Preformulation Strategies

Module Information

2022.01, Approved

Summary Information

Module Code	7103PHASCI
Formal Module Title	Preformulation Strategies
Owning School	Pharmacy & Biomolecular Sciences
Career	Postgraduate Taught
Credits	20
Academic level	FHEQ Level 7
Grading Schema	50

Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

Learning Methods

Learning Method Type	Hours
Lecture	14
Practical	21
Workshop	6

Module Offering(s)

Display Name	Location	Start Month	Duration Number Duration Unit
SEP-CTY	CTY	September	12 Weeks

Aims and Outcomes

Aims	To provide students with knowledge and skills to examine physical and chemical properties of both small molecules and macromolecules and estimate how these influence their in vitro and in vivo behaviour as active pharmaceutical ingredients.

After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Demonstrate expertise in applying specialised techniques to determine the physicochemical properties active pharmaceutical ingredients
MLO2	2	Display mastery of interpreting complex information and data generated from specialised techniques to determine the physicochemical properties of active pharmaceutical ingredients

Module Content

Outline Syllabus	SolubilityPermeabilityStabilityThermal analysisCrystallinity/PolymorphismParticle size/morphologyPreformulation techniques: UV, IR, XRD, TGA, DSC, Particle Sizing, SEM, ELISA, SDS Page, Western Blot assay
Module Overview	This module will equip you with the core skills to examine the physical and chemical properties of pharmaceutical ingredients and predict their influence on in vitro and in vivo behaviour.
Additional Information	Course notes Available on Canvas

Assessments

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

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Linda Seton	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings