

Introduction to Psychobiology: From Ion Channels to Abnormal Behaviour

School of Psychology

College of Life and Environmental Sciences

Details

Code 08639

Level of study First Year

Credit value 10

Semester 1

Module description

Topics to be covered:

1. Brain and Behaviour
2. Anatomical organisation of the nervous system
3. Communication with the neuron
4. Communication between neurons
5. Drugs and Behaviour
6. Dopamine and Operant Conditioning
7. Dopamine, Parkinson's disease and schizophrenia
8. Mood disorders
9. Alzheimer's disease
10. Anxiety disorders

KEY LEARNING OUTCOMES:

On completion of this module the student should be able to:

1. Give an account of the historical development of the concept of the cerebral localisation of function and modern views on consciousness.
2. Explain the basic workings of the neuron and synapse.
3. Explain how neurotransmitters exert their action.
4. Describe how drugs can interfere with neural transmission.
5. Give an account of the neurobiological mechanisms underlying schizophrenia, mood disorders, Alzheimer's and anxiety disorders.
6. Explain the role of dopamine in reinforcement
7. Describe the basic anatomical organisation of the nervous system.

Teaching and learning methods

Lectures and workshops