

BS Microbiology

Semester 1

Course Code	Course Title	Credit Hours
MIC-301	General Microbiology-I	3(2-1)
MIC-303	Biochemistry-I	3(2-1)
MIC-305	Cell Biology-I	3(3-0)
MTH-321	Mathematics (Compulsory)	3(3-0)
ENG-321	EAP (English for Academic Purpose) (Compulsory)	3(3-0)
ISL-321	Islamic Studies (Compulsory)	2(2-0)

Semester 2

Course Code	Course Title	Credit Hours
MIC-302	General Microbiology-II	3(2-1)
MIC-304	Microbial Anatomy and Physiology	3(2-1)
MIC-306	Biochemistry-II	3(2-1)
MIC-308	Cell Biology-II	3(2-1)
ENG-322	Academic Reading and Writing (Compulsory)	3(3-0)
PST-322	Pakistan Studies (Compulsory)	2(2-0)

Semester 3

Course Code	Course Title	Credit Hours
MIC-401	Bacteriology	3(2-1)
MIC-403	Microbial Taxonomy	3(3-0)
MIC-405	Fundamentals of Mycology	3(2-1)
STAT-421	Biostatistics (Compulsory)	3(3-0)
ENG-421	Communication Skills (Compulsory)	3(3-0)
CSI-421	Computer Applications in Biology (Compulsory)	3(2-1)

Semester 4

Course Code	Course Title	Credit Hours
MIC-402	Basic Pathology	3(2-1)
MIC-404	Food and Dairy Microbiology	3(2-1)
MIC-406	Virology	3(2-1)
MIC-408	Techniques in Parasitology	3(2-1)

MIC-410	Fundamentals of Epidemiology & Public Health	3(3-0)
ENG-422	Advanced Academic Reading and Writing (Compulsory)	3(3-0)

Semester 5

Course Code	Course Title	Credit Hours
MIC-501	General Immunology	3(2-1)
MIC-503	Cell and Tissue Culture Technology	3(2-1)
MIC-505	Microbial Enzyme Technology	3(2-1)
MIC-507	Biotechnology	3(2-1)
MIC-509	Agricultural Microbiology	3(3-0)
MIC-511	Biosafety and Risk Management	2(2-0)

Semester 6

Course Code	Course Title	Credit Hours
MIC-502	Veterinary Microbiology	3(2-1)
MIC-504	Environmental Biotechnology	3(2-1)
MIC-506	Medical Microbiology	3(2-1)
MIC-508	Diagnostic Chemistry for Microbial Diseases	3(3-0)
MIC-510	Bioinformatics	3(2-1)
MIC-512	Management of Infectious Waste	3(3-0)

Semester 7

Course Code	Course Title	Credit Hours
MIC-601	Microbial Biodegradation and Bioremediation	3(3-0)
MIC-603	Microbial Genetics	3(2-1)
MIC-605	Marine & Fresh water Microbiology	3(2-1)
MIC-607	Pharmaceutical Microbiology	3(2-1)
MIC-609	Industrial Microbiology	3(2-1)
ENG-621	EFE (English for Employment)	3(3-0)

Semester 8

Course Code	Course Title	Credit Hours
MIC-602	Research Methodology	2(2-0)
MIC-604	Clinical Microbiology (Optional Papers-I)	3(2-1)
MIC-606	Molecular Immunology (Optional Papers-II)	3(3-0)

MIC-608	Mini Research Project (Optional)	6(0-6)
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