

COURSE MODULE INFORMATION

ZO317: Evolutionary Biology

Semester 1 | Credits: 5

This module is focused on key concepts in evolutionary biology including the mechanisms operating on molecules, on populations and those involved in the formation of new species. It will also include topics such as evolutionary repatterning of development, evolutionary constraint and bias and evolutionary innovation.

Learning Outcomes

1. Describe the evolutionary forces acting on alleles and genotypes.
2. Describe the methods used to study genetic variation in natural populations.
3. Describe in detail different types of speciation, including detailed discussion on the degree and type of isolation, selection and genetic mechanisms at play.
4. Describe the evolutionary origin of development and of metazoans
5. Explain the different modes in which development can be repatterned during evolution
6. Discuss how developmental processes can affect the direction of evolution
7. Display enhanced skills in writing essays on selected key concepts of evolutionary biology

Assessments

- Written Assessment (70%)
- Continuous Assessment (30%)

Module Director

- GRACE PATRICIA MCCORMACK: [Research Profile](#) | [Email](#)

Lecturers / Tutors

- LOUISE ALLCOCK: [Research Profile](#)
- MARK PETER JOHNSON: [Research Profile](#)
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- ANNE MARIE POWER: [Research Profile](#)
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Reading List

1. "Evolution" by Stephen C. Stearns, Rolf F. Hoekstra
ISBN: 0-19-854968-7.

The above information outlines module ZO317: "Evolutionary Biology" and is valid from 2015 onwards.
Note: Module offerings and details may be subject to change.