

Biol 2003 Animal Diversity Syllabus

Department of Biology

Fall 2023

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present. The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people.

Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

Why This Course?

How many animal phyla do you see in the following picture (Figure 1)? Are any of them closely related? How do they relate to other animals, such as humans?

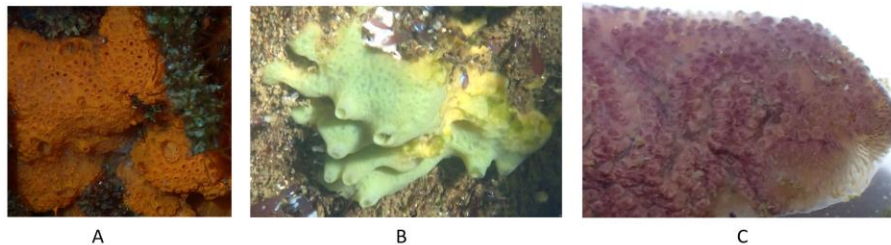


Figure 1: Encrusting animals. Photos by L. Gibson (A, & C); cc-by, and J. Frail- Gauthier (B); used by permission.

Are these two animals in the same phyla (Figure 2)? How do we decide what is related? How do we organize these relationships?

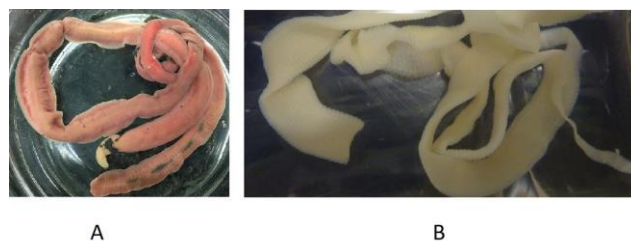


Figure 2: Worms. Photo by L. Gibson; cc-by.

What animals can be found in these three habitats (Figure 3)? Which area is more biodiverse? How can we tell?

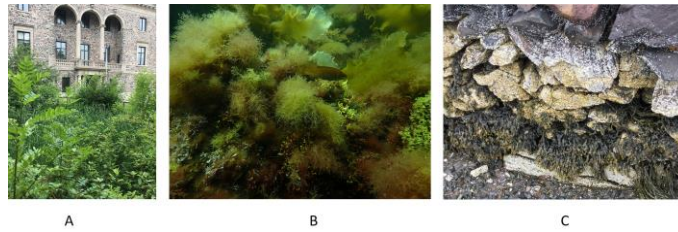


Figure 3: Terrestrial habitat Dalhousie University (A), Subtidal habitat (B), Intertidal habitat (C). Photo by L. Gibson; cc-by.

These are some of the questions that will be addressed in this class, through lectures, discussions, project work, and specimen observation. The course takes a phylogenetic approach, exploring the evolutionary relationships and key transitions between metazoan taxa.

Teaching Team

Name	How to Contact	Office Hours
Isabelle Aubé Lecturer	Isabelle.Aube@dal.ca	Friday from 12-1, LSC B 2123
Lara Gibson Lab Instructor & Course Coordinator	During your lab section At Friday Open Lab Through the Brightspace Discussion Board	Friday Open Lab. 1:30-3:30, LSC B 2102 September 15, 22, October 20, 27, November 3, 24

Course Description

Surveys the diversity of forms and functions of invertebrate and vertebrate animals. The course takes a phylogenetic approach, exploring the evolutionary relationships and key transitions between metazoan taxa. Examples of the different life forms are introduced.

Course Prerequisites

A grade of C or higher in BIOL 1011.03 or (BIOL 1021.03, BIOL 1031.03, BIOA 1003.03, SCIE 1506.09).

Course Structure

Course Delivery

Both the lectures and the labs will be held in person. Lectures will be held on Monday, Wednesday, and Friday from 8:35 to 9:25. Lectures will take place in ROWE Management Building 1028 (A on Figure 4).

Lecture and Lab dates and topics can be found in Table 1.

When you attend lecture, you are asked to enter the room through the lobby of the ROWE building, fill the room from top to bottom to avoid passing other students, and exit via the doors at the top of the room onto University Ave.

