

## ENVS3005: Animal Behaviour

Callaghan and Ourimbah  
Semester 1 - 2024



THE UNIVERSITY OF  
NEWCASTLE  
AUSTRALIA

## OVERVIEW

### Course Description

Animal behaviour includes the ways animals interact with other living things, each other, and their environment. Students will gain knowledge of the principles and current theoretical issues within the field. The course models the process of conducting scientific research in the field of animal behaviour from hypothesis formulation to design, sampling, analysis and dissemination of findings. As such, the course encourages skill development in observing behaviour, formulating testable hypotheses, experimental design, data collection and analysis, and the presentation of findings in written scientific format. Further, theoretical instruction provides students with the requisite knowledge to be able to interpret and place their findings within the body of discipline-specific theory.

### Academic Progress Requirements

Nil

### Requisites

This course replaces BIOL3350. If you have successfully completed BIOL3350 you cannot enrol in this course.

### Assumed Knowledge

STAT1020 or STAT1070

### Contact Hours

#### Computer Lab

Face to Face on Campus  
3 hour(s) per week(s) for 12 week(s) starting Week 1

#### Field Study

Face to Face Off Campus  
20 hour(s) per term starting Week 1

#### Lecture

Online  
2 hour(s) per week(s) for 7 week(s) starting Week 2

#### Workshop

Face to Face on Campus  
32 hour(s) per term  
Workshop will involve 4 x 8hr workshops; Students will also be required to complete some self-directed field-based study for a Student Project.

#### Ourimbah

##### Computer Lab

Face to Face on Campus  
3 hour(s) per week(s) for 12 week(s) starting Week 1

##### Field Study

Face to Face Off Campus  
20 hour(s) per term starting Week 1

# COURSE OUTLINE

[www.newcastle.edu.au](http://www.newcastle.edu.au)

CRICOS Provider 00109J

**Lecture**

Online

2 hour(s) per week(s) for 7 week(s) starting Week 2

**Workshop**

Face to Face on Campus

32 hour(s) per term

Workshop will involve 4 x 8hr workshops; Students will also be required to complete some self-directed field-based study for a Student Project.

**Unit Weighting**

10

**Workload**

Students are required to spend on average 120-140 hours of effort (contact and non-contact) including assessments per 10-unit course.

## CONTACTS

**Course Coordinator****Callaghan and Ourimbah**

A/Prof Geoff Macfarlane

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Consultation: By Appointment.

**Teaching Staff**

A/Prof Andrea Griffin

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Consultation: By Appointment

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OURIMBAH

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9am-5pm (Mon-Fri)

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# SYLLABUS

## Course Content

Proximate causes and ultimate function of behaviour, the adaptive nature of behaviour measuring behaviour, experimental design, sampling techniques, physiological basis of behaviour, the development of behaviour ontogeny, experience and learning, antipredator behaviour, communication and sociality, co-operation, altruism and kin selection, sexual selection, mating systems, parental care strategies, the art of scientific writing and peer review.

## Course Learning Outcomes

**On successful completion of this course, students will be able to:**

1. Apply knowledge of behavioural theory to new situations.
2. Interpret, summarise, validate and critique data from the scientific literature.
3. Work independently to design and execute a scientific study in the discipline area.
4. Formulate a hypothesis and robust experimental design.
5. Collect, analyse, and interpret data statistically, and write a scientific paper based on data
6. Critically evaluate the work of peers.

# SCHEDULE

Week	Week Begins	Lecture	Tutorial	Assessment Due
1	26 Feb	ONLINE WORKSHOP: Sampling techniques for behavioural studies	TUTORIAL: Introduction: background and instructions for course and independent project INDUCTION	
2	4 Mar	ONLINE LECTURE: proximate and ultimate explanations of behaviour	TUTORIAL: past independent projects; analysing proximate and ultimate studies ZOO Field Trip Hunter Valley Zoo (Saturday)(\$38 entry)	QUIZ 8th march midnight
3	11 Mar	ONLINE LECTURE: sexual selection	TUTORIAL: experimental design principles and analysing sexual selection studies	QUIZ 15th March midnight
4	18 Mar	ONLINE LECTURE: Animal Cognition	TUTORIAL: Writing and analysing a paper An experiment in animal cognition/learning (Indian mynah social learning)	QUIZ 22nd March midnight ZOO report 22nd March Midnight CANVAS
5	25 Mar		No tutorial	
6	1 Apr		No tutorial	Risk Assessment 5th April midnight via email
7	8 Apr	ONLINE LECTURE: Animal communication	TUTORIAL: Communication	QUIZ 12th April
<b>Mid-Semester Recess</b>				
<b>Mid-Semester Recess</b>				
8	29 Apr	ONLINE LECTURE: Choosing where to live	TUTORIAL: Animal behaviour in wildlife conservation and management	QUIZ 3rd May midnight
9	6 May	ONLINE LECTURE: Social living	STATISTICS	QUIZ 10th May midnight Draft Scientific paper 10th May midnight CANVAS
10	13 May	ONLINE LECTURE: Same-sex sexual behaviour	Presentations	QUIZ 17th May midnight Peer review 17th May midnight CANVAS
11	20 May		Presentations	Final Paper 24th May midnight CANVAS
12	27 May	ONLINE LECTURE: Development of behaviour	No tutorial	QUIZ 31st May midnight
13	3 Jun		No tutorial	
<b>Examination Period</b>				
<b>Examination Period</b>				

# ASSESSMENTS

This course has 3 assessments. Each assessment is described in more detail in the sections below.

	Assessment Name	Due Date	Involvement	Weighting	Learning Outcomes
1	Zoo Report	22nd March midnight	Individual	30%	1, 5
2	Draft and Final Scientific Paper; Peer Reviews and Presentation	Draft 10th May midnight Review 17th May midnight Final 24th May midnight	Individual	50%	1, 2, 3, 4, 5, 6
3	Multiple choice content questions	8th March 15th March 22nd March 12th April 3rd May 10th May 17th May 31st May midnight	Individual	20%	1, 2

**Late Submissions** The mark for an assessment item submitted after the designated time on the due date, without an approved extension of time, will be reduced by 10% of the possible maximum mark for that assessment item for each day or part day that the assessment item is late. Note: this applies equally to week and weekend days.

## Assessment 1 - Zoo Report

<b>Assessment Type</b>	Report
<b>Purpose</b>	Zoo report-encourages skill development in the sampling techniques required to undertake behavioural studies. The report also fosters data interpretation skills
<b>Description</b>	Written report
<b>Weighting</b>	30%
<b>Due Date</b>	22nd March midnight
<b>Submission Method</b>	Online
<b>Assessment Criteria</b>	Rubrics available on CANVAS
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Online.
<b>Opportunity to Reattempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

## Assessment 2 - Draft and Final Scientific Paper; Peer Reviews and Presentation

<b>Assessment Type</b>	Written Assignment
<b>Purpose</b>	Draft and Final Scientific Paper- Undertaking the independent field project and writing a scientific paper has been designed to enable students to gain skills in: <ul style="list-style-type: none"> <li>- hypothesis formulation</li> <li>- experimental design and collection of field data</li> <li>- interpretation and statistical analysis of data</li> <li>- communicating findings in scientific written format</li> </ul> Peer review - the peer review process is undertaken to gain skills in critically evaluating scientific papers and to encourage reflection on your own writing
<b>Description</b>	Written assignment
<b>Weighting</b>	50%
<b>Due Date</b>	Draft 10th May midnight Review 17th May midnight Final 24th May midnight
<b>Submission Method</b>	Online
<b>Assessment Criteria</b>	Rubric on CANVAS
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Online.
<b>Opportunity to Reattempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

