

BIOLOGY 3FF3 Evolution

Time

2018 Fall term

Coordination

person: Doc Roc
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e-contact: use **avenue** to learn course folder Discussion Tool

Objectives

Successful participants synthesise and apply the main theoretical concepts and evaluate and analyse the major empirical observations related to evolution upon completing this course.

Topics

Course content could include items presented subsequently:

Introduction

- The Pattern of Evolution
- Evolution by Natural Selection
- Estimating Evolutionary Trees

Mechanisms of Evolutionary Change

- Mendelian Genetics in Populations I: Selection and Mutation
- Mendelian Genetics in Populations II: Migration, Genetic Drift, and Nonrandom Mating
- Evolution at Multiple Loci: Linkage and Sex
- Evolution at Multiple Loci: Quantitative Genetics

Adaptation

- Studying Adaptation: Evolutionary Analysis of Form and Function
- Sexual Selection

The History of Life

- Mechanisms of Speciation
- Development and Evolution
- Human Evolution.

Resources

Textbook: Herron, J. C., and S. Freeman. 2014. *Evolutionary Analysis* (5th edition). New York: Prentice Hall.

e-learning management tool: an 'information and repository' course folder is accessible via the McMaster University Centre for Leadership in Learning Internet site, at the URI <http://avenue.mcmaster.ca> (the software **avenue** to learn will be used); course participants must be familiar with how to use this resource.

Core

Core sessions are delivered in ITB 137 on Mondays, Wednesdays, and Thursdays from 1030 to 1120.

Tutorial

Tutorials sessions usually start with teaching assistants answering questions or addressing issues related to core material and thereafter generally involve informal (enjoyable) activities, which could include games, 'practicals,' or discussions.

Evaluation

A 100 point scale is implemented for evaluation. The final grade is calculated as a sum over the components listed immediately below;

online quizzes	10
reports (major and minor)	15
assessments	15
tutorial assignments	30
examination	30

it then is converted trivially to a percentage and thence to the McMaster University 12-point grading system.

Messages From University Administration

1. Academic Integrity – course participants are expected to exhibit honesty and use ethical behaviour in the learning process. Academic credentials earned are rooted in principles involving honesty and academic integrity.

Academic dishonesty is defined as knowingly acting or failing to act in a way that results or could result in unearned academic credit or advantage. Engaging in this behaviour can result in serious consequences (e.g., zero grade for an evaluation component item), missed course credit with a notation on academic transcript (reading "Grade of F assigned for academic dishonesty"), or suspension or expulsion from the university.

Course participants are responsible for understanding what constitutes academic dishonesty. Access the Academic Integrity policy by surfing to the URI www.mcmaster.ca/academicintegrity to acquire additional information; common instances include

- plagiarism (e.g. submitting work completed by another person or for which credit already has been obtained);
- improper collaboration in group work;
- copying or using unauthorised aids in tests and examinations.

2. Authenticity-Plagiarism Detection – Internet-based services (e.g., Turnitin.com) might be used to reveal authenticity and ownership for submitted work. Course participants may be requested to submit work electronically either directly to a service or via the

avenue to learn system plagiarism detection service (supported by Turnitin.com) so that work can be checked for academic dishonesty.

Course participants who refuse to submit work through Turnitin.com or avenue to learn will be required to submit an electronic or hardcopy version to Doc Roc; no penalty will be assigned to these course participants. All submitted work is subject to normal verification that academic integrity standards have been upheld. Access the Turnitin.com policy by surfing to the URI www.mcmaster.ca/academicintegrity to acquire additional information.

3. Online Element – Course participants should be aware that private information such as first and last names, user names for McMaster University e-mail accounts, and program affiliation may become apparent to other course participants in the course via the electronic components in this course. Information available is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure.

4. Academic Accommodation for Course Participants with Disabilities – Course participants with disabilities who require academic accommodation must contact Student Accessibility Services to make arrangements with a program coordinator. Student Accessibility Services can be contacted by telephone (905-525-9140 x. 28652) or email (sas@mcmaster.ca). Access the Academic Accommodation of Students with Disabilities policy by surfing to the URI <https://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentsWithDisabilities.pdf> to acquire additional information.

5. Request for Relief from Missed Academic Work (McMaster Student Absence Form) – Course participants should review and follow the Academic Regulation in the Undergraduate Calendar “Requests for Relief for Missed Academic Term Work” in circumstances involving missed work or absence for medical or other reasons.

6. Academic Accommodation for Religious, Indigenous, or Spiritual Observances (RISO) – Course participants requiring academic accommodation based on religious, indigenous, or spiritual observances should follow the procedures set out in the RISO policy. Course participants requiring a RISO accommodation should submit their request to their faculty office normally within 10 working days of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Course participants also should contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

7. Extreme Circumstances – the university reserves the right to change dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions). Changes will be communicated through regular McMaster University communication channels, such as McMaster Daily News, McMaster University email, or the avenue to learn system.