

INSTITUTE OF MICROBIOLOGY

CREDIT HOURS FOR UNDERGRADUATE AND GRADUATE DEGREES

A credit hour means teaching/earning a theory course for one hour each week throughout the semester.

Course	Duration of Class
Theory Course of 03 Credit Hours	3 classes of 01 hour per week Or 2 classes of 1.5 hours per week
Practical (Lab)Work/Field Work of 01 Credit Hour	02 to 03 contact hours per week

One credit hour in laboratory or practical work/project would require lab contact of two to three hours per week throughout the semester.

The credit hours are denoted by two digits within brackets with a hyphen/plus in between. The first digit represents the theory part while the second (right side) digit represents the practical.

Thus 3(3-0) means three credit hours of theory, while 4(3-1) means a total of four credit hours, of which three are of theory while one credit hour is for laboratory/studio work/field work/practical work supervised as mentioned above.

CLASS ATTENDANCE

A candidate with less than 75% of the attendance in a course shall not be eligible to appear in the final examination.

RULES REGARDING THE AFFILIATED COLLEGES (GOVERNMENT / PRIVATE)

. SEMESTER SYSTEM BASED DEGREES

The apportionment of marks is as under

(a) Mid-semester examination	20%
(b) At least 02 Assignments and 02 quizzes/ presentations.	10%
(c) Final examination (at least 20% of Final Exams will consist of Mid Term Course).	70%
Total	100%

GRADE POINT AVERAGE

21.6.1 Grade point and equivalence between letter grading and numerical grading shall be as follows:

Grade	Value	Marks (%)
A	4.00	85% or above
A-	3.75-3.95	80% to 84%
B+	3.35- 3.70	70% to 79%
B	3.00-3.28	65% to 69%
B-	2.70-2.94	60% to 64%
C+	2.35-2.63	55% to 59%
C	2.00-2.28	50 to 54%
C-	1.50-1.90	45 % to 49%
D	1.00-1.40	40 to 44%
I	(Incomplete)	
F (Fail)	0	<ul style="list-style-type: none">• Less than 40% for undergraduate & master level programs.• Less than 50% for MS/MPhil/PhD.
W	(Withdrawn)	Will not be included in GPA calculation.

* There is no "D" and "C-" Grades in Pharm-D, Electrical Engineering, MPhil and PhD programs.

In order to calculate the GPA, multiply Grade Point (next page) with the Credit Hours in each Course to obtain total grade points, add up to cumulative Grade Points and divide by the total number of Credit Hours to get the GPA for a Semester.

$$\text{GPA} = \frac{\sum (\text{GP} \times \text{Credit Hours}) \text{ courses of a semester}}{\text{Total Credit Hours of a semester}}$$

For calculating CGPA, sum total of GPs in a semester earned in different courses multiplied by respective credit hour of a course and divided by total numbers of credit hours.

$$\text{CGPA} = \frac{\sum (\text{GP} \times \text{Credit Hours}) \text{ of all courses in a programme}}{\text{Total Credit Hours of all courses in that Programme}}$$

21.6.2 Grade point (GP) shall be determined on the basis of numerical grade in the following table:

Percentage Marks	Grade Point (GP)	Percentage Marks	Grade Point (GP)	Percentage Marks	Grade Point (GP)	Percentage Marks	Grade Point (GP)
Grade "D" Range of Numerical value		Grade "C+" Range of Numerical value		Grade "B+" Range of Numerical value		Grade 'A' Range of Numerical value	
40	1.0	55	2.35	70	3.25	85.0 and above	4.00*
41	1.1	56	2.42	71	3.30		
42	1.2	57	2.49	72	3.35		
43	1.3	58	2.56	73	3.40		
44	1.4	59	2.63	74	3.45		
Grade "C-" Range of Numerical value		Grade "B-" Range of Numerical value		75	3.50		
45	1.5	60	2.70	76	3.55		
46	1.6	61	2.76	77	3.60		
47	1.7	62	2.82	78	3.65		
48	1.8	63	2.88	79	3.70		
49	1.9	64	2.94				
Grade "C" Range of Numerical value		Grade "B" Range of Numerical value		Grade "A-" Range of Numerical value			
50	2.0	65	3.00	80	3.75		
51	2.07	66	3.05	81	3.80		
52	2.14	67	3.10	82	3.85		
53	2.21	68	3.15	83	3.90		
54	2.28	69	3.20	84	3.95		

REQUIRED CREDIT HOURS AND DURATION OF DEGREE PROGRAMS

Following is the minimum and maximum duration of academic programs.

DEGREE PROGRAM	CREDIT HOURS	DURATION	
		MINIMUM	MAXIMUM
Under Graduate Program (BS and BBA etc.)	130	4 Academic Years	6 Academic Years

ROAD MAP OF BS MICROBIOLOGY (2020-2024)

