exam. Please be advised that you should carefully think about using this option and how this may affect your final grade. Making the final exam very heavily weighted will put a lot of pressure on you during the finals session.
- **ALL students** who miss the **FINAL EXAM** MUST submit a deferred standing agreement (DSA)

to the Biology Undergraduate office (LSB102) within 5 business days of the missed exam. The DSA must be accompanied by the documentation supporting the absence. If your DSA is approved, you will be given an opportunity to write the deferred final exam. If your DSA is denied, you will need to petition the course to your home faculty.

3. **RE-MARKING REQUESTS:**
   - If you believe a written answer on a test was marked incorrectly you must submit a written rationale detailing the suspected error through Moodle (instructions to be given at a later date) within 1 week of receiving a Crowdmark link to your marked paper. I will aim to address all re-marking requests within 1-2 weeks of receiving them.
   - **NOTE: re-marking can result in the mark being raised, confirmed, or lowered.**
   - To be fair and consistent with regards to the entire class, **individual grades are NOT negotiable**. We cannot provide 'extra credit' assignments. **Marks for assignments and tests are not 'rounded' or 'bell-curved'.** Contact me (vbelozer@yorku.ca) about marks **ONLY if there is a clear error in your mark (calculation, clerical, etc.) within ONE (1) week of the test score being made available to you.** It is highly unlikely that you will receive a response regarding any other mark-related queries.

4. **ACCOMMODATIONS:**
   - **Submit a scan or photo of CDS Accommodation letters via the Biology Department's Online Document Submission System 102 LSB as soon as possible.**
   - Please make the instructors (and TA Coordinator if tutorials are affected) aware of any religious observance conflicts occurring at any point during the term, for which accommodations will be required as soon as possible.
   - **Please note:** "Senate policy states that students are expected to monitor their progress in courses, taking into account their personal and academic circumstances, and to make the necessary adjustments to their workload to meet the requirements and deadlines." (from Senate Policy of Students' Responsibilities in the Petition/Appeal Processes).
   - Students with physical, learning, or psychiatric disabilities who require reasonable accommodations in resources or evaluation methods are encouraged to consult with the Office for Persons with Disabilities (OPD) and ensure that requests for appropriate accommodations are arranged with the Section Instructor early in the term.

5. **ACADEMIC INTEGRITY:**
   - Students should be familiar with, and follow York University's policies regarding academic integrity. See: https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/

6. **RECORDING LECTURES:** All lectures will be recorded and posted on Moodle.

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. 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.

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.

Students 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 at Keele
Counselling (Glendon)
York Accessibility Hub

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.

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. Click here for the policy and procedures governing disruptive and/or harassing behaviour by students in academic situations.