

## **Program Outcome:**

This program is one of the most fundamental units of basic sciences studied at undergraduate level. The program helps to develop scientific tempers and attributes, which in turn will be beneficial for the society. Students enrolled in B.Sc (Hons) degree program in Zoology will study and acquire complete knowledge of disciplinary as well as allied biological sciences. After the completion of the B.Sc degree there are ample opportunities to explore different carrier avenues. At the end of graduation, they are likely to possess expertise which will provide them competitive advantage in persuing higher studies. Students will be able to define and explain major concepts in the biological sciences.

## **Course Outcome:**

Sl No	Course Title	Course Code	Course Outcome
1	NON-CHORDATES I: PROTISTS TO PSEUDOCOELOMATES	ZC101T	The objective of the course is to expose the students to various forms of protozoa and worms; their classification and structural anatomy
2	PRINCIPLES OF ECOLOGY	ZC102T	The objective of the course is to familiarize the students with fundamentals of ecology and impacts of ecological factors on living organisms
3	NON-CHORDATES II: COELOMATES	ZC203T	The objective of the course is to expose the students to various forms of coelomates, their classification and structural anatomy
4	CELL BIOLOGY	ZC204T	The objective of the course is to expose the students to structure and function of a cell as the fundamental unit of life.
5	DIVERSITY OF CHORDATA	ZC305T	The objective of the course is to expose the students to various forms of chordates, their classification and structural anatomy

6	ANIMAL PHYSIOLOGY: CONTROLLING AND COORDINATING SYSTEM	ZC306T	The objective of this course is to provide a foundation for understanding the complexities of the coordination system of animal body.
7	FUNDAMENTALS OF BIOCHEMISTRY	ZC307T	The objective of this course is to expose the students to biomolecules of living organisms, their interactions for perpetuation of life.
8	COMPARATIVE ANATOMY OF VERTEBRATES	ZC408T	Students will have understood the structures of different systems such as, integumentary, skeletal, digestive, respiratory, circulatory, urinogenital, nervous and sensory organs in comparative way among the vertebrate groups.
9	PHYSIOLOGY: LIFE SUSTAINING SYSTEMS	ZC409T	Students will know the physiology of digestion, respiration, circulation, excretion and adaptation.
10	BIOCHEMISTRY OF METABOLIC PROCESSES	ZC410T	Students will understand the metabolism of carbohydrates, lipids and proteins in details. They will also learn about oxidative phosphorylation and redox reactions.
11	MOLECULAR BIOLOGY	ZC511T	Students will acquire knowledge about replication, transcription, translation, post transcriptional and post translational modifications, gene regulation, DNA repair mechanisms and various molecular tools and techniques
12	PRINCIPLES OF GENETICS	ZC512T	Students will learn the fundamental genetics like Mendelian and Non Mendelian inheritances, linkages, mutations, sex determination of various animals, extrachromosomal inheritances, transposable genetic elements etc.
13	ANIMAL BEHAVIOUR AND CHRONOBIOLOGY	ZD501T	Students will know in details about patterns of behaviours, survival strategies, social and cooperative behaviours, design of signals and chronobiology.
14	COMPUTATIONAL BIOLOGY	ZD502T	Students will be able to understand about various computational methods related to biological practices like genomics, proteomics, transcriptomics, metabolomics, FASTA, BLAST etc.
15	EVOLUTIONARY BIOLOGY	ZC614T	Students will know about population genetics, human evolution, various concepts about origin of species,

			extinctions, phylogenetic tree making. They will also understand few basic of bioinformatics.
16	IMMUNOLOGY	ZD608T	Students will develop knowledge about structures and function of immune cells, immunoglobulins, antigens and their interactions with antibodies. They will know about MHC molecules, cytokines, hyper sensitivity reactions and cellular mode of immunity development. They will know the immune diffusion technique and ELISA.
17	DEVELOPMENTAL BIOLOGY	ZC613T	Students will learn the different aspects of early, late and post embryonic developments. They will have the knowledge about implications of developmental biology in various fields, such as in stem cell biology, in vitro fertilization, cryopreservation etc.
18	PARASITOLOGY	ZD609T	Students will learn the different aspects of parasitology like life cycle, prevalence, epidemiology, pathogenecity etc of different protists, helminthes, nematodes, arthropoda, vertebrates etc.