Master of Science Evolutionary and Comparative Psychology: The Origins of Mind

Programme Requirements

Evolutionary and Comparative Psychology: The Origins of Mind - MSc
150 credits from Module List: PS5005, PS5010 - PS5013 **and** 30 credits from Module List: PS4085 - PS4086, PS4096, PS5003, PS5021, PS5031

Compulsory modules:

PS5005 Methods of Data Analysis in Psychology				
SCOTCAT Credits:	30	SCQF Level 11	**Semester:**	2
Planned timetable:	12.00 noon Mon			
This module aims to ensure that students are competent in the use of advanced data analysis in psychology. This includes advanced training in common statistics (including regression, analysis of variance and multivariate techniques) plus additional training in qualitative methods. Students will also study more complex topics such as statistical modeling.				
Programme module type:	Compulsory for MSc Evolutionary and Comparative Psychology: the Origins of Mind, MSc Psychology (Conversion), MSc in Health Psychology, Compulsory for Research Methods in Psychology (MSc)			
Learning and teaching methods and delivery:	**Weekly contact**: 11 x 3-hour workshops plus optional tutorials.			
Assessment pattern:	Coursework = 100%			
Module coordinator:	Dr E Bowman			
Module teaching staff:	Dr E Bowman, Dr R Spence, Dr S Pehrson and Professor S Reicher			

PS5010 Principal Approaches to the Origins of Mind				
SCOTCAT Credits:	30	SCQF Level 11	**Semester:**	1
Planned timetable:	9.00 am Seminars, 2.00 pm practicals/tutorials.			
This module serves to introduce distinct ways of studying the origins of mind within a comparative Tinbergian framework, emphasising both functional and mechanistic accounts; why capacities exist, how they are implemented, how they evolved and how they develop. Lectures will cover general evolutionary theory and: (1) Comparative/Phylogenetic, (2) Developmental, (3) Mechanistic/causal, and (4) Functional/adaptive approaches. 'Hot' research topics will be presented using particulars of these frameworks and will exemplify the spectrum of methods possible to address the origins of mind.				
Programme module type:	Compulsory for MSc Evolutionary and Comparative Psychology: the Origins of Mind.			
Co-requisite(s):	PS5005, PS5011, PS5012, PS5013			
Learning and teaching methods and delivery:	**Weekly contact**: Seminar and tutorial/practical each week.			
Assessment pattern:	Coursework = 100%			
Module coordinator:	Dr C Hobaiter			
Module teaching staff:	Dr C Hobaiter and Dr G Brown			

PS5011 Empirical Approaches to the Evolution of Communication

SCOTCAT Credits:	15	SCQF Level 11	**Semester:**	1
Planned timetable:	To be arranged.			
This module will explore the evolution of human language and animal communication through the comparative study of communication and cognition in humans and a variety of non-human species. The module will include detailed analysis of multiple empirical approaches used in cutting-edge research in both field and laboratory. The module integrates evolutionary theory, behavioural ecology, ethology, linguistics and psychological theory to account for how and why humans and other species have evolved their unique communication skills. An important focus will be on empirical methods of testing various theories proposed for the evolution of communication and language.				
Programme module type:	Compulsory for MSc Evolutionary and Comparative Psychology: the Origins of Mind.			
Co-requisite(s):	PS5005, PS5010, PS5012, PS5013			
Learning and teaching methods and delivery:	**Weekly contact**: 10 x 3-hour sessions including seminars, tutorials and practicals over the semester.			
Assessment pattern:	Coursework = 100%			
Module coordinator:	Prof K Zuberbühler			

