

Curriculum BS Microbiology

YEAR ONE / SEMESTER FIRST

S. No	Course Code	Name of Subject	Credits
1.	ENG 101	English-I (CR)	3
2.	PS 101	Pakistan Studies (CR)	2
3.	MTH 107	Mathematics-I (CR)	3
4.	BOT 101	Diversity of Plants (GC) (Botany in HEC)	3
5.	MIC 105	Human Physiology-I (GC)	2+1
6.	MIC 106	Fundamentals of Microbiology-I (DSFC)	2+2
		Total	18

CR: Compulsory Requirements (the student has no choice)

GC: General courses to be chosen from other departments

DSFC: Discipline Specific Foundation Courses

YEAR ONE / SEMESTER SECOND

S. No	Course Code	Name of Subject	Credits
1.	ENG 151	English-II (CR)	3
2.	ISL 151	Islamic Studies / Ethics (CR)	2
3.	MTH 151 /- ?	Mathematics-II / Biostatistics (CR)	3
4.	MIC 155	Human Physiology-II (GC)	2+1
5.	ZOOL 101	Principle of Animal Life (GC) (Zoology in HEC)	2+1
6.	156	Fundamentals of Microbiology-II (DSFC)	2+2
		Total	18

CR: Compulsory Requirements (the student has no choice)

GC: General courses to be chosen from other departments

DSFC: Discipline Specific Foundation Courses

YEAR TWO/SEMESTER THIRD

S. No	Course Code	Name of Subject	Credits
1.	CS 101	Introduction to Information & Computer Technology (ICT) (Computer Application in HEC) (CR)	2+1
2.	MIC 205	Biochemistry-I (GC)	2+1
3.	ENV 101	Introduction to Environmental Sciences (Environmental Current Issues in HEC) (GC)	3
4.	MIC 206	Introduction to Medical Microbiology (DSFC)	2+2
5.	MIC 207	General Immunology (DSFC)	2+1
			16

CR: Compulsory Requirements (the student has no choice)

GC: General courses to be chosen from other departments

DSFC: Discipline Specific Foundation Courses

YEAR TWO/SEMESTER Fourth

S. No	Course Code	Name of Subject	Credits
1	ENG 201	English-III (CR)*	3
2	MIC 251	General Genetics (GR)	2+1
3	MIC 255	Biochemistry-II (GR)	2+1
4	MIC 256	Microbial Taxonomy (DSFC)	2+1
5	MIC 257	General Virology (DSFC)	2+1
6	MIC 258	Cell Biology-I (DSFC)	2+1
		Total	18

*Not in the Compulsory Courses of HEC but as per UoS Uniformity Policy where number of compulsory courses should be nine with total Cr.Hrs. twenty-five.

CR: Compulsory Requirements (the student has no choice)

GC: General courses to be chosen from other departments

DSFC: Discipline Specific Foundation Courses

YEAR three/SEMESTER fifth

S. No	Course Code	Name of Subject	Credits
1	MIC 305	Mycology (DSFC)	2+1
2	MIC 306	Biotechnology (DSFC)	2+1
3	MIC 307	Bacterial Genetics (MC)	2+2
4	MIC 308	Medical Virology (MC)	2+2
5	MIC 309	Cell Biology-II (MC)	2+1
		Total	17

DSFC: Discipline Specific Foundation Courses

MC: Major Courses

YEAR three/SEMESTER sixth

S. No	Course Code	Name of Subject	Credits
1	MIC 355	Research Methodology (DSFC)	2+1
2	MIC 356	Clinical Bacteriology (MC)	2+2
3	MIC 357	Genetic Engineering (MC)	2+2
4	MIC 358	Microbial Physiology (MC)	2+1
5	MIC 360	Fresh Water Microbiology (MC)	2+1
			17

DSFC: Discipline Specific Foundation Courses

MC: Major Courses

YEAR FOUR/SEMESTER SEVENTH

S. No	Course Code	Name of Subject	Credits
1	MIC 405	Molecular Mechanism of Antimicrobial Agent (MC)	2+2
2	MIC 406	Soil Microbiology (MC)	2+1
3	MIC 407	Plant Microbiology / Microbial Plant Diseases (EC)	2+1
4	MIC 408	Food and Dairy Microbiology (EC)	2+1
5	ENG 251	English-IV* (CR)**	2+1
			16

*Not found in either HEC BS recent Curricula

** Compulsory Requirement as to fulfill the recent UoS criteria of "Uniformity in curriculum of all discipline" in which CR should be nine in number with total twenty-five Cr.Hrs.

Note: ELECTIVE PAPER / RESEARCH PROJ / INTERNSHIP of Cr Hrs 3 from seventh semester moved to eight semester.

YEAR FOUR/SEMESTER EIGHT

S. No	Course Code	Name of Subject	Credits
1	MIC 455	Epidemiology, Public Health and Bioethics (MC)	2+1
2	MIC 456	Immunobiology (MC)	2+1
3	MIC 457	Clinical Parasitology (EC)	2+1
4	MIC 458	Industrial Microbiology (EC)	2+1
5	MIC 466	RESEARCH PROJ / INTERNSHIP or Elective V & VI*	6/3+3
			18