UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Pharmacy Science And Practice 1
Module Code	PHA5014-R
Academic Year	2020/1
Credits	90
School	School of Pharmacy and Medical Sciences
Subject Area	Pharmacy
FHEQ Level	FHEQ Level 5
Pre-requisites	N/A
Co-requisites	N/A

Contact Hours	
Type	Hours
Online Lecture (Synchronous)	24
Seminars	25
Practical Classes or Workshops	107
Laboratories	28
Directed Study	180
Independent Study	536

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

Module Aims

To integrate knowledge, skills and practice to be able to understand the physiology and pathology of the major body systems and to use this to recognise signs and symptoms of health conditions in these body systems. To learn how to identify the therapeutic agents that may be used to treat these conditions and their pharmacology including mechanisms of action, pharmacokinetic and pharmacodynamic considerations. To be able to process prescriptions for commonly prescribed medicines used in these conditions and to advise patients about their usage and to promote healthy behaviours.

Outline Syllabus

To develop and apply understanding of various aspects of body systems from physiological, pathological, therapeutic, legal, ethical and clinical perspectives by:
- Exploring the anatomical features and physiological and biochemical concepts/principles of the gastrointestinal, endocrine, reproductive, cardiovascular, urinary, respiratory, nervous, musculoskeletal, immune and sensory systems (skin, eye, ear, nose and tongue).
- Understanding the physiological changes of the relevant body systems in different stages of life.
- Recognising important signs and symptoms and underlying pathophysiology of common conditions (both major and minor) of the above organs and systems.
- Investigating and interpreting clinical data and diagnostic tests available and the influence these effects have on evidence-based decision making.
- Understanding and communicating scientific information effectively and efficiently to a range of audiences including other healthcare professionals and patients.
- Examining and elucidating the pharmacology and medicinal chemistry of drugs used in treating diseases of the above organs and systems.
- Theory and practice of processing multiple-item prescriptions for commonly prescribed medicines used to treat or prevent common conditions affecting the above organs and body systems.
- Applying the theories and models of health promotion to advise patients on behaviour change, with a focus on substance misuse (including tobacco and alcohol) and sun-related skin conditions.
- Recognising the difference between major and minor health conditions in the main body systems and organs and developing a 'responding to symptoms' strategy to manage self-limiting conditions.
- Comparing strengths and weaknesses of drug delivery systems used in the above organs and systems for optimum medication efficacy in the patient being treated.

Learning Outcomes	
Outcome Number	Description
LO1	Manage the procurement, storage, supply, use and disposal of medicines, including ensuring an appropriate supply chain.
LO2	Recognise the normal structure and function of the gastrointestinal, endocrine, reproductive, cardiovascular, urinary, respiratory, nervous, musculoskeletal, immune and sensory systems (skin, eye, ear, nose and tongue).
LO3	Understand the physiological changes of the relevant body systems in different stages of life.
LO4	Recognise important signs and symptoms and underlying pathophysiology of common conditions of the above organs and body systems.
LO5	Interpret simple clinical data and diagnostic tests relating to the above body systems and their effects on evidence-based decision making.
LO6	Explain the pharmacology and medicinal chemistry of drugs used in treating diseases of the above organs and body systems.
LO7	Process prescriptions for commonly prescribed medicines used to treat or prevent common conditions affecting the above organs and body systems.
LO8	Apply the theories and models of health promotion to advise patients on behaviour change to improve health, with a focus on substance misuse (including tobacco and alcohol) and sun-related skin conditions.
LO9	Recognise the difference between major and minor health conditions in the above body systems and organs using a 'responding to symptoms' approach to identify self-limiting conditions and consider when to refer.
LO10	Evaluate different drug delivery systems to optimise medicines efficacy.
LO11	Play an active and appropriate role within the team.

Learning, Teaching and Assessment Strategy

Students will develop the knowledge, understanding and skills necessary to meet the learning outcomes of the module through the programme's instructional learning and teaching strategy; Team-Based Learning (TBL). By studying the core knowledge-based content of the module out of class through guided reading, supported by interactive student support sessions students will engage in group activities to ensure understanding and application their developed knowledge. Activities will be based in several settings including classrooms and laboratories.
Resources for self-directed study will be provided for students. Self-directed study will include guided reading and completion of TBL Study Packs, preparation for RAPs, Application Exercise, laboratory/workshop and Prescription Processing sessions.
TBL follows a range of assessment from individual to team and written to oral. Students are assessed through a number of individual readiness assurance tests (iRAT) throughout the academic year. On completion of the iRAT assessment, students form their pre-assigned teams (5-7 students) and retake the assessment as a team (tRAT). Once all the answers have been collated, students receive instant in-class feedback from the academic expert. In subsequent sessions, teams of students will apply their new knowledge to several formative and summative Application Exercises (AE), including role plays, problem solving and laboratory experiments and submission of reports.
Long loop assessment, taken at the start of the year (to integrate & synthesise knowledge from Year 1), contributes 5% to the overall mark of the module.
At the end of the academic year, summative assessment of learning outcomes is through written and practical examinations. To pass the module, students will need to demonstrate a pass standard of 40% in the module overall and must also achieve at least 40% in each of the written and practical examinations.
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 mixture of both face to face and active online sessions. We will have a combination of Online Lecture (Synchronous), Online Lecture (Asynchronous), Practical Class, Workshops, Learning Objects Interaction, Online Tutorial (Synchronous), Seminar and laboratory sessions. We are likely to have more online sessions (around 80%) in semester 1 and more face to face classes (around80%) in the 2nd semester. Please note that the percentage of time spent face to face and online may change depending on the Covid situation.

Mode of Assessment				
Type	Method	Description	Length	Weighting
Summative	Examination - practical/laboratory	Synoptic Practical Examination (Must Pass at 40%)	2 hour	20%
Summative	Examination - MCQ	Long loop examination at the beginning of the year	1 hour	5%
Summative	Examination - Closed Book	Synoptic Written Examination (MCQ/EMQ/modified essay questions) [MUST PASS at 40%]	3 hour	45%
Summative	Classroom test	iRATs 15%; tRATs 5%; Application Exercises/Clinical Skills/lab Reports 5%; Peer review 5% - Supp is Reflection	N/A	30%
Formative	Examination - practical/laboratory	Mock Practical examinations	2 hours	N/A
Formative	Examination - Closed Book	Synoptic Written Exam (MCQ/EMQ/modified essay questions)	3 hours	N/A
Formative	Other form of assessment	Peer review (online)	1 hour	N/A
Formative	Classroom test	Application Exercises / Clinical skills development tasks / laboratory reports	17.5 hour	N/A
Formative	Classroom test	Readiness Assurance Process (RAP)	4.5 hour	N/A

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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