BIOL-GA 1007 Programming for Biologists

Instructor:
Manpreet Katari

Course Description:
This course aims to provide introductory theory and hands-on training in bioinformatics for graduate students or advanced undergraduates in biology who have no prior computational experience. Students will learn basic computer programming as applied to bioinformatics as well as foundational concepts and practical tools that provide a starting point for further advanced study in bioinformatics and computational biology.

Pre-requisite:
N/A

Textbook and Required Materials:

Grading:
Lab/Homework 60%
Exams 40%

Topics:
Introduction to Python
Data structures
Functions
BioPython
Introduction to Linux
Sequence analysis
Data analysis
Scientific programming
Data visualization with Python and R
Machine learning in Python