

## School of Psychology & Neuroscience

### Neuroscience (PN) Modules

PN3312 Pharmacology			
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b> 2
<b>Planned timetable:</b>	Lectures: 11.00 am Mon, Tues and Wed. Practicals: to be arranged.		
<p>This module assumes that students are familiar with the material covered in BL2101. The basic principles of pharmacology will be covered, including evidence to support the modern concept that drugs act via specific receptors present on target tissues and our present understanding of laws governing drug-receptor interactions. The concept of agonists, competitive and non-competitive antagonists and the interactions between such classes of drugs will be discussed. The effects of drugs upon the peripheral and central nervous systems and the cardiovascular system will be covered. How these drugs can be used to understand the function of these systems and to correct their malfunctioning in various disease states will be explained. The practical component will cover the principles of drug action and receptor theory and illustrate the use of bioassays in pharmacological investigations. These practical sessions aim to help students build a working knowledge of drug names and actions as well as pharmacological concepts.</p>			
<b>Programme module type:</b>	Compulsory for Neuroscience. Optional for Biochemistry, Biomolecular Science, Molecular Biology, Cell Biology, Biology, and all Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	BL2101 or BL2104	<b>Anti-requisite(s):</b>	BL3312
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures and seminars, plus practicals.		
	<b>Scheduled learning:</b> 37 hours	<b>Guided independent study:</b> 163 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 20%, Coursework = 14%		
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%		
<b>Module Co-ordinator:</b>	Dr G Doherty		
<b>Lecturer(s)/Tutor(s):</b>	Dr A Butler, Dr G Doherty, Dr GB Miles, Dr G Prescott, Dr R Ramsay, Prof K Sillar, Prof G Taylor		

## Psychology & Neuroscience - Honours 2013/14 - January 2014

PN3313 Neuroscience				
<b>SCOTCAT Credits:</b>	20	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	Lectures: 12.00 am Mon, Tues and Wed. Practicals: to be arranged.			
<p>This module covers biochemical, cellular and behavioural aspects of the nervous system. It starts with the basic biochemistry of neural membrane proteins such as receptors and channels, and considers the cellular mechanisms of action potential generation and propagation, and synaptic transmission. The physiology of sensory perception is illustrated by examining the visual system, while motor control is considered in terms of vertebrate locomotion. Selected aspects of learning and memory processes are examined from simple invertebrate systems through to the higher primates. Students are given extensive hands-on experience of computer simulation as a learning tool in this course. The associated practical work illustrates the lecture course through experiments on the nerve impulse, sensory processes, and the biochemistry of synaptic transmission.</p>				
<b>Programme module type:</b>	Compulsory for, Neuroscience. Optional for Behavioural Biology, Cell Biology, Evolutionary Biology, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	BL2101		<b>Anti-requisite(s):</b>	BL3313
<b>Required for:</b>	PN4230, PN4231, BL4232, PN4234, PN4235			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures and seminars, plus practicals.			
	<b>Scheduled learning:</b> 36 hours		<b>Guided independent study:</b> 164 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%			
	<b>As used by St Andrews:</b> 3-hour Written Examination = 66%, Coursework = 34%			
<b>Module Co-ordinator:</b>	Dr G Miles			
<b>Lecturer(s)/Tutor(s):</b>	Prof F Gunn-Moore, Prof K Sillar, Dr G Miles, Dr W Heitler, Dr W Li, Dr G Doherty			