Laboratory sessions will occur in- person and you are expected to attend each lab session in your registered section. Labs occur in LSC B 2102, beside the McCulloch Museum (B on Figure 4). The day and time of each lab are outlined in Table 1.

While masking is no longer required at Dal, you will be in close quarters with your peers, and we recommend masking.

As you move around campus you may want to visit green spaces, these are marked as 1-4 on Figure 4. 1 & 2 are around the Killam Library, space 3 is the Ocean pond, a freshwater wetland, found between chemistry and biology departments. Space 4 is found between Sheriff hall and psychology, and mimics a forested area.

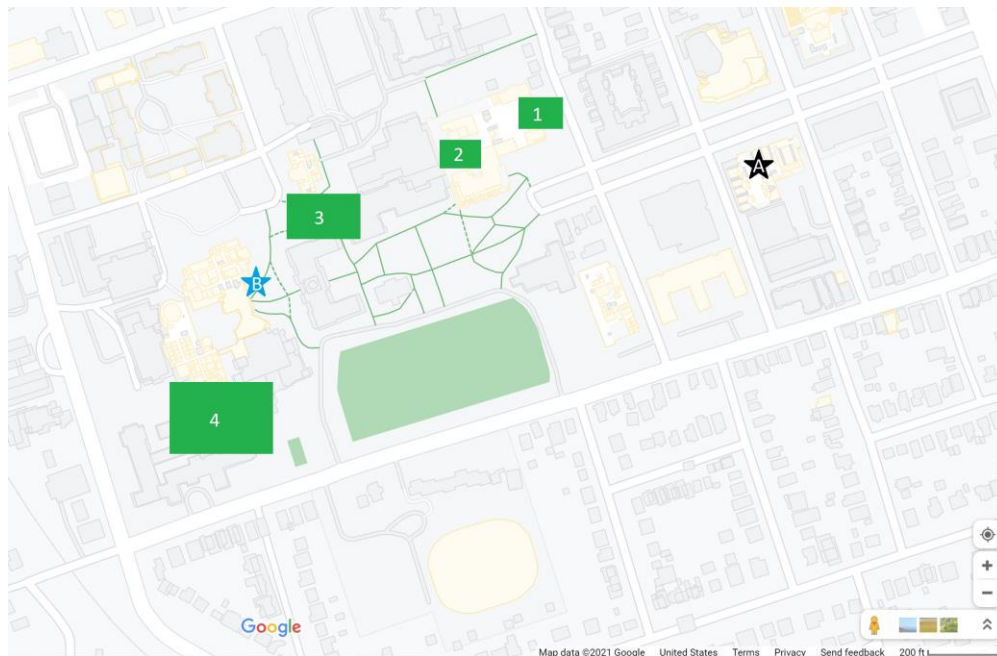


Figure 4: Dalhousie campus with the lecture location at A, lab at B, and a variety of campus greenspaces marked 1-4.

Table 1 Lecture Schedule and Lab Topics by date. Please note: Lecture topics may vary slightly by date but test dates are fixed.

