

Department of Zoology  
**Course Objective and Course Outcomes.**  
 June 2025 (For AAA) (First Year)

Sr. No.	Name of the Paper	Course Objectives	Course Outcomes
1	DSC-1 Animal Diversity-I (Non chrodates)	<ul style="list-style-type: none"> <li>To understand the basic concept in Zoology</li> <li>To learn the general characters and classification of non chrodates.</li> <li>To understand the diversity and complexity of life from Protista to Echinodermata</li> </ul>	<ul style="list-style-type: none"> <li>Understand general organization of unicellular and multicellular animals.</li> <li>Recognized diversity and adaptation and significance.</li> <li>acquired deep knowledge and importance of biodiversity conservation.</li> </ul>
2	SEC – (Bee Keeping)	<ul style="list-style-type: none"> <li>To teach techniques of construction of Bee Hives and its maintenance.</li> <li>To teach students about Honey production and health related problems with honey bees.</li> <li>To teach students about honey production and health related problems with honey bees. Importance of honey.</li> <li>Students will learn important steps in bee keeping and bee hive handling without fear.</li> <li>Students will learn the use of different equipments in bee keeping.</li> </ul>	<ul style="list-style-type: none"> <li>The learner will be able to differentiate types of honey bee castes</li> <li>Learner will be able to use the artificial hive for beekeeping.</li> <li>Use the technique of honey purification and processing.</li> <li>To construct the artificial honey hive and maintain it.</li> <li>Learner If not employed can find own employment by doing Bee keeping.</li> <li>Can start own \beekeeping equipment agency for farmers and beekeepers.</li> </ul>
3	DSC-3 Animal Diversity-II	<ul style="list-style-type: none"> <li>To understand the basic concepts of lower and higher vertebrate animals.</li> <li>To learn the classification characters and general organization of chordates</li> <li>To understand the diversity and complexity of life from protochordata to the class mammalia.</li> </ul>	<ul style="list-style-type: none"> <li>Understand general organization of vertebrate animals.</li> <li>Recognize diversity migration and adaptive radiation of vertebrate animals.</li> <li>Acquire deep knowledge and importance of biodiversity conservation.</li> <li>Develop the capacity to understand biological importance and their conservation methods.</li> </ul>
4	VSC – 1 Aquarium Fish Keeping	<ul style="list-style-type: none"> <li>Understand the principles and scope of aquarium fish keeping.</li> <li>Learning about exotic and endemic fish species and their management.</li> <li>Learn about the preparation and composition of fish food.</li> <li>Gain practical experience in designing the fish aquarium.</li> </ul>	<ul style="list-style-type: none"> <li>Explore the potential of aquarium fish industry.</li> <li>Familiarize the fish breeding and fish food technology.</li> <li>Recognize the fish diseases for the management of fish keeping.</li> <li>Understand the transportation techniques for fish market.</li> </ul>

Department of Zoology  
**Course Objective and Course Outcomes.**  
 June 2025 (For AAA) (Second year)

