

General Ecology

Existence in the world consists of living and non-living things. The two species should coexist in order to share the resources available within the natural community. We need to study and understand ecology to understand this mutual relationship. The science of ecology is all about relations. By carefully applying the principles of ecology, we can learn to predict, extinguish, counteract and prevent the hypothetically adverse effects we may have on the globe around us. Governments and citizens around the world are becoming increasingly aware of the consequences of atmospheric pollution and climate change. In large-scale studies, plants and animals were subjected to carefully controlled atmospheres and varying ecological factors. Researchers use this knowledge to explain how we react to pollution levels and to make predictions regarding future climate change. Ecology allows us to understand how the world works. It provides useful evidence of the interdependence between people and the natural world, as well as of the environmental impact of human activity. By studying ecology, the emphasis is placed on how each species needs the other for peaceful coexistence. The lack of understanding of ecology has led to the degradation of land and the environment, which is the home of other species, leading to the extinction of the species because of lack of knowledge e.g. dinosaurs, mammoth, white shark, black rhinos, sperm whales etc. The aim of this book is to familiarize you with ecological theory and its applications.

The book is comprised with seven chapters. This introduction to ecology covers population, community and ecosystem level ecology of plants and animals. It focuses on the interactions of organisms with each other and with their abiotic environment. These include the study of different types of populations, communities and ecosystems. Topics include population structure and growth, species interaction, energy flow, nutrient cycling, succession, and applications to current environmental management issues.

The Book comes with a companion DVD for rich learning experience, which includes:

1. E-Book with further reading and learning links.
2. Interactive E-lecture of each chapter. E-lectures are expressive, informational, entertaining and persuasive, it uses the tool of self-exploration, which makes it easy to learn and understand each topic in detail. It is very informative as concrete details are provided and also entertaining, as graphics and other visuals are provided to make the learning process more interactive.
3. Video Lecture of each chapter, which explains each topic in detail with examples, animations, images and text and makes it easy to understand the topics in easier, simpler and better way.
4. Huge Database of Interactive Assessments for each chapter, which is also printable.
5. Further reading and learning links for each topic.
6. Glossary and Notes for each chapter to understand each chapter with to the point information.
7. The DVD also includes a printable workbook, which walks through with a various sets of questions and choices and assists in completing the curriculum. The workbook covers; Learning Objectives, Essential Concepts, Matching Definitions, Study Problem, Questions, Fill in the Blanks and Answers.
8. Review Questions for each chapter are also given in the DVD, which are also printable.

The DVD is also a useful tool for teachers to teach with digital resources in classroom and do a great job of illustrating skills and techniques that are otherwise difficult to explain.

