Course: TOPICS OF MOLECULAR BIOLOGY

Course content:

Nucleic acid structures, DNA replication, telomeres and telomerase, DNA repair, genetic recombination, transposable elements (transposons), Transcription and post-transcriptional modifications of RNA, retrotransposons, Viruses, Translation, post-translational modifications of proteins, membrane proteins, structure and function of proteins, Organisation of eukaryotic DNA, Study of cellular organizations, genetic testing, DNA-binding motifs, post-transcriptional control, cell cycle control and cell proliferation, apoptosis, signal transduction mechanisms, Molecular mechanisms of carcinogenesis, epigenetics.

LECTURERS

Faculty Members:

N. Galanopoulou (coordinator), Assoc. Professor, Faculty Member Department of Chemistry

Outside contributors:

S. Stratikos, Researcher, NCSR Demokritos,

P.Georgiadis, Researcher, National Research Foundation

ASSESSMENT METHOD:

Written exam

The course also includes a compulsory bibliographical work.