Evolutionary Behavioural Ecology
Biology 4436G
Course Outline/Syllabus Winter 2025

1. Course Information and Prerequisites

Lectures: See OWL
Lab/Seminar: See OWL

Prerequisites:

Biology 3436F/G or Psychology 3221F/G and either completion of at least 1.5 Biology courses from the 3000 level or above, or registration in year 4 of the Honours Specialization in Animal Behaviour.

Unless you have either the requisites for this course or written special permission from your Dean's Designate (Department or Science Academic Advisors) to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

2. Instructor Information

Instructor: See OWL
TA: See OWL
Office hours: by appointment.

During the semester, all electronic correspondence about Bio 4436G should be done by email. Students emailing their instructors or TAs directly must use their Western (@uwo.ca) email addresses.

3. Course Description, Learning Outcomes, Schedule, Delivery Mode

Course Description: A study of the relationships between animal behavior, ecology and evolution. Topics will include evolution, optimization theory, survival strategies, game theory, reproductive strategies, and social behaviour.

Learning Outcomes and Objectives:

By the end of this course you should be able to:

1. Engage in meaningful discussion about behavioural ecology and how it relates to ecology, evolution, and behaviour.
2. Recall and explain the main behavioural ecology theories that are covered.
3. Critically evaluate text in the context of behavioural ecology theories.
4. Independently collect and synthesize information on a topic in the field of behavioural ecology.
5. Communicate scientific knowledge in written and oral forms.

Contingency Plan: This course will be delivered in-person, however in the unlikely event of any university-declared emergency, some or all of this course may be required to be delivered online, either synchronously or asynchronously. ***The grading scheme will not change.*** Any assessments affected will be conducted online as determined by the professor.

4. Course Materials

Required:

Laptop: Use your own. You must have a stable internet connection and a working microphone.

Owl: All course documents and information (syllabus, lecture files, instructional documents, required readings, etc.) **will be posted to OWL and students are responsible for checking the course OWL site (https://westernu.brightspace.com) on a regular basis for updates**. If students need assistance with the course OWL site, they can seek support on the OWL Help page. Alternatively, they can contact the Western Technology Services Helpdesk, which can be contacted by phone at 519-661-3800 or ext. 83800.

Book: Davies, N.B., J.R. Krebs, and S.A. West. 2012. An introduction to behavioural ecology. 4th edn. Wiley-Blackwell (the e-text is available for purchase for $54.00 from the bookstore)

Software:

Statistical analysis software (preferably R and R Studio).

SimUText for Evolutionary Behavioural Ecology and Life History ($23 USD)
    More information for subscribing to SimUText will be available on OWL

5. Methods of Evaluation

The overall course grade will be calculated as:

5%   Crayfish Lab write-up (due February 7, 4:30 pm)
15%   Midterm test (February 12, 9:30-10:20)
10%   Project presentation – draft (due March 20, 11:59 pm)
10%   Project presentation – final (scheduled between March 27-Apr 3)
25%   Project write-up (due April 4, 2024, 4:30 pm)
35%   Final exam (date TBA)

Extra: SimBio assignments (2% per section x 7 sections = 14%). These credits can be used to boost the 35% allocation. I will assign the higher of your final exam alone (35%) **OR** your final exam (21%) + SimBio (14%).

The final exam will be in person. The exam is cumulative will cover all lecture content.

A passing grade on the lab components (summing to 50% of course grade) is required to pass the course. If a passing grade is not met, the maximum course grade will be 45%.

☒ Written assignments will be submitted to Turnitin (statement in policies below)
☒ Students will have 1 submission to Turnitin
☒ Rubrics will be used to evaluate assessments and will be posted with the instructions
☒ After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator

Click here for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
A	80-89	Superior work which is clearly above average
B	70-79	Good work, meeting all requirements, and eminently satisfactory
C	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

6. Student Absences

General information about missed coursework

Students must familiarize themselves with the University Policy on Academic Consideration – Undergraduate Students in First Entry Programs posted on the Academic Calendar: https://www.uwo.ca/univsec/pdf/academic_policies/appeals/academic_consideration_Sep24.pdf

This policy does not apply to requests for Academic Consideration submitted for attempted or completed work, whether online or in person.

The policy also does not apply to students experiencing longer-term impacts on their academic responsibilities. These students should consult Accessible Education.

For procedures on how to submit Academic Consideration requests, please see the information posted on the Office of the Registrar's webpage: https://registrar.uwo.ca/academics/academic_considerations/

All requests for Academic Consideration must be made within 48 hours after the assessment date or submission deadline, using the [Student Absence Portal](#).

