

Department of Biology Course Outline

WINTER 2024, SC/BIOL 3350 4.00 COMPARATIVE CHORDATE ANATOMY

Course Instructors:

Dr. Carol Bucking

Dr. Lisa Robertson

How to address us:

Professor Bucking, Dr. Bucking,

Personal Pronouns: she/her/hers

Preferred Method of Contact: course email

Professor or Dr. Robertson, Dr. R, Dr. Lisa

Personal Pronouns: she/her/hers

Preferred Method of Contact: course email

Course Email: biol3350@yorku.ca

Note: If you have a question or would like to talk with us, you can send an email, visit us during student hours (see below), or approach us after class. Please don't use the eClass message/email function or our personal email addresses.

Student Hours:

Each week, a “student hours” zoom session will be held. (link) Students may also see me after class, email me to book an appointment, or post questions to the appropriate discussion forum.

What are 'Student Hours'?

Student hours are a dedicated time for us to meet with YOU. Please come to introduce yourself, ask questions about the course, or discuss course content.

Prerequisites:

SC/BIOL 2030 4.00

Class (Lecture) Times and Location:

Mon, Wed, Fri, 12:30 – 1:20 am (60 min)

Location: VH D

[Visual directions to Vari Hall \(VH\)](#)

Laboratory Times and Location:

Mon, Tues, Wed, Thurs, 2:30 – 5:20 am (180 min)

Location: Lumbers 128

[Visual directions to Lumbers](#)

Note: Please check the timetable closer to the start date of class in case of change!! You **must** attend the lab section that you are registered for!

Course Format: BIOL 3350 is a learner-centred course that incorporates a significant amount of independent and active learning into classes (lectures) and online content to take a comparative approach to examining the evolution of chordate animals with a focus on the relationship between structure and function.

Study Spaces on Campus:

<https://currentstudents.yorku.ca/study-spaces>

Where to find stuff in this course outline!

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Land Acknowledgement

York University recognizes that many Indigenous Nations have longstanding relationships with the territories upon which York University campuses are located that precede the establishment of York University. York University acknowledges its presence on the traditional territory of many Indigenous Nations. The area known as Tkaronto has been care taken by the Anishinabek Nation, the Haudenosaunee Confederacy, and the Huron-Wendat. It is now home to many First Nation, Inuit, and Métis communities. We acknowledge the current treaty holders, the Mississaugas of the Credit First Nation. This territory is subject of the Dish with One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lakes region. As settlers on this land, and as biologists, we have a responsibility to respect and care for this land and its resources. You can find out more about the traditional homelands that you occupy by heading to <https://native-land.ca>.

Welcome to BIOL 3350!

Greetings! This course delves into the evolution of chordate animals and an examination of chordate structures and their functions. We'll also study how evolutionary adaptations have allowed certain species to thrive in their habitats. The course is designed to cater to the needs of students, emphasizing interactive activities, collaboration, and discussion. By participating in projects and interactive activities, students will hone their scientific literacy, critical analysis of literature, teamwork, and metacognition skills.

Course Calendar Description: A comparative study of the biology of chordate animals in which the evidence of their evolutionary relationships is emphasized. Three lecture hours, and three laboratory hours. One term. Four credits.

Contacting us by email

Please use biol3350@yorku.ca to contact us, **not** the eClass message system nor our personal email addresses. In your email correspondence, please:

- Use your yorku.ca email address, if possible. Emails from other addresses may be filtered as spam/junk which will delay response.
- Put a **relevant description** in the email **subject line**.
- Include your **name and student number** at the **end of your email**.
- **Allow up to 5 business days for a response.** To use our professional and personal time more effectively, we typically don't check email after 5 pm or before 9 am daily, nor at any time on the weekend. If your email is urgent, please send with high priority.

Course-level learning objectives:

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

Class (Lecture)

1. Compare major features of body systems in representative chordate taxa.
2. Discuss relationships between the form and function of anatomical features.
3. Describe the morphological and physiological changes that have occurred through the evolution of the chordates.
4. Understand the influence the environment has on the evolution of chordates.
5. Use comparative anatomy and physiology to distinguish between primitive and derived character states and explain evolutionary transitions.
6. Describe adaptations that accompanied the water-land transition in vertebrates.
7. Apply knowledge to solve problems and case studies.

Lab

1. Use dissection to display and identify anatomical features of example chordate taxa.
2. Identify major features of body systems in representative chordates.
3. Verbally discuss the importance of anatomical features of representative chordates.
4. Verbally discuss how structures compare across vertebrate phyla and how class material relates.

Skills

1. Demonstrate critical thinking, analysis, and application of scientific works.
2. Work effectively, responsibly, and collegially with peers.
3. Communicate knowledge and information through oral and written communication.
4. Develop skills and strategies for effective communication, evaluation (peer and self), learning and wellness (e.g., time management, study strategies).
5. Create new knowledge with academic integrity, acknowledging clearly which ideas are not your own.

Inclusive Teaching Statement: Equity, Diversity, and Inclusion in BIOL 3350

We strive to foster a learning environment and class community that is inclusive and equitable and that supports learning and success for everyone. We are here to learn and succeed together, support each other, and interact with one another with respect and grace. This course is designed with a commitment to evidence-based teaching practices and the principles of Universal Design for Learning (UDL- [Learn more about the UDL framework](#)). Historically, science has been influenced by cultural context and has often been exclusionary. We are integrating diverse scientists and experiences into the course to not only reflect *our* diversity, but also to acknowledge the exclusionary practices of the past. We will work to continually improve upon the inclusive learning environment that is provided and appreciate your support in our learning journey. Any feedback, respectfully given, is always welcome at biol3350@yorku.ca.

Community Guidelines

The following values are fundamental to academic integrity and are adapted from the International Center for Academic Integrity*. In our course, we will seek to behave with these values in mind.

	As students, we will...	As an instructor, I will...
Honesty	<ul style="list-style-type: none"> Honestly demonstrate our knowledge and abilities on coursework Communicate openly without using deception, including citing appropriate sources 	<ul style="list-style-type: none"> Provide honest feedback on your demonstration of knowledge and abilities on coursework Communicate openly and honestly about course expectations and standards via the syllabus, instructions, and rubrics
Responsibility	<ul style="list-style-type: none"> Complete assigned material to prepare for class Show up to class on time, and be mentally/physically present Participate fully and contribute to learning and activities 	<ul style="list-style-type: none"> Ensure timely feedback on your coursework Show up to class on time, and be mentally/physically present Create relevant assessments and class activities
Respect	<ul style="list-style-type: none"> Speak openly with one another, while respecting diverse viewpoints and perspectives Provide sufficient space for others to voice their ideas 	<ul style="list-style-type: none"> Respect your perspectives even while I challenge you to think more deeply and critically Help facilitate respectful exchange of ideas
Fairness	<ul style="list-style-type: none"> Contribute fully and equally to collaborative work, so that we are not freeloading off others Not seek unfair advantage over fellow students in the course 	<ul style="list-style-type: none"> Create fair assignments and exams, and ensure they are graded in a fair, and timely manner Treat all students equitably
Trust	<ul style="list-style-type: none"> Not engage in personal affairs while in class Be open and transparent about what we are doing in class Not distribute course materials to others without authorization 	<ul style="list-style-type: none"> Be available to you when I say I will be Follow through on promises Not modify the expectations or standards without communicating with everyone in the course
Courage	<ul style="list-style-type: none"> Say or do something when we see actions that undermine any of the above values Accept a lower or failing grade or other consequences of upholding and protecting the above values 	<ul style="list-style-type: none"> Say or do something when I see actions that undermine any of the above values Accept the consequences (e.g., lower teaching evaluations) of upholding and protecting the above values

² This class statement of values is adapted from Tricia Bertram Gallant, Ph.D.

Learning Materials

‘Required’ Course Materials:

Textbooks

There is NO obligation to use these textbooks. Page references will not be provided for these textbooks.

