1. **Title of the module**

PHAM1128 - Medicine and Disease 2B – Cancer, Infection, Joints, Lungs and Skin

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

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

PHAM1126 Medicines and Disease 2C

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. An understanding of the pathogenic processes by which a wide range of organisms cause disease in humans and how these are spread

2. An ability to identify the general symptoms exhibited by patients suffering from selected conditions and make judgements about treatment options taking into account the clinical needs of the patient

3. A knowledge of the methods used to monitor drugs which require individualised dosing and an ability to interpret associated clinical data

4. An understanding of the key aspects of the cellular basis of oncology and the principles of neoplastic therapy

5. An ability to critically appraise the literature, interpret key findings, identify study limitations and utilize the emerging evidence to guide best practice

6. Knowledge and understanding of the underlying genetic, immunological and pathological basis of selected diseases

7. Knowledge and critical understanding of the pharmacological /non -pharmacological interventions which are appropriate for the prevention and/or treatment of selected conditions

8. An ability to reflect on and discuss detailed mechanisms of drug action as well as the cautions, contraindications and risks associated with certain drug therapies

9. An awareness of how to undertake and interpret patient monitoring requirements linked to selected clinical conditions and/or therapeutic intervention

10. An understanding of powder and inhalation technology in pharmaceutical manufacture

11. An understanding of powder properties and semi-solid dosage forms

12. An understanding of pharmaceutical analysis and drug discovery

13. An awareness of recent therapeutic advances in the prevention and treatment of viral, bacterial and other infective conditions

14. An understanding of patient assessment with respect to patient history taking and responding to symptoms

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

Have:

1. Knowledge of the skills necessary for independent learning, problem analysis, oral and written communication

2. Application of verbal and non-verbal communication skills appropriate to the situation

3. An ability to analyse and carry out a critical appraisal of the literature

4. Ability to undertake pharmaceutical calculations without a calculator, to ensure patient safety

5. An understanding of the patient as an individual including awareness of factors that may influence health behaviour such as age, gender, ethnicity, faith, illness and cultural background

6. An increasing understanding 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

7. An understanding of the roles of other health and social care professionals in relation to improving patient outcomes

1. **A synopsis of the curriculum**

Pathological basis of disease:

* Introduction to immunology and inflammatory processes
* Introduction to cell biology of cancer, oncogenes and tumour growth
* Microbial infection and control
* Introduction to Public Health concepts & infectious diseases
* Pathogenesis of atopic dermatitis, rhinitis, asthma and chronic obstructive pulmonary disease
* Introduction to the pathogenesis of arthritis and gout

Pharmaceutics and Drug discovery:

* Powder technology (flow, mixing and particle size reduction)
* An introduction to inhalation delivery systems
* Topical dosage forms including emulsions, gels, creams and ointments
* Spectroscopic studies relating to pharmaceutical analysis – including principles and practice of mass spectroscopy (MS); Infrared (IR); and nuclear magnetic resonance (NMR)
* Drug synthesis

Pharmacotherapy:

* Chemotherapy and Infection Control
* Dosage regimen design and therapeutic drug monitoring (TDM)
* Prophylactic, reliever and antihistamine drug groups
* Introduction to immunopharmacology

Professional Practice:

* Minimisation of triggers
* Responding to symptoms
* Smoking cessation
* Health beliefs
* Clinical and legal review of prescriptions
* Application of professional standards and guidance
* Calculations for the practice of pharmacy
* 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: 150

Community Placement: 40

Private study hours: 210

Total study hours: 400

1. **Assessment methods**
	1. Main assessment methods
2. Coursework (40% of module mark):
3. Written Lab Report (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. Pharmaceutical Calculations (P/F) \*\*
9. Community 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 70% attainment 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)***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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* | *8.**12* | *8.**13* | *8.**14* | *9.1* | *9.2* | *9.3* | *9.4* | *9.5* | *9.6* | *9.7* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *Private Studies* | x | x | x | x | x | x | 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 |  |  | x | x | x |
| *Workshops/ seminars/ dispensing/ laboratory sessions* | x | x | x | x |  | x | x | x | x | x | x | x | x | x | x | x | x | x | X | x | x |
| *Placement* |  | x |  |  |  |  | x | x |  |  |  |  |  | x | x | x |  |  | x | x | X |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| *MCQ Assessment* | x | x | x | x |  | x | x | x | x | x | x | x | x | x | x | x |  | x | x | x | X |
| *Written Lab Report* |  |  |  |  | x |  |  |  |  |  |  | x |  |  |  |  | x |  |  |  |  |
| *Written Examination* | x | x | x | x |  | x | x | x | x | x | x | x | x | x | x | x |  | x | x | x | X |
| *Pharmaceutical Calculations* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |
| *Attendance* | x | x | x | x |  | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | X |
| *Placement* |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 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