

<b>Module code: MOD004966</b>		<b>Version: 4    Date Amended: 12/Sep/2023</b>	
<b>1. Module Title</b>			
Cognition, Evolution and Behaviour			
<b>2a. Module Leader</b>			
Claudia Wascher			
<b>2b. School</b>			
School of Life Sciences			
<b>2c. Faculty</b>			
Faculty of Science and Engineering			
<b>3a. Level</b>			
6			
<b>3b. Module Type</b>			
Standard (fine graded)			
<b>4a. Credits</b>			
15			
<b>4b. Study Hours</b>			
150			
<b>5. Restrictions</b>			
<b>Type</b>	<b>Module Code</b>	<b>Module Name</b>	<b>Condition</b>
Co-requisites:	None		
Exclusions:	None		
<b>Courses to which this module is restricted:</b>	None		

## LEARNING, TEACHING AND ASSESSMENT INFORMATION

### 6a. Module Description

How do animals learn? Can they count? Do they think like us? You will be taught an advanced knowledge and understanding of the study of animal cognition, combining 'proximate' and 'ultimate' perspectives. We will discuss two main topics: Physical cognition, covering space, time, number, physical causation; and Social cognition, including social knowledge, social learning and cooperation. Through a series of lectures and discussion sessions, you will develop key skills, such as critical evaluation and synthesis. You will learn how to approach your critical evaluation through breaking down concepts into their core components to see how each have an effect. You will then evaluate the evidence for specific cognitive abilities in nonhuman animals, involving:

development of a conceptual definition of that ability; identification of alternative explanations; critical evaluation of existing studies in the literature; and drawing conclusions about our current state of knowledge on that cognitive ability.

This type of approach is relevant to most other fields of scientific research.

The knowledge you will gain in this module will prepare you well for any career in pure or applied animal behaviour, including welfare and conservation.

### 6b. Outline Content

- What is cognition? How can cognition be measured?
- Physical cognition
- Causal understanding, understanding of time and numbers, tool use
- Social cognition
- Social knowledge, social learning, cooperation, theory of mind
- Individual differences

### 6c. Key Texts/Literature

The reading list to support this module is available at: <https://readinglists.aru.ac.uk/>

### 6d. Specialist Learning Resources

None

7. Learning Outcomes (threshold standards)		
No.	Type	On successful completion of this module the student will be expected to be able to:
1	Knowledge and Understanding	Describe different approaches to assess cognition in non-human animals.
2	Intellectual, practical, affective and transferrable skills	Examine different concepts, theory and empirical studies relating to animal cognition.
3	Intellectual, practical, affective and transferrable skills	Evaluate the evidence for specific cognitive abilities in nonhuman animals, using a structured logical approach
4	Knowledge and Understanding	Present a clear written argument for or against the presence of specific cognitive abilities in nonhuman animals

8a. Module Occurrence to which this MDF Refers				
Year	Occurrence	Period	Location	Mode of Delivery
2025/6	ZZF	Template For Face To Face Learning Delivery		Face to Face

8b. Learning Activities for the above Module Occurrence			
Learning Activities	Hours	Learning Outcomes	Details of Duration, frequency and other comments
Lectures	11	1-2	11 x 1 hr lecture/active learning
Other teacher managed learning	25	1-3	11 x 2 hrs Discussion sessions, practical exercises + 3 hr assessment literacy
Student managed learning	114	2-4	Background reading, online activities, preparation for lectures and practicals, and completion of assessments
TOTAL:	150		

9. Assessment for the above Module Occurrence					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
010	Coursework	2-4	50 (%)	Fine Grade	30 (%)
Written Submission (1500 words)					
Assessment No.	Assessment Method	Learning Outcomes	Weighting (%)	Fine Grade or Pass/Fail	Qualifying Mark (%)
011	Coursework	1-3	50 (%)	Fine Grade	30 (%)
Written Submission (1500 words)					

In order to pass this module, students are required to achieve an overall mark of 40% (for modules at levels 3, 4, 5 and 6) or 50% (for modules at level 7\*).

In addition, students are required to:

- (a) achieve the qualifying mark for each element of fine graded assessment as specified above
- (b) pass any pass/fail elements

[\* the pass mark of 50% applies for all module occurrences from the academic year 2024/25 – see Section 3a of this MDF to check the level of the module and Section 8a of this MDF to check the academic year]