

Module Details	
Module Title:	Fundamentals of Drug Delivery
Module Code:	PHA6005-B
Academic Year:	2019-20
Credit Rating:	20
School:	School of Pharmacy and Medical Sciences
Subject Area:	Pharmacy
FHEQ Level:	FHEQ Level 6
Pre-requisites:	
Co-requisites:	

Contact Hours	
Type	Hours
Lectures	22
Laboratory	15
Directed Study	163

Availability	
Occurrence	Location / Period
BDA	University of Bradford / Semester 1 (Sep - Jan)

Module Aims
To develop a critical understanding of drug delivery systems including associated regulatory framework and stability testing, physico-chemical principles that determine the routes of drug delivery, and principles of dosage form design.

Outline Syllabus
This module will cover the process of developing pharmaceuticals with a focus on routes of delivery and dosage form development, performance evaluation of dosage forms and regulatory requirements. Topics to be covered include: drug development process, regulatory requirements; GMP and quality assurance; routes of drug delivery; stability of medicines; dosage forms, inhaled, topical and transdermal delivery; and formulation of biopharmaceuticals. The

laboratory classes will attempt to put principles discussed in lectures into practice and will develop laboratory skills as well as scientific report writing.

Learning Outcomes

1	Demonstrate an understanding of the pharmaceutical development process, associated regulatory requirements, principles that determine routes of delivery and drug dosage form design, and formulation and manufacture of dosage forms.
2	Critically evaluate pre-formulation and formulation development process proceeding from laboratory to market.
3	Demonstrate good laboratory practice.
4	Develop generic literature searching and evaluation skills.
5	Analyse data from experiments.
6	Write scientific reports for laboratory based experiments.

Learning, Teaching and Assessment Strategy

This will involve lectures that will explore concepts, principles and theoretical ideas. The latter will be developed and demonstrated in laboratory classes, which will also develop practical skills. Written laboratory reports involving rationalisation of the results/data will develop analytical skills.

Mode of Assessment

Type	Method	Description	Length	Weighting
Summative	Examination - closed book	Closed-book examination	2 hours	70%
Summative	Coursework	Reports on laboratory exercises	1 500 word equivalent	30%

Reading List

To access the reading list for this module, please visit <https://bradford.rl.talis.com/index.html>.

Please note:

This module descriptor has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but minor changes may occur given the interval between publishing and commencement of teaching. Upon commencement of the module, students will receive a handbook with further detail about the module and any changes will be discussed and/or communicated at this point.