

Module Details for CASE STUDIES IN NEUROPSYCHOLOGY

Current Record

Module Code	PSU34710
Module Name	CASE STUDIES IN NEUROPSYCHOLOGY
Module Short Title	
ECTS weighting	5
Semester/term taught	Michaelmas Term
Contact Hours and Indicative Student Workload	11 Lectures: 103 hours independent study
Module Coordinator/Owner	Prof Paul Dockree
Learning Outcomes	<p>Learning Outcomes</p> <p>On successful completion of this course, students will be able to:</p> <ul style="list-style-type: none">• Understand broadly the function of different brain regions underlying cognitive function• Knowledge of case study methods of assessment of brain structure and function• Understanding of methods of assessment in cognitive neuropsychology• Knowledge of the different types of neuropsychological syndrome that can arise following particular lesions to the brain• Understanding the relationship between case studies in neuropsychology and techniques in cognitive neuroscience (e.g. imaging and electrophysiological methods)• Knowledge and understanding of the mechanisms and methods of recovery and rehabilitation following brain damage.
Module Learning Aims	<p>Rationale and Aims</p> <p>Rationale:</p> <p>Case studies of patients with brain damage remain a critical part of cognitive neuropsychology's methods for understanding the organisation of cognitive systems and devising principled approaches to rehabilitation. On this topic, there is great scope for clinicians and researchers to inform and learn from one another with respect to the manifestation of clinical disorders, their potential causes, and paths to rehabilitation. Students</p>

are aware of famous patients with brain damage (e.g. Phineas Gage and patient H.M.) but this module will address lesser-known cases, who have nevertheless provided important insights into contemporary research problems across several domains including attention, memory, dysexecutive syndrome and disorders of meta-cognition and social-cognitive processing.

This module aims to:

1) introduce the value of case studies in neuropsychology for dissociating mechanisms of human cognition and contributing to the development of theory.

2) highlight different methodological approaches that are employed to study patients with brain damage, and their advantages and limitations.

3) discuss the role of case studies in complementing other approaches in cognitive neuroscience, including imaging and electrophysiological studies.

4) explain the role of case studies in shaping novel approaches to neuropsychological rehabilitation

Module Content

Course Content

The module will start with an introduction to concepts and methods in neuropsychology and thereafter cover the following topics:

Perceptual Disorders:

- Visual agnosia
- Art and brain injury
- Synaesthesia

Memory Disorders:

- Remembering and forgetting our autobiographical pasts
- Confabulation

Executive function Disorders:

- Dysexecutive Syndrome

Motivational Disorders:

- Apathy
- Impulsivity and disinhibition

Metacognitive Disorders:

- Impaired self-awareness

Connectomics and neuropsychology

- Diaschisis: remote effects of brain lesion
- Maladaptive and compensatory brain changes
- Guided recovery and rehabilitation

Recommended Reading List

Indicative Resources

Reading:

There will be no core textbook for this module. Articles from journals including, *Brain*, *Neuropsychology*, *NeuroCase*, *Cognitive Neuropsychology* and *Neuropsychological Rehabilitation* will be uploaded to Blackboard on a weekly basis in advance of each lecture.

Books for orientation to Neuropsychology:

Introduction to Neuropsychology. 2nd Ed. J. Graham Beaumont.

In to the Silent Land: Travels in Neuropsychology. Paul Broks

Useful websites:

- n. <http://www.the-ins.org>
- n. <http://www.the-bns.org/index.html>
- n. <http://www.thedtgroup.org/brain-injury/about-the-brain-injury-rehabilitation-trust/>
- n. <http://www.psihq.ie/psi-division-neuropsychology>
- n. <http://www.scn40.org>

Module Pre-requisite

For visiting students: Introduction to Psychology or Cognitive Neuroscience Foundation Course

Module Co Requisite

Assessment Details@I-MOD-ASSM

TBC

Module Website

Module approval date

Approved By

Academic Start Year

Academic Year of Data 2020/21