

**Faculty of Science Course Syllabus
Department of Biology**

*BIOL4510
Cultural Evolution
Fall 2021*

Instructor: Hal Whitehead LSC3076 hwhitehe@dal.ca

Classroom: LSC(PSYCH)5208

Office hours: Mon Weds 11:35-12:00; if this does not work email instructor to set up time.

Lectures: Mon Weds 10:05-11:25

Laboratories: None

Tutorials: None

Course Description

Culture is socially learned and group-specific information or behaviour. This course explores the nature of culture across the animal kingdom, how it evolves, and its relationship to ecology, genetic evolution and conservation. Students consider and discuss the controversies and uncertainties as to the role of culture in biology.

Course Prerequisites

BIOL 2040 (Evolution), and BIOL 3062 (Behavioural Ecology) or PSYO 3162 (Advanced Animal Behaviour)

Course Objectives/Learning Outcomes

How biologists view the concept of culture.

How animals learn socially.

Why culture is a system of heritability.

How culture evolves.

The breadth of culture across the animal kingdom.

How the capacity of culture may have evolved.

How culture affects genetic evolution.

The role of culture in ecology

Course Materials

Brightspace site

Course Assessment

Component	Weight (% of final grade)	Date
Midterm exam	20%	18 Oct
Final exam	20%	7 Dec
Discussion participation	15%	
Introduce discussion paper	15%	
Quizzes on discussion papers	10%	
Final paper	20%	8 Dec

Assignments

Midterm exam: This will be an in-class, short-answer exam on topics in first half of class (students answer ca. 10 questions out of 12).

Final exam: This will be an in-class, short-answer exam on topics in second half of class (students answer ca. 10 questions out of 12).

Discussion participation: Students will be marked on their participation in the discussion for each lecture (2 marks for attendance; 3 marks for brief remark; 4 marks for substantial remark(s); 5 for important intervention(s)). Discussion participation marks will be averaged over all lecture classes (except the Introduction and Wrap-up), although two missed class will be allowed. In each class, there can discussion during the class and online (Brightspace Discussion Forum) during the following 1.5 days. Students will be marked on each and given the highest of the in person and online discussions for each class.

Introduce discussion paper: Students will each introduce one discussion paper (a list will be available on Brightspace). Students will be allocated to papers and dates randomly. The introduction will last less than 5 minutes and not use Powerpoint or any other visual aid.

Quizzes on discussion papers: At the beginning of each class, students will have a one-question paper quiz on the assigned paper. Answers will be a phrase or less. Students can miss two quizzes, so the two lowest quiz marks (or two missed quizzes) will be omitted before calculating the average over the term.

Final paper: Students will be given a list of potential topics for their final paper (or they can suggest their own). The papers will be in scientific format with citations to the primary literature. The papers should start with a brief summary aimed at a general readership. The

paper must be less than 4 pages (≥ 11 point font) long, excluding reference list and tables and figures.

Other course requirements

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Plagiarism

Do not plagiarize (including self-plagiarize)! I catch plagiarizing students quite often. If you are uncertain of what is and is not acceptable, ask me, or see http://www.dal.ca/dept/university_secretariat/academic-integrity/plagiarism-cheating.html

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

Papers must be sent in through Brightspace by 16:30 on due date

10% off for each day late for assignments, without medical (etc.) excuse

Projects should be carried out individually

Plagiarism software (e.g. Urkund) may be used on Final papers

Students are expected to use the Student Declaration of Absence form for late or missed requirements, and may use the form as many times as necessary

If an assignment deadline is unavoidably missed, deadlines may be changed

Course Content

Preliminary list of 80 min lectures/discussions:

- Introduction to class
- What is culture?
- What is social learning?
- Types of culture
- How culture evolves
- Conformism and symbolic marking
- Culture in fish, rodents

Culture in insects
Culture in birds: songs
Culture in birds: feeding and migration
Culture in monkeys
Culture in apes
Culture in toothed whales
Culture in baleen whales
Culture in humans: foraging, tools
Culture in humans: society and culture
Culture in humans: language and communication
How is human culture different?
The evolution of cultural capacity
Culture and ecology
Culture and conservation
Gene-culture coevolution

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://www.dal.ca/academics/important_dates.html

University Grading Practices

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

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/academic-advising.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/services-support/student-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>