

Faculty of Science Course Syllabus (Section A)**Department of Biology**

BIOL 3601.03

Nature Conservation

Winter 2023 (Jan 4 update)

Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq. We are all Treaty people.

We acknowledge the histories, contributions, and legacies of the African Nova Scotian people and communities who have been here for over 400 years.

Instructor: C. Isabelle Aubé Email: Isabelle.Aube@dal.ca Office: LSC 2123

Office Hours: Mondays 12-1 pm, or by appointment

Lectures: Tuesdays & Thursdays 10:05 – 11:25 am (LSC P4260)

Tutorials: 6 tutorials (90 min/tutorial)

Tuesdays 2:35 – 3:55 pm (T01: LSC P5208, T02: LSC C214, T03 LSC C334, T04: LSC C216)

Course Delivery: In-person, synchronous live lectures

COVID-19 Masking and Isolation protocols: <https://www.dal.ca/covid-19-information-and-updates.html>

Course Description

This interdisciplinary course explores relationships between humans and the natural world, including damage caused to species and ecosystems. The course looks at environmental ethics and world views, environmental philosophy, sustainability, and conservation science and actions, including the establishment of protected areas. The ultimate focus will be on combating threats to nature, and major conservation challenges. This interactive course emphasizes student involvement and participation.

Course Prerequisites

BIOL 1010.03 (or BIOL 1020.03 or BIOA 1002.03) and BIOL 1011.03 (or BIOL 1021.03 or BIOA 1003.05); or SCIE 15XX; or permission of instructor.

Course Textbook

Main Text (T1): Peter Kareiva & Michelle Marvier, 2017. *Conservation Science*. 2nd ed. Macmillan Learning.

Additional Optional Text (T2): Peter Kareiva, Michelle Marvier & Brian Silliman, 2018. *Effective Conservation Science: Data not Dogma*. Oxford University Press.

Learning Objectives

- Describe need of nature conservation.
- Understand impacts of threats and challenges to biodiversity.
- Demonstrate basic environmental ethics and sustainability.
- Enable conservation decision making on national and international concerns.
- Demonstrate deeper knowledge of a specific conservation topic through formal group oral presentation and report writing.
- Discuss nature conservation literature.

Course Assessment

Assignment, Exam, or Presentation	Marks %	Date
Quiz 1	08	Feb 07 (during tutorial time)
Midterm Exam	24	Mar 07 (during lecture time)
Quiz 2	08	Mar 21 (during tutorial time)
Oral Presentation (group presentation)	10	Mar 28 & 30 (during lectures), Apr 4 (during lecture & tutorial), Apr 6 (during lecture)
Tutorial Assignment Reports (4 x 5 pts)	20	Feb 6, 13, 27, and Mar 14
Final Exam	30	TBD
Total	100	

Oral Presentation

Students are expected to do a 10 + 2 minute PowerPoint group presentation on their chosen topic related to Nature Conservation.

Evaluation Rubric

<i>Evaluation categories:</i>	MARKS				
The presentation reflected a thorough knowledge of 'Nature Conservation' <i>Introduction/background info etc.</i>	5	4	3	2	1
The presentation exhibited clarity, correctness, and conciseness <i>Credible information/ free from unnecessary elaboration and superfluous detail</i>	5	4	3	2	1
The presentation was well organized. <i>With a burning question/severity of crisis</i>	5	4	3	2	1
The topic was covered in an understandable fashion. <i>Voice, enthusiasm, eye contact, pace (flow), transition</i>	5	4	3	2	1
The presentation was very well timed <i>Length of talk</i>	5	4	3	2	1
Presentation resources were incorporated and used effectively. <i>Original music video/ proper animation/ one point at a time, use of visual aids</i>	5	4	3	2	1
The group responded effectively to questions posed by the audience. <i>Handling of questions</i>	5	4	3	2	1
Main points were effectively summarized at the end of the presentation. <i>Summary can be in the form of conclusion (5)</i>	5	4	3	2	1
Overall total: Out of 10 = (Total of the above 8 categories/ 8) * 2					

Grading Scale

Conversion of numerical grades to Final Letter Grades follows the [Dalhousie Common Grade Scale](#)

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

Course Policies

General Policies:

In-person class participation is considered vital. Complete attendance of all lectures is highly recommended since it helps to improve your grade significantly. Detailed pdfs lectures slides are uploaded beforehand. No lecture recordings will be uploaded, except for a few small clips. In addition to lecture content, class time is reserved for pre-tutorial sessions, discussion sessions (led by TAs), and student oral group presentations.

Tutorial sessions and meeting deadlines are mandatory. Due to the current health regulations/restrictions and internet-related issues, a two-week deadline is given to all tutorial assignment submissions (see schedule). No late submission without a valid reason is accepted for marking.

Brightspace (course web-tool) is used for posting and submitting content on lectures, tutorials, regular updates, and announcements.

TAs are the first point of contact (unless for major and/or personal issues) and copying the instructor on messages is highly recommended.

Specific Policies:

The policies will only be implemented when a student's absence is due to physical or mental health conditions; involvement in an accident; immediate family illness, injury, or death; or other extenuating circumstances as described in Dalhousie University's [Academic Calendar Regulation: Missed or Late Academic Requirements due to Student Absence \(SDA\)](#)⁽¹⁾. The student must notify the instructor or teaching assistant **prior** to the academic requirement deadline and **must** submit a completed [Student Declaration of Absence form](#)⁽²⁾ **by email**.

No more than **two (2)** separate Student Declaration of Absence (SDA) forms may be used per course during a single term. SDA forms are valid for missed tutorial in-person sessions, but **not** for assignment deadlines. SDA forms are also valid for missed mandatory lectures/presentations and quizzes, but **not** for midterm or final exams.

Where SDAs are not valid, or the absence is long-term (i.e., exceeds 3 days), please contact your TA and/or instructor.

Quizzes

- There are **no makeups** for missed quizzes.
- If quiz #1 is missed for a valid and credible reason, those marks will be re-distributed to quiz #2
- If quiz #2 is missed for a valid and credible reason, those marks will be re-distributed to the final exam
- If both quizzes are missed, only one will be re-distributed

Midterm Exam and Final Exam

- One makeup exam can be scheduled for any student(s) provided the examination was missed for a valid and credible reason (document/s may be required), and the instructor or teaching assistant was notified prior to the examination start time.
- The makeup exam will be a different exam than the one given during the regularly scheduled examination time

Tutorials

- Missing a tutorial is only acceptable in those cases where the student has notified the teaching assistant prior to the start time of the tutorial with a valid and credible reason, along with an SDA.

Altogether, **no more than three (3)** tutorials, quizzes, exams, and their oral presentation may be missed as there will not be enough material to adequately evaluate the student on.

⁽¹⁾**Academic Calendar Regulation: Missed or Late Academic Requirements due to Student Absence:**

https://www.dal.ca/dept/university_secretariat/policies/academic/missed-or-late-academic-requirements-due-to-student-absence.html

⁽²⁾**Student Declaration of Absence Form:**

<https://cdn.dal.ca/content/dam/dalhousie/pdf/campuslife/Health%20and%20wellness/FINAL%20Student%20Declaration%20of%20Absence%20Form.pdf>

Course Content

Schedule (Tentative)

A. Lectures

Week 1

Jan 10 & 12 classes postponed by a week.

Week 2

Jan 17 – Lec 00: Course Introduction, Humans: The dominant ecological force (T1 Chap 1)

Jan 19 – Lec 01: Why conservation is needed I: Biodiversity and extinction (T1 Chap 2, T2 Chap 22)

Week 3

Jan 24 – Pre-Tutorial Session: The Sixth Mass Extinction

Jan 26 – Lec 02: Why conservation is needed II: The value of valuing nature: Current issues (T1 Chap 2, T2 Chap 3 & 25)

Week 4

Jan 31 – Pre-Tutorial Session: The guide: Movie on “Gorongosa restoration story”

Feb 2 – Lec 03: Protected areas: A cornerstone of conservation (T1 Chap 5 & 6, T2 Chap 23)

Week 5

Feb 7 – Lec 04: Parks and Protected Areas in Canada: Current issues

Feb 9 – Lec 04 (Part 2): The performance and potential of protected areas TA Discussion Session

Week 6

Feb 14 -- Lec 05: Choosing conservation actions (T1 Chap 9 & 11)

Feb 16 -- Lec 06: Reversing deforestation I & (T1 Chap 13)

Week 7: Study Break

Week 8

Feb 28 – Pre-Tutorial Session: Conservation Poster & Introduction to students’ oral PPT presentations TA Discussion Session

Mar 2 – Midterm Review

Week 09

Mar 7 - Midterm Exam ...24 Marks

Mar 9 – Lec 07: Reversing deforestation II: Current issues (T1 Chap 13)

Week 10

Mar 14 – Lec 08: Balancing agriculture and conservation (T1 Chap 14, T2 Chap 11)

Mar 16 – Lec 09: Managing fresh water for people and nature (T1 Chap 15)

Week 11

Mar 21 – Lec 10: Sustainable marine fisheries TA Discussion Session (T1 Chap15, T2 Chap 17 & 19)

Mar 23 -- Lec 11: Making conservation a success story: Current issues (T1 Chap 19) & End-Term revision

Week 12

Mar 28 & 30 -- Student Presentations ...10 Marks

Week 13

Apr 4 & 6 -- Student Presentations and/or Final Exam Review ...10 Marks

Final Exam (TBD/Scheduled by Registrar) ...30 marks

B. Seminar/Tutorial sessions

Tutorial Attendance Mandatory

Jan 24: Tutorial 1: The Sixth Mass Extinction (**Report required, due online Mon Feb 6, 11:30 pm, 5 marks**)

Jan 31: Tutorial 2: “Gorongosa”: Restoration story (**Report required, due online Mon Feb 13, 11:30 pm, ...5 marks**)

Feb 7: Quiz 1 in/during tutorial time ...8 Marks

Feb 14: Tutorial 3: Paper critique/TA Discussion, (**Final Submission due online Mon Feb 27, 11:30 pm, ...5 marks**)

Feb 28: Tutorial 4: Conservation poster (**Hard Copy Report required, due in Tutorial Tues Mar 14, 2:35 pm, ...5 marks**)

Mar 7: Tutorial 5: Topic/Discussion on oral presentation (group activity)

Mar 14: Tutorial 6: Oral presentation/PPT preparation and submission (group activity)

Mar 21: Quiz 2 in/during tutorial time ...8 Marks

Apr 4 – Student Presentations (cont.) during tutorial time, location TBD ...10 marks

Faculty of Science Course Syllabus (Section B)

University Policies and Statements

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate

Academic Integrity

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of 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.

Information: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (Canada and Nova Scotia).

Information: https://www.dal.ca/campus_life/academic-support/accessibility.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.

Code: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

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

Statement: <http://www.dal.ca/cultureofrespect.html>

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 (1321 Edward St) (elders@dal.ca).

Information: https://www.dal.ca/campus_life/communities/indigenous.html

Important Dates in the Academic Year (including add/drop dates)

<https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=117&chapterid=-1&topicgroupid=31821&loaduseredits=False>

University Grading Practices

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

Faculty of Science Course Syllabus (Section C)

Student Resources and Support

Advising

General Advising https://www.dal.ca/campus_life/academic-support/advising.html

Science Program Advisors: <https://www.dal.ca/faculty/science/current-students/undergrad-students/degree-planning.html>

Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html

Black Students Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre/current-students.html

Academic supports

Library: <https://libraries.dal.ca/>

Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html

Studying for Success: https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html

Copyright Office: <https://libraries.dal.ca/services/copyright-office.html>

Fair Dealing Guidelines <https://libraries.dal.ca/services/copyright-office/fair-dealing.html>

Other supports and services

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness.html

Student Advocacy: <https://dsu.ca/dsas>

Ombudsperson: https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html

Safety

Biosafety: <https://www.dal.ca/dept/safety/programs-services/biosafety.html>

Chemical Safety: <https://www.dal.ca/dept/safety/programs-services/chemical-safety.html>

Radiation Safety: <https://www.dal.ca/dept/safety/programs-services/radiation-safety.html>

Scent-Free Program: <https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html>

Dalhousie COVID-19 information and updates: <https://www.dal.ca/covid-19-information-and-updates.html>