**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 and  presentation 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/ Internship  Or 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 |