

INSTITUTE OF BIOCHEMISTRY

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W	(Withdrawn)	Will not be included in GPA calculation.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 BIOCHEMISTRY (2020-2024)

Scheme of Studies BS Biochemistry

Semester 1		
BCH-301	Introductory Biochemistry	4 (3-1)
ENG-321	Functional English	3 (3-0)
ISL-321	Islamic Studies	2(2-0)
ISL-322	Ethics (For Non-Muslim only)	2(2-0)
MTH-321	Algebra and Trigonometry	3 (3-0)
ACH- 301	Fundamentals of Inorganic Chemistry	3 (2-1)
SOC- 307	Introduction to Sociology	3 (3-0)
Semester 2		
BCH- 302	Biochemistry of Carbohydrates	4(3-1)
BCH-304	Biophysics	3(3-0)
ENG-322	English Comprehension and Composition	3 (3-0)
PST-321	Pakistan studies	2 (2-0)
STA-307	Biostatistics	3(3-0)
PSY-422	Introduction to Psychology	3 (3-0)
Semester 3		
BCH-401	Cell Biology	3(2-1)
BCH-403	Biochemistry of Nucleic acid	3(3-0)
ENG- 421	Communication Skills	3(3-0)
CSI-321	Introduction to Computing Applications	3 (3-0)
ACH- 302	Fundamentals of organic Chemistry	3 (2-1)

Semester 4		
BCH- 402	Human Physiology	3(3-0)
BCH- 404	Biochemistry of lipids	4(3-1)
BCH- 406	Molecular Biology	4(3-1)
ACH- 401	Fundamental of Physical Chemistry	3(2-1)
MIC-301	Introductory Microbiology	3(2-1)
Semester 5		
BCH-301	Amino Acids and Proteins	4(3-1)
BCH-303	Enzymology	3(2-1)
BCH-303	Biosafety & Ethics	2(2-0)
BCH-307	Biochemical Techniques	3(2-1)
BCH-309	Plant Biochemistry	3(3-0)
Semester 6		
BCH-302	Nutritional Biochemistry	3(2-1)
BCH- 304	Industrial Biochemistry	3(2-1)
BCH-306	Genetics	3(3-0)
BCH-308	Biomembranes & Cell Signaling	3(3-0)
BCH-310	Bioenergetics	2(2-0)
BNB-302	Proteomics	3(2-1)
Semester 7		
BCH-601	Current Trends in Biochemistry	3(3-0)
BCH-603	Biological Metabolism	4(4-0)
BCH-605	Fermentation Biotechnology	3(3-0)
BIN-402	Introduction to Biological Data Retrieval	3(2-1)
BNB-304	Genomics	3(3-0)
Semester 8		
BIT-405	Introduction to Biotechnology	3(3-0)
BCH-602	Immunochemistry	3(3-0)
BCH-604	Antimicrobials & Chemotherapy	3(3-0)
BCH-606	Research Planning and Report Writing	3(3-0)
BCH-628	Seminar	1(0-1)
BCH-631	Computational Methods for Biological Systems	3(2-1)
BCH-632	Internship	3(0-3)

FACULTY OF LIFE SCIENCES, GULAB DEVI EDUCATIONAL COMPLEX, LAHORE

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

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
Arian Block, First Floor, Room # 01		Introductory Biochemistry (BCH-301), 1st Biochem, Ms. Saman		Introduction to Sociology (SOC-307), 1st Biochem, Ms. Tayyeba	Islamic Studies (ISL-321), 1st Biotech, 1st Biochem, Ms. Ayesha Ibrahim	Functional English (ENG-321), 1st HND, 1st Biochem, Ms. Nosheen

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
Arian Block, First Floor, Room # 01	Fundamentals of Inorganic Chemistry (ACH-301), 1st Biochem, Ms. Saman			Algebra & Trigonometry (MTH-321), 1st Biotech, Biochem, Mr. Zubair	Introduction to Sociology (SOC-307), 1st Biochem, Ms. Tayyeba	Islamic Studies (ISL-321), 1st Biotech, 1st Biochem, Ms. Ayesha Ibrahim

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
Arian Block, First Floor, Room # 01				Introductory Biochemistry (BCH-301), 1st Biochem, Ms. Saman	Functional English (ENG-321), 1st HND, Biochem, Ms. Nosheen	

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
Arian Block, First Floor, Room # 01	Introduction to Sociology (SOC-307), 1st Biochem, Ms. Tayyeba	Fundamentals of Inorganic Chemistry (ACH-301), 1st Biochem, Ms. Saman				Functional English (ENG-321), 1st HND, Biochem, Ms. Nosheen
Al-Aleem Medical College, Biochemistry Lab			Introductory Biochemistry (BCH-301), 1st Biochem, Ms. Saman			

FRIDAY

ROOMS #	8:00-09:00	09:00-10:00	10:00-11:00	11:00-12:00		
Arian Block, First Floor, Room # 01	Introductory Biochemistry (BCH-301), 1st Biochem, Ms. Saman	Algebra & Trigonometry (MTH-321), 1st Biotech, Biochem, Mr. Zubair				

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
Arian Block, First Floor, Room # 01			Algebra & Trigonometry (MTH-321), 1st Biotech, Biochem, Mr. Zubair			
Arian Block, Ground Floor, Chemistry Lab	Fundamentals of Inorganic Chemistry (ACH-301), 1st Biochem, Ms. Saman					

Focal Persons

From Biochemistry: Mr. Bashir; Cell No. 0312 9233786; 0332 9233786

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