1. **Title of the module**

PHAM1090: Advanced Drug Delivery Technologies

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 7

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

20 credits (10 ECTS)

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

Spring

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

Prerequisites:

A successful completion of all the modules from Stage 1, 2 and 3 (level 4, 5 and 6) of the MPharm programme

Co-requisite:

PHAM1125 Preparing for Practice

PHAM1096 Sustained Research Project

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:**
2. Have a comprehensive understanding of the concepts that underpin advanced therapeutic agents and their delivery
3. Have a critical awareness and understanding of current problems and/or new insights associated with pharmaceutical agents and their delivery
4. **The intended generic learning outcomes.  
   On successfully completing the module students will be able to:**
5. Identify and resolve complex issues in the topics covered both systematically and creatively
6. Critically assess relevant scientific publications and communicate their conclusions clearly to specialist and non-specialist audiences
7. **A synopsis of the curriculum**

• ***Targeted and non-targeted drug delivery systems***: This part of the elective will provide a detailed insight into the application of synthetic polymers and monoclonal antibodies in nanomedicines. Marketed products or in clinical development will be used to illustrate and critically discuss the challenges and benefits associated with these carriers in the context of drug, protein or DNA/siRNA delivery.

• ***Targeted delivery of contrast agents, early diagnostics and treatment monitoring***: This part of the elective will provide a detailed insight into the application of targeted cell and tissue imaging. The most recent and advanced technological approaches will be discussed and the students will be able to evaluate the advantages/disadvantages of the panel of multimodal contrast agents and their most suitable carriers. This part of the course will also explore the most advances products for early diagnostics and treatment monitoring of diseases, both from the clinical and also point-of-care use perspective

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. Students will be directed as appropriate to primary literature and reviews available from journal collections in Kent or Greenwich and from performing online literature searches.

1. **Learning and teaching methods**

Total contact hours: 42

Private study hours: 158

Total study hours: 200

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

The pass mark for this module is 50% overall. Students must pass the professional competency assessment in order to satisfactorily complete the module and to graduate with a Master of Pharmacy degree.

\* 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* | *9.1* | *9.2* |
| **Learning/ teaching method** |  |  |  |  |
| *Private Studies* | X | X | X | X |
| *Lectures /Workshops* | X | X | X | X |
| **Assessment method** |  |  |  |  |
| *Written Assignment* | X | X | X | X |
| *Written Examination* | X | X | X | X |
| *Attendance* | 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**

This module focuses on scientific developments that are occurring world-wide and across borders.

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.

**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