



SCHOOL OF LIFE SCIENCE AND BIOTECHNOLOGY

Department of Biological Sciences

B.Sc. Biochemistry

Course Grid -

B.Sc. Biochemistry Semester-I

Course Type	Course Code	Course Name	Contact Hours Per Week	L	T	P	Credit
Core Theory	BIC11001	Molecules of Life	4	3	1	0	4
Core Practical	BIC12002	Molecules of Life Lab	3	0	0	3	2
Core Theory	BIC11003	Protein	4	3	1	0	4
Core Practical	BIC12004	Protein Lab	3	0	0	3	2
AECCI	ENG11057	English Language and Literature	2	2	0	0	2
Foundation	DGS11011	Design Thinking	2	2	0	0	2
Generic Elective 1 (GE1*) Theory	BOT11001 /ZOL11001	Any one of the following: Elective Botany I /Elective Zoology I / Elective Chemistry I / *Elective General Psychology	4	3	1	0	4
Generic Elective 1 (GE1*) Practical	BOT12002 /ZOL12002	Corresponding Practical (anyone): Elective Botany I Lab / Elective Zoology I Lab / Elective Chemistry I Lab /	3	0	0	3	2
Total			30	14	4	12	22

*6 credit course for non-lab-based subject

B.Sc. Biochemistry Semester-II

Course Type	Course Code	Course Name	Contact Hours Per Week	L	T	P	Credit
Core Theory	BIC11005	Enzymes	4	3	1	0	4
Core Practical	BIC12006	Enzymes Lab	3	0	0	3	2
Core Theory	BIC11007	Human Physiology	4	3	1	0	4
Core Practical	BIC12008	Human Physiology Lab	3	0	0	3	2

AECCH Theory	EVS11110	Environmental Science and Energy Resources	2	2	0	0	2
Foundation	IDP14001	Inter disciplinary Project	3	3	0	0	3
Generic Elective 2#(GE2) Theory	BOT11003 /ZOL1100 3	Any one of the following: Elective Botany II /ElectiveZoologyII/	4	3	1	0	4
Generic Elective 2# (GE2*) Practical	BOT12004 /ZOL1200 4	Corresponding Practical (anyone): Elective Botany II Lab /ElectiveZoologyII Lab	3	0	0	3	2
Total			26	15	4	12	23

*6 credit course for non-lab-based subject

B.Sc.BiochemistrySemester-III							
Course Type	Course Code	Course Name	Contact Hours Per Week	L	T	P	Credit
Core Theory	BIC11010	Metabolism of Carbohydrates and Lipids	4	3	1	0	4
Core Practical	BIC12011	Metabolism of Carbohydrate and Lipids Lab	4	0	0	4	2
Core Theory	BIC11012	Cell Biology	4	3	1	0	4
Core Practical	BIC12013	Cell Biology Lab	4	0	0	4	2
Core Theory	BIC11014	Metabolism of Amino acids and Nucleotides	4	3	1	0	4
Core Practical	BIC12015	Metabolism of Amino acids and Nucleotides Lab	4	0	0	4	2
	BIC11016/ BIC11017	Tools and Techniques in/Clinical Biochemistry	3	3	0	0	2

Foundation	SOC14100	Community Service	-	-	-	-	1
Foundation	EIC11001	Venture Ideation	2	2	0	0	2
Generic Elective3# (GE3*) Theory	CSE11641/ CHM11151/ SDS11506	Any one of the following: Elective Computer Science I/ Elective Chemistry I / Elective Statistics I*/	4	3	1	0	4
Generic Practical	CSE12642/ CHM12152	Corresponding Practical (anyone): Elective Computer Science I Lab/ Elective Chemistry I Lab	4	0	0	4	2
Total			39	17	4	16	29

B.Sc. Biochemistry Semester-V

Course Type	Course Code	Course Name	Contact Hours Per Week	L	T	P	Credit
Course Type	BIC11026	Concept of Genetics	4	3	1	0	4
Core Theory	BIC12027	Concept of Genetics Lab	4	0	0	4	2
Core Practical	BIC11028	Gene Expression and Regulation	4	3	1	0	4
Course Type	BIC12029	Gene Expression and Regulation Lab	4	0	0	4	2
CORE Discipline Specific Elective I(DSEI) Theory	BIC11030/ BIC11032/ BIC11034	Any one of the following:	4	3	1	0	4
CORE Discipline Specific Elective I(DSEI) Practical	BIC12031/ BIC12033/ BIC12035	Corresponding Practical(any one): Bioinformatics Lab/ Basic Microbiology Lab/ Molecular Basis of non- infectious human diseases Lab	4	0	0	4	2

CORE Discipline Specific Elective II (DSEII) Theory	BIC11036/ BIC11038/ BIC11040	Any one of the following: Molecular Basis of Infectious Human Diseases/ Medical Microbiology/ Nutritional Biochemistry	4	3	1	0	4
CORE Discipline Specific Elective II (DSEII) Practical	BIC12037/ BIC12039/ BIC12041	Molecular Basis of Infectious Human Diseases Lab/ Medical Microbiology Lab/ Nutritional	4	0	0	4	2
Foundation	BIC14042	Industry Internship					2
Total			32	12	4	16	26

*6 credit course for non-lab based subject

Note: Offer of DSE courses may vary from year to year based on availability of faculty

B.Sc. Biochemistry Semester-VI							
Course Type	Course Code	Course Name	Contact Hours Per Week	L	T	P	Credit
Course Type	BIC11043	Genetic Engineering and Biotechnology	4	3	1	0	4
Core Theory	BIC12044	Genetic Engineering and Biotechnology Lab	4	0	0	4	2
Course Type	BIC11045	Hormones: Biochemistry and Function	4	3	1	0	4
Core Theory	BIC12046	Lab: Hormones Biochemistry and Function	4	0	0	4	2
CORE Discipline Specific Elective III (DSEIII) Theory	BIC11047/ BIC11049/ BIC11051	Any one of the following: Plant Biochemistry / Advanced Cell Biology / Research Methodology*	4	3	1	0	4

CORE Discipline Specific Elective III (DSEIII) Practical	BIC12048 /BIC12050	Corresponding Practical (anyone): Plant Biochemistry Lab / Advanced Cell Biology Lab	4	0	0	4	2
	BIC15052	Dissertation	9	0	0	9	6
Total			28	9	3	16	26

Total credit distribution semester-wise:

Semester	I	II	III	IV	V	VI	Total
Credits	22	23	29	28	26	26	154