PN4230 Neurodegeneration and Aging				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	BSc Hons Neuroscience students have priority on this module			
<b>Planned timetable:</b>	To be arranged.			
<p>In this module, students will develop a detailed understanding of molecular neuroscience. There will be three main sections. Firstly, how neurons stay alive (e.g. neurotrophic factor signalling cascades) is examined; then how neurons age (e.g. White matter thinning, Gliosis (neuroinflammation), and thirdly, how the nervous system responds to neurodegenerative diseases, in particular Alzheimer's disease. Work will focus at the biochemical and molecular level, so that detailed knowledge of signalling pathways including the kinase cascades from the neurotrophic factors and death pathways will be gained. The module concentrates on three key areas relating to neurodegenerative processes. 1) How neurons stay alive, for example the neurotrophic factor signalling cascades 2) The aging nervous system: Changes that can 'prime' neurons for degeneration, degenerative disorders - risks, pathology, treatments. Including a practical session looking at aging murine brains (histology) and at aging neurons and glia in vitro 3) How the nervous system responds to neurodegenerative diseases, with particular focus on Alzheimer's disease. Work will be especially at the biochemical and molecular level, so that detailed knowledge of signalling pathways including the kinase cascades from the neurotrophic factors and death pathways will be gained.</p>				
<b>Programme module type:</b>	Optional for Biochemistry, Cell Biology, Molecular Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	PN3313		<b>Anti-requisite(s):</b>	BL4230
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars			
	<b>Scheduled learning:</b> 24 hours		<b>Guided independent study:</b> 126 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 66%, Practical Examinations = 14%, Coursework = 20%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 66%, Coursework = 34%			
<b>Module Co-ordinator:</b>	Dr G Doherty			
<b>Lecturer(s)/Tutor(s):</b>	Prof F Gunn-Moore, Dr G Doherty			

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<b>PN4231 Neuromodulation</b>			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Availability restrictions:</b>	BSc Hons Neuroscience students have priority on this module		
<b>Planned timetable:</b>	To be arranged.		
<p>Until recently the nervous system was viewed as a black and white world in which neuronal networks carried out tasks using fast chemical synaptic transmission to produce an appropriate network output. However the output of neuronal networks is not fixed but instead is modifiable under different behavioural or developmental circumstances. A major source of flexibility in the output neuronal networks derives from neuromodulation; a process in which the basic operation of the networks remains the same but the strengths of synaptic connections and the integrative electrical properties of neurons in the networks are changed by the actions of a range of neuromodulators. This module explores the diverse range of neuromodulatory mechanisms and outlines their importance in information processing in the nervous system.</p>			
<b>Programme module type:</b>	Optional for Cell Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	PN3313	<b>Anti-requisite(s):</b>	BL4231
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2 seminars.		
	<b>Scheduled learning:</b> 24 hours	<b>Guided independent study:</b> 126 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 50%, Practical Examinations = 25%, Coursework = 25%		
	<b>As used by St Andrews:</b> 1-hour Written Examination = 50%, Coursework = 50%		
<b>Module Co-ordinator:</b>	Prof K Sillar		
<b>Lecturer(s)/Tutor(s):</b>	Prof K Sillar, Dr G Miles, Dr W Heitler		

<b>PN4234 Synaptic Transmission</b>			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Availability restrictions:</b>	BSc Hons Neuroscience students have priority on this module		
<b>Planned timetable:</b>	To be arranged.		
<p>Extensive and versatile communication between nerve cells using special junctions called synapses endows the nervous system with many complex functions like learning and memory. This module will cover important recent progress in understanding the morphology and ultrastructure of synapses, neurotransmitter corelease, vesicle release and recycling mechanisms, retrograde signalling, synaptic plasticity, the role of glial cells and the development of neurotransmission. Some laboratory work will provide students with hands-on experience of advanced research methods.</p>			
<b>Programme module type:</b>	Optional for Behavioural Biology, Cell Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.		
<b>Pre-requisite(s):</b>	PN3312 and PN3313	<b>Anti-requisite(s):</b>	BL4234
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, seminars and 2 practical classes.		
	<b>Scheduled learning:</b> 19 hours	<b>Guided independent study:</b> 131 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%		
<b>Module Co-ordinator:</b>	Dr W Li		
<b>Lecturer(s)/Tutor(s):</b>	Dr W Li, Prof K Sillar, Dr G Miles, Dr W Heitler		

## Psychology & Neuroscience - Honours 2013/14 - January 2014

PN4235 Motoneurons: From Physiology to Pathology				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	BSc Hons Neuroscience students have priority on this module			
<b>Planned timetable:</b>	To be arranged.			
This module aims to provide in depth knowledge of key aspects of neuronal function and potential dysfunction by focussing on one of the most studied and best characterised classes of neurons in the central nervous system, motoneurons. The module will cover topics such as: the history of motoneurons in neuroscience research; the genetics controlling motoneuron development, the intrinsic electrical properties of motoneurons; synaptic inputs received by motoneurons; motoneuron recruitment; and motoneuron disease.				
<b>Programme module type:</b>	Optional for Behavioural Biology, Cell Biology, Biology, Neuroscience, Zoology and all Biology Joint or Major/Minor Degree programmes.			
<b>Pre-requisite(s):</b>	PN3313	<b>Anti-requisite(s):</b>	BL4235	
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Lectures, seminars and 2 practical classes.			
	<b>Scheduled learning:</b> 21 hours		<b>Guided independent study:</b> 129 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr G Miles			
<b>Lecturer(s)/Tutor(s):</b>	Dr W Li, Prof K Sillar, Dr G Miles, Dr W Heitler			

PN4299 Neuroscience Research Project				
<b>SCOTCAT Credits:</b>	60	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	To be arranged with the supervisor.			
This project will involve extensive laboratory or field research to investigate a defined problem within biology or psychology, appropriate to the degree programme being studied by each student. The project will involve diligence, initiative and independence in pursuing the literature, good experimental design, good experimental and/or analytical technique either in the field or the laboratory, and excellent record keeping. The project will culminate in the production of a high-quality report that demonstrates a deep understanding of the chosen area of research. Students will be allocated to a member of staff within the School of Psychology and Neuroscience or the School of Biology who will guide and advise them in research activities throughout the academic year.				
<b>Programme module type:</b>	PN4299 or BL4200 or BL4201 is compulsory for Neuroscience.			
<b>Anti-requisite(s):</b>	BL4200, BL4201, PS4299			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Meetings with supervisor.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 567 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 35%, Coursework = 65%			
	<b>As used by St Andrews:</b> Practical Examination = 35%, Coursework = 65%			
<b>Module Co-ordinator:</b>	Prof K T Sillar			
<b>Lecturer(s)/Tutor(s):</b>	Individual Supervisors across the School of Psychology and Neuroscience or the School of Biology			

Psychology (PS) modules

PS3021 Research Design and Analysis 1				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am / 2:00 - 5:00 pm Mon.			
This module is designed to provide a basic understanding of research design and statistics that will provide the foundations for independent empirical research and critical analysis required in the final year of the Honours programme. Emphasis will be placed on the acquisition of design and analysis skills and an understanding of the underlying philosophy that guides research. The syllabus will include core aspects such as ethical issues in research, basic statistics, technical writing and the use of statistical packages.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology degrees with BPS recognition, Psychology with Biology, Psychology with Film Studies. Compulsory for BPS Recognition. Optional for Joint Honours Psychology without BPS recognition.			
<b>Required for:</b>	PS3022			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar.			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 95 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr M W Oram			
<b>Lecturer(s)/Tutor(s):</b>	Dr M W Oram, Dr K Mavor			

PS3022 Research Design and Analysis 2				
<b>SCOTCAT Credits:</b>	15	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am / 2:00 - 5:00 pm Mon.			
This module is designed to provide a more advanced understanding of research design and statistics. Emphasis will be placed on the acquisition of analytical skills covering typical research situations encountered in the behavioural sciences. The syllabus will include advanced analysis of variance, multivariate statistics and non-parametric statistics, as well as training in computerised data analysis and presentation.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology degrees with BPS recognition, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory for BPS Recognition. Optional for Joint Honours Psychology without BPS recognition.			
<b>Pre-requisite(s):</b>	PS3021			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar.			
	<b>Scheduled learning:</b> 55 hours		<b>Guided independent study:</b> 95 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 60%, Coursework = 40%			
<b>Module Co-ordinator:</b>	Dr P Foldiak			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Foldiak and Mr P L Gardner			

## Psychology & Neuroscience - Honours 2013/14 - January 2014

PS3031 Conceptual Issues and Theoretical Perspectives				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Thu. (first half of semester)			
This module addresses the historical and philosophical background to current debates in psychology. The module will be taught via lectures and seminars including student presentations. Emphasis will be placed on the development of critical analysis of alternative models and levels of explanations of behaviour, and the ability to relate conceptual debates in psychology to issues in the real world.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory module for BPS Recognition.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar (only first half of semester).			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Mr P L Gardner			
<b>Lecturer(s)/Tutor(s):</b>	Mr P L Gardner			

