

BIO 302: Genomics and Bioinformatics

Bioinformatics is the use of computer databases and algorithms to analyze biological data. This course will apply bioinformatics to the field of genomics: the study of the protein, mRNA, and DNA sequences that comprise an organism's genome. Topics will include sequence databases, pairwise and multiple sequence alignments, genome browsers, genome assembly and annotation, molecular evolution, phylogenetic analysis, and population genetics. The computer-based laboratory component will provide students with training in several command-line and web-based bioinformatics tools.

Units: 3

Prerequisites:

[CHEM 150](#) and IBC 200

Program: [Biology](#)