- Kardong, K. 2019. *Vertebrates: Comparative Anatomy, Function, Evolution*. 8th Ed. McGraw-Hill Education. Available at the bookstore and online.
- De luliis, G., & Pulera, D. 2011. *The Dissection of Vertebrates: A Laboratory Manual*. 2nd Ed. Elsevier Inc. Available at the bookstore and online.

Note: If you wish to use a textbook to supplement course materials but find the cost too high, please consider using an older edition or a used textbook. There are older versions of the above books at the Steacie Science & Engineering Library. They are wonderful resources and edition number does not matter for this course.






QL 805 K35	<i>Vertebrates: Comparative Anatomy, Function, Evolution.</i>
QL 812.5 D45	<i>The Dissection of Vertebrates: A Laboratory Manual</i>

eClass site

BIOL 3350 extensively uses the eClass site (<https://eclass.yorku.ca>). Here you’ll find announcements, course materials, resources, discussion forums, etc.

Check your email account associated with eClass regularly (at least once per day) for course announcements, other important tidbits, and inspirational messaging ☺. Inclement weather could potentially cause a shift to virtual instruction. This change in instructional method will be sent to the class in an announcement – so we advise to subscribe to the announcements so that you do not miss an important one (they’re all important ;)!)

Technology Checklist:

 <p>An internet-enabled device to access eClass & participate in class</p>	 <p>Computer-installed software for student hours, class activities, etc.</p>	 <p>Access to reliable internet for eClass access, Zoom, etc.</p>	 <p>Webcam in case we meet over Zoom!</p>	 <p>Microphone in case we meet over Zoom!</p>
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Note: If you don’t have access to a computer, webcam, microphone, consider borrowing a laptop from York U, financial aid from York, and single workspaces available for student use on campus at the library. (<https://www.library.yorku.ca/web/ask-services/printing-and-computing/computing/public-computers-labs/>)

Course Overview & Assessments

The most important factor in learning is *doing* the work. Learning happens best when you *actively engage* with the material consistently (it's not just us saying this! Research about learning strongly suggests it!). **Using evidence-based practices and Universal Design for Learning (UDL) principles, this course has been purposefully designed with flexibility that allows for self-accommodation and that also inherently addresses many accommodations.**

The major emphasis of lectures will be on the evolution of vertebrates and the major changes in anatomy during key events that have taken place. Within this context, the focus will be on gaining an understanding of the anatomy of vertebrate animals, with an emphasis on anatomical and physiological functioning. Current evolutionary relationships between chordates will be studied based on morphology (form and function), inferred phylogenetic relationships, and evolutionary histories of major taxa.

LECTURE TOPICS

What is a chordate? General concepts including development and cladistics.

Integument (skin and scales)

Skull Evolution

Skeletal System

Respiratory System

Circulatory System

Digestive System

Reproductive System

IF TIME: Musculature

Labs are dissection-intensive and directly link to lecture. In labs you will learn the anatomical structures and parts of the body systems discussed in lecture.

LAB

Animals used for dissection will be pigeon, perch, cat, and a model frog

Display material includes skeletons, cross sections of animals, etc

You must use critical deduction to determine which structures to know and how best to dissect them. As part of your learning, you must incorporate lecture material into lab experiences. **DISSECTIONS & DISPLAY MATERIALS ARE TESTABLE**

Course Grade Breakdown

Course Flexibility and Grace Days

Since life can be the total pits sometimes, we offer inherent course **flexibility**. Part of this flexibility is in the form of **three (3) grace days** for some course tasks. These three calendar days are automatically added onto an applicable task deadline, so you do not have to ask to use them and there is no penalty for using them. They are there to be used, so please use them if you need them. It is up to your discretion to use grace days. Unused grace days on a course task are not transferrable to another course task. So, if a course task that has grace days is due at 11:59 pm on a Friday, you would have until 11:59 pm on a Monday to hand in the course task without penalty. If you hand in the task after the end of the grace day period, it will be subject to a 20% late penalty per calendar day for up to 3 days past the end of the grace day period. After this, the late task will not be graded and will be assigned a zero (0).

