1. **Title of the module**

PHAM1126 - Medicines and Disease 2C- Brain, Psychiatry, Eyes

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 5

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

40 credits (20 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**

Prerequisite:

A successful completion of all the modules at Stage 1 (level 4) of the MPharm programme

Co-requisites:

PHAM1127 Medicines and Disease 2A

PHAM1128 Medicines and Disease 2B

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

MPharm (Master of Pharmacy)

1. **The intended subject specific learning outcomes.
On successfully completing the module students will be able to:**

Have:

1. A knowledge of the pathophysiology of specific central nervous system diseases and psychiatric conditions

2. An understanding of the pharmacological interventions, including knowledge of mechanism of drug action, for the prevention and treatment of selected conditions

3. An awareness of the patient as an individual and the need for patient monitoring requirements linked to specific disease states or therapeutic interventions

4. An understanding of the theoretical basis of chromatographic methods and mass spectroscopy and a knowledge of their use for identification and quantification of pharmaceuticals

5. A knowledge and understanding of drug receptor interactions, drug stereochemistry and structure activity relationship of relevant CNS drugs

6. An awareness of key statistical methods relevant to scientific and health related research

7. An ability to formulate a search strategy, to conduct and record a literature search and perform basic appraisal of the results

8. Demonstrate an ability to write in an appropriate academic style with proper use of references according to an approved format

9. An increasing awareness of the ethical and legal responsibilities of the pharmacist, including their accountability in relation to supply, dispensing, medical and non-medical prescribing of medicines and appliances

10. An ability to undertake an assessment of health care needs with respect to patient history taking, differential diagnosis, appropriate referral and responding to symptoms

11. An ability to describe a consultation model based on concordance and to apply this to an assessment of health care needs with respect to patient history taking, differential diagnosis, appropriate referral and responding to symptoms

1. **The intended generic learning outcomes.
On successfully completing the module students will be able to:**

Have:

1. An ability to communicate information to both specialist and non-specialist audiences; decision making in the absence of complete information

2. An ability to undertake complex pharmaceutical calculations, without a calculator, to ensure patient safety

3. An ability to analyse and critically evaluate published data

4. Time-management and organisational skills within both the context of self-directed learning and class group work

1. **A synopsis of the curriculum**

Introduction to Central Nervous System (CNS)

* Anatomy, structure and function of CNS
* Function and activity of specific neurotransmitters
* Neurotransmitter pathways in the brain
* Anatomy and structure of the eye
* Pathophysiology and treatment of glaucoma

Neurological Disorders

* Pathophysiology and treatment of epilepsies
* Circadian rhythms and maintenance of normal sleep patterns
* Diagnosis and treatment of sleep disorders

Psychiatric Conditions

* Presentation, diagnosis and treatment of depression and anxiety disorders
* Introduction to substance abuse – focus on alcohol abuse and smoking

Research Methods

* Academic writing and referencing
* Literature searching and critical thinking
* Introduction to statistics

Drug Discovery

* Pharmaceutical Analysis
* High Performance Liquid Chromatography (HPLC)
* Gas Chromatography
* Mass Spectroscopy
* Molecular structure
* Drug Receptor Interactions
* Stereoisomers
* Pro drugs
* Structural Activity Relationships (SAR)

Framework for Practice

* Responding to symptoms
* NHS Contract
* Prescribing
* Medicines supply
* Medicines administration
* Placement and development of professional behaviour
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: 118

Hospital Placement: 24

Private study hours: 258

Total study hours: 400

1. **Assessment methods**
	1. Main assessment methods
2. Coursework (40% of module mark):
3. Written Assignment (50% of Coursework mark)
4. MCQ Assessment (50% of Coursework mark)
5. Written Examination, 3 hours (60% of module mark)
6. Professional Competency (Pass/Fail)
7. Attendance (P/F) \*
8. OSCE (P/F) \*\*
9. Hospital Placement (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 assessments in order to satisfactorily complete the module and to progress to the next stage of the MPharm 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.

\*\* Requires to Pass 3 of 4 stations for a Pass

# 100% attendance is required for a Pass.

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)***

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *8.6* | *8.7* | *8.8* | *8.9* | *8.10* | *8.11* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Private Studies* | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| *Lectures* | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| *Laboratory sessions / workshops* | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| *Placement* |  |  | x |  |  |  |  |  | x | x | x | x | x |  | x |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Written Assignment* | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| *MCQ Assessment* | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| *Written Examination* | x | x | x | x | x | x | x | x | x | x | x |  |  |  |  |
| *OSCE* | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| *Attendance* | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| *Placement* |  |  | 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) |
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Revised FSO Jan 2018