Dear students,
Welcome back. This handbook will outline the electives that are available for you this year. The nice thing about modules PS315 and PS316 is that they are specifically designed to give students more choice and flexibility in final year, allowing you to pick electives in which you may have a particular interest.

**Students must sign up for 3 electives from each semester.** Table 1 provides an indication of the different modules and in which semester they occur. A fuller description of each elective, including the objectives and content, is provided in later in this booklet.

Sign up for the electives will take place on the first day of term - **Monday 19th September 2016**. The sign-up sheets will be located on the final year notice board. Please note that electives scheduled to take place in weeks 1-6 will start immediately that week. Two electives, Classic studies in Cognitive Neuroscience in Semester 1 and Psychology in the ‘Real’ World in Semester 2, are restricted to a maximum of 20-25 students (see individual descriptions below). This is due to the presentational component in each of these electives. There is no restriction in numbers for any other elective.

Assignments will be provided by the lecturer in each elective but note carefully the dates of the deadlines. Depending on the electives chosen you may have two or three assignments fall on the one date. It may be wise to plan your electives carefully to avoid unnecessary stress around hand-in day.

**Deadline for assignments:**
- **Semester 1:**
  - Weeks 1-6 options – 10th November 2016
  - Weeks 7-12 options – 15th December 2016
- **Semester 2:**
  - Weeks 1-6 options – 23rd March 2017
  - Weeks 7-12 options – 4th May 2017

**Table 1:** Summary of electives schedule.

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<tr>
<td>Psychology in the ‘Real’ World</td>
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<td>Health Psychology</td>
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As these electives have a presentational component the numbers are restricted.

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**Classic Studies in Cognitive Neuroscience:**

**Critical Thinking in Psychology**

**No. of Students:** 25 Maximum

Co-ordinators: Dr. R. Roche, Dr. S. Commins

Lecturers: Dr. R. Roche, Dr. S. Commins

**Summary**

In this course we will examine six studies in contemporary cognitive neuroscience which have come to be viewed as key experiments due to their innovative approach, ingenious design or important findings in that area of research. Each week students (4/5 per group) will give an oral presentation of the study which will be followed by open discussion.

**Objectives**

To introduce and explore innovative and pioneering studies in cognitive neuroscience and to encourage critical evaluation of experimental approaches, design, methodology and interpretation.

**Content**

History of cognitive neuroscience; critical discussion of six classic experimental articles in modern cognitive neuroscience. Students present in small groups on one of these articles from Week 2 to Week 6.

**Assessment/Compulsory Elements:** Essay (80%) and in-class presentation (20%).

**Recommended Texts**


**Recommended Articles**


Spatial Navigation and Memory

Co-ordinator/Lecturer: Dr. S. Commins

Summary
How do animals get from A to B? In this module we will examine how honey bees communicate location, how migratory birds find their way home and explore whether humans use similar mechanisms to navigate their environment. In addition, the module will examine the neural basis of spatial navigation and memory and how disruption and brain damage can lead to us getting lost.

Objectives
To examine the behaviour and neural basis of spatial navigation and spatial memory across a range of species from insects to humans.

Content

Assessment/Compulsory Elements: Essay/journal article review.

Recommended Texts

Sleep and Circadian Rhythms

Co-ordinator/Lecturer: Dr. A. Coogan

Summary
This module examines the importance of sleep and circadian rhythms for physical and psychological health and wellbeing. We examine the neurobiological basis of sleep and circadian timing, as well as examining common sleep disorders and the conflict between modern lifestyles and our ancient body clock, such as occurs in shift workers.

Objectives
To examine the processes of sleep and biological timekeeping, and appreciate how these processes impinge on behaviour.

Content

Assessment/Compulsory Element: Essay.

Recommended Texts
The Normal and Abnormal Brain

Co-ordinator: Dr. R. Roche
Lecturer: Dr. R. Roche plus guest lecturers.

Summary
This module explores the neural underpinnings of several important cognitive processes (including vision, attention and memory), and investigates how an understanding of what happens in the brain when these systems fail to work properly can inform our knowledge of normal processing in the intact brain.

Objectives
To examine the functional neuroanatomy and cognitive systems of the brain in both health and illness (brain injury, disease and degeneration).

Content
The structure and neuroanatomy of the temporal, occipital, parietal and frontal lobes of the brain. General theory of the function of each lobe. Brain injury and degeneration, neuro-imaging techniques, vision, memory, attention and brain plasticity.

Assessment/ Compulsory Elements: Essay (80%); Research Poster (20%).

Recommended Texts

The Mirror Neuron System in Action and Language

Co-ordinator/Lecturer: Dr. P. Gough

Summary
Mirror Neurons were first discovered in the macaque monkey in the 1990s. These neurons are active both when the monkey performs an action and when the monkey sees another individual performing the same action. Evidence for a mirror system in humans has since been demonstrated. The discovery has changed ideas about separating sensory and motor information in the brain and provides an explanation for how we may understand others actions through the activation of our own action systems. These ideas have also been applied to several other abilities such as imitation. It has also been hypothesised that the presence of the mirror neuron system in our evolutionary past allowed for the evolution of language. It has been suggested that the MNS is important for our processing of language at two levels: Speech (phonology) and Semantics.