Sr. No.	Name of the Paper	Course Objectives	Course Outcomes
1	ZOL-311 Developmental biology of vertebrates	<ul style="list-style-type: none"> <li>To provide a comprehensive understanding of the knowledge of the concept of early development of animals</li> <li>To develop a critical appreciation of methodologies those use to study the process of embryonic development in animals</li> </ul>	<ul style="list-style-type: none"> <li>Students should be able to know the basic concepts related to embryonic development and to understand the basis of the animals.</li> </ul>
2	ZOL-312 Ecology	<ul style="list-style-type: none"> <li>Understand and appreciate interactions of organisms with environment and the ecosystem dynamic.</li> <li>Awareness of current environment issues and understanding of relation between structure and function of ecosystem.</li> <li>Knowledge of local and geographical distribution and abundance of organisms.</li> <li>Develop a n appreciation of scope of modern scientific inquiry in the field of ecology.</li> <li>Study structural and functional adaptation of organisms to their environment.</li> <li>Study conservation of natural resources and management of pollution.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrate knowledge of biotic and abiotic interactions.</li> <li>Express understanding of environment issues and inter relation between different components of an ecosystem</li> <li>Ability to elaborate about distribution and abundance of organisms.</li> <li>Apply different experimental techniques to study any ecosystem or it's components.</li> </ul>
3	ZOL- 411- Biochemistry and Endocrinology	<ul style="list-style-type: none"> <li>To understand the structure and function of biomolecules in animals</li> <li>To understand and identify the structure and function of endocrine function.</li> </ul>	<ul style="list-style-type: none"> <li>Students will learn the fundamental of biochemical process and their applications and will understand the structure and function of endocrine system.</li> </ul>
4	ZOL-412- Evolution	<ul style="list-style-type: none"> <li>To know the history and concept of evolution.</li> <li>To understand the mechanism and factors involving in evolution process.</li> <li>To acquire increased theoretical and practical knowledge of various processes of molecular genetics.</li> <li>To study the techniques for obtaining genetically modified organisms</li> </ul>	<ul style="list-style-type: none"> <li>Understand the theories and concepts of evolution.</li> <li>Learn the process of evolution in animals.</li> <li>Understand the patterns of evolutionary changes in animals.</li> <li>Understand the organization and functions of genetic material in the living World.</li> <li>Understand the Recombinant DNA technology</li> </ul>

Department of Zoology  
**Course Objective and Course Outcomes.**  
 June 2025 (For AAA) (Third year)

Sr. No.	Name of the Paper	Course Objectives	Course Outcomes
1	ZOL-511 Animal Physiology	<ul style="list-style-type: none"> <li>To understanding the structure of the different organ systems in man/mammals</li> <li>To understand the mechanisms involved in the functioning of the different systems.</li> <li>To learn the structure and physiology of digestion respiration and circulation in animals.</li> </ul>	<ul style="list-style-type: none"> <li>Understand the nutrition and physiology of digestion in man</li> <li>Learn the structure and working of mammalian heart blood composition and clotting mechanism.</li> </ul>
2	ZOL-512 Fishery Science – I	<ul style="list-style-type: none"> <li>To develop the scientific outlook and awareness in inland and marine fisheries and its great potential for fish production.</li> <li>To familiarize the students with finfish and shellfish fisheries.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the marine brackish as well as freshwater fishes.</li> <li>Develop knowledge on inland and marine fisheries resources of India.</li> </ul>
3	ZOL- 513- Vermicompost and Vermiculture	<ul style="list-style-type: none"> <li>To introduce the students about biology of some important species of earth worms used in vermiculture.</li> </ul>	<ul style="list-style-type: none"> <li>Acquire a critical knowledge on role of earth worms in marking organic matter from biodegradable wastes.</li> <li>Understand the biology of some important used in vermiculture.</li> <li>Acquire skills on production of vermicompost.</li> <li>Explain benefits and problems with vermiculture and vermicompost.</li> </ul>
4	ZOL-611- Animal Physiology – II	<ul style="list-style-type: none"> <li>To understand the structure of the different organ and receptor systems in man/mammals</li> <li>To understand the mechanisms involved in the functioning of excretion nerve and muscles receptors and reproductive system.</li> <li>To learn the structure and physiological mechanism of excretion nerve muscles receptors and reproductive system,</li> </ul>	<ul style="list-style-type: none"> <li>Understand the structure and functional anatomy of kidney osmoregulation and homeostasis.</li> <li>Learn the process of gametogenesis hormones reproductive cycle and methods of contraception.</li> </ul>
5	ZOL- Fishery Science - II	<ul style="list-style-type: none"> <li>To develop the scientific outlook and awareness on freshwater fish farming.</li> <li>To familiarize the students with fish hatcheries their operations and fish diseases.</li> <li>To aware students about impact of exotic fishes on Indian fish fauna.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the freshwater fishes.</li> <li>Develop knowledge on freshwater fish farming and fish seed production techniques.</li> <li>Familiar with fish diseases and their control.</li> </ul>
6.	ZOL- Aquarium Fish Keeping	<ul style="list-style-type: none"> <li>To learn details about skills in aquarium construction fish keeping and maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>The studies learn details of aquarium fish keeping and maintenance</li> </ul>