

Summary Information

Module Code	5501YAUBIO
Formal Module Title	Microbiology and Biotechnology
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	90
Practical	6

Module Offering(s)

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

Aims and Outcomes

Aims	The aim of this module is to provide a broad spectrum of knowledge about microorganisms and their activities. Students will develop an understanding of the ecology and importance of microorganisms in different environments. Students will also develop an understanding of the applied nature of microbiology and how fundamental knowledge can be applied for the development of useful products, which address global challenges.
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After completing the module the student should be able to:

Learning Outcomes

Code	Number	Description
MLO1	1	Recognise the diversity of microorganisms in natural environments, and important morphological features.
MLO2	2	Describe the basic methods for cultivation, observation, enumeration and identification of microorganisms, including factors which influence growth.
MLO3	3	Examine the impact of microorganisms in the environment, and their role in health and disease.
MLO4	4	Discuss the importance and future potential of microorganisms in development of useful products.
MLO5	5	Appreciate the role of biotechnology, traditional and modern, in the food industry.
MLO6	6	Discuss the use of biotechnology in the advancement of infectious disease diagnosis and therapy.

Module Content

Outline Syllabus	The module content will include study of the diversity of microorganisms in natural environments, and important morphological features, basic methods for cultivation, observation, enumeration and identification of microorganisms, including factors which influence growth. The module will also cover the impact of microorganisms in the environment, and their role in health and disease, and the importance and future potential of microorganisms in medical and food biotechnology.
Module Overview	
Additional Information	This module is for students to develop an understanding of the role of microorganisms in the environment, and how they are used in biotechnology for the manufacture of useful products. Students will also develop basic practical skills in microbiology. Students will develop an understanding of the advances in biotechnological applications and their importance in food production and human health.

Assessments

Assignment Category	Assessment Name	Weight	Exam/Test Length (hours)	Module Learning Outcome Mapping
Essay	Essay	33	0	MLO1, MLO2, MLO3, MLO4
Exam	Exam	34	2	MLO3, MLO4, MLO5
Report	Report	33	0	MLO3, MLO4, MLO6

Module Contacts

Module Leader

Contact Name	Applies to all offerings	Offerings
Katie Evans	Yes	N/A

Partner Module Team

Contact Name	Applies to all offerings	Offerings
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