

Department of Biochemistry and Biotechnology

Description of the Program

Duration of the program:

Years: Four (04) Years

Semesters: Two Semesters per Year [Total Eight (08) Semesters]

Total minimum credit requirement to complete the program: According to BNQF (Part B) for Higher Education: 157 Credits

Total class weeks in a Year/semester: 52 Weeks in a year and 26 Weeks for a Semester.

Minimum CGPA requirements for graduation: 2.00 out of 4.00

Maximum academic years of completion: 6 years (May be extended 1 year with the approval of Academic council)

Year/Level/Semester/Term wise distribution of courses:

1st Year 1st Semester (Semester I)

Course Number	Course Title	Credit
051 - BB - 111	Biophysical Chemistry-I	3.0
051 - BB - 112	Bioorganic Chemistry-I	3.0
051 - BB - 113	Basic Biochemistry	3.0
051 - BB - 114	Introductory Biotechnology	3.0
051 - BB - 115	University English	3.0
051 - BB - 116	Practical/ Sessional	3.0

1st Year 2nd Semester (Semester II)

Course Number	Course Title	Credit
051 - BB - 121	Biophysical Chemistry-II	3.0
051 - BB - 122	Bioorganic Chemistry-II	3.0
051 - BB - 123	Basic Microbiology	3.0
051 - BB - 124	Human Physiology-I	3.0
051 - BB - 125	Enzymology-I	3.0
051 - BB - 126	Practical/ Sessional	3.0

2nd Year 1st Semester (Semester III)

Course Number	Course Title	Credit
051 - BB - 211	Enzymology - II	3.0
051 - BB - 212	Biomolecules - I	3.0
051 - BB - 213	Metabolism - IA	3.0
051 - BB - 214	Human Physiology - II	3.0
051 - BB - 215	Biostatistics	3.0
051 - BB - 216	Practical/ Sessional	3.0

2nd Year 2nd Semester (Semester IV)

Course Number	Course Title	Credit
051 - BB - 221	Molecular Biology-I	3.0
051 - BB - 222	Biomolecules - II	3.0
051 - BB - 223	Metabolism - IB	3.0
051 - BB - 224	Human Nutrition	4.0
051 - BB - 225	Computer Science	3.0
051 - BB - 226	Practical/ Sessional	3.0

3rd Year 1st Semester (Semester V)

Course Number	Course Title	Credit
051 - BB - 311	Metabolism-II	4.0
051 - BB - 312	Molecular Biology-II	3.0
051 - BB - 313	Pharmaceutical Chemistry	3.0
051 - BB - 314	Basic Immunology	4.0
051 - BB - 315	Endocrinology	4.0
051 - BB - 316	Practical/ Sessional	3.0

3rd Year 2nd Semester (Semester VI)

Course Number	Course Title	Credit
051 - BB - 321	Cell Biology-I	3.0
051 - BB - 322	Clinical Biochemistry	4.0
051 - BB - 323	Molecular Genetics	4.0
051 - BB - 324	Analytical Methods in Biochemistry	4.0
051 - BB - 325	Plant Biochemistry	3.0
051 - BB - 326	Practical/ Sessional	3.0

4th Year 1st Semester (Semester VII)

Course Number	Course Title	Credit
051 - BB - 411	Cell Biology-II	3.0
051 - BB - 412	Genetic Engineering-I	3.0
051 - BB - 413	Immunogenetics	4.0
051 - BB - 414	Virology	4.0
051 - BB - 415	Environmental Biotechnology	4.0
051 - BB - 416	Practical/ Sessional	3.0

4th Year 2nd Semester (Semester VIII)

Course Number	Course Title	Credit
051 - BB - 421	Genetic Engineering-II	3.0
051 - BB - 422	Biotechnology of Microbial System	4.0
051 - BB - 423	Spectroscopy	4.0
051 - BB - 424	Cancer Biology	4.0
051 - BB - 425	Practical/ Sessional	3.0