

Liverpool John Moores University

Title: GENERAL AND MEDICAL MICROBIOLOGY
Status: Definitive
Code: **5502ICBTBE** (127048)
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: ICBT, Colombo

Team	Leader
Alison Cotgrave	Y

Academic Level: FHEQ5
Credit Value: 15
Total Delivered Hours: 65
Total Learning Hours: 150
Private Study: 85

Delivery Options

Course typically offered: Semester 1 and Summer

Component	Contact Hours
Lecture	45
Practical	12
Tutorial	6

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Formal written exam	70	2
Practice	Practical	Practical portfolio (1500 words)	30	

Aims

To enable learners to develop knowledge of microbiology, including the structure, physiology and genetics of microorganisms, and safe microbiology laboratory practice.

Also, this module is designed to cover the current methods used for the collection of specimens from patients; isolation and identification of bacteria by biochemical, serological and other laboratory methods, laboratory methods of screening for

antibiotic sensitivity, and types of pathogen.

Learning Outcomes

After completing the module the student should be able to:

- 1 Recognise the diversity of microorganisms in natural environments and apply knowledge of the range of microorganisms involved in human disease processes, including the role of normal microbiota in health and disease.
- 2 Describe and examine the basic methods for cultivation, observation, enumeration and identification of microorganisms, including factors which influence growth.
- 3 Apply knowledge in the identification of pathogenic microorganisms and in the treatment of infectious disease.
- 4 Describe the basic components of the immune system and discuss the role of the immunity in infectious diseases.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Formal Written Exam	1	3	4
Practical Assessment	2		

Outline Syllabus

Diversity of microorganisms

Prokaryotic cell structure

Structure and properties of viruses

Microbial growth

The control of microorganisms

Microbial genetics

Methods for the collection of specimens from patients

Identify bacteria

Methods of screening for antibiotic sensitivity

Other pathogens

Components of the immune system

Learning Activities

Students will be supported in their learning, to achieve the above learning outcomes, in the following ways:

- By a series of lectures and tutorials and through discussion of tutorials.

Notes

Learners will need access to appropriate laboratory, library and IT facilities and

tutorials.