COMPONENT	WEIGHTING & INFORMATION
LECTURE: 55%	
TERM TESTS*	40% (3 tests, 20% each; best 2 of 3)
FINAL TEST**	15%
ESSAY: 10%	
COMPARISON ESSAY	10% (Grace day eligible)
LAB: 35%	
LAB TESTS	20% (5 tests; 1 test per organism class; best 4 of 5)
PRESENTATION	10% (completed throughout term)
ENGAGEMENT ACTIVITIES	5% (best 90%; completed throughout the term)
<u>BONUS</u> ENGAGEMENT ACTIVITIES: 5%	5% <u>BONUS</u> (best 90%; completed throughout the term); available for up to an extra 5% <u>added to calculated final course grade!</u>

* Must write at least one term test to pass the course.

** Must be written to pass the course.

You are entitled to religious accommodation where necessary.

Please let us know of any potential religious conflicts within the first 3 weeks of term.

See 'University Policies' for more information.

Course Grade Breakdown Details

Lecture: 55% of final grade

Term Tests (40%; three (3) term tests; 20% each; best 2 of 3 tests counted)

There will be three (3) term tests. Term tests will be in-person and written during class time. The tests are **designed to take 25 minutes** to complete but you will be **given 50 minutes**. This is called Universal Design and includes any accommodations up to 100% extra time for all students. If personal accommodations are granted beyond 100% extra time, extra time will be given as appropriate. The term tests may consist of, but not limited to, short-answer, long-answer, application, critical thinking, and problem-solving questions. Questions will be like those in in-class activities or otherwise practiced in class (i.e., with clickers) or completed as engagement activities asynchronously. More details on eClass and discussed in class.

You must write at least one of the 3 term tests to pass the course (but you should write all three!).

TERM TEST	GRADE VALUE	TOPICS	DATE
1	20%	Summative; topics to date	Jan 31
2	20%	Summative; topics to date	Feb 26
3	20%	Summative; topics to date	March 22
The best two will be used to calculate your term test grade; you must write at least one term test to pass the course			

Missed term test policy: There are no make-up opportunities for term tests in this course. Term tests do not qualify for grace days. If you miss a term test, you do not need to bring supporting documentation.

- If you miss ONE term test, the weighting of the test will automatically be transferred to the final exam. **A student may only transfer the weighting of one term test to the final test.**
- If two term tests are missed, one term test weighting will be transferred to the final exam and the other will be recorded as a zero.
- **A student must write at least one term test to pass the course.**
- **The final test must be written to complete the course.**

Term test grade improvement policy: You will have the opportunity to write three term tests. Only the best two marks will be used to calculate your grade. (See missed test policy if a test is missed).

Final Test (15%)

The final test will take place during the final exam period and is **designed to take half of the allotted time for the exam**. This is called Universal Design and includes any accommodations up to 100% extra time for all students. If personal accommodations are granted beyond 100% extra time, extra time will be given as appropriate. The summative final test may consist of, but not limited to, multiple-choice, short-answer, long-answer, essay, application, critical thinking, and problem-solving questions. Questions will be like those completed through class activities.

The final test must be written by students to complete the course.

Missed final test policy: If you miss the final test, you must petition. **This process is strictly enforced.**
Note that the deferred exam will be in an oral exam format.

FINAL TEST	GRADE VALUE	TOPICS	DATE
1	15%	Summative – all course topics; Weeks 1-12	TBD; during final exam period

Comparison Essay: 10% of final grade

The comparison essay will be completed individually. The comparison essay will provide you with the opportunity to write an engaging scientific paper about a system of your choosing. You will evaluate scientific literature and synthesize information from many sources.