## Assessment 3 - Multiple choice content questions

<b>Assessment Type</b>	Quiz
<b>Purpose</b>	assesses knowledge acquisition in the field of animal behaviour
<b>Description</b>	online multiple-choice quiz
<b>Weighting</b>	20%
<b>Due Date</b>	8th March 15th March 22nd March 12th April 3rd May 10th May 17th May 31st May midnight
<b>Submission Method</b>	Online
<b>Assessment Criteria</b>	multiple choice
<b>Return Method</b>	Online
<b>Feedback Provided</b>	Online.
<b>Opportunity to Reattempt</b>	Students WILL NOT be given the opportunity to reattempt this assessment.

## ADDITIONAL INFORMATION

### Grading Scheme

This course is graded as follows:

Range of Marks	Grade	Description
85-100	High Distinction (HD)	Outstanding standard indicating comprehensive knowledge and understanding of the relevant materials; demonstration of an outstanding level of academic achievement; mastery of skills*; and achievement of all assessment objectives.
75-84	Distinction (D)	Excellent standard indicating a very high level of knowledge and understanding of the relevant materials; demonstration of a very high level of academic ability; sound development of skills*; and achievement of all assessment objectives.
65-74	Credit (C)	Good standard indicating a high level of knowledge and understanding of the relevant materials; demonstration of a high level of academic achievement; reasonable development of skills*; and achievement of all learning outcomes.
50-64	Pass (P)	Satisfactory standard indicating an adequate knowledge and understanding of the relevant materials; demonstration of an adequate level of academic achievement; satisfactory development of skills*; and achievement of all learning outcomes.
0-49	Fail (FF)	Failure to satisfactorily achieve learning outcomes. If all compulsory course components are not completed the mark will be zero. A fail grade may also be awarded following disciplinary action.

\*Skills are those identified for the purposes of assessment task(s).

### Communication Methods

Communication methods used in this course include:

### Course Evaluation

Each year feedback is sought from students and other stakeholders about the courses offered in the University for the purposes of identifying areas of excellence and potential improvement.

**Oral Interviews (Vivas)** As part of the evaluation process of any assessment item in this course an oral examination (viva) may be conducted. The purpose of the oral examination is to verify the authorship of the material submitted in response to the assessment task. The oral examination will be conducted in accordance with the principles set out in the [Oral Examination \(viva\) Procedure](#). In cases where the oral examination reveals the assessment item may not be the student's own work the case will be dealt with under the [Student Conduct Rule](#).

**Academic Misconduct** All students are required to meet the academic integrity standards of the University. These standards reinforce the importance of integrity and honesty in an academic environment. Academic Integrity policies apply to all students of the University in all modes of study and in all locations. For the Student Academic Integrity Policy, refer to <https://policies.newcastle.edu.au/document/view-current.php?id=35>.

**Adverse Circumstances** The University acknowledges the right of students to seek consideration for the impact of allowable adverse circumstances that may affect their performance in assessment item(s). Applications for special consideration due to adverse circumstances will be made using the online Adverse Circumstances system where:

1. the assessment item is a major assessment item; or
2. the assessment item is a minor assessment item, and the Course Co-ordinator has specified in the Course Outline that students may apply the online Adverse Circumstances system;
3. you are requesting a change of placement; or
4. the course has a compulsory attendance requirement.

Before applying you must refer to the Adverse Circumstance Affecting Assessment Items Procedure available at:

<https://policies.newcastle.edu.au/document/view-current.php?id=236>

**Important Policy Information** The Help button in the Canvas Navigation menu contains helpful information for using the Learning Management System. Students should familiarise themselves with the policies and procedures at

<https://www.newcastle.edu.au/current-students/respect-at-uni/policies-and-procedures>

that support a safe and respectful environment at the University.

*This course outline was approved by the Head of School. No alteration of this course outline is permitted without Head of School approval. If a change is approved, students will be notified, and an amended course outline will be provided in the same manner as the original.*

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