PS3032 Assessment in Clinical Psychology				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Thu. (second half of semester).			
This module presents psychopathological conditions and provides a basic understanding of the underlying neuronal and/or cognitive-behavioural mechanisms. Examples will be drawn from the field of clinical psychology and/or clinical neuropsychology. The module will further explore in detail the tools and procedures used to assess psychopathological conditions by discussing their theoretical/statistical background and by demonstrating how to use these tools in clinical and experimental settings.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory module for BPS Recognition.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar (second half of semester).			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr D Balslev			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Balslev			

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<b>PS3033 Developmental Psychology</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Thu. (first half of semester)			
This module is designed to equip students with an appreciation of key principles, concepts, methods and discoveries in developmental psychology, with an emphasis on evolutionary and comparative perspectives that are a particular strength of such work in St Andrews. The module aims to offer a broad perspective spanning infancy to childhood, and a range of key topics in cognitive and social development.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory module for BPS Recognition.			
<b>Anti-requisite(s):</b>	PS3010 and PS3011			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar (first half of semester).			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr A Lucas			
<b>Lecturer(s)/Tutor(s):</b>	Dr A Lucas			

<b>PS3034 Social Psychology</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Tue. (first half of semester)			
This module explores in depth key topics across the breadth of social psychological enquiry. A variety of research approaches will be examined in order to develop the scientific understanding and critical skills in this field. Approaches that will be covered include social cognition, social identity and the study of intergroup relations. In each case, the strengths and limitations of the approaches are explored, and theoretical knowledge will be linked to current events.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory module for BPS Recognition.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar (first half of semester).			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K Mavor			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Mavor			

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PS3035 Cognitive and Behavioural Neuroscience				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Academic year:</b>	2013/4			
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Tue. (first half of semester).			
This module aims to provide an understanding of psychological knowledge in several inter-related domains concerned with the biological bases of behaviour. Emphasis will be laid on basic experimental science from analysis of molecular and synaptic events, single cell studies, brain activity scans, and clinical studies, and the relationship between cognitive, emotional, behavioural, neurological and physiological processes will be examined.				
<b>Programme module type:</b>	Compulsory for Neuroscience, Single Honours Psychology. Either PS3035 or PS3036 is a compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar (first half of semester).			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr I Jentsch			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Jentsch			

PS3036 Evolutionary and Comparative Psychology				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Tue. (second half of semester).			
This module will address evolutionary and comparative approaches to psychology. The aim is to provide an understanding of major evolutionary forces and how they have shaped animal and human behaviour and psychology. Key principles, concepts and methodologies will be introduced and related to specific topic areas such as the evolution of social behaviour and the evolutionary origins of language and cognition.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology. Either PS3035 or PS3036 is a compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar (second half of semester).			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Hobaiter			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Hobaiter			



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<b>PS3037 Perception</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Tue. (second half of semester).			
<p>The aim of this module is to develop an understanding of visual perception and its functions. Stress will be laid on the integration of findings from physiology, neuropsychology, anatomy, and psychophysics. Topic areas covered will include theories of human vision and their application to understanding our ability to perceive distinct visual properties, for example the shape, size, location and identity of objects. Emphasis will be placed on the development of the skill of critical evaluation of evidence and theory.</p>				
<b>Programme module type:</b>	Compulsory for Neuroscience, Single Honours Psychology. Either PS3037 or PS3038 (normally PS3038) is a compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar (second half of semester).			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Prof J Harris			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Harris			

<b>PS3038 Cognition</b>				
<b>SCOTCAT Credits:</b>	10	SCQF Level 9	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am and 2.00 pm - 5.00 pm Thu. (second half of semester).			
<p>The aim of this module is to develop an understanding of human memory and attention. Topic areas covered will include theories of attention, short and long term memory, processes involved in memory encoding, maintenance and retrieval. Emphasis will be placed on the development of the skill of critical evaluation of evidence and theory. Lectures will be accompanied by practical classes, in which students will gain experience of the experimental methods used in cognitive research, and seminars in which research papers will be critically evaluated.</p>				
<b>Programme module type:</b>	Compulsory for Neuroscience, Single Honours Psychology. Either PS3037 or PS3038 (normally PS3038) is a compulsory for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography and for BPS Recognition.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 2-hour lecture and 1 x 3-hour laboratory class or seminar (second half of semester).			
	<b>Scheduled learning:</b> 27 hours		<b>Guided independent study:</b> 73 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
	<b>As used by St Andrews:</b> 1.5-hour Written Examination = 100%			
<b>Module Co-ordinator:</b>	Dr J G Quinn			
<b>Lecturer(s)/Tutor(s):</b>	Dr J G Quinn			

