

Biomaterials

Module Information

2022.01, Approved

Summary Information

Module Code	6107BMBMOL
Formal Module Title	Biomaterials
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 6
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

Learning Methods

Learning Method Type	Hours
Lecture	45
Workshop	10

Module Offering(s)

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

Aims and Outcomes

Aims	The aim of this module is to facilitate students examining in detail the importance of biomaterials in contemporary biomedicine, and discover how their analysis in vitro predict success in vivo.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Analyse the important characteristics of biomaterials and how they influence biologic responses
MLO2	2	Critically evaluate biomaterial assisted tissue repair
MLO3	3	Critically evaluate the methods by which the body interrogates a biomaterial.

Module Content

Outline Syllabus	The module will cover the definition, purpose and delivery of biomaterials; the evaluation of biomaterials in vitro and in vivo. Important properties of biomaterials and tissue specific roles of biomaterials will be discussed and the clinical and commercial exploitation of biomaterials explored.
Module Overview	The aim of this module is to facilitate you in examining in detail the importance of biomaterials in contemporary biomedicine. You will discover how your analysis in vitro predicts success in vivo. Through a series of lectures detailing the importance of various properties of biomaterials and how their properties are evaluated you will develop a detailed comprehension of how these substances are continually revolutionising medicine.
Additional Information	This course is designed to inform students as to the current states of the art in biomaterial science. Through a series of lectures detailing the importance of various properties of biomaterials and how their properties are evaluated students will develop an detailed comprehension of how these substances are continually revolutionising medicine. Students will learn about specific tissues and diseases in which biomaterials are making a particularly high impact, and also think about how the commercial aspects of biomaterial science and why developing biomaterials carries such global financial interest.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Report	Critical Analysis of research	50	0	MLO1, MLO2, MLO3
Presentation	Poster presentation	50	0	MLO1, MLO2, MLO3

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Nicholas Bryan	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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