

Sterile Pharmaceutical Products

Module Information

2022.01, Approved

Summary Information

Module Code	5004PHASCI
Formal Module Title	Sterile Pharmaceutical Products
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	20
Practical	18
Tutorial	1
Workshop	4

Module Offering(s)

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

Aims and Outcomes

Aims	To describe and evaluate the formulation, preparation, manufacture and quality control of sterile products including injections and ophthalmic products. To describe and discuss the principles and practice of sterilisation and sterilisation controls. To discuss the concepts of quality assurance of sterile products. To facilitate the development of written communication skills as they apply to the content of the module.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Appraise the formulation and characteristics of sterile products
MLO2	2	Demonstrate hygienic and clean preparation, and aseptic processing.
MLO3	3	Discuss the quality control pertinent to the sterilisation of sterile products
MLO4	4	Evaluate the mode of action, mechanisms and controls used during thermal and non-thermal sterilisation processes
MLO5	5	Explain the concepts of bioburden and overkill with respect to sterilisation

Module Content

Outline Syllabus	The formulation and characteristics of sterile products (parenterals and ophthalmics) Hygienic and clean preparation, and aseptic processing. Quality control pertinent to the sterilisation of sterile products The mode of action, mechanistic and controls of moist heat sterilisation (autoclaving), dry heat sterilisation, filtration and gaseous sterilisation The concepts of bioburden and overkill to sterilisation
Module Overview	This module enables you to learn about the formulation, preparation, manufacture and quality control of sterile products. You will be able to describe and discuss the principles and practice of sterilisation and the concepts of quality assurance of sterile products.
Additional Information	The module will introduce the student to the manufacture, formulation and quality control of sterile products. The module will also describe the theory behind the sterilisation process as applied to pharmaceutical products. The module also follows the concepts provided by earlier modules to discuss the systems and devices which provide drug to the patient

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Presentation	Lab Report	40	0	MLO4, MLO2
Centralised Exam	Exam	60	2	MLO3, MLO1, MLO5

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
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