PS5012 Origins of Human Cognition

SCOTCAT Credits:	15	SCQF Level 11	**Semester:**	2
Planned timetable:	9.00 am seminars, 2.00 pm practicals/tutorials.			
This module focuses on the origins of human cognition from evolutionary and developmental perspectives. How do we come to parse the 'blooming buzzing confusion' of cues from our physical and social environments into meaningful representations that support functionally adaptive behaviour? In the physical world are objects, their properties and the causal underpinnings of their interactions. The social world contains agents, their actions, and their mental states. How does cognitive processing reveal cues and build representations about the causal structure of the physical and social world? This course examines how these features are perceived and processed by developing humans and other animals for adaptive behaviour, and investigates the evidence for the proximate mechanisms underlying the abilities seen. The module links together the evolution and development of different cognitive abilities with a focus on empirical comparative research.				
Programme module type:	Compulsory for MSc Evolutionary and Comparative Psychology: the Origins of Mind.			
Co-requisite(s):	PS5005, PS5010, PS5011, PS5013			
Learning and teaching methods and delivery:	**Weekly contact**: 2-hour seminars, 1.5- hour tutorials and practicals.			
Assessment pattern:	Coursework = 100%			
Module coordinator:	Dr A Seed			
Module teaching staff:	Dr A Seed			

PS5013 Research Project				
SCOTCAT Credits:	60	SCQF Level 11	**Semester:**	Summer
Planned timetable:	Not applicable.			
This aim of this module is to acquire research skills within the domain of evolutionary psychology. Students will conduct and report a research project from an evolutionary perspective. Projects may comprise field and/or laboratory-based studies, the analysis (including meta-analysis) of extant data, or the critical review and evaluation of existing literature. Students will need to demonstrate substantive contribution to the project and that the work is original. The thesis can be in any area of evolutionary psychology agreed by the student's supervisor and course coordinator, and approved by ethical review.				
Programme module type:	Compulsory for MSc Evolutionary and Comparative Psychology: the Origins of Mind.			
Co-requisite(s):	PS5005, PS5010, PS5011, PS5012			
Learning and teaching methods and delivery:	**Weekly contact**: Not applicable.			
Assessment pattern:	Coursework = 100%			
Module coordinator:	Dr K Spencer			

Optional modules:

PS4085 Evolution and Development of Social and Technical Intelligence				
SCOTCAT Credits:	15	SCQF Level 10	**Semester:**	1
Planned timetable:	11.00 am - 1.00 pm Fri			
The last two decades have witnessed a surge of research on social and technical intelligence, both in humans and an increasingly wide range of non-human animal species. This module surveys the principal discoveries, integrating field and captive studies, as well as both observational and experimental methodologies, to trace the evolution and development of aspects of social intelligence such as imitation and theory of mind, and technical intelligence, such as tool use and understanding of causality. Key aims include appreciating the range of methodologies that have been developed and how these can be used to trace the evolution and ontogeny of the underlying psychological mechanisms.				
Programme module type:	Optional for MSc Evolutionary and Comparative Psychology: the Origins of Mind.			
Learning and teaching methods and delivery:	**Weekly contact**: 2-hour seminars plus office hour.			
Assessment pattern:	Take Home Written Examination = 75%, Coursework = 25%			
Module coordinator:	Dr C Cross			

PS4086 Origins and Evolution of Mind Reading (Theory of Mind)

SCOTCAT Credits:	15	SCQF Level 10	**Semester:**	2
Planned timetable:	9.00 am - 11.00 am Fri			
The module will offer a comparative approach to the emergence of the ability to understand mental states in children and non-human primates, and its alteration in autism. This ability (also known as Theory of Mind) is at the heart of many of humans unique cognitive achievements, but their origins can be traced back in evolution and development. The course will discuss the current state of research in this area, emphasising both empirical and conceptual aspects posed by the combination of the evolutionary and developmental approaches.				
Programme module type:	Optional for MSc Evolutionary and Comparative Psychology: the Origins of Mind.			
Learning and teaching methods and delivery:	**Weekly contact**: 2-hour seminars plus office hour.			
Assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%			
Module coordinator:	Dr J-C Gomez			

PS4096 Mechanisms of Behaviour: integrating psychological and neuroscience perspectives

SCOTCAT Credits:	15	SCQF Level 10	**Semester:**	2
Planned timetable:	12.00 noon - 2.00 pm Tue			
The aim of this module is to explore some of the many physiological and neural systems that modulate patterns of behaviour in a range of species, including humans. It will highlight the importance of integrating information from psychology and neuroscience disciplines in order to further our understanding of how and why animals and humans behave the way they do in different situations. The module will deal with examples of mechanisms across different levels of complexity (from genes to physiology). The module will include lectures and student presentations/journal club discussions based around current research articles in the field and a practical session with hands on experience of a physiological technique.				
Programme module type:	Optional for MSc Evolutionary and Comparative Psychology: the Origins of Mind. Optional for MRes in Neuroscience			
Learning and teaching methods and delivery:	**Weekly contact**: 2-hour lecture (x 10 weeks), 1 practical class (x 4 weeks) plus office hour.			
Assessment pattern:	Coursework (including presentation) = 100%			
Module coordinator:	Dr K Spencer			

PS5003 Generic Research and Professional Skills in Psychology

SCOTCAT Credits:	30	SCQF Level 11	**Semester:**	Whole Year
Planned timetable:	To be arranged.			
This module introduces students to the various skills and issues that are of importance to academic psychologists irrespective of their particular area of research. Weekly seminars will cover the various topics, such as academic presentations (published writing, talks, posters), the use of technology in order to enhance communication, how to read research reports, how to gain ethical approval for research, and how to build an academic career.				
Programme module type:	Compulsory for Research Methods in Psychology (MSc) Compulsory for MSc in Health Psychology. Optional for MSc - Evolutionary and Comparative Psychology: the Origins of Mind.			
Co-requisite(s):	All seven modules are to be taken together in the same session. The 'same session' requirement may be waived at the discretion of the Head of School.			
Learning and teaching methods and delivery:	**Weekly contact**: 17 x 2-hour seminars.			
Assessment pattern:	4 elements of Coursework = 100%			
Module coordinator:	Dr S Pehrson			

PS5021 Methodologies for Psychology and Neuroscience

SCOTCAT Credits:	15	SCQF Level 11	**Semester:**	Whole Year
Planned timetable:	To be arranged.			
The primary aim of this module would be that the student gains some practical, hands-on experience, albeit rather briefly, of a number of laboratory techniques and of research methodologies as are employed by the Principal Investigators in the School of Psychology and Neuroscience. Across the course the student would experience a wide variety of methods and research practices and thereby become more aware of the possibilities of an integrative approach. The course would entail one weekly session (approx. 5 hours per week) during which the student would spend a session in the laboratory of a PI (Principal Investigator). This module would cover the research design, data collection, data analysis and the publication style of each PI. The PI would demonstrate the methodology, data collection and data analysis relevant to that laboratory and to the field in which the PI works. This may include an introductory lecture or discussion of literature relevant to the PI's field and would be followed by observation of, and basic training in the specific techniques used by the PI in conducting that research. The student would be involved in any data collection that may take place during that session, be made aware of the way in which those data are analysed by that PI's group and then shown how those results are prepared for publication and other dissemination.				
Programme module type:	Optional for MSc Evolutionary and Comparative Psychology: the Origins of Mind and Research Methods in Psychology (MSc)			
Learning and teaching methods and delivery:	**Weekly contact**: 5 hours each week for 5 weeks.			
Assessment pattern:	Coursework = 100%			
Module coordinator:	Dr K Spencer			

PS5031 Review - Approaches to the Study of Mind

SCOTCAT Credits:	15	SCQF Level 11	**Semester:**	Whole Year
Planned timetable:	To be arranged.			
This supervised review will compare and contrast different theoretical and methodological approaches to a particular topic in the study of the mind. The aim of this module is to encourage students to gain a clear picture as to what is unique about an evolutionary approach to the study of the mind, how it differs from other psychological approaches, and to gain an appreciation of the strengths and weaknesses of such an approach. Suitable topics for review will be chosen by agreement with the student's supervisor and the Course Controller.				
Programme module type:	Optional for MSc Evolutionary and Comparative Psychology: the Origins of Mind.			
Co-requisite(s):	PS5005, PS5010, PS5011, PS5012, PS5013			
Learning and teaching methods and delivery:	**Weekly contact**: 4 tutorials across the semester.			
Assessment pattern:	Coursework = 100%			
Module coordinator:	Dr E Bowman			