COMPONENT OF LAB INDIVIDUAL PROJECT	WEIGHT OF FINAL GRADE	DUE DATE	GRACE DAYS?
FINAL PAPER	10%	Wed. April 8 th , 11:59 pm	Yes

Lab: 35% of final grade**Lab Tests (20%; Five (5) lab tests; best 4 of 5 tests counted)**

There will be five (5) lab tests. Lab tests will be written in person during your lab. The tests are **designed to take 25 minutes** to complete but you will be **given 50 minutes**. This is called Universal Design and includes any accommodations up to 100% extra time for all students. If personal accommodations are granted beyond 100% extra time, extra time will be given as appropriate. The lab tests will be in bell-ringer format. See the table below for some details. More details are provided in eClass and the lab. Lab tests will consist of questions about the dissection completed during the designated labs and the demonstration/display materials provided.

LAB TEST	WEIGHT OF FINAL GRADE	ORGANISM	DATE
1	5%	Microscopy & Protostomes (Labs 1-2)	Week 3
2	5%	Perch (Labs 3-4)	Week 5
3	5%	Frog (Labs 5-6)	Week 7
4	5%	Pigeon (Labs 7-8)	Week 9
5	5%	Cat (Labs 9-10)	Week 11

The best four lab tests will be used to calculate your lab test grade

Missed lab test policy: There are no make-up opportunities for lab tests in this course. Lab tests do not qualify for grace days. If you miss a lab test, you do not need to bring supporting documentation. If you miss a lab test, you can consider this as the 1/5 that is dropped. If you miss a second, third, etc., test then the mark for these missed tests will be 0.

Lab test grade improvement policy: You will have the opportunity to write five (5) lab tests. Only the best four (4) lab test marks will be used to calculate your grade.

Presentation (10%)

The presentation will be collaborative and will consist of a team presentation during the lab. Teams will have time in lab to work on their presentation. More detail provided in eClass, class and lab.

Late policy: Only some parts of the team presentation are eligible for grace days (see table below). After the grace period, a late penalty of 15% will be deducted per day late up to a total of 3 days, after which time the work will not be graded and the grade assigned will be a zero (0).

COMPONENT OF TEAM PROJECT	WEIGHT OF FINAL GRADE	DUE DATE	GRACE DAYS?
TEAM CHARTER & OUTLINE	1%	Week 3	Yes
TEAM PRESENTATION	8%	Week 12 in lab	No
TEAM ENGAGEMENT	1%	Throughout the term	No

Lab Engagement Activities (5%)

Engagement activities will provide opportunities for engagement with course material, skill building, and engaging in the Team Presentation. Activity points are earned in the lab only and cannot be earned asynchronously or if a lab is missed. Understanding that you may have to miss a few classes, **you need only 90% of the total wellness learning activity points to earn full marks toward your grade.** Activities completed in lab are not eligible for grace days; students must be present for lab to earn lab activity points.

BONUS Engagement Activities: 5% ON TOP OF FINAL GRADE

Bonus engagement activities will engage you with the course material and provide an opportunity for skill-building. This class relies on the participation of student colleagues. Understanding that life can suck rocks sometimes, we are providing the opportunity for students to acquire up to **5% bonus** added to their final grade. **You need only 90% of the total bonus engagement activity points to earn full marks toward this bonus percentage added to your final grade.** Bonus engagement activities may include quizzes, polls, clicker questions, discussions, worksheets, etc. Some activities will be graded on good faith effort while others may be graded for correctness. Some activities may be weighted more than others. More information on eClass and in class.

Regrading/Reappraisal Procedures

Any graded coursework may be submitted for regrading. If you believe a course component was graded incorrectly and wish to submit a reappraisal request, please follow the appropriate procedure below **within 5 business days of the work being returned or grades/feedback made available to you.**

Lecture Tests, Comparison Essay, BONUS engagement activities

The regrade request will be emailed to biol3350@yorku.ca. Please include “regrade request for...” in the subject of your email, where ... is the graded course task you are asking to be reappraised. Your email must include academically valid reasons for the reappraisal request, and you must refer directly to the rubric, marking key, and/or feedback provided. Requests such as “because I need/deserve a higher mark” or “the grading was not fair” will not receive a response nor a regrade. Note that **remarking may result in the mark being raised, lowered, or staying the same; the grade resulting from a remark is final.**

