

Zoology is a broad field of research that includes studying animals in their natural habitats to assess behaviors, living conditions and interactions with other wildlife. Medical researchers need to understand health problems before they can develop ways to treat them. Some diseases and health problems involve processes that can only be studied in a living organism. Animals are necessary to medical research when it is impractical or unethical to use humans. Monitoring animal health and preventing animal disease outbreaks is vital to the economy and safety of the country's food supply. Production of healthy livestock helps to ensure a safe food supply and keep consumer prices stable. Zoologists observe and sometimes conduct experiments on animals, either in the wild or in a controlled setting (such as a zoo or a laboratory). Zoology is important for many reasons. For one, the study of animals and communities provides insight into how "life" works, and, consequently, how we work

Here are the reasons why zoology matters so much:

1. To Appreciate Nature

Once you study the life cycles and food chain, you'll have a better understanding of nature's handiworks.

2. To Understand Animals

If you consider their nature and habitats, it will be clear that they become threats only when people interfere with their activities.

3. To Understand the Importance of Preservation

When you study animal life you learn of their habits, food and behaviour. You'll see that they are all integrated.

Zoology (along with Botany and Chemistry) is the ideal subject to understand life and living. It includes almost all aspects of life, especially the relationship among the various organisms. Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. They will be able to use specific examples to explicate how descent with modification has shaped animal morphology, physiology, life history, and behavior and explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations.

Students will be able to apply the scientific method to questions in biology by formulating testable hypotheses, gathering data that address these hypotheses, and analyzing those data to assess the degree to which their scientific work supports their hypotheses. 2. Students will be able to present scientific hypotheses and data both orally and in writing in the formats that are used by practicing scientists. 3. Students will be able to access the primary literature, identify relevant works for a particular topic, and evaluate the scientific content of these works. 4. Students will be able to apply fundamental mathematical tools (statistics, calculus) and physical principles (physics, chemistry) to the analysis of relevant biological situations. 5. Students will be able to identify the major groups of organisms with an emphasis on animals and be able to classify them within a phylogenetic framework. Students will be able to compare and contrast the characteristics of animals that differentiate them from other forms of life. 6. Students will be able to use the evidence of comparative biology to explain

how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth. They will be able to use specific examples to explicate how descent with modification has shaped animal morphology, physiology, life history, and behavior. 7. Students will be able to explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system. Drawing upon this knowledge, they will be able to give specific examples of the physiological adaptations, development, reproduction and behavior of different forms of life. 8. Students will be able to explicate the ecological interconnectedness of life on earth by tracing energy and nutrient flows through the environment. They will be able to relate the physical features of the environment to the structure of populations, communities, and ecosystems. 9. Students will be able to demonstrate proficiency in the experimental techniques and methods of analysis appropriate for their area of specialization within biology.