School of Psychology & Neuroscience

Neuroscience (PN) modules

PN33	PN3312 Neuropharmacology							
	SCOTCAT Credits:	AT Credits: 20 SCQF Level 9 Semester 2						
	Academic year: 2018/9							
	Planned timetable:	Lectures: 11 00 an	ectures: 11.00 am Mon. Tue and Wed Practicals: to be arranged					

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.

Pre-requisite(s):	Before taking this module you must pass at least 2 modules from {BL2301, BL2302, BL2305, BL2306}		
Anti-requisite(s)	You cannot take this module if you take BL3312		
Learning and teaching methods of delivery:	Weekly contact : Lectures and tutorials: 27 hours in total, Usually 3 lectures or tutorials (x 11 weeks) Practicals: 2 x 3 hours during the semester.		
methods of delivery:	Scheduled learning: 33 hours Guided independent study: 1		
A	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
Assessment pattern:	As used by St Andrews: 3-hour Written Examination = 60%, Coursework = 40%		
Re-assessment pattern:	3-hour Written Examination = 100%		
Module teaching staff:	Dr A Butler, Dr G Doherty, Dr W Li, Dr G B Miles, Dr R Ramsay, Dr K Spencer, D Aitken		

PN3313 Neuroscience							
	SCOTCAT Credits:	20	SCQF Level 9	Semester	1		
Academic year: 2018/9							
	Planned timetable:	Lectures: 12.0	ectures: 12.00 am Mon, Tue and Wed Practicals: to be arranged.				

This module covers biochemical, cellular and behavioural aspects of the nervous system in health and disease. 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 also examined. 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, and mechanisms of neuronal cell loss.

Pre-requisite(s):	Before taking this module you must pass BL2301 and pass BL2305		
Anti-requisite(s)	You cannot take this module if you take BL3313		
Learning and teaching	Weekly contact : 29 hours of lectures or tutorials in total, 3 x 3-hour practicals and 4 hours of labs during the semester.		
methods of delivery:	Scheduled learning: 42 hours	Guided independent study: 158 hours	
A m - m t m - ett - m m -	As defined by QAA: Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%		
Assessment pattern:	As used by St Andrews: 3-hour Written Examination = 60%, Co.	ursework = 40%	
Re-assessment pattern:	3-hour Written Examination = 100%		
Module coordinator:	Prof G B Miles		
Module teaching staff:	Prof F Gunn-Moore, Prof K Sillar, Dr S Pulver, Dr G Miles, Dr W Heitler, Dr W Li, Dr G Doherty		

PN3321 Advanced Critical Analysis Reading Party SCOTCAT Credits: 10 SCQF Level 9 Semester Summer Holiday before start of session Academic year: Planned timetable: To be arranged

An introductory residential module to Honours study for students studying Neuroscience, Psychology and Biology degrees held at the Burn (or equivalent location) between the resit diet and the start of semester 1. This module introduces students to the skill of critically analysing scientific literature and the methodology behind preparing research proposals. Students will work in groups to analyse and assess a grant proposal and present their ideas to a mock research grant panel. In response to detailed feedback students can improve their skills and finally submit an extended referees report on a real grant proposal.

Learning and teaching	Weekly contact: 5 day residential course, 8 hours per day		
methods of delivery:	Scheduled learning: 16 hours	Guided independent study: 84 hours	
Accessment matterns	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
Assessment pattern: As used by St Andrews: Coursework = 100%			
Re-assessment pattern:	Coursework = 100%		
Module coordinator:	Prof G B Miles		
Module teaching staff:	Dr G Miles, Dr S Pulver , Dr E Robbins Sillar	, Dr G Doherty, Dr W Li, Dr M Zwart, Prof K	

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SCOTCAT Credits:	15	SCQF Level 10	Semester	1
Academic year:	2018/9			
Availability restrictions:	BSc Hons Neuroscience students have priority on this module			
Planned timetable:	Seminars: 3.00 pm - 4.00 Mon, 1.00 pm - 2.00 pm Thu (weeks 1-5); Seminars: 12.00 pm - 2.00 pm Thu (weeks 7 and 9-11); Labs: 2.00 pm - 5.00 pm Tues, Wed (week 8)			

In this module, students will develop a detailed understanding of molecular neuroscience. Work will focus at the biochemical and molecular level, so that detailed knowledge of signalling pathways will be gained. The module concentrates on three key areas relating to neurodegenerative processes. 1) How neurons stay alive 2) The aging nervous system: Changes that can 'prime' neurons for degeneration, degenerative disorders - risks, pathology, treatments. Including a practical session 3) How the nervous system responds to neurodegenerative diseases, with particular focus on Alzheimer's disease.

Pre-requisite(s):	Before taking this module you must pass PN3313 and pass BL3303		
Anti-requisite(s)	You cannot take this module if you take BL4230		
Learning and teaching	Weekly contact : Seminars: up to 2 hours per week (to a total of 18 hours) and 2 x 3-hour practicals during the semester.		
methods of delivery:	Scheduled learning: 24 hours Guided independent study: 126		
	As defined by QAA: Written Examinations = 66%, Practical Examinations = 0%, Coursework = 34%		
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 66%, Coursework = 34%		
Re-assessment pattern:	2-hour Written Examination = 100%		
Module teaching staff:	Prof F Gunn-Moore, Dr G Doherty, Dr	M Andrews	

PN4231 Neuromodulation SCOTCAT Credits: 15 SCQF Level 10 Semester 2 Academic year: 2018/9 Availability restrictions: BSc Hons Neuroscience students have priority on this module Planned timetable: Lectures: 11.00 am - 12.00 noon Tue and 10.00 am - 11.00 am Fri. Practicals to be arranged.

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.

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Pre-requisite(s):	Before taking this module you must pass PN3313	
Anti-requisite(s)	You cannot take this module if you take BL4231	
Learning and teaching	Weekly contact: 2 seminars.	
methods of delivery:	Scheduled learning: 24 hours	Guided independent study: 126 hours
Assessment pattern:	As defined by QAA: Written Examinations = 50%, Practical Examinations = 25%, Coursework = 25%	
, , , , , , , , , , , , , , , , , , ,	As used by St Andrews: 1.5-hour Written Examination = 50%, C	Coursework = 50%
Re-assessment pattern:	1.5-hour Written Examination = 100%	
Module coordinator:	Dr S Pulver	
Module teaching staff:	Dr S Pulver, Prof K Sillar, Dr G Miles, Dr W Li, Dr W Heitler	

PN42	PN4234 Synaptic Transmission						
	SCOTCAT Credits:	15	SCQF Level 10	Semester	2		
	Academic year:	2018/9 BSc Hons Neuroscience students have priority on this module					
	Availability restrictions:						
	Planned timetable:	Lectures: 11.00 am - 12:30 pm Wed and 12.00 noon - 1.00 pm Fri. Practicals to be arranged.					

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 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.

