

**Course Outcome**  
**CCF 2023**

**Sem-I (Hons):**

**CC 1 (Cell Biology)**

- This course introduces the students to the basics of cell and its components.
- This gives them a strong foundation on the basic unit of life.
- At the end of the course, the student has a strong foundation on the functions of the cell.
- Students will understand the structures and purposes of basic components of prokaryotic and eukaryotic cells, especially macromolecules, membranes, and organelles
- Students will understand how these cellular components are used to generate and utilize energy in cells. Students will understand structure and function of different cell organelles.
- Students will understand the cellular components underlying mitotic cell division. Students will be able to understand the cyclic events of cell division and types of cell division.
- Will understand cell signalling and processes of cell death and cellular aging.
- Students will apply their knowledge of cell biology to selected examples of changes or losses in cell function. These can include responses to environmental or physiological changes, or alterations of cell function brought about by mutation.

**SEC-1 (Applied Entomology)**

- Attain a solid foundation in insect biology, including general entomology, basic systematics, morphology, physiology, and biodiversity.
- Understand evolution and biodiversity generation through macro- and micro-evolutionary processes, including how these processes have formed and diversified insects.
- Develop the ability to read and interpret scientific papers in entomology, and critically assess content.
- Attain skills in written and verbal scientific communication.
- Develop the ability to design and perform a scientific study on insects, and to analyze results.
- Develop an understanding of the distributions and abundances of organisms including insects, and their interactions with each other and the environment.
- Learn modern techniques in insect science such as molecular biology, bioinformatics, and/or imaging.
- Gain appreciation of insects in society and human affairs, and as model systems in insect biology.

## **Sem-I (Gen):**

### **SEC G (Applied Zoology)**

- Students gain knowledge and skill in the fundamentals of animal sciences, understands the complex interactions among various living organisms.
- Gain knowledge of small scale industries like sericulture, fish farming, bee keeping, aquaculture, animal husbandry, poultry farm.
- Understand the applications of biological sciences in Apiculture, Aquaculture, Sericulture, Animal Husbandry, Poultry Farm.
- Apply ethical principles and commit to professional ethics and responsibilities in delivering his duties.
- Apply the knowledge and understanding of Zoology to one's own life and work.
- Develops empathy and love towards the animals.
- Gains knowledge about effective communication and skills of problem solving methods.
- Contributes the knowledge for Nation building.

### **IDC-1 (Animal Biology)**

- Analyse complex interactions among the various animals of different phyla, their distribution and their relationship with the environment
- Apply the knowledge of internal structure of cell, its functions in control of various metabolic functions of organisms.
- Understands the complex evolutionary processes and behaviour of animals.
- Correlates the physiological processes of animals and relationship of organ systems.
- Understands about various concepts of genetics and its importance in human health.
- Understanding of environmental conservation processes and its importance, pollution control and biodiversity and protection of endangered species.
- Perform procedures as per laboratory standards in the areas of Taxonomy, Physiology, Ecology, Cell biology, Genetics, Applied Zoology, Clinical science, tools and techniques of Zoology, Toxicology, Entomology, Nematology, Sericulture, Biochemistry, Fish biology, Animal biotechnology.