Date	#	Lecture Topic	Laboratory Topic
Sept. 6	1	Class Introduction & Taxonomy	
Sept. 8	2	Biodiversity	
Sept. 11	3	Animal Architecture	1. Introduction & Habitat Biodiversity
Sept. 13	4	Phyla Porifera & Placozoa	
Sept. 15	5	Phylum Cnidaria	Friday Open Lab: 1:30-3:30
Sept. 18	6	Phylum Ctenophora & Intro to Bilaterian animals	2. Porifera, Cnidarians, & Ctenophora
Sept. 20	7	Phyla Xenacoelomorpha & Platyhelminthes	
Sept. 22	8	Annelida- a true can of worms!	Friday Open Lab: 1:30-3:30
Sept. 25		To Be Announced (TBA)*	3. Worms
Sept. 27		MIDTERM TEST 1	
Sept. 29	9	Phylum Mollusca (Part 1)	Dal BioBlitz
Oct. 2		NO CLASS: National Day for Truth & Reconciliation	4. Molluscs
Oct. 4	10	Phylum Mollusca (Part 2)	
Oct. 6	11	All the small things (Lophotrochozoa)	Friday Open Lab: 1:30-3:30
Oct. 9		NO CLASS: Thanksgiving	NO LABS
Oct. 11	12	Non-Arthropod Ecdysozoans	
Oct. 13	13	Phylum Arthropoda (Part 1)	
Oct. 16	14	Phylum Arthropoda (Part 2)	5. Arthropods
Oct. 18	15	Phylum Echinodermata (Part 1)	
Oct. 20	16	Phyla Echinodermata (Part 2) & Hemichordata	Friday Open Lab: 1:30-3:30
Oct. 23	17	Phylum Chordata: Tunicates & Cephalochordates	6. Echinoderms
Oct. 25	18	Introduction to Vertebrates: early verts & early fishes	
Oct. 27	19	Jawless Fishes & Gnathostome jaws	Friday Open Lab: 1:30-3:30
Oct. 30	20	Chondrichthyes: Cartilaginous Fishes	7. Fish & Lissamphibia
Nov. 1	21	Osteichthyes- the bony fishes	
Nov. 3	22	The origin of Tetrapods and the move to land	Friday Open Lab: 1:30-3:30
Nov. 6		To Be Announced (TBA)*	8. To Be Announced
Nov. 8		MIDTERM TEST 2	
Nov. 10	23	Lissamphibia- extant amphibians	
Nov. 13			
Nov. 15			
Nov. 17		Study Break	
Nov. 20	24	Introduction to the Amniotes	9. Amniotes
Nov. 22	25	Reptiles (Part 1): Lepidosaur	
Nov. 24	26	Reptiles (Part 2): Turtles & Crocodiles	Friday Open Lab: 1:30-3:30
Nov. 27	27	Reptiles (Part 3): Extinct Archosaurs, the Pterosaurs & Dinosaurs	10. Lab Test
Nov. 29	28	Origin of bird flight, Birds (Part 1)	
Dec. 1	29	Birds (Part 2)	
Dec. 4	30	Mammals (Part 1)	
Dec. 5	31	Mammals (Part 2)	
Dec. 6	34	Final Exam Review*	

*In case of class disruptions previously scheduled topics will be covered in these sessions.

Table 2 Animal Diversity Lab section, day, time and teaching staff.

Section	Day	Times	Teaching Team
B01	Tuesday	11:35 am – 2:25 pm	Lara & Sara
B02	Tuesday	3:05 – 5:55 pm	Lara & Patrick
B03	Wednesday	11:35 am – 2:25 pm	Lara & Kevin
B04	Wednesday	3:05 – 5:55 pm	Lara & Kylie
B05	Thursday	11:35 – 2:25	Lara & Violet
B06	Thursday	3:05 – 5:55 pm	Lara & Jack

Course Safety & Materials

Course Safety:

We are hopeful that the high vaccination rates among Dalhousie's Students, Staff, & Faculty will allow us to deliver a safe in-person teaching experience. We recommend that you wear a mask while attending both lecture and lab. In addition, hand sanitizer will be available at each lab bench and several hand washing stations can be found in the lab room.

If you feel ill, or test positive for COVID-19 do not attend any in- person activities. If you miss your lab you will be able to complete the activities using the posted photo documents, and you will be welcome to come and see the specimens during any of the Friday Open Labs. If you miss lecture, please ensure that you watch the appropriate lecture recording.

Lab coats can be purchased through the bookstore

In addition your conduct in lab is regulated by the [Student Code of Conduct](#). In particular note that members of the university community have a "A right to and responsibility for contributing to a learning environment of mutual respect where the dignity of all members of the University Community is valued."

The consequences of any course disruptions will be communicated through Brightspace.

Course Materials:

- Hickman CP Jr, Roberts LS, Keen SL, Larson A, Eisenhour DJ. 2015. Animal Diversity. 9th ed. Boston: McGraw Hill, 479 p.
Note: It is acceptable to use the 7th or 8th edition of Animal Diversity.