All Academic Consideration requests normally must include supporting documentation; however, recognizing that formal documentation may not be available in some extenuating circumstances, the policy allows students to make one Academic Consideration request without supporting documentation in this course. However, the following assessments are excluded from this, and therefore always require formal supporting documentation:

- The Project Presentation (final)
- The final exam

When a student mistakenly submits their one allowed Academic Consideration request without supporting documentation for the assessments listed above or those in the Coursework with Assessment Flexibility section below, the request cannot be recalled and reapplied. This privilege is forfeited.

Deadlines are fixed, but some have flexibility. Late penalties (1% of course grade per 24 h) will accrue immediately after a deadline. Deadlines to complete the Crayfish Lab write-up and Project Presentation (draft) will be subject to a 48h grace period when accrued late penalties will not be deducted. The Project write-up will be subject to a 72h grace period when accrued late penalties will not be deducted. For example, if you hand in the Crayfish Lab write-up 40 h after the deadline, a 2% late penalty will have accrued but this late penalty will not be applied. If you hand in your Crayfish Lab write-up 50 h after the deadline, a 3% late penalty will have accrued and this late penalty will be applied (i.e., the maximum grade you can achieve on this assignment will be 2/5).

When a student misses the Final Exam and their Academic Consideration has been granted, they will be allowed to write the Special Examination (the name given by the University to a makeup Final Exam). See the Academic Calendar for details (under Special Examinations), especially for those who miss multiple final exams within one examination period.

Note: missed work can *only* be excused through one of the mechanisms above. Being asked not to attend an in-person course requirement due to potential COVID-19 symptoms is **not** sufficient on its own.

7. Accommodation and Accessibility

Religious Accommodation
When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request an accommodation for their absence in writing at least two weeks prior to the holiday to the course instructor and/or the Academic Advising office of their Faculty of Registration. Please visit the Diversity Calendars posted on our university's EDID website for the recognized religious holidays:

https://www.edi.uwo.ca.

Accommodation Policies
Students with disabilities are encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found at:

[https://www.uwo.ca/univsec/pdf/academic_policies/appeals/Academic Accommodation_disabilities.pdf](https://www.uwo.ca/univsec/pdf/academic_policies/appeals/AcademicAccommodation_disabilities.pdf).

8. Academic Policies

The website for Registrarial Services is https://www.registrar.uwo.ca/.

In accordance with policy,

https://www.uwo.ca/univsec/pdf/policies_procedures/section1/mapp113.pdf,

the centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner.

Only non-programmable calculators will be permitted on tests and exams.

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

https://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com).

9. Support Services

Please visit the Science & Basic Medical Sciences Academic Advising webpage for information on adding/dropping courses, academic considerations for absences, appeals, exam conflicts, and many other academic related matters: https://www.uwo.ca/sci/advising/.

Students who are in emotional/mental distress should refer to Mental Health@Western (https://uwo.ca/health/) for a complete list of options about how to obtain help.

Western is committed to reducing incidents of gender-based and sexual violence and providing compassionate support to anyone who has gone through these traumatic events. If you have

experienced sexual or gender-based violence (either recently or in the past), you will find information about support services for survivors, including emergency contacts at

  https://www.uwo.ca/health/student_support/survivor_support/get-help.html.

To connect with a case manager or set up an appointment, please contact support@uwo.ca.

Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. You may also wish to contact Accessible Education at

  http://academicsupport.uwo.ca/accessible_education/index.html

if you have any questions regarding accommodations.

Learning-skills counsellors at Learning Development and Success (https://learning.uwo.ca) are ready to help you improve your learning skills. They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Western University is committed to a thriving campus as we deliver our courses in the mixed model of both virtual and face-to-face formats. We encourage you to check out the Digital Student Experience website to manage your academics and well-being: https://www.uwo.ca/se/digital/.

Additional student-run support services are offered by the USC, https://westernusc.ca/services/.

10. Equity, Diversity, Inclusion and Decolonization (EDID)

Land Acknowledgement: We acknowledge that Western University is located on the traditional lands of the Anishinaabek, Haudenosaunee, Lūnaapéewak and Chonnonton Nations, on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous peoples (e.g. First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society. Throughout Canada, North America, and the world, Indigenous Peoples are vital contributors to their communities, and we greatly value their presence, knowledge, and wisdom.

More information about Indigenous Services (https://indigenous.uwo.ca/) and this Land Acknowledgement (https://communications.uwo.ca/comms/land-acknowledgement/) are available.