UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Psychobiology and Neuroscience
Module Code	PSY7012-B
Academic Year	2021/2
Credits	20
School	School of Social Sciences
FHEQ Level	FHEQ Level 7

Contact Hours	
Type	Hours
Lectures	20
Laboratories	4
Directed Study	172
Online Tutorials (Synchronous)	2
Online Lecture (Synchronous)	2

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 2

Module Aims

This module will examine the psychobiological control of functions such as consciousness, locomotion, emotion, pain, eating, and sleep. You will investigate the role of biology in a number of different pathologies e.g eating disorders, anxiety, schizophrenia, substance abuse amongst other neurological disorders such as epilepsy and Alzheimer's disease. The module explores how our knowledge of the structure and function of the nervous system has given rise to current biological/pharmacological treatments of psychiatric and degenerative pathologies.

Outline Syllabus

- History of psychobiology and cognitive neuroscience.
- Biological approaches to personality development and individual difference.
- Anatomy and physiology of the nervous system.
- Rods and cones, spectral sensitivity, introduction to colour vision.
- Neural communication and psychopharmacology.
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- Psychiatric disorders and their biological/pharmacological treatments.
- Role of hormones on the control of brain function and the control of the `master` gland (pituitary) by brain mechanisms.
- Neurodegenerative diseases (Alzheimer's disease , Parkinson's disease).

Learning Outcomes

Outcome Number	Description
01	a) Describe some basic brain mechanisms involved in a number of biological functions; b) Identify and describe the functional architecture of complex brain circuits, which link to behavioural output; c) Identify the uses and limitations of research techniques used in Psychobiology and Neuroscience; d) Understand how the nervous and endocrine systems are involved in various pathologies such as depression, obesity and drug abuse; e) Understand how degeneration of the brain affects normal functioning.
02	a) Understand the organisation of a research article and how to use research articles to support learning; b) Identify the advantages and disadvantages of using human and animal models for Psychobiology and Neuroscience research; c) Understand the actions of drugs and their importance in developing treatments for dysfunctional behaviours.
03	a) Demonstrate good analytical skills; b) Use IT skills to seek out current literature related to the course lectures and tutorials; c) Develop critical thinking skills when reading scientific literature.

Learning, Teaching and Assessment Strategy

Weekly lectures will will present overviews of topics and current issues in behavioural neuroscience, particularly how biological mechanisms influence behaviour (LO1 a-e). A 3D Brain app, animations, demonstrations and videos of the connections between normal brain circuitry and dysfunction will be illustrated(LO1 a-e) in both online and face to face environments. Seminars will be used to explore current up to date literature and to clarify topics covered in class (LO2 a-c, LO3 a-c). Directed study for this module requires students to carry out independent reading relevant to the topics covered in lectures

Mode of Assessment

Type	Method	Description	Weighting
Summative	Coursework - Written	Critically analyse a particular element of a psychological or neurological condition (1500 words)	50%
Summative	Examination - MCQ	MCQ and short answer examination 1.5 hours	50%

Reading List

To access the reading list for this module, please visit https://bradford.rl.talis.com/index.html

Please note:
This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.

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