**BS ZOOLOGY**

**PROGRAM LENGTH**

Duration: 04 years

Semesters: 08

Maximum Credit Hrs. 136

**ENTRY REQUIREMENTS (Eligibility Criteria)**

Intermediate with Bio (Pre-Medical) and 40 score in Entry Test

**ANNUAL INTAKE**

There are 40 places available annually.

**Course Structure**

|  |  |
| --- | --- |
| **1st Semester**  | **1st year**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | Compulsory-I |  | English-I (Functional English) | 3(3+0) |
|  | Compulsory-II |  | Pakistan Studies | 2(2+0) |
|  | Compulsory-III |  | Mathematics | 3(3+0) |
|  | General- I |  | Botany – I (Diversity of Plants) | 3(2+1) |
|  | General – II |  | Chemistry-I (Organic Chemistry) | 3(2+1) |
|  | Foundation-I |  | Principles of Animal Life-I | 4(3+1) |
|  |  |  | Total Credits | 18 |
| **2nd Semester**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | Compulsory-IV |  | English-II (Communication Skills) | 3(3+0) |
|  | Compulsory-V |  | Islamic Studies | 2(2+0) |
|  | Compulsory-VI |  | Biostatistics | 3(3+0) |
|  | General- III |  | Botany-II (Plant Systematics,Anatomy and Development / Embryology) | 3(2+1) |
|  | General – IV |  | Chemistry-II (Inorganic Chemistry) | 3(2+1) |
|  | Foundation-II |  | Principles of Animal Life-II | 4(3+1) |
|  |  |  | Total Credits | 18 |
| **3rd Semester** | **2nd year**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | Compulsory-VII |  | English-III: Technical writing andpresentation skills | 3(3+0) |
|  | Compulsory-VIII |  | Introduction to Computer | 3(1+2) |
|  | General- V |  | Botany-III (Cell Biology, Genetics and Evolution) | 3(2+1) |
|  | General – VI |  | Chemistry-III (Environmental Chemistry) | 3(2+1) |
|  | Foundation-III |  | Invertebrates | 4(3+1) |
|  |  |  | Total Credits | 16 |
| **4th Semester**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | Compulsory-IX |  | English-IV (Advanced Academic Reading and Writing) | 3(3+0) |
|  | General – VII |  | Botany IV (Plant Physiology and Ecology) | 3(2+1) |
|  | Foundation-IV |  | Chordates | 4(3+1) |
|  | Foundation-V |  | Animal Form and Function I | 4(3+1) |
|  | Foundation-VI |  | Animal Form and Function II | 4(3+1) |
|  |  |  | Total Credits | 18 |
| **5th Semester**  | **3rd year**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | General – VIII |  | Psychology/Geography/ets | 2(2+0) |
|  | Foundation-VII |  | General Biochemistry | 4(3+1) |
|  | Major-I |  | Cell & Molecular Biology | 4(3+1) |
|  | Major-II |  | Physiology | 4(3+1) |
|  | Major-III |  | Animal Behavior | 3(2+1) |
|  |  |  | Total Credits | 17 |
| **6th Semester**  |
| **S.No** | **Course Category** | **Course Title** | **Credits**  |
|  | Foundation-VIII | Biological Techniques | 3(1+2) |
|  | Foundation-IX | Evolution & Principles of Systematics | 3(2+1) |
|  | Major-IV | Developmental Biology | 4(3+1) |
|  | Major-V |  | Genetics | 4(3+1) |
|  | Major-VI |  | Wildlife | 2(2+0) |
|  |  |  | Total Credits | 16 |
| **7th Semester** | **4th year**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | Major-VII |  | Environmental Biology | 4(3+1) |
|  | Major-VIII |  | Zoogeography and Paleontology | 3(2+1) |
|  | Major-IX |  | Special Paper (Univ Opt)  | 4(3+1) |
|  | Major-X |  | Synopsis and Research Methodology | 2(2+0) |
|  | Elective-I |  | Univ Option | 3(2+1) |
|  |  |  | Total Credits | 16 |
| **8th Semester** |
| **S.No** | **Course Category** | **Course Title** | **Credits**  |
|  | Major-XI | Bioinformatics | 3(2+1) |
|  | Major-XII |  | Thesis/Research Project/ InternshipOr Special Paper | 4(0+4) or 4(3+1)  |
|  | Elective-II |  | Univ Option | 3(2+1) |
|  | Elective-III |  | Univ Option | 3(2+1) |
|  | Elective-IV |  | Univ Option | 3(2+1) |
|  |  |  | Total Credits | 16 |

**M.Sc. ZOOLOGY**

**PROGRAM LENGTH**

Duration: 02 years

Semesters: 04

Maximum Credit Hrs. **67**

**ENTRY REQUIREMENTS (Eligibility Criteria)**

B.Sc with Zoology and 40 score in Entry Test

**ANNUAL INTAKE**

There are 40 places available annually.

**Course Structure**

|  |  |
| --- | --- |
| **1st Semester**  | **1st year**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | Foundation-I |  | Biostatistics | 3(3+0)  |
|  | Foundation-II |  | Biochemistry | 4(3+1) |
|  | Major-I |  | Cell & Molecular Biology | 4(3+1) |
|  | Major-II |  | Zoogeography and Paleontology | 3(2+1) |
|  | Major-III |  | Animal Behaviour | 3(2+1) |
|  |  |  | Total Credits | 17 |
| **2nd Semester** |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | General – I |  | Biological Techniques  | 3(1+2) |
|  | Foundation-III |  | Evolution & Principles of Systematics | 3(2+1) |
|  | Major-IV |  | Developmental Biology | 4(3+1) |
|  | Major-V |  | Genetics | 4(3+1) |
|  | Major-VI |  | Research Methodology | 2(2+0) |
|  |  |  | Total Credits | 16 |
|  | **3rd Semester**  | **2nd year**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | Major-VII |  | Environmental Biology | 4(3+1) |
|  | Major-VIII |  | Animal Physiology | 4(3+1) |
|  | Major-IX |  | Parasitology I | 4(3+1) |
|  | Major-X |  | Wildlife | 2(2+0) |
|  | Elective-I |  | Entomology | 3(2+1) |
|  |  |  | Total Credits | 17 |
|  | **4th Semester**  |
| **S.No** | **Course Category** |  | **Course Title** | **Credits**  |
|  | Major-XI |  | Bioinformatics | 3(2+1) |
|  | Major-XII |  | Thesis/ Research Project/Internship or Special Paper | 4(0+4) or 4(3+1) |
|  | Elective-II |  | Applied Fisheries | 4(3+1) |
|  | Elective-III |  | Applied Entomology and Pest Management | 3(2+1) |
|  | Elective-IV |  | Parasitology II | 3(2+1) |
|  |  |  | Total Credits | 17 |