Pre-requisite(s):	Before taking this module you must pass PN3313		
Anti-requisite(s)	You cannot take this module if you take BL4234		
Learning and teaching	Weekly contact : A total of 6 x 1.5 hour hour practicals over 10 weeks	r seminars, 7 x 1 hour lectures and 2 x 3	
methods of delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
	As defined by QAA: Written Examinations = 60%, Practical Examinations = 20%, Coursework = 20%		
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 60%, Co.	ursework = 40%	
Re-assessment pattern:	2-hour Written Examination = 100%		
Module coordinator:	Dr W Li		
Module teaching staff:	Dr W Li, Dr S Pulver, Dr G Miles		

35 iviotoneurons: Fro	m Physiology to	Pathology				
SCOTCAT Credits:	15	SCQF Level 10	Semester	1		
Academic year:	2018/9					
Availability restrictions:	BSc Hons Neurosc	BSc Hons Neuroscience students have priority on this module				
Planned timetable:	Lectures : 2.00 pn arranged.	Lectures: 2.00 pm - 3.00 pm Mon and 9.00 am - 10.30 am Fri. Practicals to be arranged.				
dysfunction by focussing onervous system, motone neuroscience research;	on one of the most eurons. The modul the genetics con	vide in depth knowledge of key aspects of neuronal function and potential none of the most studied and best characterised classes of neurons in the central urons. The module will cover topics such as: the history of motoneurons in the genetics controlling motoneuron development, the intrinsic electrical ns; synaptic inputs received by motoneurons; motoneuron recruitment; and				
Pre-requisite(s):	Before taking this	module you must pa	ass PN3313			
Anti-requisite(s)	You cannot take t	his module if you tak	e BL4235			
	Weekly contact : 10 hours of seminars, 6 hours of lectures and 6 hours of practical over the semester.					
Learning and teaching	•		s, 6 hours of lectures and	6 hours of		
_	•	semester.	Guided independent st			
methods of delivery:	practical over the Scheduled learning As defined by QA	semester. ng: 22 hours A:		udy: 128 hours		
methods of delivery:	practical over the Scheduled learnin As defined by QA Written Examinat As used by St And	semester. ng: 22 hours A: tions = 60%, Practica	Guided independent st Examinations = 0%, Cou	udy: 128 hours		
methods of delivery:	practical over the Scheduled learnir As defined by QA Written Examinat As used by St And 2-hour Written Ex	semester. ng: 22 hours A: tions = 60%, Practica	Guided independent st Examinations = 0%, Cou	udy: 128 hours		
methods of delivery: Assessment pattern:	practical over the Scheduled learnir As defined by QA Written Examinat As used by St And 2-hour Written Ex	semester. ng: 22 hours A: tions = 60%, Practica lrews: tamination = 60%, Co	Guided independent st Examinations = 0%, Cou	udy: 128 hours		

SCOTCAT Credits:	60	SCQF Level 10	Semester	Full Year
Academic year:	2018/9	1		1
Availability restrictions:	Not automatically	y available to Genera	al Degree students	
Planned timetable:	To be arranged w	ith the supervisor.	-	
and excellent record kee demonstrates a deep und of staff within the School	derstanding of the	chosen area of resea	rch. Students will be	allocated to a mem
			School of Biology wr	no will guide and adv
	es throughout the	academic year.		
them in research activitien Pre-requisite(s): Anti-requisite(s)	Before taking this You cannot take t	academic year. s module you must p	ass PN3312 and pass ke BL4200 or take BL	s PN3313
Pre-requisite(s): Anti-requisite(s)	Before taking this You cannot take to or take PS4299 or	academic year. s module you must p this module if you ta	ass PN3312 and pass ke BL4200 or take BL e PS4797	s PN3313
Pre-requisite(s): Anti-requisite(s) Learning and teaching	Before taking this You cannot take to or take PS4299 or	academic year. s module you must p this module if you ta r take PS4796 or tak Meetings with supe	ass PN3312 and pass ke BL4200 or take BL e PS4797 rvisor	s PN3313
Pre-requisite(s): Anti-requisite(s) Learning and teaching methods of delivery:	Before taking this You cannot take to or take PS4299 or Weekly contact: Scheduled learni As defined by QA	academic year. s module you must p this module if you ta r take PS4796 or tak Meetings with supe ng: 33 hours AA:	ass PN3312 and pass ke BL4200 or take BL e PS4797 rvisor	s PN3313 .4201 or take PS405 ent study: 567 hour
Pre-requisite(s): Anti-requisite(s) Learning and teaching	Before taking this You cannot take to or take PS4299 of Weekly contact: Scheduled learni As defined by QA Written Examina As used by St And	academic year. s module you must p this module if you ta r take PS4796 or tak Meetings with supe ng: 33 hours AA: utions = 0%, Practical	hass PN3312 and pass ke BL4200 or take BL e PS4797 rvisor Guided independe Examinations = 35%	s PN3313 .4201 or take PS40! ent study: 567 hour
Anti-requisite(s) Learning and teaching methods of delivery:	Before taking this You cannot take to or take PS4299 of Weekly contact: Scheduled learni As defined by QA Written Examina As used by St And Practical Examina	academic year. s module you must p this module if you ta r take PS4796 or tak Meetings with supe ng: 33 hours AA: ations = 0%, Practical drews: ation = 35%, Coursev ation = 35%, Coursev	hass PN3312 and pass ke BL4200 or take BL e PS4797 rvisor Guided independe Examinations = 35%	s PN3313 _4201 or take PS40! ent study: 567 hour s, Coursework = 659

Psychology (PS) modules

PS302	21 Research Design ar	nd Analysis 1			
	SCOTCAT Credits:	15	SCQF Level 9	Semester	1
	Academic year:	2018/9			
	Availability restrictions:	Not available to G	eneral Degree Studer	nts.	
	Planned timetable:	Lectures: 9.00 am 5	- 11.00 am Mon. 1-h	our practical: one of Mo	n 1-2, 2-3, 3-4, 4-

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.

Pre-requisite(s):	Before taking this module you must pass PS2002			
Learning and teaching	Weekly contact : 1 x 2-hour lecture and 1 x 1-hour laboratory/tutorial class o seminar.			
methods of delivery:	Scheduled learning: 30 hours	Guided independent study: 120 hours		
A	As defined by QAA: Written Examinations = 25%, Practical Examinations = 0%, Coursework = 75%			
Assessment pattern:	As used by St Andrews: 1-hour Written Examination = 25%, Coursework = 75%			
Re-assessment pattern:	1-hour Written Examination = 25%, Corto failed components only	ursework = 75%, Re-assessment applies		
Module coordinator:	Dr M W Oram			

PS3022 Resear	ch Design and Analysis 2	

SCOTCAT Credits:	15 SCQF Level 9 Semester 2					
Academic year:	2018/9					
Availability restrictions:	Not available to	General Degree Stud	dents.			
Planned timetable:	Lectures: 9.00 at 4, 4-5	m - 11.00 am Mon. 1	-hour practical: two of Mo	n 1-2, 2-3, 3-		

