### **Branches of Zoology**

Here are the main branches of Zoology:

- Biogeography
- Classification
- Developmental Biology
- Ethology
- Evolutionary Biology
- Molecular Biology
- Physiology
- Structural Zoology
- Vertebrate and Invertebrate Zoology



**Sub-Branches of Zoology** 

Branches of Zoology	Definition	
Anatomy	Study of internal structure of animals	
Anthrozoology	Study of past, present and future interactions between animals and human beings	
Archaeozoology or Zooarchaeology	Study of dead animals	
Arachnology	Branch of biology that deals with the study of spiders, scorpionsor other arachnids	
Bionics	Study of mechanical systems like living organisms and parts of living organisms	
Carnicology	Study of Crustaceans	
Cetology	Study of marine mammals [Dolphins, Whales, Porpoises, etc]	
Cytology	Study of cell structure and its functions	
Ecology	Relationship between the organisms and their surrounding environments	
Embryology	Study of egg fertilisation, embryos and fetuses	
Entomology	Study of insects	
Ethology	Study of the behaviour of animals to interpret their effects on evolution	

Evolution Environments	Study of origin of animals and their adaptation	
Genetics	Study of heredity and variations	
Geology	Study of earth and life as shown by fossils in rocks	
Herpetology	Study of reptiles and amphibians	
Histology	Study of anatomy of cells and tissues of animals	
Ichthyology	Study of Fishes	
Mammalogy [Also called Mastology]	Study of Mammals	
Malacology	Study of animal forms with shells [Snails, Octopus, Slugs, etc]	
Morphology	Study of form and specific structures of animal organisms	
Nematology	Division of zoology that studies roundworms	
Neonatology	Study of newborn animals till the age of two months	
Ornithology	This branch of zoology concerns the study of birds.	
Paleontology	Study of fossils and extinct animals	

Pathology	Study of bodily fluids in laboratory like blood, urine, tissues, etc to diagnose diseases
Primatology	Study of primates [apes, gorillas, monkeys, prosimians, etc]
Protozoology	Study of protozoa or the unicellular organisms
Taxonomy	This field studies, groups and formulates nomenclaturerules of animals on the basis of common characteristics.
Zoography (Descriptive Zoology)	Study of animals and their respective habitats
Zoogeography	Study of geographical distribution of animal species
Zoometry	Study of measurement including size and length of animal parts
Zootomy	Study of animal anatomy

#### **Understanding the Origins of Zoology**

Concerned with the study of the animal kingdom, Zoology focuses on the interaction of animal kingdom with their ecosystems as well as animal biology. It encompasses a detailed study of different species coming under the animal kingdom. The early origins of Zoology trace back to the ancient Greek Philosopher Aristotle who actually classified the living things broadly in the 4th century BC. He is often considered as the father of Zoology as he classified the living things into animals and plants and it was only later that words like zoology, botany, etc. originated. Further, Charles Darwin brought forward his theory of evolution by natural selection.

The branches of zoology are spread across the comparative anatomy of animals, plants, and other living things. Though the study of animal sciences is quite ancient, the

actual areas of zoology investigations were developed from the comparative anatomical study on morphographs which was carried out by Hunter and Cuvier.

### **Branches of Zoology: Major Universities**

While it is no surprise that Ivy League Colleges and royal UK universities feature amongst the highly revered institutions offering degree programs across the different branches of zoology and life sciences in general, there are scores of emerging universities worldwide which are consistently being recognised for their academically as well as professionally oriented courses. Glance over the following table to have a view of the Zoology courses you can consider.

Name of University	Location	THE World University Rankings 2020	Courses Offered in Branches of Zoology
University of Edinburgh	UK	30th	Bachelor of Science Hons     Agricultural Science [Animal     Science]2. MSc Animal Biosciences     BSc Hons Biological     Sciences [Biology]
The University of Melbourne	Australia	32nd	BSc [Major in Animal Science & Management]2. BSc Major in Zoology     Graduate Diploma in Science [Advanced] – Zoology
The University of British Columbia	Canada	34th	BSc in Zoology MSc in Zoology PhD in Applied Animal Biology PhD in Zoology
McGill University	Canada	42nd	PhD in Animal Science: Bioinformatics PhD in Animal Science

University of	USA	48th	BSc in Animal Science
Illinois			MSc in Animal Science
at Urbana			PhD in Animal Sciences
Champaign			

## **Top 10 Collges in India for Zoology**

There are plenty of colleges and universities in India offering Zoology at undergraduate, postgraduate, and doctoral levels. Here are the top colleges in India for Zoology:

St. Xavier's College, Mumbai	http://xaviers.edu/main/
Christ University, Banglore	http://www.christuniversity.in/
The Oxford College of Science, Banglore	http://www.theoxford.edu
Stella Maris College, Chennai	http://www.stellamariscollege.org
Hansraj College, New Delhi	http://www.hansrajcollege.co.in
Presidency College, New Delhi	http://www.presidencychennai.com
Miranda House, New Delhi	http://www.mirandahouse.ac.in
Hindu College, New Delhi	http://www.hinducollege.org
St. Albert's College, Kerala	http://alberts.ac.in/
St. Xavier's College, Kerala	http://www.sxccal.edu/

# **Offered Courses in Zoology**

The zoological or animal kingdom is further classified into taxonomic classes, namely, birds, reptiles, amphibians, fishes, invertebrates and mammals. Though exceptions exist, this is more of a large overview. Moreover, it also includes the study of extinct animals and skeletal studies and many zoological experts work with archaeologists and geologists and even anthropologists. If you are in search of the course offerings pertaining to the variegated branches of Zoology, take a look at the following list.

- BSc Biology
- BSc Animal Sciences
- BSc Bioinformatics
- BSc Biotechnology
- BSc Zoology
- BSc Botany
- BSc Genetics
- MSc Zoology
- MSc Microbiology
- MSc Bioinformatics
- MSc Botany
- MSc Biotechnology
- MSc Biochemistry
- PhD Animal Sciences

#### **Branches of Zoology Syllabus**

Wondering what are the subject you will study in Zoology? Zoology is a study of earth, animals, their origin and behavior, and even about life underwater such as fishes, dolphins, etc. Here are the core subjects of Zoology:

- Morphology
- Genomics
- Ecology
- Biology of Parasitism
- Animal Behaviour
- Genetics and Evolution
- Chronobiology
- Structure and Function of Genes
- Cell and Molecular Biology
- Animal Physiology and Ethology
- Biosystematics, Structure, and Functions of Invertebrates
- Biochemistry
- Biotechnology