

Outcomes Based Education (OBE) Framework
Three Year Full Time Undergraduate Program
B.Sc. Biotechnology

FIRST YEAR: Semester: 1					
Course Code	Course Title	No. of hours per week			Credits
		Lecture	Tutorial	Practical	
BBT 101	Basics of Biotechnology	3	-	-	3
BBT 103	Biology-I	3	-	-	3
BBT 105	Biology-II	3	-	-	3
BBT 107	Chemistry	3	-	-	2
BBT 109	Computer Science	3	-	-	2
BBT 111	Biology-I	-	-	3	2
BBT 113	Biology-II	-	-	3	2
BBT 115	Chemistry	-	-	3	1
BBT 117	Computer Science	-	-	3	1
BBT 119	Seminar/Journal Club	-	3	-	1
	Total	15	3	12	20

FIRST YEAR: Semester: 2					
Course Code	Course Title	No. of hours per week			Credits
		Lecture	Tutorial	Practical	
BBT 102	Cell Biology	3	-	-	3
BBT 104	Biochemistry	3	-	-	3
BBT 106	Environmental Science	3	-	-	3
BBT 108 (or) BBT 110	Physics (or) Advanced Chemistry	3	-	-	2
BBT 112 (or) BBT 114	Mathematics (or) Biotechnology & Business Entrepreneurship	3	-	-	2
BBT 116	Cell Biology	-	-	3	2
BBT 118	Biochemistry	-	-	3	2
BBT 120	Environmental Science	-	-	3	1
BBT 122 (or) BBT 124	Physics (or) Advanced Chemistry	-	-	3	1
BBT 126	Seminar/Journal Club	-	3	-	1
	Total	15	3	12	20

SECOND YEAR: Semester: 3					
Course Code	Course Title	No. of hours per week			Credits
		Lecture	Tutorial	Practical	
BBT 201	Genetics	3	-	-	3
BBT 203	Molecular Biology	3	-	-	3
BBT 205	Developmental Biology	3	-	-	3
BBT 207	Biophysics	3	-	-	3
BBT 209	Genetics	-	-	3	2
BBT 211	Molecular Biology	-	-	3	2
BBT 213	Developmental Biology	-	-	3	2
BBT 215	Biophysics	-	-	3	1

BBT 217	Seminar/Journal Club	-	3	-	1
	Total	12	3	12	20

SECOND YEAR: Semester: 4					
Course Code	Course Title	No. of hours per week			Credits
		Lecture	Tutorial	Practical	
BBT 202	Microbiology	3	-	-	3
BBT 204	Pharmacology & Pharmacogenomics	3	-	-	3
BBT 206	Plant Biotechnology	3	-	-	3
BBT 208	Bioinformatics	3	-	-	3
BBT 210 (or) BBT 212	Immunology (or) Cell & Tissue Engineering	3	-	-	2
BBT 214	Microbiology	-	-	3	1
BBT 216	Pharmacology & Pharmacogenomics	-	-	3	1
BBT 218	Plant Biotechnology	-	-	3	1
BBT 220	Bioinformatics	-	-	3	1
BBT 222 (or) BBT 224	Immunology (or) Cell & Tissue Engineering	-	-	3	1
BBT 226	Seminar/Journal Club	-	3	-	1
	Total	15	3	15	20

THIRD YEAR: Semester: 5					
Course Code	Course Title	No. of hours per week			Credits
		Lecture	Tutorial	Practical	
BBT 301	Microbial Biotechnology	3	-	-	3
BBT 303	Biostatistics	3	-	-	3
BBT 305	Advanced Genomics	3	-	-	3
BBT 307	Nanobiotechnology	3	-	-	3
BBT 309	Research Methodology	3	-	-	3
BBT 311	Microbial Biotechnology	-	-	3	1
BBT 313	Biostatistics	-	-	3	1
BBT 315	Advanced Genomics	-	-	3	1
BBT 317	Nanobiotechnology	-	-	3	1
BBT 319	Seminar/Journal Club	-	3	-	1
	Total	15	3	12	20

THIRD YEAR: Semester: 6					
Course Code	Course Title	No. of hours per week			Credits
		Lecture	Tutorial	Practical	
BBT 302	Tutorial/Seminars/Journal Club	-	8	-	4
BBT 399	Research Project/Submission of dissertation/Submission of manuscript	-	-	32	16
	Total	-	8	32	20