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. There is also an emphasis on integration of concepts across a family of techniques based on correlation and regression. The syllabus will include such topics as multiple regression, path analysis, mediation analysis, factor analysis, ANOVA designs using regression, and moderated multiple regression. There is a focus on computerized data analysis, interpretation, and presentation. A section on qualitative analysis is included to highlight a broader range of research approaches and questions.

approaches and questions.					
Pre-requisite(s):	Before taking this module you must pass PS3021				
Learning and teaching	Weekly contact: 1 X 2-hour lecture (weeks 1-11) and 2 X 1 hour laboratory/tutorial (weeks 1-10)				
methods of delivery:	Scheduled learning: 42 hours	Guided independent study: 108 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 40%, Pract 60%	ical Examinations = 0%, Coursework =			
	As used by St Andrews: 2-hour Written Examination = 40%,	Coursework = 60%			
Re-assessment pattern:	2-hour Written Examination = 40%, Coursework = 60%, Re-assessment applies to failed components only				
Module coordinator:	Dr K I Mavor				
Module teaching staff:	Dr K Mavor, Dr S Pehrson, P Gardn	er			

31 Conceptual Issues	and Theoretical	Perspectives		
SCOTCAT Credits:	10	SCQF Level 9	Semester	1
Academic year:	2018/9			
Availability restrictions:	Available to Gene Honours Adviser	ral Degree student	s with permission of t	he Psychology
Planned timetable:	Lectures: 9.00 am (Module runs in w		hour practical: one of	Thu 2-3, 3-4, 4-5.
module will be taught via on the development of contents the ability to relate conce	ritical analysis of aleptual debates in p	ternative models a sychology to issues	nd levels of explanation in the real world.	
Pre-requisite(s):	Before taking this	module you must	pass PS2002	
Learning and teaching	Weekly contact: (Weeks 1 - 5).	1 x 2-hour lecture a	and 1 x 1-hour labora	tory class or seminar
methods of delivery:	Scheduled learning	ng: 15 hours	Guided independe	ent study: 85 hours
Accordment nattorn	As defined by QA Written Examina		al Examinations = 0%,	Coursework = 100%
Assessment pattern:	As used by St And Coursework = 100			
_				
Re-assessment pattern:	Coursework = 100)%		

SCOTCAT Credits:	10	SCQF Level 9	Semester	2
Academic year:	2018/9	-		
Availability restrictions:	Available to Gene Honours Adviser	ral Degree student	s with permission of	f the Psychology
Planned timetable:	Lectures: 9.00 am (Module runs in v		hour practical: one	of Thu 2-3, 3-4, 4-5.
		• •	•	in detail the tools
procedures used to ass background and by demo	sess psychopathol onstrating how to u	ogical conditions se these tools in cl	by discussing thei nical and experimer	r theoretical/statis
procedures used to ass background and by demo Pre-requisite(s): Learning and teaching	sess psychopathol postrating how to u Before taking this	ogical conditions se these tools in clamodule you must	by discussing thei nical and experimer pass PS2002	r theoretical/statist ntal settings.
procedures used to ass background and by demo Pre-requisite(s):	sess psychopatholonstrating how to unstrating how to unstrating this weekly contact:	ogical conditions se these tools in cl module you must 1 x 2-hour lecture	by discussing thei inical and experimer pass PS2002 and 1 x 1-hour labor	r theoretical/statist
procedures used to ass background and by demo Pre-requisite(s): Learning and teaching methods of delivery:	Before taking this Weekly contact: (Weeks 6 - 10). Scheduled learning As defined by QA	ogical conditions se these tools in clamodule you must 1 x 2-hour lecture ng: 15 hours A:	by discussing thei inical and experiment pass PS2002 and 1 x 1-hour labor	r theoretical/statist ntal settings. ratory class or semin dent study: 85 hour
procedures used to ass background and by demo Pre-requisite(s): Learning and teaching methods of delivery:	Before taking this Weekly contact: (Weeks 6 - 10). Scheduled learnin As defined by QA Written Examina As used by St And	ogical conditions se these tools in clamodule you must 1 x 2-hour lecture ng: 15 hours A: tions = 100%, Pract	by discussing thei inical and experiment pass PS2002 and 1 x 1-hour labor Guided independentical Examinations =	r theoretical/statis ntal settings. ratory class or semin dent study: 85 hour
procedures used to ass background and by demo Pre-requisite(s): Learning and teaching	Before taking this Weekly contact: (Weeks 6 - 10). Scheduled learnin As defined by QA Written Examina As used by St And 1.5-hour Written	ogical conditions se these tools in clamodule you must 1 x 2-hour lecture ng: 15 hours A: tions = 100%, Practice drews:	by discussing thei inical and experiment pass PS2002 and 1 x 1-hour labor Guided independentical Examinations =	r theoretical/statist ntal settings. ratory class or semin

33 Developmental Psy	ychology			
SCOTCAT Credits:	10	SCQF Level 9	Semester	2
Academic year:	2018/9			
Availability restrictions:	Available to Gener Honours Adviser	al Degree students	with permission of	the Psychology
Planned timetable:	Lectures: 9.00 am 5. (Module runs in		-hour practical: Thu	u, either 2-3:30 or 3:30-
This module is designed in developme discoveries in developme that are a particular strespanning infancy to child	ntal psychology, wi ngth of such work	th an emphasis on ϵ in St Andrews. The	evolutionary and commodule aims to of	omparative perspectives ffer a broad perspective
Pre-requisite(s):	Before taking this	module you must pa	ass PS2002	
Anti-requisite(s)	You cannot take th	nis module if you tal	ke PS3010 or take I	PS3011
Learning and teaching	Weekly contact: 1 (Weeks 1 - 5).	1 x 2-hour lecture ar	nd 1 x 1.5-hour labo	oratory class or seminar
methods of delivery:	Scheduled learnin	g: 18 hours	Guided indepen	dent study: 82 hours
Assessment mattern.	As defined by QAA Written Examinat		Examinations = 0%	, Coursework = 100%
Assessment pattern:	As used by St And Coursework = 100			
Re-assessment pattern:	Coursework = 100	%		
Module teaching staff:	Dr E Robbins			

4 Social Psychology						
SCOTCAT Credits:	10	SCQF Level 9	Semester	2		
Academic year:	2018/9					
Availability restrictions:	Available to Gene Honours Adviser	eral Degree studen	ts with permission o	of the Psychology		
Planned timetable:	Lectures: 9.00 and (Module runs in v		l-hour practical: one	e of Tue 2-3, 3-4, 4-5		
This module explores in c research approaches will this field. Approaches th intergroup relations. In a theoretical knowledge wil	be examined in or nat will be covere each case, the str	der to develop the ed include social engths and limita	e scientific understa cognition, social id	nding and critical skills in entity and the study of		
Pre-requisite(s):	Before taking this	s module you must	t pass PS2002			
Learning and teaching	Weekly contact: (Weeks 1 - 5)	1 x 2-hour lecture	and 1 x 1-hour labo	oratory class or seminar		
	Scheduled learning: 15 hours Guided independent study: 85 hours					
methods of delivery:	Scheduled learni	ng: 15 hours	Guided indepe	ndent study: 85 hours		
methods of delivery:	As defined by QA	AA:		ndent study: 85 hours %, Coursework = 100%		
	As defined by QA	AA: itions = 0%, Practions drews:		·		
methods of delivery:	As defined by QA Written Examina As used by St An	AA: itions = 0%, Practions: drews: 0%		·		

