UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Endocrinology and Neurobiology
Module Code	PHA5010-B
Academic Year	2020/1
Credits	20
School	School of Pharmacy and Medical Sciences
Subject Area	Pharmacy
FHEQ Level	FHEQ Level 5
Pre-requisites	CLS4002-B, CLS4004-C, CLS4003-B
Co-requisites	N/A

Contact Hours	
Type	Hours
Online Lecture (Asynchronous)	36
Online Seminar (Synchronous)	13
Laboratories	2
Directed Study	149

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

Module Aims

To facilitate the development of knowledge of the structure & 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
01	Discuss the structure & function of the endocrine systems and their role in homeostasis.
02	Explain the effects of hormone deficiency and excess.
03	Explain how disruptions of the CNS can lead to symptoms of disease.
04	Explain the mechanism of action of the major classes of drug used to treat conditions of the CNS.
05	Collect, evaluate and draw conclusions from clinical data using sources of information available within the discipline.
06	Use effective written and oral communication and IT 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. 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.
A formative assessment will be used to monitor your progress.
Your knowledge base of the material will be assessed by a Semester 2 examination comprising short answer questions.
Your deeper understanding of the pathophysiology and clinical applications will be assessed by an oral presentation and case study.

Keeping in mind the health and safety of the students due to the current Covid situation, this year the learning and teaching sessions will be asynchronous online lectures supported by synchronous online tutorial sessions. 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.

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