UNIVERSITY of BRADFORD

Module Descriptor

Module Details	
Module Title	Pharmacy Science And Practice 2
Module Code	PHA6020-R
Academic Year	2020/1
Credits	90
School	School of Pharmacy and Medical Sciences
Subject Area	Pharmacy
FHEQ Level	FHEQ Level 6
Pre-requisites	N/A
Co-requisites	N/A

Contact Hours	
Type	Hours
Seminars	18 (student support session on campus)
Lectures	10
Online Lecture (Synchronous)	22
Practical Classes or Workshops	93
Laboratories	4
Directed Study	753

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

Module Aims

To integrate knowledge, skills and practice to be able to understand the pathophysiology of conditions affecting a range of body systems and to use this to recognise signs and symptoms of health conditions in these body systems. To develop an appreciation of the strategies to problem-solving when more than one body system is involved in the aetiology of a condition. To develop an understanding of factors to consider when selecting appropriate drug treatment(s) to treat these conditions, in different patients and at different stages of life, taking into account both drug-related and patient-related factors. To be able to process more complex prescriptions for multiple items and to develop an understanding of and approach to patient motivation to adhere to such treatments.

Outline Syllabus

To develop and apply understanding of various aspects of body systems and their inter-relationships from pathophysiological, therapeutic, legal, ethical and clinical perspectives by:
? Evaluating the aetiology, epidemiology, natural history, clinical features, and management of a range of common chronic and self-limiting diseases affecting the gastrointestinal, endocrine, reproductive, cardiovascular, urinary, respiratory, nervous, musculoskeletal, immune and sensory systems and how these conditions may influence one another.
- Developing the ability to respond to symptoms presented by patients in order to recognise and manage self-limiting conditions, identify "red flag" signs and symptoms and when to refer patients to another healthcare professional.
? Integrating different body systems and diseases to predict the mechanism of action of drugs, side effects, adverse drug reactions and contraindications.
- Recognise and/or recommend evidence-based appropriate management options for a range of common self-limiting and long-term conditions.
- Recognise common disease processes that affect multiple body systems such as malignancy, infection, pain and inflammation.
- Developing an understanding of appropriate and reliable reference sources.
- Understanding and communicating scientific information effectively and efficiently to a range of audiences including other healthcare professionals and patients.
? Educating patients, carers, prescribers and other healthcare professionals on the adverse effects of drugs on the above organs and systems.
? Educating patients and prescribers on the effective use, storage and disposal of medicines.
? Educating patients and prescribers on the safe and effective use of medicines in different stages of life including pregnancy.
? Critically appraise approaches to promoting health and preventing lifestyle-based health problems.
? Processing complex prescriptions for the treatment of multiple diseases with multiple medicines.

Learning Outcomes	
Outcome Number	Description
01	Appraise the aetiology, epidemiology, natural history, clinical features, and management of a range of common long-term conditions, in order to recognise and/or recommend the optimal management option (including formulation/drug delivery option), monitor outcomes, enhance adherence, and recognise and resolve medication-related problems.
10	Demonstrate an appropriate understanding of communicating scientific, medical, public health and pharmaceutical information in an audience-appropriate manner, whether that information is for fellow health-care professionals, pharmacy co-workers, patients or the public.
11	Work effectively within a team.
02	Appraise the aetiology, epidemiology, natural history, clinical features, competing diagnoses (differential diagnosis), "red flag" features and management options of a range of self-limiting conditions in order to correctly recognise them from information provided by or about the patient (effectively "responding to symptoms") and recommend appropriate and effective management or onward referral.
03	Integrate and apply knowledge and skills to be able to problem-solve and consider appropriate management options when patients present with multiple conditions that affect more than one of these body systems - gastrointestinal, endocrine, reproductive, cardiovascular, urinary, respiratory, nervous, musculoskeletal, immune and sensory systems (skin, eye, ear, nose and tongue).
04	Evaluate the adverse effects, contraindications and interactions of commonly used drugs in these conditions to influence treatment regimens and in order to educate patients and prescribers about their recognition and avoidance.
05	Identify and assess factors that can adversely affect the lifecycle of a medicine in order to educate patients and prescribers on their avoidance.
06	Assess the different effects of drugs at different stages of life, including children, adults, during pregnancy and in older age, in order to educate patients and prescribers on the safe and effective use of medicines at different life stages.
07	Critically appraise and apply strategies aimed at promoting health and preventing lifestyle-influenced health problems.
08	Effectively process complex prescriptions for the treatment of multiple diseases with multiple medicines.
09	Demonstrate ability to synthesise information from different sources (e.g. different units of study, different reference sources).

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 a number of 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 of 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 a number of 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 3% 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.

Mode of Assessment

Type	Method	Description	Length	Weighting
Summative	Examination - practical/laboratory	Synoptic Practical Examination (Must Pass at 40%)	2 hour	30%
Summative	Examination - MCQ	Long loop examination at the beginning of the year	1 hour	3%
Summative	Examination - Closed Book	Synoptic Written Examination (MCQ/EMQ/modified essay questions) [MUST PASS at 40%]	2 hour	27%
Summative	Classroom test	iRATs 15%; tRATS 5%; Application Exercises/Prescription Processing tasks/lab reports15%; Peer Review 5%, Supp is Reflect	N/A	40%

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.
