Introduction to Bioinformatics (BIO 132)

Credit Hours: 3

Instructor: Aziz Mithani

Schedule: Monday to Friday (2.45 PM – 4.45 PM)

This course provides an introduction to the area of bioinformatics and describes how computers can be used to analyze biological data. Topics include fundamentals of nucleic acid and protein sequence analysis, protein structures, introduction to molecular evolution and biological networks. Students are also introduced to tools and databases commonly used in bioinformatics. Students will be able to explore how differences in DNA results in different traits and phenotypes that we see in humans and other species around us. A significant amount of time is spent for hands-on training and programming of topics covered in the lectures. Students are also introduced to the statistical package R.