



TOPIC
BIOCHEMISTRY and BIOLOGY <ol style="list-style-type: none">1. Chemical Bonds2. Carbohydrates3. Lipids4. Proteins5. Nucleic Acids6. Chromatin and Chromosomes7. Structure of the Cell Membrane8. Enzymes
CYTOLOGY and HISTOLOGY <ol style="list-style-type: none">1. Structure of Eukaryotic Cells2. Cellular Components and Their Functions3. Extracellular Matrix and Connective Tissues4. Epithelium5. Glandular Tissue6. Muscle Tissue7. Nervous Tissue
CELLULAR PHYSIOLOGY <ol style="list-style-type: none">1. Cell Division2. Cellular Metabolism3. Transcription and Signal Transduction4. The Cell Cycle5. Apoptosis and Cell Death6. Cellular Differentiation
MOLECULAR BIOLOGY <ol style="list-style-type: none">1. Separation of Protein Mixtures2. Principles of Chromatography3. Principles of Electrophoresis4. Cellular Homogenates5. PCR (Polymerase Chain Reaction)6. Recombinant DNA Techniques
GENETICS <ol style="list-style-type: none">1. Genes and Genome2. Structure and Function of Genes



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DIPARTIMENTO
DI SCIENZE MEDICHE
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3. Gene Expression
4. The Epigenome
5. Gametogenesis and Sexual Reproduction
6. Meiosis and Fertilization
7. Genetic and Epigenetic Mutations

BASIC LABORATORY TECHNIQUES

1. Use of Pipettes
2. The Microscope
3. Preparation of Solutions with Known Molarity
4. Volume-to-Volume Dilutions
5. pH and Osmolarity of Solutions