

AGEN 3001 ANIMAL BEHAVIOUR

Credit Points 10

Legacy Code 300878

Coordinator John Hunt (<https://directory.westernsydney.edu.au/search/name/John Hunt/>)

Description Focusing on a variety of wildlife and domestic animal species, the subject addresses how classic ecological and evolutionary principles shape animal behaviour by weighing the experimental and observational evidence for each idea. We illustrate concepts with examples from a wide range of taxonomic groups of animals in diverse ecosystems. Students will conduct experimental field and laboratory procedures, as well as observe and work with groups of animals on the UWS Hawkesbury campus.

School Science

Discipline Agriculture, Environmental and Related Studies, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 10cp

Check your fees via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Undergraduate Level 3 subject

Equivalent Subjects AGEN 3002 - Animal Behaviour

Restrictions

Successful completion of 120 credit points in the Bachelor of Science OR Bachelor of Natural Sciences.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Integrate basic evolutionary theory and genetics principles to determine how/why animal behaviour is both related to and shaped by evolution/genetics.
2. Determine how cost/benefit/risk can be identified in the context of optimality and game theories to formulate and test ultimate and proximate hypotheses for behaviours.
3. Describe the evolution of different reproductive strategies and mating patterns and strategies, and how tools such as phylogenetics and experimentation can be used to study it.
4. Determine how the evolution of animal behaviour is used to understand aspects of human behaviour.
5. Explain why understanding the ethology of companion animals and domestic stock is important in our interactions with them.
6. Conduct field investigations safely and ethically in the field and laboratory, using sampling methodology correctly to obtain valid data.
7. Use spreadsheets and statistical tools in analytical programs to enter, analyse and graph data and to draw appropriate conclusions from data.
8. Communicate findings correctly in oral or in written form using an appropriate style, accessing the scientific literature to place the findings in context.

Subject Content

1. The proximate control, organisation, and development of animal behaviour
2. The ecological and evolutionary mechanisms underlying animal behaviour
3. Foundational and contemporary theories of animal behaviour, as well as the application of animal behaviour
4. General scientific and specific behavioural methodologies to test hypotheses and effectively communicate research using a range of scientific modes

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

| Type | Length | Percent | Threshold | Individual/ Group Task | Mandatory |
|-------------|--|---------|-----------|------------------------|-----------|
| Report | 2,000 word | 20 | N | Individual | N |
| Poster | A0 poster and presentation (must be present at poster session for 2 hours to answer) | 30 | N | Individual | N |
| Quiz | 20 minutes (per quiz) | 40 | N | Individual | N |
| Presentatio | 15 minutes | 10 | N | Individual | N |

Prescribed Texts

- Alcock, J 2009, Animal behavior: an evolutionary approach, 9th edn, Sinauer Associates, Sunderland, Mass.

Teaching Periods

Spring (2025)

Hawkesbury

On-site

Subject Contact John Hunt (<https://directory.westernsydney.edu.au/search/name/John Hunt/>)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=AGEN3001_25-SPR_HW_1#subjects)