We will be using the 9th edition of Animal Diversity (Hickman et al. 2021) as our textbook. As you are introduced to each group in lecture, there will be a corresponding chapter on each taxa in the textbook. Test questions will be drawn from the material presented in lecture. Older versions of the textbook can be used, but you will need to be aware of when the taxonomy has changed.

Textbooks are available as eBooks. They can be purchased through the bookstore and accessed through the link on Brightspace.

Course Materials (Con't):

- Lab Coat: Dalhousie university policy states that all students will wear a lab coat when attending a laboratory session with potential hazards. Lab coats can be transported to and from lab in a plastic bag.

Lab coats will be required for the weekly in-person labs. These are available through the bookstore.

- Gibson L, & Frail-Gauthier J. 2023. Biology 2003 Animal Diversity Laboratory Manual.

You will also require a lab manual. The lab manual will be available through the bookstore.

OPTIONAL:

Sept JD. 2008. A photographic guide to Seashore Life in the North Atlantic, Canada to Cape Cod. New Jersey: Princeton University Press, 224 p.

Kinsely K. 2005. A student handbook for writing in biology. 4th ed. Sunderland: Sinauer Associates. 237 p. (Dalhousie Killiam call number QL 605 P68 1996)

ON COURSE RESERVE AT KILLIAM LIBRARY: The following items will be placed on course reserve in the library.

- One copy of Hickman et al. 9th ed. On 2 hour reserve
- Two copies of Hickman et al. 8th ed. One on 2 hour reserve, one on 24 hour reserve

Assessment

55% of your grade is from Lectures, 45% from Labs. Weighting of all assignments can be found in Table 3.

Lecture Midterms and Final: There will be two lecture midterm exams on Wednesday September 27th, and Wednesday November 8th. Each test is worth 13% of your final grade, and will occur **in-person**, in the ROWE lecture hall, during the regular lecture time. The two midterms are non-cumulative.

The final exam will be scheduled by the registrar's office during the December exam period, December 8th to 19th. This test is worth 26% of your overall grade and will be cumulative.

What happens if you miss a test: If you miss either of the midterm tests, your final exam will be re-weighted. If you miss one midterm your final will be worth 39%, if you miss both midterms your final will be worth 52%. You do not need to contact us to tell us you will be missing the test- we will know because we do not have a test for you.

Please note that accommodation cannot be made for illness or other circumstances once you start to write a test. If you are dealing with illness or other situations that will severely impact your grade do not write the test. Talk to us afterwards and we will determine the best course of action.

Table 3 Assessment components, value and due dates.

Evaluation Component	Weight (% of final grade)	Due Date
Midterm 1	13	September 27th
Midterm 2	13	November 8 th
Cumulative Final	26	TBA Scheduled by the registrar's office during the exam period: December 8-19 th
In person Lecture Quizzes	3	Periodic between September 6- December 6 th
Dal Biodiversity Day Participation	5	September 29 th
Habitat Biodiversity Worksheet	5	September 25 th
Worm Drawing	1	October 6 th
Mollusc Question	2	October 10 th
Fish Observations	4	November 6 th
TBA	1	November 20 th
Natural History Pages 1) Your place 2) Scavenger Hunt 3) Species List 4) Drawing 5) Observation to Question 6) Surveys 7) Free	2/ page 14 total	1) September 25 th 2) October 3 rd 3) October 16 th 4) October 23 rd 5) October 30 th 6) November 6 th 7) November 27 th
Summary Quiz	13	In lab the week of November 27 th - December 1st

Assignment Submission: All written assignments will be submitted to Brightspace dropboxes, and are due no later than 11:50 PM on the associated due dates. Most due dates are on Monday, except for where Monday is a Holiday. You are always welcome to submit your assignment early.

If you are submitting a picture of your work, it must be legible. It is not the responsibility of the teaching team to ensure that your file has been submitted properly, that the correct file has been uploaded, or that the file is legible.

You may submit any assignment up to two days past the official due date with no grade penalty. Assignments submitted past this grace period will be assigned a penalty of 5% per day.

