NYU DEPARTMENT OF BIOLOGY

BIOL-UA.32 Gene Structure and Function

Instructor:
Suse Broyde

Course Description:
An intermediate course on the molecular basis of gene function in viruses, prokaryotes, and eukaryotes. Covers topics drawn from the following areas or other current work: DNA and Chromatin Structure; Viruses: Lambda Phage and Retroviruses including HIV; Carcinogenesis; Environmental Pollutants and DNA Damage; DNA Repair; DNA Polymerase Structure and Function. The molecular basis of drug design is emphasized throughout the course in relation to all topics discussed.

Pre-requisite:
Molecular and Cell Biology (BIOL-UA 21).

Textbook and Required Materials:
N/A

Grading:

Exam 1	30%
Exam 2	35%
Final Exam	35%

Topics:
DNA and Chromatin Structure
Viruses
Lambda Phage
Retroviruses
HIV
Carcinogenesis
DNA Repair
Drug Design
Peptide Nucleic Acids
DNA Polymerase Structure and Function
Environmental Pollutants and DNA Damage
Special Topics