

Summary Information

Module Code	7123PHASCI
Formal Module Title	Product Development and Control
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	20
Practical	18
Workshop	3

Module Offering(s)

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

Aims and Outcomes

Aims	To understand and apply the principles of good manufacturing practice to the production and quality control of pharmaceutical products.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Display mastery of applying the appropriate testing procedures to ensure the quality of sterile and non-sterile dosage forms and interpreting the data generated.
MLO2	2	Demonstrate expertise in the understanding and application of the principles of good manufacturing practice in the production of sterile and non sterile pharmaceutical products.

Module Content

Outline Syllabus	GMP Milling, mixing, granulation, drying Freeze Drying Process Scale-up Process Analytical Technology (PAT) Tableting, compaction simulation Quality Control Testing Sterilisation process Sterile Product Testing Sterilisation Validation
Module Overview	
Additional Information	Practical sessions will involve students developing hands-on experience of the manufacturing procedures in the production of sterile (injectable ampoules, eyedrops) and non-sterile (tablets) pharmaceutical dosage forms as well as the pharmacopoeial standard QC testing procedures used. Exam will assess students understanding of the principles through data interpretation/problem solving questions

Assessments

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

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Touraj Ehtezazi	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings