Research Masters (MRes) in Neuroscience

The MRes in Neuroscience is designed to provide advanced training in research techniques in neuroscience. It will provide exceptional students with opportunities to design and conduct original research while at the same time, provide training at the cutting edge of neuroscience research. The overall aim is to give students the necessary skill set to succeed as independent research scientists.

- 30 credits: PN5000, PN5001
- 30 credits from*: PN4230, PN4231, PN4234, PN4235, PS4065, PS4071, PS4089, PS4096
  *optional modules available may vary from year to year
- 120 credits: PN5099

PN5000 Neuroscience Research Design Reading Party

SCOTCAT Credits:	10	SCQF Level 11	**Semester:**	1
Academic year:	2017/18			
Availability restrictions:	Available only to students on MRes in Neuroscience.			
Planned timetable:	1 week in summer vacation just prior to orientation week			
An introductory week-long module designed to provide an intensive introduction to designing and carrying out neuroscience research at the postgraduate level. Throughout the module, students will have opportunities to learn transferable career skills that revolve around the process of proposing and evaluating scientific research. Students will critically analyse current primary literature in neuroscience and the methodology and ethical issues underlying research proposals. Students will self-direct their own learning and work in groups to create research proposals which they then orally present 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.				
Programme module type:	Compulsory for Neuroscience MRes			
Co-requisite(s):	PM5001 and PN5099			
Learning and teaching methods and delivery:	**Weekly contact**: 40 hours of lectures and tutorials during 1 week in summer vacation 2 weeks before presessional week			
Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr S Pulver			
Lecturer(s)/Tutor(s):	Team taught			

Psychology and Neuroscience – MRes in Neuroscience for 2017/8

PN5001 Techniques and Skills in Neuroscience Research				
SCOTCAT Credits:	20	SCQF Level 11	**Semester:**	1
Academic year:	2017/18			
Availability restrictions:	Available only to students on MRes in Neuroscience.			
Planned timetable:	To be arranged			
This seminar-based module offers a theoretical perspective on state-of-the-art neuroscience techniques through critical analysis of primary literature. It also provides opprotunities to learn transferrable career skills that are of importance to neuroscientists irrespective of any one area of research. Weekly seminars will involve presentations by students and /or staff that cover neurophysiological, neuropharmacological and neurogenetic approaches to understanding neural function. Seminars will also provide a framework for discussing general career skills such as grant writing, gaining ethical approval for research, using technology to enhance communication, and social networking withing scientific communities. Learning will be largely self-directed with students delving into research areas and career paths that they wish to pursue. Assessment will be based on oral presentations which synthesize and critique recent advances in neuroscience.				
Programme module type:	Compulsory for Neuroscience MRes			
Co-requisite(s):	PM5001 and PN5099			
Learning and teaching methods and delivery:	**Weekly contact**: 1.5-hour seminars (x 11 weeks)			
Assessment pattern:	Coursework = 100%			
Module Co-ordinator:	Dr S Pulver			
Lecturer(s)/Tutor(s):	Team taught			

PN5099 Masters Thesis Research in Neuroscience				
SCOTCAT Credits:	120	SCQF Level 11	**Semester:**	Whole Year
Academic year:	2017/8			
Availability restrictions:	Available only to students on MRes in Neuroscience.			
Planned timetable:	To be arranged with the supervisor			
The student will carry out a major piece of original and independent research under the supervision of an academic adviser. Supervision will be regular but will vary depending on the nature of the research project and the skill set of individual students. The aim of the module is to give students an opportunity to design, conduct and analyze neuroscience research and then learn how to present such work in writing. Assessment will be in the form of an oral presentation at the beginning of semester 2 and in the form of a written thesis submitted by the stated date in August.				
Programme module type:	Compulsory for Neuroscience MRes			
Co-requisite(s):	PM5001 and PN5099			
Learning and teaching methods and delivery:	**Weekly contact**: 1 hour (x 40 weeks)			
Assessment pattern:	**As used by St Andrews:** 30-minute Oral Examination = 25%, Dissertation = 75%			
Module Co-ordinator:	Dr S Pulver			
Lecturer(s)/Tutor(s):	various			