

# PS3032- Assessment in Clinical Psychology

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## **Course Overview**

The aim of this module is to provide a comprehensive introduction to the theory and practice of clinical psychology in the context of understanding the neural mechanisms that underlie dysfunctional behavior. This module therefore is at the interface of several disciplines, including cognitive neuroscience, cognitive psychology, neurology, psychiatry and gerontology.

We will focus on examples where normal lapses in psychological functions — such as inattention or forgetting— progress beyond a healthy spectrum, into disorders like spatial neglect or amnesia. We will emphasise that clinical conditions can be interpreted as reflecting extreme individual differences, and we will explore how these individual differences can be assessed using — for example — behavioural tasks and neuroimaging.

This module aims to provide you with a good understanding of the normal variation in psychological processes, and how brain disorders can lead to variation beyond this range. In addition, the course will help you gain knowledge about practical aspects of psychological testing, including how to assess the impact of brain pathology on behavior.

## **Practical Afternoon Classes**

For the practical classes, students will be divided into three groups for hour-long sessions. The content of the classes will vary. Some will focus on introducing you to the theoretical background of some psychological assessment tools, and enable you to practice administering them. You will also learn about some neuroscientific methods available for the evaluation and quantification of pathology in the nervous system as a result of injury or illness. Other classes will be devoted to student-led group discussions, where you will present and debate an issue in psychological assessment which has generated controversy in the scientific world, and captured the public imagination. This is designed to help you appreciate how basic research can challenge clinical practice, and gives you the opportunity to consider how research could further improve clinical outcomes.

## **Assessment**

### **PS3032**

This module will be assessed entirely by a 90-minute exam. The exam will comprise 5 short questions, which may come from any aspect of the course, including the required readings. You will have to answer 3 of these questions. The exam will be marked as a whole, after reading the response to all three questions.

## **Textbooks**

Although the module does not follow one particular textbook in full, the following provide a useful source of information several chapters of which we will use in some lectures or tutorials, in conjunction with more specific readings.

Zillmer, E., Spiers, M.V., Culbertson, W. Principles of Neuropsychology (2<sup>nd</sup> ed), 2008.  
Wadsworth Publishing OR Kolb, B, Wishaw, I.Q. Fundamentals of Human Neuropsychology, (6th or 7th ed), Worth Publishers 2015

Lezak, M.D., Howieson D.B., Biegler E.D, Tranel D Neuropsychological Assessment. (5<sup>th</sup> ed), 2012. OxfordUniversity Press. Particularly chapters 1,2,3, 4 and 8.

Martin, G.N., Carlson, N.R., & Buskist, W. Psychology (5<sup>th</sup> ed.). 2013. Allyn & Bacon, Pearson Education Ltd. Particularly chapters 2, 4, 8 and 11.

## **Course Contents**

### **Week 6: Basic concepts in assessment.**

#### **Lecture 1**

Assessment in Psychology: aims, concepts and assumptions. What do we mean when we talk about “individual differences”? How can we differentiate “normal” from “abnormal” psychology by looking at groups of different individuals (e.g. statistical distributions, norms, outliers)? Clinical classification of the psychological diseases (DCM and ICD). How can we differentiate “health” and “disease” (ie biological, cognitive and social models for disease mechanisms).

#### **Practical 1**

Behavioral assessment using paper-and-pencil and computerized versions of the test. How can behavioural tasks help us understand and systematise individual patients' symptoms?

### **Week 7: Methods for Assessing Psychological Dysfunction**

#### **Lecture 2**

Evaluating assessments ( comparison standard, validity, reliability, specificity, sensitivity and predictive power). Critical evaluation of neurobiological assessment methods ( genotyping, neuroanatomy, lesion symptom mapping, functional and mollecular neuroimaging )

#### **Practical 2**

Neuroanatomical assessment – the normal brain, stroke diagnostic using brain imaging

### **Week 8: Showcase 1. Spatial attention and spatial neglect.**

#### **Lecture 3**

Disorders of spatial attention: case history, assessment, disease mechanisms and treatment.

### **Practical 3**

Student power-point presentations showcasing a clinical condition of your choice: case history, assessment, mechanisms and treatment

### **Week 9: Showcase 2. Executive function and executive dysfunction**

#### **Lecture 4**

The executive functions are essential for adapting to novel situations. What are the cognitive processes behind the executive function ? How do we understand, assess and treat executive dysfunctions ?

#### **Practical 4**

The pros and cons of cognitive enhancement.

### **Week 10: Individual variables in clinical assessment**

We will discuss how neural and behavioral variables can impact on the result of the clinical assessment.

#### **Practical 5**

This practical will be dedicated to preparing for the course assessment. The students will work on example exam questions and individual feedback will be provided.

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