35 Cognitive and Beha	avioural ive	ar oscierice		
SCOTCAT Credits:	10	SCQF Level 9	Semester	1
Academic year:	2018/9			
Availability restrictions:	Available to 0 Honours Adv	General Degree studen iser	ts with permission o	f the Psychology
Planned timetable:		0 am - 11.00 am Tue. 1 s in weeks 1 - 5 only).	-hour practical: one	of Tue 2-3, 3-4, 4-5
concerned with the biolog analysis of molecular and	synaptic ever			
·	cognitive, em	notional, behavioural, i	neurological and phy	vsiological processes will
pe examined.	· ·			rsiological processes will
be examined. Pre-requisite(s): Learning and teaching	Before taking	this module you must	pass PS2002	rsiological processes will
be examined. Pre-requisite(s): Learning and teaching	Before taking Weekly cont (Weeks 1 - 5)	this module you must	pass PS2002 and 1 x 1-hour labor	<u> </u>
be examined. Pre-requisite(s): Learning and teaching methods of delivery:	Before taking Weekly cont (Weeks 1 - 5) Scheduled le As defined b	this module you must act: 1 x 2-hour lecture arning: 15 hours	pass PS2002 and 1 x 1-hour labor	ratory class or seminar
be examined. Pre-requisite(s): Learning and teaching methods of delivery:	Before taking Weekly cont (Weeks 1 - 5) Scheduled le As defined b Written Exar As used by S	g this module you must act: 1 x 2-hour lecture arning: 15 hours y QAA: minations = 100%, Prac	pass PS2002 and 1 x 1-hour labor Guided independentical Examinations =	ratory class or seminar
be examined. Pre-requisite(s):	Before taking Weekly cont (Weeks 1 - 5) Scheduled le As defined b Written Exar As used by S 1.5-hour Wri	act: 1 x 2-hour lecture arning: 15 hours y QAA: minations = 100%, Pract	pass PS2002 and 1 x 1-hour labor Guided independentical Examinations =	ratory class or seminar

SCOTCAT Credits:	10	SCQF Level 9	Semester	2		
Academic year:	2018/9					
Availability restrictions:	Available to Gen Honours Adviser	_	ts with permission o	f the Psychology		
Planned timetable:		m - 11.00 am Tue. 1 uns in weeks 6 - 10 (•	e of Tue 2-3:30, 3:30-		
This module will address understanding of major opsychology. Key principloares such as the evolution	evolutionary force es, concepts and	es and how they ha methodologies will	ve shaped animal an be introduced and	d human behaviour and related to specific topic		
Pre-requisite(s):	Before taking th	is module you must	pass PS2002			
Learning and teaching	Weekly contact: (Weeks 6 - 10).	1 x 2-hour lecture	and 1 x 1.5-hour lab	oratory class or seminar		
methods of delivery:	Scheduled learning: 18 hours Guided independent study: 82 hours					
•	Joneduled learn	ing: 18 nours	•			
Accordment nattorns	As defined by Q	AA:	•	0%, Coursework = 0%		
Assessment pattern:	As defined by Q Written Examin As used by St Ar	AA: ations = 100%, Prac ndrews:	•	0%, Coursework = 0%		
·	As defined by Q Written Examin As used by St Ar Take-home form	AA: ations = 100%, Prac ndrews:	tical Examinations =	0%, Coursework = 0%		
Assessment pattern: Re-assessment pattern: Module coordinator:	As defined by Q Written Examin As used by St Ar Take-home form	AA: ations = 100%, Prac ndrews: aat Written Examina	tical Examinations =	0%, Coursework = 0%		

37 Perception					
SCOTCAT Credits:	10	SCQF Level 9	Semester	1	
Academic year:	2018/9				
Availability restrictions:	Available to General Degree students with permission of the Psychology Honours Adviser				
Planned timetable:	Lectures: 9.00 am - 11.00 am Tue. Four 1.5-hour practical: one of Tue 2-3:30, 3:30-5pm. (Module runs in weeks 7 - 11 only).				
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 experimental psychology. 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.					
Pre-requisite(s):	Before taking this module you must pass PS2002				
Learning and teaching	Weekly contact : 1 x 2-hour lecture and (weeks 7 - 11) and 4 x 1.5-hour laboratory class or seminar spread over Weeks 7 - 11.				
methods of delivery:	Schodulad laarnin	or 16 hours	Guided independent st	udv. 84 hours	

Pre-requisite(s):	Before taking this module you must pass PS2002			
Learning and teaching laboratory class or seminar spread over Weeks 7 - 11. Weekly contact: 1 x 2-hour lecture and (weeks 7 - 11) and 4 x 1.5-hour laboratory class or seminar spread over Weeks 7 - 11.				
methods of delivery:	Scheduled learning: 16 hours Guided independent study: 84 hou			
A	As defined by QAA: Written Examinations = 100%, Practical Examinations = 0%, Coursework = 0%			
Assessment pattern:	As used by St Andrews: 1.5-hour Written Examination = 100%			
Re-assessment pattern:	1.5-hour Written Examination = 100%			
Module coordinator:	Prof J Harris			

SCOTCAT Credits:	10	SCQF Level 9	Semester	1	
Academic year:	2018/9				
Availability restrictions:	Available to General Degree students with permission of the Psychology Honours Adviser				
Planned timetable:		Lectures: 9.00 am - 11.00 am Thu. 1-hour practical: one of Thu 2-3, 3-4, 4-5. (Module runs in weeks 7 - 11 only).			
include, for example, atte development of the skill practical classes, in whic	nodule is to develop an understanding of human cognitive processes. Topic areas covered aple, attention, memory, reasoning, and decision making. Emphasis will be placed on the the skill of critical evaluation of evidence and theory. Lectures will be accompanied by in which students will gain experience of the experimental methods used in cognitive minars in which research papers will be critically evaluated.				
Pre-requisite(s):	Before taking this module you must pass PS2002				
Learning and teaching	Weekly contact: (Weeks 7 - 11).	1 x 2-hour lecture an	d 1 x 1-hour laboratory c	lass or seminar	
methods of delivery:	Scheduled learning	g: 15 hours	Guided independent st	udy: 85 hours	
As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
Assessment nottons.	Assessment pattern: As used by St Andrews: Coursework = 100%				
Assessment pattern:					
Assessment pattern: Re-assessment pattern:		%			

10 Psychology Review	V				
SCOTCAT Credits:	10	SCQF Level 10	Semester	Full Year	
Academic year:	2018/9				
Availability restrictions:	Available only to	Available only to students in a Psychology Honours Programme.			
Planned timetable:	Not applicable.				
herefore complements iterature will be encoura within the area of the s	Emphasis will be placed on analytical and methodological issues, and this module PS3021 and PS3022. A systematic approach to the analysis of a specific body of aged. Students are invited to identify preferred subject matters so long as they fall upervisor's expertise. Supervision will be given to aid students in the collation, nal phases of their work. The review will be limited to 4,000 words.				
	Before taking this module you must pass PS2002				
Pre-requisite(s):	Before taking this		•	0.403.	
		module you must p	•		
Co-requisite(s):	In the same year	module you must p as taking this modul	ass PS2002	21 and take PS3022	
Co-requisite(s): Learning and teaching	In the same year	module you must p as taking this modul Individual supervisio	ass PS2002 e you should take PS302	21 and take PS3022 nber of staff.	
Co-requisite(s): Learning and teaching methods of delivery:	In the same year a Weekly contact: Scheduled learning As defined by QA	module you must p as taking this modul Individual supervisions: 10 hours A:	ass PS2002 e you should take PS302 on by pre-assigned mem	21 and take PS3022 nber of staff. study: 90 hours	
Co-requisite(s): Learning and teaching methods of delivery:	In the same year a Weekly contact: Scheduled learning As defined by QA	s module you must p as taking this modul Individual supervisiong: 10 hours A: tions = 0%, Practical	ass PS2002 e you should take PS302 on by pre-assigned mem Guided independent	21 and take PS3022 nber of staff. study: 90 hours	
Co-requisite(s): Learning and teaching methods of delivery: Assessment pattern:	In the same year a Weekly contact: Scheduled learnin As defined by QA Written Examina As used by St And Review = 100%	s module you must p as taking this modul Individual supervisiong: 10 hours A: tions = 0%, Practical drews:	ass PS2002 e you should take PS302 on by pre-assigned mem Guided independent	21 and take PS3022 nber of staff. study: 90 hours	
Pre-requisite(s): Co-requisite(s): Learning and teaching methods of delivery: Assessment pattern: Re-assessment pattern: Module coordinator:	In the same year a Weekly contact: Scheduled learnin As defined by QA Written Examina As used by St And Review = 100%	s module you must p as taking this modul Individual supervisiong: 10 hours A: tions = 0%, Practical drews:	ass PS2002 e you should take PS302 on by pre-assigned mem Guided independent	21 and take PS3022 nber of staff. study: 90 hours	

SCOTCAT Credits:	30	SCQF Level 10	Semester	Full Year	
Academic year:	2018/9	•			
Availability restrictions:	Available only to	students in the secor	nd year of the Honours	Programme	
Planned timetable:	Not applicable.				
PS3021,PS3022 and PS4 conducted with another s but all analysis and report	ment and statistical analysis. A wide choice of topics is possible, but the skills developed in modules PS3022 and PS4040 are an essential preparation. The empirical part of the project may be ed with another student, to allow greater research scope and the choice of more realistic problems, nalysis and report-writing must be carried out individually. Topics range over all areas of psychology citive investigation in the School, and effort is made to arrange for students to work in one of their				
Pre-requisite(s):	Before taking this module you must pass PS4040 and pass PS3021 and pass PS3022				
	You cannot take this module if you take PN4299 or take BL4200 or take PS4299 or take PS4796 or take PS4797				
Anti-requisite(s)	or take PS4796 or	take PS4/9/			
	0. tante : 0 : 7 0 0 :	tano i o i i o i	on by pre-assigned mem	ber of staff	
Learning and teaching	0. tante : 0 : 7 0 0 :	Individual supervision	on by pre-assigned mem		
Learning and teaching methods of delivery:	Weekly contact: Scheduled learning As defined by QA	Individual supervisions: 30 hours A:		study: 270 hours	
Learning and teaching methods of delivery:	Weekly contact: Scheduled learning As defined by QA	Individual supervisiong: 30 hours A: tions = 0%, Practical drews:	Guided independent s	study: 270 hours	
Learning and teaching methods of delivery: Assessment pattern:	Weekly contact: Scheduled learnin As defined by QA Written Examina As used by St And Dissertation = 100	Individual supervisions: 30 hours A: tions = 0%, Practical drews: 0%	Guided independent s	study: 270 hours ursework = 100%	
Anti-requisite(s) Learning and teaching methods of delivery: Assessment pattern: Re-assessment pattern: Module coordinator:	Weekly contact: Scheduled learnin As defined by QA Written Examina As used by St And Dissertation = 100	Individual supervisions: 30 hours A: tions = 0%, Practical drews: 0% Re-assessment m	Guided independent s Examinations = 0%, Cou	study: 270 hours ursework = 100%	

PS4060 Review Essay SCOTCAT Credits: 15 SCQF Level 10 Semester Full Year Academic year: 2018/9 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: To be arranged.

In this module students will select a key psychological research paper to review (subject to approval by module controller). Students will then submit an outline for formative feedback. The review will be composed independently thereafter. The review should include historical antecedents, including theoretical and methodological issues related to the area and specific problem of issue that the paper addresses. The review should also include an evidence-based evaluation of the impact of the key paper on psychological science and on society. The module includes 6 one-hour sessions on practical skills required to complete the review.

Pre-requisite(s):	Before taking this module you must pass PS2002. Module prerequisites may be waived for students with entry into honours psychology		
Anti-requisite(s)	You cannot take this module if you take BL4200 or take PN4299 or take PS4299		
Learning and teaching	Weekly contact: 3 x 2-hour workshops in Semester 1		
methods of delivery:	Scheduled learning: 6 hours Guided independent study: 144 hours		
A	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
Assessment pattern:	As used by St Andrews: Coursework = 100%		
Re-assessment pattern:	Coursework = 100%		
Module coordinator:	Dr E M Bowman		
Module teaching staff:	TBC		

PS400	S4069 Group Behaviour					
	SCOTCAT Credits:	15	SCQF Level 10	Semester	2	
	Academic year:	2018/9				
	Availability restrictions:	Available only to students in the second year of the Honours Programme.				
	Planned timetable:	To be arranged.				

This module aims to develop an advanced understanding of selected topics relating to the psychology of groups and collective behaviour. It will address how behaviour is affected by the group context and examine the psychological mechanisms which shape how people act as group members. Teaching will be seminar based and students will be expected to read independently and contribute actively to sessions. Emphasis will be placed on the development of critical skills and the ability to relate individual studies and theories to broader conceptual debates in social psychology. More detailed module content will be announced in advance of student choices.

Pre-requisite(s):	Before taking this module you must pass PS2002			
Learning and teaching	arning and teaching Weekly contact: 2-hour seminar plus tutorial time.			
methods of delivery:	Scheduled learning: 20 hours	Guided independent study: 130 hours		
A	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 75%, Coursework = 25%			
Re-assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only			
Module coordinator:	Prof S D Reicher	Prof S D Reicher		
Module teaching staff:	Prof S Reicher			

PS4071 Behavioural Neuroscience SCOTCAT Credits: 15 SCQF Level 10 Semester 1 Academic year: 2018/9 Availability restrictions: UG - Available only to students in the second year of the Honours Programme. Planned timetable: 11.00 am - 1.00 pm Thu

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.