Lab Components (Tests, Presentation, Lab engagement)

The regrade request will be discussed with your TA (via email or in person; it is up to your TA). If via email, please include “regrade request for...” in the subject of your email, where ... is the graded lab task you are asking to be reappraised. Your email must include academically valid reasons for the reappraisal request, and you must refer directly to the rubric, marking key, and/or feedback provided. Requests such as “because I need/deserve a higher mark” or “the grading was not fair” will not receive a response nor a regrade. Note that **remarking may result in the mark being raised, lowered, or staying the same; the grade resulting from a remark is final.**

Important note about grades: To be fair and consistent **grades are not negotiable.** The course has been designed to have no one heavily weighted element and there is considerable flexibility and buffer built into the course. Grades will not be “curved”. No alternative assignments or assessments can be completed as ‘extra credit’.

University Policies

Important Dates

Classes start: January 8

Winter Reading Week: February 17-23

Drop Deadline: March 11

Course Withdrawal Period: March 12-April 8

Classes End: April 8 (*but you never want 3350 to end...*)

Winter Study Day: April 9

Final Exam Period: April 10-26 (*final test will be written during this period*)

Grading Scheme

In accordance with the York University Undergraduate Calendar Regulations, the letter grades assigned in undergraduate courses at York conform to the descriptions and grade ranges shown here:

<https://calendars.students.yorku.ca/2022-2023/grades-and-grading-schemes>

Academic Honesty and Integrity

Academic misconduct undermines the values of honesty, trust, respect, fairness, and responsibility that I expect in this class. York University provides supports such as academic integrity workshops to ensure that you understand the norms and standards of academic integrity that I expect you to uphold.

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 like myself to foster acceptable standards of academic conduct and of you to abide by such standards. Please review and familiarize yourself with the policy. There is also an academic integrity website with comprehensive information about academic honesty and how to find resources at York to help improve your research and writing skills, and cope with University life. You are expected to review the materials on the Academic Integrity website as part of the Academic Integrity Assignment you will complete during Weeks 1 and 2.

Examples of actions that do not adhere to York's Academic Integrity Policy include:

- Plagiarism (passing off someone else's work as your own)
- Accessing unauthorized sites for assignments or tests
- Unauthorized collaboration on assignments and exams
- Uploading work to third party repository sites (e.g., Course Hero, One Class, etc.)
- Scanning, sharing, uploading, or publishing exams, tests, or scholarly work

For more information on what academic integrity is and why it is important see:

<https://spark.library.yorku.ca/academic-integrity-what-is-academic-integrity/>. Information on the process of investigations into breaches of academic honesty:

<https://spark.library.yorku.ca/academic-integrity-breach-of-policy-on-academic-honesty/>

Important Note from the FSc Committee on Examinations & Academic Standards (CEAS):

Numerous students in Faculty of Science courses have been charged with academic misconduct when materials they uploaded to third party repository sites (e.g., Course Hero, One Class, etc.) were taken and used by unknown students in later offerings of the course. Whenever a student submits work obtained through an external site (e.g., Course Hero, Chegg), the **submitting student will be charged with plagiarism** and the **uploading student will be charged with aiding and abetting**. To avoid this risk, students are urged not to upload their work to these sites.

Assistance for Students (Academic and Well-Being)

Academic Advising*: <https://www.yorku.ca/science/academic-advising/> * Departments also offer program-specific advising. Check with your Department's Undergraduate Office.

