CHAPTER 1: INTRODUCTION TO BIOLOGY

Fields of Study in Biology

Field of study	Description
Aerobiology	**Aerobiology** is the study of organic particles, e.g. bacteria and fungal spores, and very small insects and pollen, which are all passively transported by the air.
Arachnology	**Arachnology** is the study of spiders and related organisms such as scorpions, pseudo-scorpions and harvestmen which are collectively called arachnids.
Astrobiology	**Astrobiology** is the study of the effects of outer space on living organisms and the search for extraterrestrial life.
Bioengineering	**Bioengineering** is the application of the principles of engineering and natural sciences to tissues, cells and molecules.
Bioinformatics	**Bioinformatics** is the application of information technology to biology, especially the technology used for the collection, storage, and retrieval of genomic data.
Bionics	**Bionics** is the application of methods and systems found in nature to the study and design of engineering systems and modern technology.
Biophysics	**Biophysics** is the application of theories and methods of physical science to questions of biology.
Biopsychiatry	**Biopsychiatry** is an approach to psychiatry that aims at understanding mental disorders in terms of the biological function of the nervous system.
Cryobiology	**Cryobiology** is the study of the effects of low temperatures on living organisms.
Developmental biology	**Developmental biology** is the study of the processes by which an organism develops from a zygote to its full structure.
Marine biology	**Marine biology** is the study of ocean plants and animals and their ecological relationships.
Neurobiology	**Neurobiology** is the branch of biology that deals with the anatomy, physiology and pathology of the nervous system.
Biomathematics	**Biomathematics** is the use of mathematical techniques and tools to model natural, biological processes.