Scheme of Studies BS Microbiology

Semester 1		
MIC-301	Introductory Microbiology	3(2-1)
MIC-303	Microbial Taxonomy	3(3-0)
BCH-301	Introductory Biochemistry	4(3-1)
BOT-301	Diversity of Plants	4(3-1)
ISL-321	Islamic Studies	2(2-0)
ISL-322	Ethics (For Non-Muslim only)	2(2-0)
PST-321	Pakistan Studies	2(2-0)
ENG-321	Functional English	3(3-0)
Semester 2		
MIC-302	Cell Biology	3(3-0)
MIC-304	Microbial Anatomy and Physiology	3(2-1)
MIC-306	Human Physiology	3(2-1)
ZOL-301	Principles in Animal Life-I	4(3-1)
ENG-322	English Comprehension and Composition	3(3-0)
MTH-321	Algebra and Trigonometry	3(3-0)
Semester 3		
MIC-401	Basic Pathology	3(2-1)
MIC-403	Bacteriology	3(2-1)
MIC-405	Mycology	3(2-1)
MIC-407	Biosafety and Risk Management	3(2-1)
ENG-422	Technical Writing	3(3-0)
CSI-321	Introduction to Computing Applications	3(2-1)
Semester 4		
MIC-402	General Virology	3(2-1)
MIC-404	Immunology	3(2-1)
MIC-406	Parasitology	3(2-1)
MIC-408	Epidemiology, Public Health and Bioethics	3(3-0)
MIC-410	Laboratory Animals and Model Organisms	2(0-2)
STA-307	Biostatistics	3(3-0)
Semester 5		
MIC-501	Systemic Virology	3(2-1)
MIC-503	Cell and Tissue Culture	3(2-1)
MIC-505	Microbial Genetics	3(3-0)
MIC-507	Molecular Biology and Biotechnology	3(2-1)

MIC-509	Food Microbiology	3(2-1)
MIC-511	Infectious Waste Management	3(2-1)
Semester 6		
MIC-502	Vaccinology	3(2-1)
MIC-504	Environmental Microbiology	3(2-1)
MIC-506	Medical Microbiology	3(2-1)
MIC-508	Veterinary Microbiology	3(2-1)
MIC-510	Microbial Enzymology	3(3-0)
BIN-422	Introduction to Bioinformatics	3(2-1)
Semester 7		
MIC-601	Diagnostic Microbiology	3(2-1)
MIC-603	Soil and Agricultural Microbiology	3(2-1)
MIC-605	Marine and Fresh Water Microbiology	3(2-1)
MIC-607	Pharmaceutical and Industrial Microbiology	4(3-1)
MIC-609	Genetic Engineering	3(2-1)
MIC-611	Research Methodology	2(2-0)
Semester 8		
MIC-632	Internship	6(0-6)

FACULTY OF LIFE SCIENCES, GULAB DEVI EDUCATIONAL COMPLEX, LAHORE

TIME TABLE (FALL - 2020-21) FOR INSTITUTE OF MICROBIOLOGY

MONDAY

ROOMS #	8:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00	12:00-01:00	01:00-02:00
Saigal Block, Lecture Hall # 03	Functional English (ENG-321), 1st Micro, Biotech, Ms. Nosheen	Introductory Microbiology (MIC-301), 1st Micro, Ms. Saira Khan				Pakistan Studies (PST-321), 1st Micro, 3rd Biotech, Ms.Sadaf
Al-Aleem Medical College, Biochemsitry Lab			Introductory Biochemistry (BCH-301), 1st Micro, Ms. Rida			

TUESDAY

ROOMS #	8:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00	12:00-01:00	01:00-02:00
Saigal Block, Lecture Hall # 03	Functional English (ENG-321), 1st Micro, Biotech, Ms. Nosheen	Introductory Microbiology (MIC-301), 1st Micro, Ms.Saira Khan	Diversity of Plants (BOT-301), 1st Micro, Ms. Sidra Munir	Introductory Biochemistry (BCH-301), 1st Micro, Ms. Rida		
Arian Block, Microbiology Lab					Introductory Microbiology (MIC-301), 1st Micro, Mr. Ameer Hamza	

WEDNESDAY

ROOMS #	8:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00	12:00-01:00	01:00-02:00
Saigal Block, Lecture Hall # 03	Functional English (ENG-321), 1st Micro, Biotech, Ms. Nosheen	Islamic Studies (Isl-321), 1st Micro, Ms. Ayesha Ibrahim	Diversity of Plants (BOT-301), 1st Micro, Ms. Sidra Munir	Pak Studies (PST-321), 1st Micro, 3rd Biotech, Ms. Sadaf Inam		Microbial Taxonomy (MIC-303), 1st Micro, Mr. Abdullah Riaz

THURSDAY

ROOMS #	8:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00	12:00-01:00	01:00-02:00
Saigal Block, Lecture Hall # 03	Islamic Studies (ISL-321), 1st Micro, Ms. Ayesha Ibrahim		Introductory Biochemistry (BCH-301), 1st Micro, Ms. Rida	Microbial Taxonomy (MIC-303), 1st Micro, Mr. Abdullah Riaz	Diversity of Plants (BOT-301), 1st Micro, Ms. Sidra Munir	

FRIDAY

ROOMS #	8:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00	12:00-01:00	01:00-02:00
Saigal Block, Lecture Hall # 03	Introductory Biochemistry (BCH-301), 1st Micro, Ms. Rida					
Arian Block, Zoology Lab			Diversity of Plants (BOT-301), 1st Micro, Ms. Sidra Munir			

SATURDAY

ROOMS #	8:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00	12:00-01:00	01:00-02:00
Saigal Block, Lecture Hall # 03						Microbial Taxonomy (MIC-303), 1st Micro, Mr. Abdullah Riaz

Focal Persons

From Microbiology: Mr. Abdullah: Cell No. 0300 4828886

From Admin Office: Mr. Muzaffar Khaliq; Cell No. 0324 4082690