Transport 1 - Cardiovascular, Urinary and Respiratory Systems

Module Code: PHA5005-C
Academic Year: 2018-19
Credit Rating: 30
School: School of Pharmacy and Medical Sciences
Subject Area: Pharmacy
FHEQ Level: FHEQ Level 5
Module Leader: Dr Rajendran Gopalan

Additional Tutors:
Mr Babir Malik, Dr Khaled Assi, Dr Talat Nasim, Dr Diana Wood, Dr Venu Vangala, Clare Hedges, Professor Tim Palmer, Mrs V-Lin Cheong, Mr Hadar Zaman, Gary Deakin, Ms Shanaz Khaliq, Mr Scott Dalgliesh, Dr Samantha McLean, Mr James Johnston, Dr Ian Grimsey, Dr Sriharsha Kantamneni, Professor Marcus Rattray

Pre-requisites: Capability in Pharmacy 1 2017-18, Foundation Studies for
Co-requisites: Capability in Pharmacy 2 2018-19, Nutrition, Metabolism

Contact Hours

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>9</td>
</tr>
<tr>
<td>Tutorials</td>
<td>38</td>
</tr>
<tr>
<td>Laboratory</td>
<td>23</td>
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<tr>
<td>Directed Study</td>
<td>230</td>
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Availability Periods

<table>
<thead>
<tr>
<th>Occurrence</th>
<th>Location/Period</th>
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<tr>
<td>BDA</td>
<td>University of Bradford / Academic Year (Sept - May)</td>
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Module Aims

This module builds on the Foundation Studies in Pharmacy modules and aims to provide pharmacy students with the integrated knowledge and skills needed to:
Recognise the normal structure and function of, the cardiovascular, urinary and respiratory systems;

Recognise important symptoms of disease of the cardiovascular, urinary and respiratory systems;

Recognise the contribution of the cardiovascular and urinary systems to drug disposition;

Explain how drugs acting on the cardiovascular, urinary and respiratory systems work;

Identify the strengths and weaknesses of pulmonary drug delivery;

Understand the application of a range of health promotion theories of change that are used in the development of health promotion interventions and the role pharmacists can play in this;

Process prescriptions for patients with single health problem/disease (of the cardiovascular, urinary or respiratory system) managed by multiple drugs.

**Outline Syllabus**

- The anatomical features and physiological and biochemical concepts/principles of the cardiovascular, urinary and respiratory systems.
- Interpreting normal historical, physical and laboratory findings
- The strengths and weaknesses of drug delivery systems used in the cardiovascular, urinary and respiratory systems and their effective use
- The pharmacology and medicinal chemistry of drugs used in treating diseases of the cardiovascular, urinary and respiratory systems
- Explaining the symptoms of diseases affecting the cardiovascular, urinary and respiratory systems
- Applying the theories and models of health promotion to prevent hazardous smoking
- Processing multiple-item prescriptions for commonly prescribed medicines used to treat or cardiovascular, urinary and respiratory problems.

Veterinary prescriptions

**Module Learning Outcomes**

On successful completion of this module, students will be able to...

1. Relate anatomical features and physiological and biochemical concepts/principles of the cardiovascular, urinary and respiratory systems in order to: recognise normal historical, physical and laboratory findings; assess the strengths and weaknesses of drug delivery systems and explain their effective use; explain how drugs work;
explain the symptoms of disease.

2 Appraise the theories and models of health promotion and apply them in order to prevent hazardous smoking.

3 Process multiple-item prescriptions for commonly prescribed medicines used to treat or prevent cardiovascular, renal and respiratory problems.

**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. Students will study the core knowledge-based content of the module out of class; this is then assessed through a series of individual readiness assurance tests (i-RAT), which are MCQ assessments for learning taken at regular intervals throughout the academic year. Students discuss the i-RAT assessment in teams of 5-7 and retake the assessment as a team (t-RAT). In class sessions, students will apply their new knowledge to a number of formative and summative team application exercises during the academic year.

Finally, students will be assessed that they can individually meet learning outcomes through a summative module exam at the end of the stage. 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 the exam. Marks from the 'synoptic' written examination paper for the question that relates to nutrition, metabolism &/or reproduction will contribute to this module, as outlined in 'Assessment components and weightings'.

Supplementary Assessment for the module is as original, the only exception is for the Peer Review of Team performance component where the supplementary will be a reflection exercise.

**Mode of Assessment**

<table>
<thead>
<tr>
<th>Type</th>
<th>Method</th>
<th>Description</th>
<th>Length</th>
<th>Weighting</th>
<th>Final Assess'</th>
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</thead>
<tbody>
<tr>
<td>Summative</td>
<td>Other form of assessment DO NOT USE</td>
<td>Ongoing auditive assessment (i-RATs(15%) t-RATs(5%) Team Application Exercise(15%)Peer review of performance in team(5%)</td>
<td>40%</td>
<td>40%</td>
<td>No</td>
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<tr>
<td>Summative Examination - MCQ</td>
<td>Final MCQ &amp; EMQ examination must be passed at 40%</td>
<td>45%</td>
<td>Yes</td>
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<tr>
<td>Summative Examination - closed book</td>
<td>PHA5005-C-related question (from the synoptic written exam paper)</td>
<td>15%</td>
<td>No</td>
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**Legacy Code (if applicable)**

PH-2228U

**Reading List**

To view Reading List, please go to [rebus:list](rebus:list).