

Microbiology

Module Information

2022.01, Approved

Summary Information

Module Code	4106BMBMOL
Formal Module Title	Microbiology
Owning School	Pharmacy & Biomolecular Sciences
Career	Undergraduate
Credits	20
Academic level	FHEQ Level 4
Grading Schema	40

Teaching Responsibility

LJMU Schools involved in Delivery
Pharmacy & Biomolecular Sciences

Learning Methods

Learning Method Type	Hours
Lecture	24
Practical	23
Workshop	6

Module Offering(s)

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

Aims and Outcomes

Aims	This course aims to provide a broad spectrum of knowledge about microorganisms and their activities which will provide a foundation for microbiology modules at Levels 5 and 6.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Explain the basic methods for cultivation, observation, enumeration and identification of microorganisms, including growth kinetics.
MLO2	2	Recognise the role of bacterial, fungal and viral diseases in man, animals and plants.
MLO3	3	Appreciate the impact of emerging drug resistance and understand the role of antimicrobials.
MLO4	4	Discuss the fundamental role of biofilms.

Module Content

Outline Syllabus	Good microbiological laboratory practice. Risk assessments, personal protection equipment and spillage management. Introduction to bacteria, fungi, parasites and viruses together with an appreciation of the complexity and diversity of their life cycle. Normal flora and microbial classification. Microbial growth kinetics and the effects of the environment on microbial culture. Isolation and identification of suspected pathogens. Bacterial, fungal and viral diseases, including routes of transmission and infection control. Antimicrobials together with an emphasis on emerging drug resistance. Practical methods in microbiology. Biofilms. Cells, tissues and acute inflammation.
Module Overview	This module aims to provide a broad spectrum of knowledge about microorganisms and their activities, which will provide a foundation for microbiology-related modules at levels 5 and 6.
Additional Information	The module will be delivered through a series of lectures, practicals and workshops. There will be a compulsory laboratory practical assessment. The final assessment component will be an examination. The lectures will cover most of the learning outcome but students will be required to do some independent learning and reading around the topics.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Practice	Practical assessment	50	0	MLO1, MLO2
Centralised Exam	Examination	50	2	MLO1, MLO2, MLO3, MLO4

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Ismeni Nakouti	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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