Pre-requisite(s):	Module prerequisites may be waived for students with entry into honours psychology. Before taking this module you must pass PS2002			
Learning and teaching	Weekly contact: 2-hour seminars plus office hour.			
methods of delivery:	Scheduled learning: 20 hours Guided independent study: 130 hours			
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
·	As used by St Andrews: 2-hour Written Examination = 75%, Coursework = 25%			
Re-assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only			
Module coordinator:	Dr E M Bowman			

PS40 7	PS4074 Cognitive Psychology and the Emotional Disorders						
	SCOTCAT Credits:	SCQF Level 10 Semester 1					
	Academic year:	2018/9					
	Availability restrictions:	Available only to s	Available only to students in the second year of the Honours Programme.				
	Planned timetable:	9.00 am - 11.00 ar	n Mon				

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.

Pre-requisite(s):	Module prerequisites may be waived for students with entry into honours psychology. Before taking this module you must pass PS2002		
Learning and teaching	Weekly contact: 2-hour seminars plus office hour.		
methods of delivery:	Scheduled learning: 20 hours	Guided independent study: 130 hours	
Assessment pattern: Assessment pattern: As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework As used by St Andrews: 2-hour Written Examination = 75%, Coursework = 25%			
Module coordinator:	Dr B Dritschel		

PS4079 Sex Differences and Gender Development SCOTCAT Credits: 15 SCQF Level 10 Semester 2 Academic year: 2018/9 Availability restrictions: Available only to students in the second year of the Honours Programme Planned timetable: 11.00 am - 1.00 pm Fri

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.

Pre-requisite(s):	Before taking this module you must pass PS2002. Module prerequisites may be waived for students with entry into honours psychology		
Learning and teaching	Weekly contact: 2-hour seminar plus office hour.		
methods of delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
Assessment pattern: As used by St Andrews: Coursework = 100%			
Re-assessment pattern:	Coursework = 100%		
Module coordinator:	Dr G R Brown		
Module teaching staff:	Dr G Brown		

PS4083 Psychology of Music SCOTCAT Credits: 15 SCQF Level 10 Semester 1 Academic year: 2018/9 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: 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.

Pre-requisite(s):	Before taking this module you must pass PS2002		
Learning and teaching	Weekly contact: 2-hour seminars plus	office hour.	
methods of delivery:	Scheduled learning: 20 hours	Guided independent study: 130 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews: 2-hour Written Examination = 75%, Coursework = 25%		
Re-assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only		
Module coordinator:	Dr I Jentzsch		

PS4084 Psychology of Art: Aesthetics and Individual Differences in Visual Function SCOTCAT Credits: 15 SCQF Level 10 Semester 2 Academic year: 2018/9 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: 11.00 am - 1.00 pm Wed

This module examines the psychology of artistic activity and aesthetic appreciation, both from the standpoint of the artistic object (e.g., painting), as well as the individual who creates or appreciates art. Why are some things more aesthetically pleasing than others? Why do some people have a greater capacity to create aesthetic things? The module will explore the links between aesthetic creation and appreciation on the one hand and perceptual and cognitive processes on the other. These links will be examined from behavioural and neurological viewpoints. A significant emphasis will be on the neurological conditions that heighten differences in the capacity to create and appreciate aesthetic objects, including mental disorders (e.g., frontotemporal dementia, autism, epilepsy) and atypical cognitive development (e.g., synaesthesia, dyslexia). This will be a critical seminar style module with readings and discussions.

Pre-requisite(s):	Before taking this module you must pass PS2002		
Learning and teaching	Weekly contact: 2-hour seminars plus office hour.		
methods of delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-assessment pattern:	Coursework = 100%		
Module coordinator:	Dr D Vishwanath		

PS408	S4085 Evolution and Development of Social and Technical Intelligence					
	SCOTCAT Credits: 15 SCQF Level 10 Semester 1					
	Academic year:	2018/9				
	Availability restrictions:	Available only to undergraduate students in the second year of the Honours ability restrictions: Programme. Also available to postgraduate students on MSc Evolutionary and Comparative Psychology: the Origins of Mind				
	Planned timetable:	11.00 am - 1.00 p	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.

Pre-requisite(s):	Module prerequisites may be waived for students with entry into honours psychology. Before taking this module you must pass PS2001 and pass PS2002			
Learning and teaching	Weekly contact: 2-hour seminars plus	office hour.		
methods of delivery:	Scheduled learning: 20 hours	Guided independent study: 130 hours		
	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%			
Assessment pattern:	As used by St Andrews: Take Home Written Examination = 75%, Coursework = 25%			
Re-assessment pattern:	Take Home Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only			
Module coordinator:	Dr C P Cross			
Module teaching staff:	Dr C Cross	Dr C Cross		

PS4086 Origins and Evolution of Mind Reading (Theory of Mind) SCOTCAT Credits: 15 SCQF Level 10 Semester 2 Academic year: 2018/9 Availability restrictions: Programme. Also available to postgraduate students on MSc in Evolutionary and Comparative Pyschology: the Origins of Mind 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.

Pre-requisite(s):	Before taking this module you must pass PS2002		
Learning and teaching	Weekly contact: 2-hour seminars plus office hour.		
methods of delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
A	As defined by QAA: Written Examinations = 75%, Practical	Examinations = 0%, Coursework = 25%	
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 75%, Coursework = 25%		
Re-assessment pattern:	2-hour Written Examination = 75%, Coursework = 25%, Re-assessment applies to failed components only		
Module coordinator:	Dr J Gomez		
Module teaching staff:	Dr J-C Gomez		

PS4089 Neural Basis of Episodic Memory							
	SCOTCAT Credits:	15 SCQF Level 10 Semester 1					
	Academic year:	2018/9					
	Availability restrictions:	Available only to s	Available only to students in the second year of the Honours Programme 11.00 am - 1.00 pm Tue				
	Planned timetable:	11.00 am - 1.00 pr					

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.

Pre-requisite(s):	Before taking this module you must pass PS2002		
Learning and teaching	Weekly contact: 2-hour seminars plus office hour.		
methods of delivery:	Scheduled learning: 20 hours	Guided independent study: 130 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 75%, Practical Examinations = 0%, Coursework = 25%		
	As used by St Andrews: Written Take Home Examination = 75%, Coursework = 25%		
Re-assessment pattern:	Coursework = 100%		
Module coordinator:	Dr J A Ainge		

PS4090 Face Perception and Human Attraction SCOTCAT Credits: 15 SCQF Level 10 Semester 2 Academic year: 2018/9 Availability restrictions: Available only to students in the second year of the Honours Programme. Planned timetable: 9.00 am - 11.00 am Wed

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.

