1. **Title of the module**

PHAM1003 - Molecules, Cells and Body Systems: Physiology and Pharmacology

1. **School or partner institution which will be responsible for management of the module**

Medway School of Pharmacy

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 4

1. **The number of credits and the ECTS value which the module represents**

30 credits (15 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Autumn and Spring

1. **Prerequisite and co-requisite modules**

Co-requisites MPharm:

PHAM1054 - Molecules, Cells and Body Systems: Cell Biology and Biochemistry

PHAM1005 - Introduction to Pharmacy: Professional Skills, Law and Ethics

PHAM1004 - Medicinal Products: Chemistry and Pharmaceutics for Pharmacy

Co-requisites BSc:

PHAM1054 - Molecules, Cells and Body Systems: Cell Biology and Biochemistry

PHAM1004 - Medicinal Products: Chemistry and Pharmaceutics for Pharmacy

PHAR1033 - Basic Laboratory Skills

PHAR1032 - Analytical Techniques in Pharmacology

1. **The programmes of study to which the module contributes**

BSc (Hons) Pharmacology and Physiology

MPharm (Master of Pharmacy)

1. **The intended subject specific learning outcomes.  
   On successfully completing the module students will be able to:**
2. Demonstrate an in depth knowledge of anatomy and physiology of selected major body systems
3. Demonstrate an understanding of functionality, regulation and relationships between each of the selected major body systems
4. Demonstrate a knowledge of mechanisms of pathophysiological changes which may occur in selected body systems together with relevant therapeutic interventions.
5. Demonstrate an understanding of the role of receptors, ion channels, enzymes and carrier molecules as drug targets.
6. Demonstrate a practical and theoretical knowledge of physiological and pharmacological techniques and an ability to present evaluate and interpret data derived from laboratory sessions.
7. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
8. Work and communicate effectively with others
9. Problem-solve relating to quantitative data, calculations and numeracy
10. Critically evaluate quantitative data
11. Accurately retrieve and understand information as part of self-directed learning
12. Show understanding of the accepted ethical principles involved in the collection, use and interpretation of scientific data
13. **A synopsis of the curriculum**

This module aims to provide students with a detailed knowledge and understanding of human anatomy and physiology of the major body systems. In addition, selected examples of pathophysiology will introduce the concept of disease and the role of non-pharmacological and pharmacological interventions. The module also provides an introduction to the pharmacological basis of drug action which will provide the underpinning knowledge necessary to develop a deep understanding of the pharmacology and therapeutics covered later in the MPharm and Foundation courses.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

The reading list for the module will be updated annually.

The current reading is available to students on the module Moodle page.

1. **Learning and teaching methods**

Total contact hours: 81

Private study hours: 219

Total study hours: 300

1. **Assessment methods**
   1. Main assessment methods
2. Coursework (40% of module mark):
3. Written Lab Report (40% of Coursework mark)
4. MCQ Assessment (30% of Coursework mark)
5. GI Assignment (30% of Coursework mark)
6. Written Examination, 3 hours (60% of module mark)
7. Professional Competency (Pass/Fail)
   1. Attendance (P/F) \*

The pass mark for this module is 40%. Students must pass both the coursework overall and the examination element in order to satisfactorily complete the module.

Students must pass the professional competency assessment in order to satisfactorily complete the module and to progress to the next stage of the programme:

\* Students who fail to meet the 80% threshold attendance at all scheduled coursework sessions (i.e. workshops, laboratory sessions and seminars) will have their coursework capped to the pass mark. Students who fail to meet the 60% threshold will be deemed not to have met the learning outcomes and will fail the module.

13.2 Reassessment methods

Like for like

1. ***Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *9.1* | *9.2* | *9.3* | *9.4* | *9.5* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |
| *Private Study* | X | X | X | X | X | X | X | X | X | X |
| *Lecture* | X | X | X | X | X |  |  |  |  |  |
| *Laboratory* | X | X | X | X | X | X | X | X | X | X |
| *Seminar* | X | X | X | X | X |  |  |  |  |  |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |
| *MCQ Assessment* | X | X | X | X | X |  |  |  |  |  |
| *Written Lab Report* | X | X | X | X | X | X | X | X | X | X |
| *GI Assignment* | X | X | X | X | X | X | X | X | X | X |
| *Written Examination* | X | X | X | X | X |  |  |  |  |  |
| *Attendance* | X | X | X | X | X | X | X | X | X | X |

1. **Inclusive module design**

The School recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Medway

1. **Internationalisation**

The staff involved in teaching this module have had substantial training abroad and this will further the international nature of the delivery of this module.

One of the goals of the MPharm degree programme is to produce graduates who will eventually become registered pharmacists in the United Kingdom. However, many of our MPharm graduates have become successful pharmacists in the Republic of Ireland, Canada and other nations.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
|  |  |  |  |  |
|  |  |  |  |  |

Revised FSO Jan 2018