## Psychology & Neuroscience - Honours 2013/14 - January 2014

PS4040 Psychology Review				
<b>SCOTCAT Credits:</b>	10	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	Not applicable.			
This module will foster the abilities needed to search, collate and integrate an extensive area of psychological literature. Emphasis will be placed on analytical and methodological issues, and this module therefore complements PS3021 and PS3022. A systematic approach to the analysis of a specific body of literature will be encouraged. Students are invited to identify preferred subject matters so long as they fall within the area of the supervisor's expertise. Supervision will be given to aid students in the collation, planning and organisational phases of their work. The review will be limited to 5,000 words.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography. Compulsory for BPS Recognition.			
<b>Co-requisite(s):</b>	PS3021 and PS3022. This module is normally completed in the first year of the Honours Programme.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision by pre-assigned member of staff.			
	<b>Scheduled learning:</b> 10 hours		<b>Guided independent study:</b> 90 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Review = 100%			
<b>Module Co-ordinator:</b>	Dr J G Quinn			
<b>Lecturer(s)/Tutor(s):</b>	Dr J G Quinn			

PS4050 Psychology Project				
<b>SCOTCAT Credits:</b>	30	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Planned timetable:</b>	Not applicable.			
The aim of the project is to develop and foster the skills of experimental design, appropriate research management and statistical analysis. A wide choice of topics is possible, but the skills developed in modules PS3021, PS3022 and PS4040 are an essential preparation. The empirical part of the project may be conducted with another student, to allow greater research scope and the choice of more realistic problems, but all analysis and report-writing must be carried out individually. Topics range over all areas of psychology under active investigation in the School, and effort is made to arrange for students to work in one of their preferred areas.				
<b>Programme module type:</b>	Compulsory for Single and Joint Honours Psychology with BPS recognition. BL4200 or BL4201 or PS4050 are compulsory for Neuroscience. BL4200 or PS4050 is compulsory for Psychology with Biology. Compulsory for BPS Recognition.			
<b>Pre-requisite(s):</b>	PS4040, PS3021 and PS3022.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> Individual supervision by pre-assigned member of staff			
	<b>Scheduled learning:</b> 30 hours		<b>Guided independent study:</b> 270 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Dissertation = 100%			
<b>Module Co-ordinator:</b>	Dr J G Quinn			
<b>Lecturer(s)/Tutor(s):</b>	Dr J G Quinn			

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<b>PS4060 Review Essay</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	Whole Year
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	To be arranged.			
In this module candidates will choose a title from a range of topics and questions and write an unsupervised review essay addressing it. Titles will be designed to allow candidates both to tackle an issue of current active interest in psychology and to display their ability to appreciate links between material from different areas of psychological inquiry.				
<b>Programme module type:</b>	Compulsory for Single Honours Psychology. Optional for Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography.			
<b>Anti-requisite(s):</b>	BL4200			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 3 x 2-hour workshops in Semester 1			
	<b>Scheduled learning:</b> 6 hours		<b>Guided independent study:</b> 144 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Essay = 100%			
<b>Module Co-ordinator:</b>	Dr J G Quinn			
<b>Lecturer(s)/Tutor(s):</b>	Dr E Bowman			

<b>PS4064 Working Memory</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed.			
This module will have both a theoretical and an applied aspect. It will illustrate how cognitive models are developed, what type of evidence is important in sustaining this development and the weight of evidence required to significantly alter the direction of such development. In its theoretical aspect, the module will investigate an influential model of memory - the Working Memory Model. The model is wide-ranging with aspects concerned with verbal and visual memory and with attention. Increasingly, there is neuropsychological input to the models development. In its applied aspects, the module will acknowledge the fact that WM is often used as a theoretical backdrop to our understanding of a variety of different 'real life' matters. Teaching will be based on seminars in which class members will be expected to play an active part, contributing on the basis of their own extensive reading. Emphasis will be placed on development of the skill of critical evaluation of research reports, and those skills necessary for going beyond current topics into future directions of research.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr J G Quinn			
<b>Lecturer(s)/Tutor(s):</b>	Dr J G Quinn			

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PS4065 Vision: from Neurons to Awareness				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	9.00 am - 11.00 am Fri.			
<p>The aim of the module is to develop an advanced understanding of the psychological processes involved in visual perception. The module will illustrate how a full understanding of perception requires scientific study at a number of levels, from the whole human, moving apparently effortlessly through our complex and sometimes dangerous environment, through neuropsychological studies exploring what happens when selective damage occurs, to the functioning of the individual neurons that underlie our ability to perceive an apparently continuous, colourful, three-dimensional world.</p> <p>The module will cover selected topics that illustrate the extraordinary range of problems our perceptual systems solve in the real world, including: active vision (how do our visual systems allow us to function fast enough to drive a car, play fast-action sports), three-dimensional vision (why and how do we perceive the world as three-dimensional), material perception (how do we perceive things as dirty, smooth, shiny, patterned), visual consciousness (is perception necessarily conscious, and is it possible to explore consciousness scientifically?).</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Prof J Harris			
<b>Lecturer(s)/Tutor(s):</b>	Prof J Harris			

PS4066 Neural Modelling				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Normally available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	9.00 am - 11.00 am Fri.			
<p>This module aims to develop an understanding of some of the fundamental principles of brain function in terms of the information processing involved in psychological phenomena and working models of specific neural circuits in the brain. Teaching will be based on seminars in which class members will be expected to play an active part, contributing on the basis of their extensive reading. Emphasis will be placed on developing the skill of critical evaluation of research reports, and those skills necessary for going beyond current topics into future directions of research. There will be some flexibility on the choice of topics to be covered by the seminars, but they may include some of the following topics: models of processes involved in perception, memory, neural organisation (e.g. neural maps), the representation of information and knowledge (e.g. neural coding and decoding) and models of cognitive processes.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr P Foldiak			
<b>Lecturer(s)/Tutor(s):</b>	Dr P Foldiak			

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<b>PS4071 Behavioural Neuroscience</b>			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri.		
<p>The overall aim of this module is to allow students access to current research in the area of behavioural neuroscience. Possible topics include motivation, learning and attention. Past themes explored in the module include: the relationship between 'normal' learning and addiction; the transition from goal-directed action to stimulus-response habit; the neural basis of compulsive gambling; the efficacy of biological treatments of addiction; and the behavioural and neural effects of MDMA ('ecstasy'). Results from both human and animal research will be considered in parallel, with examples of papers ranging from molecular neuroscience to neuropsychology. The format of the module will include lectures (which are designed to provide the students with the background necessary to read research articles); guided seminars and student presentations summarising research articles. In order to maximise the benefits of the students' presentations, each student will meet with the lecturer at least twice to discuss the topic and content of their talk.</p>			
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology degrees, Psychology with Biology, Psychology with Film Studies, Psychology with Geography		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%		
<b>Module Co-ordinator:</b>	Dr E M Bowman		
<b>Lecturer(s)/Tutor(s):</b>	Dr E M Bowman		

<b>PS4074 Cognitive Psychology and the Emotional Disorders</b>			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	9.00 am - 11.00 am Thu		
<p>This module is designed to demonstrate how theories from cognitive psychology can enhance our understanding of the emotional disorders Teaching will be based on individual seminar presentations followed by class discussion. In the presentations students will be expected to review and critically evaluate original research. Seminars will focus on topics such as autobiographical memory and depression, autobiographical memory and anxiety, attentional bias in depression and anxiety, and interpretative biases in depression and anxiety. At the end of the seminar series, students should understand how depression and anxiety can be differentiated on the basis of these biases.</p>			
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.		
	<b>Scheduled learning:</b> 33 hours	<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%		
<b>Module Co-ordinator:</b>	Dr B Dritschel		
<b>Lecturer(s)/Tutor(s):</b>	Dr B Dritschel		

