

5010



University of  
St Andrews

**PS5010:** Principal Approaches to the Origins of Mind

When: 9-11 and 2-5 on Thursdays

Where: **Lecture room 3, St Mary's College (Divinity) To Be Confirmed Wk1**

Credits: 30

Module controllers: Cat Hobaiter & Gillian Brown  
School of Psychology and Neuroscience

Core lecturers: Cat Hobaiter [clh42@st-andrews.ac.uk](mailto:clh42@st-andrews.ac.uk)  
Gillian Brown [grb4@st-andrews.ac.uk](mailto:grb4@st-andrews.ac.uk)

**AIM**

Discovering how the human mind originated in evolution, and what consequences that origin has in modern life, can be studied in a variety of ways: a truism, of course, how boring. But no: it's more than that. The range of evidence that can be used is really quite stunning, and the aim of this module is to illustrate that diversity. Of course we will look at experiments in the lab and field, at observational fieldwork and comparative analysis. But we'll also look at how the visual system works, how stone tools are made, how whale calls are analysed, how we plan our routes, the legacy of ancient hunter-gathering and pastoralism, and so on.

Each week there are two classes, one in the morning and another in the afternoon, the format is extremely varied. Some classes will be a classic lecture and discussion; others will involve hands on practical work, or student peer presentations for which you will need to prepare your own contributions. In this way you will learn a diverse set of skills ranging from critical analysis of papers and data to concise 'elevator pitch' presentation of ideas. Short reading lists for each of the classes will be made available on Moodle in Week 1, and slides for lectures will be available online the day before a class. Where reading material is provided in advance you will be expected to have read this before the class. Please check the semester timetable outline below, as it details the classes with specific activities that will require advance preparation (such as the student presentation practical) as well as class assessments.

We strongly encourage you to take advantage of the fantastic academic postgraduate community here at St Andrews.

- **Psycholoquia:** PhD and post-doctoral student talks; Thursdays 1-2pm (attendance expected).
- **Seminar:** external speakers; Fridays 1-2pm (attendance expected).
- **Bioacoustics Journal Club:** Alternate Tuesdays 12pm, discussion of journal paper over brown-bag lunch. Contact Cat to be added to email list if interested.
- **Cognition Journal Club:** Alternate Mondays 1pm, discussion of journal paper over brown-bag lunch. Contact Cat to be added to email list if interested.

**Reading suggestions**

The following books are useful touchstones while preparing for the class. You are not expected to read them cover to cover! But working through chapters that catch your interest will give you a feel for the sort of material that we will cover:

Evolving insight (RW Byrne)

Sense and Nonsense: Evolutionary perspectives on human behaviour (K Laland and G Brown)

**ASSESSMENT**

Essay 1 (40%): Critically evaluate a recent empirical paper on the evolution of human behaviour. Show how the study relates to relevant theoretical perspectives, evaluate the adequacy of its design and discuss any limitations, describe what conclusions you draw from the study, and provide ideas for future research on this topic

Max. 1500 words. Deadline: 9<sup>th</sup> October 2019 4pm upload to MMS.

Essay 2 (60%): Social cognition in non-human primates. Pick out the one empirical paper, published in the last 20-years, that you think has done the most to advance our understanding of this area. Explain why it challenged or supported prevailing conceptions of the time, what it contributed that was especially new, and in what way it could have been even more useful.

Max. 2500 words. Deadline: 29<sup>th</sup> November 2019 4pm upload to MMS.

Please do not label your essays with your names; use your matriculation number only. Word counts include figure and table legends and footnotes, but exclude figures and the reference list at the end. Referencing should be APA format. Please submit assignments as a word (or similar) text file not as a PDF.

Assignment grades will be given within 3-weeks of submission. Assignment feedback in the form of written comments on the script is made available one week before the grade is made available. All assignments are marked and the marking moderated by both of the core lecturers.

You will receive written feedback on the paper, we will give detailed advice on how to improve your writing. We expect you to take this on board during essay 2. The grading criteria sheet can be found at the end of the handbook. We strongly suggest that you read it to see what aspects will be evaluated – remember that you need to demonstrate these in your writing. Not all aspects are equally weighted in terms of the overall grade given (referencing is important but critical evaluation more so).

Please note the assignment feedback session on the 1<sup>st</sup> November – this is another chance to discuss the first assignment and ask questions on the second.

**STUDENT FEEDBACK**

If you have any concerns or ideas during the class please feel free to contact the MSc Evolutionary and Comparative Psychology co-ordinator (Dr Cat Hobaiter; ch42). General feedback on both the course as a whole and on specific lectures can be provided via the module evaluation questionnaires that will be sent out at the end of semester. Please do let us know what you think – we use the feedback to adjust and improve the course every year.

## PROVISIONAL TBC

Wk	Date	Morning (9-11am)	Afternoon (2-5pm)
1	19 Sept	Darwin and the theory of evolution (GB)	Clues to the evolution of the human mind from primate field observation (CH)
1	20 Sept	10.30am Coffee & Group meet (drop in)	
2	26 Sept	Sociobiology and human behavioural ecology (GB)	Intentionality and the gestural communication of great apes (CH)
3	3 Oct	Evolutionary psychology (GB)	Cultural evolution (GB)
3	4 Oct	10.30am Coffee & Group meet (drop in)	
<b>4</b>	<b>9 Oct</b>	<b>Submit 1500 word essay; 4pm; e-copies to MMS</b>	
4	10 Oct	Forty Years of Chasing Wild Chimpanzees (Prof. Bill McGrew)	(Dr Manon Schweinfurth) Topic TBC
5	17 Oct	Fossil cognition: what we can learn about human ancestors from paleo-archaeology (CH)	<b>Flint knapping practical</b> followed by PotLuck dinner (CH) from <b>1pm</b>
6	21-25 Oct	Independent learning week	
7	31 Oct	Comparative cognition (Prof Josep Call)	Sex differences (Dr Kate Cross)
7	1 Nov	10.30am Coffee & Group meeting (coursework feedback GB)	
8	7 Nov	Social learning in human and non-human primates (Prof. Andy Whiten)	Social learning theory: w/ fish and insects (Dr Michael Webster)
9	14 Nov	Primate navigation: the cognitive map and forward planning (Prof Richard Byrne)	<b>1.30 – 5.30pm Practical workshop</b> Marine mammals & the animal culture debate (Dr Luke Rendell)
7	15 Nov	10.30am Coffee & Group meeting (ethical applications for behavioural research CH)	
10	21 Nov	Tools, nests and causal cognition (Dr Sue Healy)	Cross-cultural developmental psychology. (Dr Erin Robbins)
11	28 Nov	Niche construction (Prof Kevin Laland)	Spatial memory in birds (Dr Sue Healy)
-	<b>29 Nov</b>	<b>Submit 2500-word essay; 4pm; e-copies to MMS</b>	

Once you've read this handbook to completion please email Dr Hobaiter a picture of your favourite dinosaur.

## PS5010 Module Grade Criteria Sheet

Grade.....	0-6.9	7	8-10	11-13	14-16	17-20
<u>Content</u>	A failure to address the topic at hand OR copying* from other sources (even if source is cited)..	Little and insubstantial reference to the issues OR over-reliance on other work (e.g. close paraphrasing*, perhaps with lack of understanding of the material).	Very patchy and limited coverage of the topic. Use of a narrow range of sources. Total reliance on secondary or out-of-date material.	Major positions/issues presented in outline, but in little depth and over-reliance on a narrow range of sources, particularly secondary sources.	Covers all the major positions and issues with use of a range of appropriate and up-to-date primary sources.	Thorough and detailed description of relevant positions, clear grasp of grasp of the core issues and widespread use of primary sources – including some independent use of sources
<u>Referencing</u>	Missing references and referencing of material not cited in the text	Minimal use of referencing	Widespread errors both in the content and style of references.	Reference list mostly comprehensive, but failure to use appropriate style in citing references	Referencing generally accurate, though some stylistic errors in the reference list	Generally thorough and proper referencing throughout.
<u>Factual accuracy</u>	Little or no accurate material	Predominantly inaccurate	Widespread substantive errors	Some substantive errors	Few substantive errors	No substantive errors, few minor errors.
<u>Relevance</u>	Little or no material relevant to the review topic	Material predominantly irrelevant to the review topic	Considerable amount of material irrelevant to the review topic	Some material irrelevant or tangential to the review topic	Some tangential material, but little material irrelevant to the review topic	Very little material irrelevant to the review topic
<u>Organisation and coherence</u>	No organisation of material	No clear structuring of the topic	Little sign of an overall basis for structuring the material, mostly a list of studies with little or no development of ideas	A discernable structuring of the topic, but often disjointed and with a limited overview of the topic as a whole	For the most part, clear structuring of the material leading to some overview of the topic	Discussion of the topic generally well structured and well developed, leading to a clear and well argued conclusion
<u>Precision of expression</u>	Absence of scientific precision in the use of terms and concepts	Minimal evidence of the ability to use terms and define concepts precisely	A few instances of scientific precision in the use of terms and concepts, but predominant sloppiness and redundancy	Signs of the ability to use precise scientific language, but still widespread instances of sloppiness and redundancy	Overall, precise use of major terms and concepts with little sloppiness or redundancy	Generally clear analytic use of language, with precise use of concepts and negligible redundancy of expression.
<u>Critical evaluation</u>	No valid evaluation of evidence	Minimal evidence of evaluation	Trivial or underspecified criticisms (e.g. 'need more research') and widespread illogical reasoning	Raises some important issues but still displays some illogical reasoning or triviality	Identifies most of the main issues relating to topic/evidence/ Methodology with few major instances of illogicality of triviality	Generally sound and thorough data evaluation. Some evidence of original thought.

This sheet is for guidance for markers to enhance consistency in evaluations. It is not intended to indicate an overall grade by application of weighted averages – sections will be weighted differently in the final determination of the overall grade, and furthermore this weighting might vary according to the nature of the specific project.

\*In some cases, the nature and extent of plagiarism will not merely attract a failing grade, but will also require referral to the Academic Disciplinary Process.