

## Course Overview

### Mycology & Virology

<b>Course code :</b>	LMT605
<b>Course title:</b>	Mycology & Virology
<b>Level/semester:</b>	<b>Sixth Semester</b>
<b>PRECEDING COURSES</b>	<b>Principles of Microbiology, Microbiology</b>
<b>Credit hours:3</b>	<b>Theoretical: 2</b>
	<b>Practical: 2</b>

**Course Title :Theory**

UNIT	CONTENTS	HOURS
UNIT1	Principles of Mycology - Characterization of fungi (vegetative and reproduction structures and nutritional adaptations)	8
UNIT2	Medically Important Phyla of Fungi - Deuteromycota. - Zygomycota. - Ascomycota. - Basidiomycota.	12
UNIT 3	Methods of Study of Fungi - Morphological study. - Cultural and serological methods.	5
UNIT 4	Principles of Virology - General properties of viruses (host range and size). - Viral structure (nucleic acid, capsid, envelope, and general morphology). - Taxonomy of viruses. - Isolation , cultivation, and identification of viruses (growth of bacteriophages in the lab, and viral identification). - Viral multiplication (multiplication of bacteriophages). - Viruses and cancer (transformation of normal cells into tumor cells and oncogenic RNA- and DNAviruses). - Latent viral infections. - Slow viral infections	20

**Course Title :(Practical)**

<b>UNIT</b>	<b>CONTENTS</b>	<b>HOURS</b>
<b>1</b>	<b>Safety Rules and General Instructions</b>	<b>2</b>
<b>2</b>	<b>Cultivation &amp; Morphology of Moulds</b> - Mycelium. - Hyphae. - Vegetative mycelium. - Aerial mycelium.	<b>12</b>
<b>3</b>	<b>Yeast Morphology</b> - Buds. - Ascospores.	<b>5</b>
<b>4</b>	<b>Identification of Unknown Fungi</b>	<b>10</b>
<b>5</b>	<b>Cultivation &amp; Enumeration of Bacteriophages</b> - Plaques. - Plaque-forming unit (PFU).	<b>15</b>
<b>6</b>	<b>Isolation &amp; Identification of Coliform from Raw Sewage</b>	<b>16</b>