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PS4079 Sex Differences and Gender Development				
<b>SCOTCAT Credits:</b>	15		<b>Semester:</b>	2
<b>Availability restrictions:</b>	Only available to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon.			
This advanced-level module will examine the evidence for sex differences in human behaviour and explore how gender develops across the lifespan. Students will learn how hormones, such as testosterone and estrogen, influence brain function and behaviour in non-human animals and will apply this knowledge to human data. Example topics include sexual behaviour (including sexual orientation), aggression, memory, sex differences in mental health, and the evolution of sex differences. Teaching will be based on student-led seminars with supporting lectures. Emphasis will be placed on critical evaluation and the ability to relate scientific data to broader debates regarding sex differences in behaviour.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminar.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr G Brown			
<b>Lecturer(s)/Tutor(s):</b>	Dr G Brown			

PS4083 Psychology of Music				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Mon.			
The aim of the module is to introduce students to psychological processes underlying music perception, cognition, and performance. The relationship between musical phenomena and mental functions will be illustrated. The module will cover different aspects of music perception including psychoacoustics and sound perception, music cognition including music memory emotion and expectancies, skilled performance as well as abnormalities in music perception and performance. The module will be taught in the form of seminars including student presentations. Emphasis will be placed on the development of critical thinking and the ability to relate conceptual debates in psychology to issues in the real world.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr I Jentsch			
<b>Lecturer(s)/Tutor(s):</b>	Dr I Jentsch			

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<b>PS4084 The Psychology of Visual Art</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Thu.			
This module will explore the value and limitations of a scientific approach to understanding visual art, and the extent to which a neurological theory of aesthetic experience is possible. These questions will be addressed from evolutionary, cognitive and neurological perspectives. Examples of specific topics that will be tackled include: can the appreciation of art be reduced to a set of physiological responses?; is it possible to describe laws of aesthetic experience?; can particular works or art be understood in terms of the known properties of the visual system?; what happens to visual artists with neuropsychological deficits? The module will be based on a critical analysis of contemporary scientific studies in the field.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr D Vishwanath			
<b>Lecturer(s)/Tutor(s):</b>	Dr D Vishwanath			

<b>PS4085 Evolution and Development of Social and Technical Intelligence</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to undergraduate students in the second year of the Honours Programme. Also available to postgraduate students on M.Sc. Evolutionary and Comparative Psychology: the Origins of Mind			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Thu.			
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.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography Optional for M.Sc. Evolutionary and Comparative Psychology: the Origins of Mind.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr C Cross			
<b>Lecturer(s)/Tutor(s):</b>	Dr C Cross			

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PS4086 Origins and Evolution of Mind Reading (Theory of Mind)				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to undergraduate students in the second year of the Honours Programme. Also available to postgraduate students on M.Sc. in Evolutionary and Comparative Psychology: the Origins of Mind			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Tue.			
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.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography Optional for M.Sc. Evolutionary and Comparative Psychology: the Origins of Mind.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr J-C Gomez			
<b>Lecturer(s)/Tutor(s):</b>	Dr J-C Gomez			

PS4088 Emotion				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	11.00 am - 1.00 pm Wed.			
This seminar-based module involves readings and discussions on psychological theories of human emotion. The following questions are examined in detail: What constitutes an emotion? Are there basic emotions universal to all humans? Or do experiences of emotion differ across cultures? How are emotions different (or the same) from moods and feelings? The module includes topics on emotion and motivation; social psychological perspectives on emotion; the interface between affect and cognition; cultural variation in emotion; biological and evolutionary bases; and papers on specific emotions such as anger, happiness, guilt, shame, and disgust. Critical analysis of theory and research on emotion is emphasised.				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
	<b>As used by St Andrews:</b> 2-hour Written Examination = 75%, Coursework = 25%			
<b>Module Co-ordinator:</b>	Dr S Sheikh			
<b>Lecturer(s)/Tutor(s):</b>	Dr S Sheikh			



PS4089 Neural Basis of Episodic Memory				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri.			
<p>This module will examine how the brain enables us to remember information from our personal experience. It will present students with cutting edge research using both humans and animals that gives us an insight into how the psychological components of episodic memory can be represented and processed by the brain. We will go on to look at how this type of research is applied in fields such as future thinking and memory decline in dementia. The course will include lectures and student presentations based around current research articles in the field.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, and Neuroscience.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 2-hour seminars plus tutorial time.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr J A Ainge			
<b>Lecturer(s)/Tutor(s):</b>	Dr J A Ainge			

