

# Biology Curriculum

## The human body with an emphasis on homeostasis:

- The Human Body-An Overlook
- The Digestive System
- The Respiratory System
- The Circulatory System
- The Urinary and Endocrine Systems
- The Immune System
- The Nervous System
- The Hormonal System (Internal Secretion System)
- The Liver
- The Reproductive System

## The cell- structure and activity:

Characteristics of the Life and Structure of a Cell -An Overlook

- The Chemical Composition of the Cell
- Transfer of Materials to and from the Cell
- Metabolism and energetic changes
- The hereditary material
- Cell cycle
- From DNA to Protein
- Mutations
- Mendelian inheritance
- Heredity, medicine and society

### Ecology:

- Characteristics of the environment
- Interactions
- Energy sources, energy transitions and material transitions in an ecosystem
  
- Evolutionary processes
- Habitat
- The Impact of Man on the Environment
- Man's potential influence on evolutionary processes

### Control of gene expression and genetic engineering:

comparative physiology from a developmental point of view: from single cell organisms to mammals

- Evolutionary processes
- Circulatory System
- The Respiratory System
- Excretory system
- The Reproductive System

### Bacteria and viruses in the human body:

- Bacteria Culture
- Microbiota
- Disease-causing bacteria
- Treatment of Infectious Diseases
- Viruses