

Evolutionary Ecology (BIOL*4120)

Winter 2014 Course Outline

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Office hours: TBD

Teaching Assistant: TBD

Meeting Schedule:

Lectures		MWF 11:30 – 12:20	RICH 2529
Tutorials	SEC 01	F 12:30 – 1:20	TBD
	SEC 02	F 1:30 – 2:20	TBD

Course Description: This course is about the process of adaptation. That is, the ways in which organisms have responded to the selective pressures imposed by their environment. We will address both theoretical and empirical issues in evolutionary ecology, but an emphasis will be placed on the process of scientific inquiry. This course will not be a broad survey of the field, but will instead focus on a few subject areas that we will discuss in detail.

Prerequisites: BIOL*3110, MBG*2040 (previously MBG*2000), and either BIOL*3400 (previously ZOO*3300) or BIOL*3020 (previously MBG*3000)

Course Content: This course has both lecture and tutorial components. The lecture period will be used to introduce and discuss theoretical concepts and specific methods in evolutionary ecology. Lectures will typically be presented twice per week (Monday, Wednesday). The Friday lecture period will be used flexibly. In some weeks it will be used for additional lectures, while in other weeks it will be used for extended tutorials or project time. Tutorials provide an opportunity to apply these concepts through discussion, critique and presentations of the primary literature.

Evaluation

30% Assignments: 1st assignment (10%), 2nd assignment (20%)

30% Tutorial discussion: participation (10%), discussion leading (15%), paper follow-up (5%)

40% Exam (date and location TBD)

Important Dates

1st Assignments due: Feb 21st

2nd Assignments due: April 25th

Recommended Readings

Lecture material will be drawn from the primary literature. However, for background material, chapters in a number of reputable books on evolutionary biology will be useful and are listed below.

Bell, G. 2008. *Selection: The mechanism of evolution*, 2nd ed. Oxford University Press, New York.

Conner, J.K. and D.L. Hartl (eds.). 2004. *A Primer in Ecological Genetics*. Sinauer Assoc. Inc., Mass.

Futuyma, D. J. 1986. *Evolutionary Biology*, 2nd edition. Sinauer Assoc. Inc., Mass.

Fox, C.W., D.A. Roff and D.J. Fairbairn (eds). 2001. *Evolutionary Ecology: Concepts and case studies*. Oxford University Press, Oxford, UK.

Grades and Deadlines: All assignments are due on the date listed above and must be submitted in hard copy to the TAs. E-mailed assignments will not be accepted. Late assignments will be deducted 10% per day. If you have a conflict with a due date then contact the instructors at least two weeks prior to the due date and we will arrange an alternative. If you disagree with one of your grades then contact the instructors within two weeks of the grading of the assignment. We will re-grade assignments, but your grade might go up or down. There is a formal university process for disputing your final grade.

Class Atmosphere:

Academic misconduct is behaviour that erodes the basis of mutual trust on which scholarly exchanges commonly rest, undermines the University's exercise of its responsibility to evaluate students' academic achievements, or restricts the University's ability to accomplish its learning objectives.

The University takes a serious view of academic misconduct and will severely penalize students, faculty and staff who are found guilty of offences associated with misappropriation of others' work, misrepresentation of personal performance and fraud, improper access to scholarly resources, and obstructing others in pursuit of their academic endeavours. In addition to this policy, the University has adopted a number of policies that govern such offences, including the policies on Misconduct in Research and Scholarship and the Student Rights and Responsibilities regulations. These policies will be strictly enforced.

It is the responsibility of the University, its faculty, students and staff to be aware of what constitutes academic misconduct and to do as much as possible through establishment and use of policies and preventive procedures to limit the likelihood of offences occurring. Furthermore, individual members of the University community have the specific responsibility of initiating appropriate action in all instances where academic misconduct is believed to have taken

place. This responsibility includes reporting such offences when they occur and making one's disapproval of such behaviour obvious.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students should also be aware that if they find their academic performance affected by medical, psychological or compassionate circumstances, they should inform the appropriate individuals (instructors, program counsellors, graduate advisors) and follow the available procedures for academic consideration outlined in the University's calendars. Please review the University's statement on academic misconduct (www.uoguelph.ca/calendar_archives/diploma/1997-98/sec_74.htm).

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