Pre-requisite(s):	Before taking this module you must pass PS2002		
Learning and teaching	Weekly contact : 0.5-hour lectures, 1.5-hour seminars and 1-hour office hour throughout the semester.		
methods of delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours	
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%		
	As used by St Andrews: Coursework = 100%		
Re-assessment pattern:	Coursework = 100%		
Module coordinator:	Prof D I Perrett		
Module teaching staff:	Prof D Perrett		

PS409	PS4091 Computer-aided Research						
	SCOTCAT Credits:	15	SCQF Level 10	Semester	1		
	Academic year:	2018/9					
	Availability restrictions:	Available only to s	tudents in the secor	nd year of the Hond	ours Programme, or		
	Availability restrictions:	Research Methods in Psychology (MSc)					
	Planned timetable:	9.00 am - 11.00 am Tue					

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.

Pre-requisite(s):	Module prerequisites may be waived for students with entry into honours psychology. Prerequisites PS3021 and PS3022 are applicable to ug students only Before taking this module you must pass PS3022			
Learning and teaching	Weekly contact: 1 lecture and 1 seminar plus office hour.			
methods of delivery:				
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
Assessment pattern:	As used by St Andrews: Coursework = 100%			
Re-assessment pattern:	Coursework = 100%			
Module coordinator:	Dr T Otto			

PS4093 The Psychology of Dementia SCOTCAT Credits: 15 SCQF Level 10 Semester 1 Academic year: 2018/9 Availability restrictions: Available only to students in the second year of the Honours programme Planned timetable: 11.00 am - 1.00 pm Wed

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 module will include lectures and student presentations based around current research articles in the field.

Pre-requisite(s):	Before taking this module you must pass PS2002			
Learning and teaching	Weekly contact: 1 lecture, 1 seminar plus office hour.			
methods of delivery:	Scheduled learning: 20 hours	Guided independent study: 130 hours		
Assessment pattern:	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%			
	As used by St Andrews: Coursework = 60%, 90-minute Written Examination = 40%			
Re-assessment pattern:	Coursework = 100%			
Module coordinator:	Dr M P Ellis			
Module teaching staff:	Dr M Ellis	Dr M Ellis		

PS4094 Communicating Psychology and Neuroscience

SCOTCAT Credits:	15	SCQF Level 10	Semester	2	
Academic year:	2018/9				
Availability restrictions:	Available only to students in the second year of the Honours programme				
Planned timetable:	11.00 am - 1.00 pr	11.00 am - 1.00 pm Mon			

This module provides final year students within the School of Psychology and Neuroscience with first-hand experience of science communication through a series of expert led master-classes (e.g. Bright Club, BBC, print journalists, science bloggers), presentations and interaction with new media (e.g. podcasts, blogs, Twitter, FaceBook). This module will enable students to gain substantial experience of working to tight deadlines, evaluating how the media translates psychological/neuroscience findings and of communicating complex ideas at various different levels, including presenting work to the press, the public and school children. Topics covered may include: why scientists must communicate with the public; how psychology/neuroscience hits the headlines; evaluating media coverage; using new media to get the message across and designing a science exhibit. While of particular value to students aiming for a career in public engagement, these core skills are equally important for any career that requires good communication, including post-graduate study. In addition students will be required to monitor relevant periodicals and evaluate several new studies in psychology/neuroscience and so should expose students to the latest trends within the field.

Pre-requisite(s):	Before taking this module you must pass PS3021 or pass PN3313			
Anti-requisite(s)	You cannot take this module if you take ID4001 or take ID4002			
Learning and teaching	Weekly contact: 2-hour lecture, plus office hour and occasional fieldwork.			
methods of delivery:	Scheduled learning: 26 hours	Guided independent study: 124 hours		
A	As defined by QAA: Written Examinations = 0%, Practical E	Examinations = 0%, Coursework = 100%		
Assessment pattern:	As used by St Andrews: Coursework = 100%			
Re-assessment pattern:	Coursework = 100%			
Module coordinator:	Dr K A Spencer			
Module teaching staff:	Dr K Spencer, Mr P L Gardner			

4095 Psychopathology				
SCOTCAT Credits:	15	SCQF Level 10	Semester	2
Academic year:	2018/9			
Availability restrictions:	Available only to s	tudents in the secon	d year of the Honours pr	ogramme
Planned timetable:	9.00 am - 11.00 ar	n Mon		
This module aims to de neuropsychiatric perspec research methods and tre adult mental health (e.g disorders, Trauma and Spectrum disorders).	tive. Classification seatment strategies g., Mood disorders	systems of mental dis critically discussed. T s, Schizophrenia Spe	orders are compared an the clinical part of the mo ectrum disorders, Obses	d evaluated, and odule focuses on sive compulsive
Pre-requisite(s):	Before taking this	module you must pa	ss PS2002	
Learning and teaching	Weekly contact:	2-hour lecture plus o	ffice hour.	
methods of delivery:	Scheduled learning	22 h	Cuided independent of	
	Serieuaica icariii	ig: 22 nours	Guidea independent st	udy: 128 hours
Assassment nattern	As defined by QA	A:	Examinations = 0%, Cou	-
Assessment pattern:	As defined by QA Written Examinat As used by St And	A: cions = 50%, Practical	Examinations = 0%, Cou	-
Assessment pattern: Re-assessment pattern:	As defined by QA Written Examinat As used by St And 2-hour Written Ex	A: cions = 50%, Practical lrews: amination = 50%, Co amination = 75%, Co	Examinations = 0%, Cou	rsework = 50%
	As defined by QA Written Examinat As used by St And 2-hour Written Ex 2-hour Written Ex	A: cions = 50%, Practical lrews: amination = 50%, Co amination = 75%, Co ents only	Examinations = 0%, Cou ursework = 50%	rsework = 50%

96 Mechanisms of Bel	haviour: integra	ting psychologic	al and neurosci	ence perspectives
SCOTCAT Credits:	15	SCQF Level 10	Semester	2
Academic year:	2018/9			
Availability restrictions:	Available only to s	tudents in the seco	nd year of the Hond	ours programme
Planned timetable:	12.00 noon - 2.00	pm Tue		
patterns of behaviour in a information from psycho and why animals and hur examples of mechanisms include lectures and stude in the field and a practica	logy and neuroscie mans behave the v across different levent presentations/j	ence disciplines in o vay they do in differ vels of complexity (f ournal club discussion	rder to further our rent situations. The rom genes to physi ons based around c	r understanding of how e module will deal with iology). The module will current research articles
Pre-requisite(s):		module you must p		mque.
Learning and teaching	Weekly contact: office hour.	2-hour lecture (x 10	weeks), 1 practical	class (x 4 weeks) plus
methods of delivery:	Scheduled learning	g: 24 hours	Guided independ	dent study: 126 hours
Assessment pattern:	As used by St And	ions = 0%, Practical		%, Coursework = 85%
. :		ding presentation) =	= 100%	
Re-assessment pattern:	Coursework = 100	1 %		
Module coordinator:	Dr K A Spencer			
Module teaching staff:	Dr K Spencer			

PS4097 Research Methods in Cognitive Neuroscience SCOTCAT Credits: 15 SCQF Level 10 Semester 2 Academic year: 2018/9 Availability restrictions: Available only to students in the second year of the Honours programme Planned timetable: 9.00 am - 11.00 am Tue

Tremendous progress in technology allows now to observe the brain in action to understand the physical bases of behaviour. This module showcases this state of the art approach. Guided by a team of lecturers with first-hand expertise in trans cranial magnetic stimulation, neurophysiology, electrophysiology, behavioural modelling, neuropsychology and functional magnetic resonance imaging the students will develop their ability to evaluate and propose cutting edge research. The course includes lectures and student led discussions of current research topics.

