

Summary Information

Module Code	5001PHASCI
Formal Module Title	Pharmaceutical Formulation
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 5
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

Learning Methods

Learning Method Type	Hours
Lecture	32
Practical	13
Workshop	4

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
JAN-CTY	CTY	January	12 Weeks

Aims and Outcomes

Aims	To develop knowledge of the scientific principles applied in the formulation, manufacture and testing of pharmaceutical dosage forms.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Apply formulation principles to the design and manufacture of pharmaceutical dosage forms
MLO2	2	Demonstrate knowledge of bioavailability and the systems used to deliver drugs via oral and alternative routes
MLO3	3	Interpret experimental data from testing procedures to determine the quality of pharmaceutical dosage forms

Module Content

Outline Syllabus	Formulation, manufacture and testing of non-sterile dosage forms including solid oral products (tablets and capsules), pulmonary, nasal and transdermal delivery systems. Particle size reduction, mixing, granulation, and drying techniques. Formulation and mechanisms of modified-release oral dosage forms in controlling bioavailability. Formulation and properties of semi-solid pharmaceutical products. Micro- and nano-carrier delivery systems
Module Overview	This module introduces you to the formulation, manufacture and testing of solid oral pharmaceutical dosage forms (tablets and capsules) as well as the development of oral modified release dosage forms.
Additional Information	This module introduces the student to the formulation, manufacture and testing of solid oral pharmaceutical dosage form (tablets and capsules) as well as the development of oral modified release dosage forms. The study of powder properties and the unit processes of mixing, drying and granulation with respect to pharmaceutical powders is also completed. This module also introduces the student to nasal, pulmonary and transdermal drug delivery systems. The concepts of micro- and nanocarrier delivery systems are also introduced. Practical sessions will complement lecture material and provide students with hands-on experience of formulation, manufacture and testing of tablets, powder flow characteristics, powder formulations using capsules and inhaled drug formulations.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Lab Report	40	0	MLO1, MLO3
Centralised Exam	Exam	60	2	MLO2

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Imran Saleem	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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