

**BIOL 1110 - Animal Biology
2023W****Instructor Information**

Instructor: Martha Barton
E-mail: mbarton@lakeheadu.ca
Office Hours: By appointment only

Lab Instructor Information: Chase Moser (cmoser@lakeheadu.ca)

Course Identification

Course Number: BIOL-1110-WAB
Course Name: Animal Biology
Course Location: GEOR-K327
Class Times: Wednesday and Friday 8:00am – 9:30am

Course Description/Overview - An introduction to the study of the structure, function and organization of animal life. Discussion of the evolution and classification of major invertebrate and vertebrate animal phyla, animal body plans and reproductive strategies. Credit Weight:0.5

Course Learning Objectives

Students are expected to be able to:

1. Describe the unifying and diversifying characteristics of animals in a broader biological context
2. Describe the general characteristics of organisms in each phylum and order of vertebrate animals.
3. Explain evolutionary relationships among the animal phyla and the evolution of novel features of each group.
4. Compare and contrast body plans of invertebrates and vertebrates and adaptations to their habitats.
5. Explain factors controlling the distribution of animals.

Recommended textbook:

Integrated Principles of Zoology - 18th edition (Hickman), ISBN 9781260205190.

Required Laboratory Manual

Exploring Biology in the Laboratory, 3rd edn., Murray P. Pendarvis and John L. Crowley (Third edition, 2018), Morton Publishing, Englewood, CO, USA. ISBN 978-1-61731-755-2.

Assignments and Evaluations

Exams and Quizzes

Exams and quizzes will be held in class. Types of question formats you might see will be fill in the blank, short answer, essay, multiple choice, and matching. There may be questions that ask you to draw or interpret figures and/or tables. *Make-up exams will be different from the regular exam and may be a different format.

Tentative Evaluation Breakdown	% of grade
Participation	3
Quizzes	12
Midterm 1	15
Midterm 2	15
Final	15
Laboratory	40
Total	100

A+	90 to 100%
A	80 to 89%
B	70 to 79%
C	60 to 69%
D	50 to 59%
E Failed	40 to 49%
F Failed	1 to 39%
F Academic Dishonesty	0

Expectations for Successful Participation

1. Attend every class (and if you cannot, ask a learning partner to help you catch up).
2. Check myCourselink regularly for announcements, reading and work assignments and course updates.
3. Ask questions if you need clarification (in class or via email). Please ensure that you “sign” your email with your name and course number.
4. Keep up with your course work. Read the designated material and complete the assigned homework so that you can come to class prepared to discuss the issues and concepts during class time.
5. Submit your assignments by the deadline! You are strongly advised not to wait until the last minute to submit your assignments in case you have computer problems.

Academic and Student Code of Conduct Policies

- Academic and student policies and procedures for those enrolled in the Lakehead-Georgian programs can be found on the [Lakehead-Georgian Student Portal](#).
- All Lakehead-Georgian programs will follow the Lakehead Regulations as list in the Lakehead University [Academic Calendar](#) (<http://csdc.lakeheadu.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&loaduseredits=False>). The University Regulations include but are not limited to Registration, Examinations, Reappraisals and Academic Appeals, Special Examinations, Academic Misconduct, Withdrawal, and Timely Feedback. Additional Faculty Regulations may also apply. Please review the Academic Calendar.
- The Lakehead University [Student Code of Conduct - Academic Integrity](#) (<https://www.lakeheadu.ca/students/student-life/student-conduct>) will apply to all Lakehead-Georgian students regardless of campus of study.
- The Lakehead University [Student Code of Conduct - Appeals](#) (<https://www.lakeheadu.ca/students/student-life/student-conduct>) will apply to all Lakehead-Georgian students regardless of campus of study.
- The Georgian College [Student Code of Conduct](#) (<http://www.georgiancollege.ca/student-code-of-conduct/>) will apply to the Lakehead-Georgian students studying at the Barrie campus. Additional campus policies of [Sexual Violence Procedure and Protocol](#) (<https://www.georgiancollege.ca/about-georgian/campus-safety-services/tab/sexual-violence>), Alcohol, Drugs and Tobacco (<https://www.georgiancollege.ca/about-georgian/campus-safety-services/tab/alcohol-drugs-and-tobacco>), and [Information Technology Acceptable Use Procedure](#) (<http://www.georgiancollege.ca/wp-content/uploads/2-117IT-acceptable-use.pdf>) also apply.
- The Lakehead University [Student Code of Conduct – Non-Academic](#) (<https://www.lakeheadu.ca/students/student-life/student-conduct>) will apply to the Lakehead-Georgian students studying at the Orillia campus.

Plagiarism and Academic Dishonesty

A breach of Academic Integrity is a serious offence. The principle of Academic Integrity, particularly of doing one's own work, documenting properly (including use of quotation marks, appropriate paraphrasing and referencing/citation), collaborating appropriately, and avoiding misrepresentation, is a core principle in university study. Students should view the [Student Code of Conduct -Academic Integrity](#) (<https://www.lakeheadu.ca/students/student-life/student-conduct>) for a full description of academic offences, procedures when Academic Integrity breaches are suspected and sanctions for breaches of Academic Integrity.

Course Policies

Attendance

Students are encouraged to attend all lecture periods. If you are absent when participation points are awarded, you cannot make up those points.

Late work

Due dates and times for assignments will be given through D2L. It is your responsibility to keep track of when assignments are due. If you are late turning in work, you will lose 25% of your grade per day it is late if you do not have a valid excuse.