Pre-requisite(s):	Before taking this module you must pass PS2002					
Learning and teaching	Weekly contact: 1 lecture, 1 seminar plus office hour.					
methods of delivery:	Scheduled learning: 22 hours	Guided independent study: 128 hours				
	As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%					
Assessment pattern:	As used by St Andrews: Coursework = 100%	As used by St Andrews:				
Re-assessment pattern:	Coursework = 100%					
Module coordinator:	Dr D Balslev	Dr D Balslev				
Module teaching staff:	Dr D Balslev, Dr T Otto, Dr J Ales, Dr G I	Miles				

PS4100 The Psychology of Terrorism

SCOTCAT Credits:	15	SCQF Level 10	Semester	1
Academic year:	2018/9			
Availability restrictions:	Available only to s	tudents in the secon	d year of the Honours pr	ogramme
Planned timetable:	9.00 am - 11.00 ar	n Fri		

This module presents the psychological underpinnings of terrorist behaviour from a variety of perspectives. The course will assess individual- and group-/structural-level explanations of terrorism, discuss the strategic logic and moral justification of terrorism, and cover some of the psychological processes involved in the radicalisation of individuals and the operation of terrorist groups. The final part of the module will examine the effects of terrorism on constituencies and target groups and the implications of psychological insights for counter-terrorism measures.

Pre-requisite(s):	Before taking this module you must pass PS2001 and pass PS2002			
rie-requisite(s).	Delote taking this module you must pass F32001 and pass F32002			
Learning and teaching	Weekly contact : 2 hour lecture plus office hour.			
methods of delivery:	Scheduled learning: 20 hours	Guided independent study: 130 hours		
Access out nottons	As defined by QAA: Written Examinations = 50%, Practical	Examinations = 0%, Coursework = 50%		
Assessment pattern:	As used by St Andrews: 2-hour Written Examination = 50%, Coursework = 50%			
Re-assessment pattern:	2-hour Written Examination = 50%, Coursework = 50%, Re-assessment applies to failed components only			
Module coordinator:	Dr N Tausch			

299 Psychology Project	: (60)				
SCOTCAT Credits:	60	SCQF Level 10	Semester	Full Year	
Academic year:	2018/9				
Availability restrictions:	Available only to students in the second year of the Honours programme				
Planned timetable:	To be arranged w	ith the supervisor.			
This project will involve within psychology. The progood experimental designation laboratory, and excellent report that demonstrates to a member of staff with research activities through the pre-requisite(s):	oject will involve d gn, good experime t record keeping. I s a deep understan hin the School of Ps hout the academic	illigence, initiative an ental and/or analyti The project will culn ding of the chosen a sychology and Neuro c year.	d independence in purs ical technique either in ninate in the productio rea of research. Studen	uing the literature, in the field or the in of a high-quality ts will be allocated and advise them in	
Anti-requisite(s)		his module if you tak take PS4796 or take	ke PS4050 or take PS406 PS4797	00 or take PN4299	
Learning and teaching	Weekly contact:	1-hour individual su	pervision sessions.		
methods of delivery:	Scheduled learning	ng: 20 hours	Guided independent s	tudy: 563 hours	
Assessment pattern:	As defined by QA Written Examinat		Examinations = 0%, Cou	ırsework = 100%	
Assessment pattern:	As used by St And Coursework = 100				
Re-assessment pattern:	Coursework = 100	0%, Re-assessment m	nay include collecting fu	rther data	
Module coordinator:	Dr R H Sprengelm	eyer			

SCOTCAT Credits:	30	SCQF Level 10	Semester	Both
Academic year:	2018/9			
Availability restrictions:	have complete andrews.ac.uk	ed the Letter of Agre	econd year of the Hon eement, downloadable No student may do mo	from https://www.st
Planned timetable:	To be arrange	d.		
	•			n consultation with t well as a clear plan
supervisors in order to preparation.	determine that		access to sources as v	
supervisors in order to preparation. Pre-requisite(s): Anti-requisite(s)	The student re	t the student has a	access to sources as v	well as a clear plan
supervisors in order to preparation. Pre-requisite(s):	The student re	t the student has a	reement in other dissertation/p	well as a clear plan
supervisors in order to preparation. Pre-requisite(s): Anti-requisite(s) Learning and teaching	The student re Cannot take n	t the student has a equires a letter of ag nore than 30 credits	reement in other dissertation/p	well as a clear plan
supervisors in order to preparation. Pre-requisite(s): Anti-requisite(s) Learning and teaching methods of delivery:	The student re Cannot take n Weekly conta Scheduled lea	equires a letter of agnore than 30 credits act: As per Letter of arning: 0 hours	reement in other dissertation/p	project modules
supervisors in order to preparation. Pre-requisite(s): Anti-requisite(s) Learning and teaching	The student re Cannot take n Weekly conta Scheduled lea As defined by Written Exam As used by St	equires a letter of agnore than 30 credits act: As per Letter of arning: 0 hours QAA: ninations = 0%, Pract	reement in other dissertation/p Agreement. Guided independent	project modules

Module teaching staff:

various

97 Joint Project (60cr)				
SCOTCAT Credits:	60	SCQF Level 10	Semester	Full Year
Academic year:	2018/9			•
Availability restrictions:	have complete andrews.ac.ul	ed the Letter of Agr	second year of the Hond eement, downloadable No student may do mo	from https://www.st-
Planned timetable:	To be arrange	d.		
supervisors in order to operation.	determine that		access to sources as w	
supervisors in order to	The student re	t the student has	access to sources as w greement	
supervisors in order to opreparation. Pre-requisite(s):	The student re	t the student has a	access to sources as w greement n/project module	
supervisors in order to opreparation. Pre-requisite(s): Anti-requisite(s) Learning and teaching	The student re Cannot take a	t the student has a equires a letter of ag ny other dissertatio	access to sources as w greement n/project module	vell as a clear plan o
Anti-requisite(s) Learning and teaching methods of delivery:	The student re Cannot take a Weekly conta Scheduled lea	equires a letter of aginy other dissertation ct: As per Letter of aging: 0 hours	access to sources as w greement n/project module Agreement.	vell as a clear plan of study: 0 hours
supervisors in order to opreparation. Pre-requisite(s): Anti-requisite(s) Learning and teaching	The student recommended to the student recommend	equires a letter of aginy other dissertation ct: As per Letter of arning: 0 hours QAA: hinations = 0%, Prac	greement n/project module Agreement. Guided independent	vell as a clear plan of study: 0 hours