

BIOU3GE: Evolution and Genetics

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▶ Canvas lectures

- ▶ Canvas lectures
- ▶ Face-to-face learning
 - ▶ Weekly lecture or workshop
 - ▶ Week 3 DNA practical
 - ▶ Week 10 computer lab

Start with the following pages:

- ▶ Learning and Teaching
- ▶ Key Contacts and Module Information
- ▶ Assessment
- ▶ Classes

Evolution: The change over time in the heritable characteristics of a population.

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Genetics: The study of heredity and the variation of inherited characteristics.

Intended Learning Outcomes

ILO1: Demonstrate knowledge and comprehension of the mechanisms of heredity and evolution, and their consequences for population genetic structure and biodiversity.

ILO2: Apply evolutionary and genetic principles, including principles of transmission and population genetics, to answer specific questions and solve specific problems.

ILO3: Analyse genetic data to draw genetic and evolutionary inferences.

ILO4: Explain core practical techniques used in molecular biology, genetics and evolution.

How will ILOs be assessed?

- ▶ Short answer essay plan (0%)
- ▶ Population Genetics Assignment (25%)
- ▶ Phylogenetics Lab Report (25%)
- ▶ Short Answer Essay Journal (50%)

See the Assessment page for more information.

BIOU3GE divided into five units

1. Genetic Mechanisms I
2. Evolution and Mechanisms of Inheritance
3. Evolutionary Ecology
4. Genetic Mechanisms II
5. Evolution of Species

Reading List Core Textbooks

- ▶ *Evolution* (4th edition) by Futuyma and Kirkpatrick
- ▶ *Biology: A Global Approach* (12th edition) by Campbell et al.