Lecture Quizzes: 3% of your grade will come from in-person lecture quizzes. These quizzes will occur during the in-person lecture slots (M, W, F 8:30-9:30). The quizzes can occur anytime during the lecture. To accommodate illness, or other reasons why you might miss lecture, only the top 80% of your responses will be considered when assigning you a final grade.

Dal Biodiversity Day: Dal Biodiversity day is university wide event which occurs each September. This year's event will occur on Friday September 29th. To participate you will need to create an account on iNaturalist.ca. More details will be shared closer to the date.

Natural History Journals: For the natural history journals you will be given a general rubric and a topic for each of the six journal topics. Completing the natural history journals will allow you to practice your observational and descriptive skills, while exploring a green space of your choice. These journals are to be written by you, and not generative AI.

Summary Quiz: You will complete a cumulative summary quiz in the last laboratory session in the week of November 27th- December 1st. This quiz will ask you to recognize and describe the key transition for the lab specimens. All specimens will have been previously available in lab, and can include partial specimens and slides.

In addition to the specimen identification, the summary quiz will include additional multiple-choice questions.

AI policy: Our general policy is to allow you to use Artificial Intelligence (AI) assisted technology as tools, but know that we will never accept fully AI generated works for graded assignments. For example, if you have ID'ed an organism using AI, you also need to confirm your identification with another source, or as is the case with iNaturalist, with the help of the expert identifiers.

For other AI technologies you will need to disclose that you have used the tool and you are responsible for any errors produced during the tools use. Because of this you should have a good idea of how the AI tool you are using works.

For example, with Chat GPT, it is not a tool that searches the web and completes research. Instead, it predicts which word should come next based on how often that word follows the preceding word. This is like the predictive text feature built into your texting app, and we can all tell stories of texting gone wrong. Some of the early reports of Chat GPT found that when asked for references, the system just made them up. They sounded plausible, and were in the right format but listed articles never written by the provided authors, or in journals that did not exist. Therefore, this is not a good tool to use when you are compiling background research.

You may find the following flowchart useful when considering the use of ChatGPT



Figure 5: Safe use of ChatGPT Flowchart. CC BY Aleksandr Tiulkanov. [ChatGPT and Artificial Intelligence in Higher Education. Quick start guide.](#)

There are times when it is beneficial to use AI assisted tools. The incorporation of AI into iNaturalist/ Seek allows for near instantaneous identifications of organisms if you have a cell phone and network connection in the field. You can also have your phone ‘listen’ to bird song and have Merlin identify the likely birds. These apps act like an expert in your pocket, allowing you to confirm an identification, and reinforce what you already know, or to find out what something is, allowing you to start recognizing the organism when you don’t have your cell phone, or to correct a mis-identification, again activating your learning pathways. In our opinion this is the optimal use of AI, as tools allowing you to learn and become independent of them.

Mostly we hope that you will be thoughtful as you incorporate various AI tools into your workflow. You should consider their limitations, how they actually work, and if you are using them to promote your own learning and skill development.

Please NOTE: The use of online assignment help tools (e.g., Chegg®) is considered cheating and is prohibited to use for the assignments in this course."

Conversion of numerical grades to final letter grades follows the [Dalhousie Grade Scale](#)

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (0-49)
A- (80-84)	B- (70-72)	C- (55-59)	

The common grade scale defines achievement of each grade level as follows:

A- to A+: “Considerable evidence of original thinking; demonstrated outstanding capacity to analyze and synthesize; outstanding grasp of subject matter; evidence of extensive knowledge base.”

B- to B+: “Evidence of grasp of subject matter, some evidence of critical capacity and analytical ability; reasonable understanding of relevant issues; evidence of familiarity with the literature”

C- to C+: “Evidence of some understanding of the subject matter, ability to develop solutions to simple problems; benefitting from his/ her university experience”

When assigning final grades, the first decimal place will be considered.

Course Objectives/Learning Outcomes

It is expected that you have completed and are familiar with the material covered in Biol 1011, or an equivalent course.

