

Module Details	
Module Title	Endocrinology and Neurobiology
Module Code	PHA5010-B
Academic Year	2021/2
Credits	20
School	School of Pharmacy and Medical Sciences
FHEQ Level	FHEQ Level 5

Contact Hours	
Type	Hours
Lectures	32
Laboratories	2
Seminars	12
Tutorials	9
Directed Study	145

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Academic Year

Module Aims
* To facilitate the development of knowledge of the structure and function of the endocrine system and how it is disrupted in pathophysiological conditions. * To review the structure and function of the autonomic nervous system and drug interactions. * To illustrate how disruptions of the CNS (Central Nervous System) can lead to disease symptoms and to familiarise the students with the main drug classes to treat these conditions and provide a link between the biological sciences and therapeutics.

Outline Syllabus

==Endocrinology==

The major endocrine systems will be defined in terms of their anatomy, physiology, hormone secretion and control, hormone function (under both physiological and pathological conditions). The module will consider both systemic and local hormone systems. Drugs used to correct hormonal imbalances will be reviewed as well as the use of other endocrine-based therapies.

==Neurobiology==

Anatomy, physiology and pathophysiology of the autonomic nervous system. Neurotransmitter and receptors in autonomic nervous system. Cholinergic neurotransmission and effects of drugs. Noradrenergic neurotransmission and effect of drugs. Quantitation of drug action. Neuronal pathways and neurotransmitter distribution, integrative neuronal mechanisms, symptoms and pathophysiology of major disorders of the CNS (neurological and psychiatric), major drug groups for the treatment of the conditions described, drug abuse.

Learning Outcomes

Outcome Number	Description
LO1	Discuss the structure and function of the endocrine systems and their role in homeostasis.
LO2	Explain the effects of hormone deficiency and excess.
LO3	Explain how disruptions of the central nervous system can lead to symptoms of disease.
LO4	Explain the mechanism of action of major classes of drug used to treat conditions of the central nervous system.
LO5	Collect, evaluate and draw conclusions from clinical data using sources of information available within the discipline.
LO6	Use effective written, oral, communication and information technology skills to acquire, review and present information.

Learning, Teaching and Assessment Strategy

Information outlining the knowledge and understanding required of this module will be delivered in lectures and tutorials. Keeping in mind the health and safety of the students and staff due to the ongoing Covid situation, this year some lectures and tutorial sessions will be held on-line. The practical laboratory sessions in semester 2 are currently scheduled to be on-campus. Please note that the percentage of time spent in the different teaching formats may change depending on the Covid situation.

Self-directed learning to support each topic will take place in your directed study time. This will develop your cognitive skills and reinforce the taught component which will be covered in lectures and reviewed in tutorials and practical sessions.

Mode of Assessment			
Type	Method	Description	Weighting
Summative	Examination - Closed Book	Written examination End of Semester 2 (2 Hrs)	70%
Summative	Coursework - Written	Case Study (800 words) Semester 1	20%
Summative	Presentation	Oral Presentation (10 minutes) on an allocated topic related to endocrinology or neurobiology Semester 2	10%

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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