Temporary Steps to Follow for Student Illness & Missed Assessments such as an Exam, Test, Quiz, etc.

If you are ill and need to defer an assessment, please follow these steps:

1. Inform your instructor(s) directly by email from your lakeheadu.ca email within 24 hours of missing an assessment
2. In exceptional circumstances, should a medical situation arise leading up to or during the assessment, inform your instructor immediately, or if you are incapacitated, inform your instructor as soon as you are able.
3. Within the email, you will be required to provide a self-declaration affirming your illness to be true. In order for your assessment to be deferred and rescheduled, you will be required to include the following Self-Declaration found at the following website:

Please refer to <https://www.lakeheadu.ca/studentcentral/exams-grades/missed-exam-medical-personal> for details. If you have any questions or require any assistance related to this, please contact Student Central at (807) 343-8500 or studentcentral@lakeheadu.ca, or your instructor directly.

Academic Integrity Statement:

I understand and agree that:

(1) Unless otherwise allowed by the course instructor, I must complete the assignments in this course without the assistance of anyone else.

(2) Unless otherwise allowed by the course instructor, I must not access any sources or materials (in print, online, or in any other way) to complete any course exam.

I further understand and agree that, if I violate either of these two rules, or if I provide any false or misleading information about my completion of course assignments or exams, I may be prosecuted under the Lakehead University Student Code of Conduct –

Academic Integrity, which requires students to act ethically and with integrity in academic matters and to demonstrate behaviours that support the University's academic values.

Academic Integrity

A breach of Academic Integrity is a serious offence. The principle of Academic Integrity, particularly of doing one's own work, documenting properly (including use of quotation marks, appropriate paraphrasing and referencing/citation), collaborating appropriately, and avoiding misrepresentation, is a core principle in university study. Students are strongly advised to familiarize themselves with the Student Code of Conduct - Academic Integrity ("[The Code](#)") - and, in particular, sections 26 and 83 through 85. Non-compliance with the Code will NOT be tolerated in this course and the Code will be adhered to in terms of disciplinary action. The Code provides a full description of academic offences, procedures when Academic Integrity breaches are suspected and sanctions for breaches of Academic Integrity.

Supports for Students – there are many resources available to support students.

These include but are not limited to:

- [Health and Wellness](#)
- [Student Success Centre](#)
- [Student Accessibility Centre](#)
- [Library](#)
- [Lakehead International](#)
- [Indigenous Initiatives](#)

Lakehead University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities and/or medical conditions to ensure they have an equitable opportunity to participate in all of their academic activities. If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact Student Accessibility Services (SAS) and register as early as possible. For more information, please contact [Student Accessibility Services](#) (SC0003, 343-8047 or sas@lakeheadu.ca)

Mental Health

As a university student, you may sometimes experience mental health concerns or stressful events that interfere with your academic performance and negatively impact your daily activities.

All of us can benefit from support during times of struggle. If you or anyone you know experiences academic stress, difficult life events or

feelings of anxiety or depression, Student Health and Wellness is here to help. Their services are free for Lakehead Students and appointments are available. You can learn more about confidential mental health services available on and off campus at lakeheadu.ca/shw.

Remember that getting help is a smart and courageous thing to do- for yourself, for those you care about, and for those who care about you. Asking for support sooner rather than later is almost always helpful.

Regulations

It is the responsibility of each student registered at Lakehead University to be familiar with, and comply with all the terms, requirements, regulations, policies and conditions in the Lakehead University [Academic Calendar](#). This includes, but is not limited to, Academic Program Requirements, Academic Schedule of Dates, University and Faculty/School Policies and Regulations and the Fees and Refund Policies and Schedules ([Lakehead University Regulations webpage](#), 6 January 2023).

Tentative Course Schedule

Week	Date	Topic	Chapter readings*
Week 1	11-Jan	Intro to Animal Biology	
	13-Jan	All about animals	5,6,7,8,9,11
Week 2	18-Jan	Evolution/population genetics	2,6
	20-Jan	Architectural pattern of an animal, Taxonomy and phylogeny of animals	9,10
Week 3	25-Jan	Porifera, Cnidaria, Ctenophora	12, 13
		Quiz #1	
	27-Jan	Platyhelminthes, Nemertea	14, 15
Week 4	01-Feb	Molluscs	16
	03-Feb	Molluscs continued	
Week 5	08-Feb	Exam 1	
	10-Feb	Annelida	17, 18
Week 6	15-Feb	Arthropods	19
	17-Feb	Arthropods continued	20
		Quiz #2	
Week 7	22-Feb	Arthropods continued	21
	24-Feb	Echinoderms, chaetognaths, and hemichordates	22, 23
Week 8	01-Mar	Study week	
	03-Mar	Study week	
Week 9	08-Mar	Chordates	23
	10-Mar	Fishes	24
Week 10	15-Mar	Exam 2	
	17-Mar	Fishes continued	
Week 11	22-Mar	Amphibians	25
	24-Mar	Amniote origins/Reptiles	26
		Quiz #3	
Week 12	29-Mar	Amniote origins/Reptiles continued	
	31-Mar	Birds	27
Week 13	05-Apr	Mammals	28
	07-Apr	No class	
Week 14	11-Apr	Mammals continued	28
Final Exam	TBD	Final exam	

* Additional readings and participation assignments may be assigned throughout the semester either in class or online.