The list of skills and topics we expect you to be familiar with at the start of Biology 2003, include:

- Create scientific questions, propose a written hypothesis as a tentative answer to that question and generate observable predictions consistent with that hypothesis.
- Describe basic animal body plans and identify different tissue types.
- Explain why community or food web structure is likely to change if a top predator is removed.
- Explain why small population size is of concern to conservation biologists.
- Provide examples of how biological interactions (competition, predation, mutualism) structure communities.
- Understand the features that allowed transition from aquatic to terrestrial environments.
- Use and know when to make use of common biological research tools.
- Analyze data using basic statistical techniques (mean, standard deviation, n, chi-square test).
- Collect both quantitative and qualitative data through careful observation.
- Describe early developmental processes in sea urchin, frog and humans.
- Describe the form and function of skeletal muscles and cardiovascular, digestive, endocrine, excretory, immune, and respiratory systems, using the human model as an example.
- Interpret animal social behaviour in light of natural selection (costs and benefits).
- Know main animal diet types and adaptation to those diets.
- Report data using written descriptions, graphs, tables, and sketches.

The student learning outcomes, the list of skills and topics we expect you to learn during Biology 2003, include:

- Assess credibility of source material
- Manage group work
- Use dissecting and compound microscopes
- Describe conservation issues facing taxonomic and functional groups of metazoans
- Identify major invertebrate and vertebrate taxa
- Use raw data to produce summary statistics and plots
- Use taxonomic keys
- Associate metazoan phyla with the habitats/environments that they occupy
- Compare classification of metazoans into major clades: protostomes/ deuterostomes, ecdysozoans, lophotrochozoans
- Generalize and appreciate animal diversity on a global scale
- Relate changes in animal systems to transition onto land
- Describe the Geologic history and time-scales associated with the evolution of metazoans
- Compare the variety of invertebrate and vertebrate animal body- form, ecologies, life histories, and physiology
- Relate animal phyla to key transitions on a cladogram

Online presence

Brightspace:

The course maintains a brightspace page. To access the site start at Dal.ca, click on the brightspace tab on the upper right of the banner. This will bring you to a log on page, which asks for your netID and password. Once you are logged in you should see all pages (links) for any of your classes that have Brightspace pages.

LibGuide:

The Dalhousie University Science Librarian has put together a subject guide for biology. On this page you will find links to the key databases, relevant books, writing guides, and other useful research tools. You can find the subject guide here: http://dal.ca.libguides.com/biology_2000_level, and as a link on the brightspace page.

Course Policies

Cell phones, & Electronic devices: Please be respectful of your fellow students and refrain from using your cell phone, laptops, and tablets/ iPad for reasons other than following along with the class powerpoints/ taking notes.

In the past we have watched students play video games, check facebook, and shop for shoes during lecture. These are all examples of activities which should be completed on your own time.

You are encouraged to bring cameras to lab and to share your photos through the brightspace discussion board. Having photos of the examined specimens, especially if you review them immediately after lab and add notes, will be beneficial when studying for the summary quiz. In the past students have been fairly successful with taking photos of microscope specimens using their phone's cameras.

Laboratory rules: Since the laboratory room is used every day of the week, we ask you to please observe the following:

1. We encourage you to wear masks while you complete the lab work. While the building ventilation has been deemed adequate, you will be working in close proximity with your peers and instructors.

2. At the end of the lab wash and put away any shared equipment to the appropriate areas.

Ensure equipment and supplies found at your bench are cleaned and returned to your bench.

Wipe down your bench to make a pleasant working space for the next group (this is especially important on weeks with dissections!!!)

3. Use the appropriate containers to dispose of your waste. There are garbage bins located under each sink on the side benches. This is also where you can find paper towels.

The drains at your benches are not appropriate places to leave waste or to dump liquids. Dispose of liquids in the sinks on the side of the room.

Please do not use the taps at the benches, they are unreliable and will flood the bench.

Sharp items should be placed in the yellow buckets (with the biohazard symbol on them) on the side counter, not in the garbage, where they might pose a hazard to our custodial staff.

4. On the weeks where the lab activity has included a dissection, please put the carcasses in the clear bags at the front of the room.

