

Fields and Their Scope

[ANAT] **anatomy**—The branch of morphology concerned with the gross and microscopic structure of animals, especially humans.

[BIOCHEM] **biochemistry**—The study of the chemical substances that occur in living organisms, the processes by which these substances enter into or are formed in the organisms and react with each other and the environment, and the methods by which the substances and processes are identified, characterized, and measured.

[BIOL] **biology**—The science of living organisms.

[BIOPHYS] **biophysics**—The science that uses the experimental and theoretical approaches of physics to study the mechanisms of biological processes.

[BOT] **botany**—That branch of biology dealing with the structure, function, diversity, evolution, reproduction, and utilization of plants and their interactions within the environment.

[CELL MOL] **cell and molecular biology**—The study of the structures, functions, and molecular aspects (proteins, enzymes, nucleic acids) of the living cell.

[ECOL] **ecology**—The study of the interrelationships between organisms and their environment.

[EMBRYO] **embryology**—The study of the development of the organism from the zygote, or fertilized egg.

[EVOL] **evolution**—The processes of biological and organic change in organisms by which descendants come to differ from their ancestors, and a history of the sequence of such change.

[FOREN SCI] **forensic science**—The recognition, collection, identification, individualization, and interpretation of physical evidence, and the application of science and medicine for criminal and civil law or regulatory purposes.

[GEN] **genetics**—The science concerned with biological inheritance, that is, with the causes of the resemblances and differences among related individuals.

[HISTOL] **histology**—The study of the structure and chemical composition of animal tissues as related to their function.

[IMMUNOL] **immunology**—The division of biological science concerned with the native or acquired resistance of higher animal forms and humans to infection with microorganisms.

[INV ZOO] **invertebrate zoology**—The branch of zoology concerned with the taxonomy, behavior, and morphology of invertebrate animals.

[MED] **medicine**—The study of cause and treatment of human disease, including the healing arts dealing with diseases which are treated by a physician or a surgeon.

[MICROBIO] **microbiology**—The science and study of microorganisms and of antibiotic substances.

[MYCOL] **mycology**—The branch of biological science concerned with the study of fungi.

[NEUROSCI] **neuroscience**—The study of the brain and nervous system, including the anatomy and histology of the nervous system, development, sensation and perception, learning, memory, motor control, behavior, aging, and neurological and psychiatric disorders. Studies range from the molecular basis of nervous system development and function to attempts to understand the basis of consciousness and behavior.

[PATH] **pathology**—The branch of biological science which deals with the nature of disease, through study of its causes, its processes, and its effects, together with the associated alterations of structure and function; and the laboratory findings of disease, as distinguished from clinical signs and symptoms.

[PHARM] **pharmacology**—The science of detecting and measuring the therapeutic and toxic effects of drugs or other chemicals on biological systems, as well as the development and testing of new drugs and alternative uses of existing drugs.

[PHYSIO] **physiology**—The branch of biological science concerned with the basic activities that occur in cells and tissues of living organisms, and involving physical and chemical studies of these organisms.

[SYST] **systematics**—The science of animal and plant classification.

[VERT ZOO] **vertebrate zoology**—The branch of zoology concerned with the taxonomy, behavior, and morphology of vertebrate animals.

[VET MED] **veterinary medicine**—The branch of medical practice which treats the diseases and injuries of animals.

[VIROL] **virology**—The science that deals with the study of viruses.

[ZOO] **zoology**—The science that deals with the taxonomy, behavior, and morphology of animal life.