PS4090 Face Perception and Human Attraction				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.			
<b>Planned timetable:</b>	9.00 am - 11.00 am Wed.			
<p>This advanced-level module will focus on face perception. The aim is to provide understanding of the development and evolutionary basis of driving forces behind human relationships and knowledge of the biological basis and psychological manifestations of these influences. Topics include: the neural basis of face attraction; development of face preferences; hormone influences on preferences and competition; sexual selection, kin selection; facial cues to health and social behaviour. Teaching will be based on the origin of individual differences, and the interaction between experience and biological factors in shaping human mate choice.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, and Neuroscience.			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 0.5-hour lectures, 1.5-hour seminars and 1-hour tutorials throughout the semester.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Prof D Perrett			

PS4091 <del>Modelling and</del> Computer-aided Research			
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b> 1
<b>Availability restrictions:</b>	Available only to students in the second year of the Honours Programme.		
<b>Planned timetable:</b>	11.00 am - 1.00 pm Fri.		
<p>As research becomes ever more computationally intense, the ability to use modern research software is becoming indispensable. This practical module will offer an introduction to computational modelling and provide you with the skills necessary to apply it in your research. Emphasis will be put on using scientific scripting languages in a research context. This module will build on the statistical techniques learned in previous modules and introduce modelling techniques, and imaging, stimulus presentation, and data visualisation.</p>			
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, and Neuroscience.		
<b>Pre-requisite(s):</b>	PS3021, PS3022		
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 lecture and 1 seminar plus tutorial time.		
	<b>Scheduled learning:</b> 22 hours	<b>Guided independent study:</b> 128 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%		
	<b>As used by St Andrews:</b> <del>2-hour Written Examination = 60%</del> , Coursework = 100%		
<b>Module Co-ordinator:</b>	Dr D W Hunter		
<b>Lecturer(s)/Tutor(s):</b>	Dr D W Hunter		

PS4092 The Evolutionary Psychology of Religion and Belief				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am Thu.			
<p>This module allows students to enhance their understanding of how evolution has shaped human psychology through the intriguing question of how religions emerged and persist. It explores the application of the theoretical framework of evolutionary psychology to this question through topics such as religion and emotion; the ascription of agency and causation; cooperation and social cohesion; the evolution of morality; religious practices as costly signals; the effect of religion on psychological and physical wellbeing. Teaching is based on lectures introducing each subtopic and student-led seminars emphasizing both conceptual and empirical aspects of this newly emerging field of study.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar, 1 x 1-hour tutorial.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr K Arnold			
<b>Lecturer(s)/Tutor(s):</b>	Dr K Arnold			

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PS4093 The Psychology of Dementia <b>(SUBJECT TO APPROVAL)</b>				
<b>SCOTCAT Credits:</b>	15	SCQF Level 10	<b>Semester:</b>	2
<b>Planned timetable:</b>	9.00 am - 11.00 am Wed			
<p>This module will examine the psychology of dementia focusing on the cognitive and psychosocial impact on individuals with a diagnosis and those who care for them. Students will examine patterns of both lost and retained cognitive skills in people with dementia. We will then focus on how retained skills can be maximised and how the caregiving experience can be improved for both people living with dementia and their caregivers. The course will include lectures and student presentations based around current research articles in the field.</p>				
<b>Programme module type:</b>	Optional for Single and Joint Honours Psychology, Psychology with Biology, Psychology with Film Studies, Psychology with Geography			
<b>Learning and teaching methods and delivery:</b>	<b>Weekly contact:</b> 1 x 1-hour lecture, 1 x 1-hour seminar, 1 x 1-hour tutorial.			
	<b>Scheduled learning:</b> 33 hours		<b>Guided independent study:</b> 117 hours	
<b>Assessment pattern:</b>	<b>As defined by QAA:</b> Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	<b>As used by St Andrews:</b> Coursework = 100%			
<b>Module Co-ordinator:</b>	Dr M Ellis			
<b>Lecturer(s)/Tutor(s):</b>	Dr M Ellis			