The squid and fish are used to feed the crabs and other critters housed in the seawater tanks throughout the remainder of the year, so no more than 4 squid or 2 fish should be placed in a single bag.

In addition, please ensure that no razor blades or other sharp objects are left/ included in the bags.

Referencing & Photo Credits:
Text:

When crediting other people’s work please use the Name-Date system of the Council for Science Editors (CSE) style. There is a link to the style guide on the brightspace website.

In your work, ANY and ALL statements that were not empirically derived for yourself as part of an experiment or study, for that assignment, must be credited to a source. In text citations should be given as (Name Date), and all sources should be collected into a list at the end of your work and presented in CSE style. Your source list should be in alphabetical order.

A skill you should be cultivating throughout your academic career is to determine the credibility of your sources. The peer review process, where the methodology, results and broader context of an experiment are written up and submitted to other researchers in the same field of study are the most credible forms of published work. Books and documentaries often draw their evidence from the peer-reviewed literature and are edited. These make them credible sources. New articles may or may not be based on peer-reviewed sources and so have varying degrees of credibility. Web sources can be very confusing, some are based on the peer reviewed literature, some are based on people’s unsupported opinion or current working theories.

There is a credible checklist flowchart to help you determine the credibility of web sources. A PDF copy of the flowchart document is located on brightspace, under the lab folder. The flow chart was developed based on the criteria outlined by Dalhousie University Librarians.

Please use the flowchart in conjunction with the following table (This will also be posted on brightspace as a word document). As you move through the flowchart add “+” or “-” to your table. As you increase the number of “-” signs the credibility of your site decreases. After you have gone through all criteria you can determine if you site is credible, less credible or not credible.

Table 4 Summary of online source credibility

Web Site	1. Authority	2. Purpose/ Objectivity	3. Currency	4. Accuracy	Overall
1.					
2.					

If you are using websites as references, please include the table as an appendix to your report.

Photos:

Not all photos presented on the internet are available for use. Some were developed for specific companies or sites and require permission or payments for use. However, if you look around you can often find photos that are published with creative commons or educational use licenses.

Good sources for photos published with creative commons licences are:

- Wikimedia Commons at http://commons.wikimedia.org/wiki/Main_Page
- iNaturalist at either iNaturalist.ca or iNaturalist.org

Avoid using photos that are under copyright or where it is unclear what type of license they are published under.

The name of the creator and the license it is being used under should be placed under the photo, and the full reference as a webpage should be placed in your reference list.

If it is your own photo put your name and either used by permission or own use.

Taxa & Spelling: In all assessments students are expected to know and be able to spell the names of taxa discussed in the class. A full list of the taxa you are expected to know can be found in the lab manual.

Permits for Dal Biodiversity Day, Animal Observations, & Dissections:

All animal observations and dissections have been approved by the University Committee on Laboratory Animals at Dalhousie University. Activities are completed under permit number I223-32, valid through September 1st, 2026.

The Dal Biodiversity Day sessions are taking place under permit number 123-33, valid through November 1st, 2023.

University Policies and Statements

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit or e-mail the Indigenous Student Centre at 1321 Edward St or elders@dal.ca. Additional information regarding the Indigenous Student Centre can be found at: https://www.dal.ca/campus_life/communities/indigenous.html

Internationalization

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." Additional internationalization information can be found at: <https://www.dal.ca/about-dal/internationalization.html>

Academic Integrity

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. Additional academic integrity information can be found at: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion, please contact the Student Accessibility Centre (https://www.dal.ca/campus_life/academic-support/accessibility.html) for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro (<https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html>)

Conduct in the Classroom – Culture of Respect

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). Additional diversity and inclusion information can be found at: <http://www.dal.ca/cultureofrespect.html>

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner - perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution. The full Code of Student Conduct can be found at: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Fair Dealing Policy

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie. Additional information regarding the Fair Dealing Policy can be found at: https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html

Originality Checking Software

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. Additional information regarding Originality Checking Software can be found at:

https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality-checking-software-policy-.html

Student Use of Course Materials

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