Centre for Human Rights, Equity, and Inclusion: <https://rights.info.yorku.ca>

Centre for Indigenous Students Services: <https://aboriginal.info.yorku.ca/>

Good2Talk 24-hour Ontario Student Helpline: 1-866-925-5454 /Text: GOOD2TALKON to 686868

Keep.meSAFE: <https://mysp.app/keepmesafe/ca/home>

Learning Commons (general academic learning supports including library research, time management, study skills, career planning, etc.): <https://learningcommons.yorku.ca/>

Sexual Violence Response and Support: <https://thecentre.yorku.ca>

Student Counselling, Health & Well-being: <https://counselling.students.yorku.ca/>

Support Services for International Students: <https://yorkinternational.yorku.ca/international-student-support/>

Writing Services: <https://www.yorku.ca/colleges/bethune/get-help/writing/>

York University Student Services: <https://family.yorku.ca/student-services/#SCD>

York University Student Well-being Resources: <https://www.yorku.ca/well-being/resources/students/>

Accessibility

York University is committed to principles of respect, inclusion, and equality of all persons with accessibility needs across campus. The University provides services for students with accessibility needs (including physical, medical, learning, and psychiatric needs) 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 accessibility 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 accessibility 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:

Student Accessibility Services: <https://accessibility.students.yorku.ca>

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

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. To arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete and submit an accommodation request form at least 3 weeks before the exam period begins. <https://secure.students.yorku.ca/pdf/religious-accommodation-agreement-final-examinations.pdf>

Student and Instructor 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/>.

Academic accommodation refers to educational practices, systems and support mechanisms designed to accommodate diversity and difference. The purpose of accommodation is to enable students to perform the essential requirements of their academic programs. At no time does academic accommodation undermine or compromise the learning objectives that are established by the academic authorities of the University. University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here: <https://calendars.students.yorku.ca/2021-2022/policies-and-regulations>

Course Calendar Overview – *Topic schedule and deadlines are subject to change. Not all assignment deadlines appear in this calendar. See a more comprehensive Course Calendar in eClass.*

SEMESTER WEEK	Mon	Tues	Wed	Thurs	Fri
January					
WEEK 1 Class: Intro, Cladistics, What are Vertebrates? Lab: Microscopy (virtual; asynchronous)	8 Semester begins First day of class!	9	10	11	12
WEEK 2 Class: Integument Lab: Lamprey	15	16	17 Birthday of Guru Gobind Singh Sahib	18 Bodhi Day	19 Problem Based Learning (PBL) Day
WEEK 3 Class: Skull Lab: Perch 1; Lamprey test	22	23	24	25	26
WEEK 4 Class: Post Cranial Skeleton Lab: Perch 2	29 PBL Day	30	31 TERM TEST 1	FEB 1	FEB 2
February					
WEEK 5 Class: Appendicular Skeleton Lab: Frog 1; Perch test	5	6	7	8	9
WEEK 6 Class: Respiration Lab: Frog 2	12 PBL Day	13	14 Ash Wednesday	15	16
READING WEEK!	19	20	21	22	23
WEEK 7 Class: Cardiovascular Lab: Pigeon 1; Frog test	26 TERM TEST 2	27	28	29	MAR 1
March					
WEEK 8 Class: Digestion Lab: Pigeon 2	4 PBL Day	5	6	7	8 Maha Shivaratri
WEEK 9 Class: Kidneys Lab: Cat 1; Pigeon Test	11	12	13 PBL Day	14	15 Shri Ramakrishna Jayanti
WEEK 10 Class: Reproduction Lab: Cat 2	18	19 Naw-Rúz starts	20 Naw-Rúz ends; Nowruz starts	21 Nowruz ends	22 TERM TEST 3
WEEK 11 Class: Work Periods Lab: Cat Test; Work period	25 Feast of the Annunciation	26	27	28 Holy Thursday	29 Good Friday
April					
WEEK 12 Class: Essay Work Periods Lab: Presentations	1	2	3	4	5
NO CLASS NO LAB	8 Essay Due Last Day of 3350!	9 STUDY DAY Ramadan ends Eid al-Fitr starts	10 FINAL EXAM PERIOD STARTS! Eid al-Fitr ends	11	12
FINAL EXAM PERIOD!	APRIL 10-26 <i>FINAL TEST SCHEDULED DURING EXAM PERIOD; DATE & LOCATION TBD</i>				