Objective
To explore the Mirror Neuron System (MNS) in the brain, considering its possible applications, in action understanding and speech and language processing.

Content
Discovery of Mirror Neurons in the monkey. The MNS in humans. Roles of the MNS. Controversies about MNS research. The role of the MNS in speech and language processing.
Assessment/Compulsory Elements: Essay

Recommended Texts

Recommended Articles
Co-ordinator: Dr. C. Murphy  
Lecturers: Dr. C. Murphy, Dr. M. Kelly

Summary
This module in Applied Behaviour Analysis is focused on the application of behaviour change procedures in real world settings to improve quality of life for individuals. Postgraduate students working in clinical applied settings will discuss basic practical ABA procedures and tactics, and issues such as appropriate targets and outcomes for IEP purposes.

Objectives
Outline fundamental assumptions for behaviour change procedures. Describe token economy procedures. Describe discrete trial instruction (DTI). Discuss positive reinforcement and issues related to use of punishment.

Content
Fundamental assumptions of behaviour change procedures; using antecedent-based interventions; using positive and negative reinforcement; extinction; using schedules of reinforcement; response-independent schedules (NCR); differential reinforcement procedures (DRO, DRA, DRL); discrimination training; shaping and chaining; discrete trial training; modelling, fading, token economies; and habilitative goals.

Assessment/Compulsory Element: Essay.

Recommended Texts

Recommended Articles


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**Healthy ageing**

Co-ordinator/Lecturer: Dr. M. Kelly

**Summary**
The module will begin with an overview of healthy ageing with a focus on lifestyle interventions, and risk and protective factors related to brain health; moving on to consider behavioural interventions to promote adherence to health behaviours for older adults. Methods for conducting systematic reviews of healthy ageing literature will also be introduced.

**Objectives**
To provide an overview of factors that contribute to healthy ageing, with a focus on brain health. To discuss the relevance of applying behavioural methods to the problems of older adults.

**Content**
Lifestyle factors that contribute to healthy ageing; risk and protective factors related to brain health; interventions to promote improved health outcomes; adherence to interventions and behaviour analysis in ageing; systematically reviewing healthy ageing literature.

**Assessment/Compulsory Element:** MCQ and Journal article review.

**Recommended Articles**


Health Psychology

Co-ordinator/Lecturer: Dr. D. Desmond

Summary
This module provides an overview of key concepts and theories in health and rehabilitation psychology, and investigates how people experience and manage health, illness, and disability.

Objectives
To consider concepts of health, illness and disability. To introduce key models and theories in health and rehabilitation psychology.

Content
Perspectives on health and illness; Illness representations; Adjustment to chronic illness and disability; Self-management. Quality of life. Coping.

Assessment/Compulsory Element: Essay.

Recommended Texts and Articles

Comparative Psychology

Co-ordinator/Lecturer: Dr. A. Coogan

Summary
In this module we examine how the structured study of animal behaviour and neurobiology can inform our understanding of human processes. We examine key psychological processes such as associative learning, cognition and higher-order domains in an evolutionary framework in order to appreciate the opportunities afforded by such approaches, as well as the limitations inherent in comparative psychology.

Objectives
To consider comparative approaches in the behavioural sciences. To appreciate what can (and cannot) be learnt about human behaviour by the study of animal behaviour.

Content
Revisiting evolutionary theory; the evolving vertebrate brain and behaviour; comparative analysis of associative learning; animal cognition; depressed mice and fat rats — the use of genetic animal models to understand psychopathology and abnormal behaviour; ethical considerations in comparative approaches.

Assessment/Compulsory Element: Essay.

Recommended Texts
Psychology in the ‘real world’:
Exploring the psychological and community context of mental health and social well being across the lifespan

No. of Students: 20 Maximum
Co-ordinator/Lecturer: Dr. S. McGilloway

Summary
This module introduces and explores the application of psychological research methods and theoretical approaches/concepts in community-engaged research, with a specific focus on the mental health and social well-being of a range of client groups. In the final week of the course, groups of students (approx. 3 per group) will be asked to give a brief oral presentation on a relevant topic of their choice.

Objectives
To introduce and explore the application of psychological research methods, theoretical approaches and concepts in community-based research on the mental health and social well being of children, young people and adults.

Content
Introduction to the practical application of psychological research to the mental health and social well being of various client groups. The module will focus, in particular, on: (1) promotion and prevention programmes/initiatives around mental health and social well being in Ireland (and elsewhere); and (2) evaluation research. A number of projects – based mainly on innovative interventions and initiatives undertaken by staff and students in the Mental Health and Social Research Unit (MHSRU), Department of Psychology (www.mhsru.com) - will provide the context for this module.

Assessment/Compulsory Element: 2000-word essay (60%); in-class presentation (30%); attendance (10%).

Recommended Texts

Recommended Articles

1 Other recommended readings will be provided throughout the module.