The importance of algorithms to Computer Science can never be overemphasized. This course discusses algorithms in a down-to-earth practical way – every algorithmic issue is motivated by a practical compressing Bioinformatics problem. This course is not simply an application of existing algorithm design principles to the biological problems, but calls for creative rethinking of many algorithm design issues with novel design ideas. This ONE course opens a new door for your future career – Bioinformatics which relates to the great pharmaceutical industry as well.

The course includes a primer of molecular biology and a detailed review of algorithms and complexity. So, you don’t need to worry about your biological background or algorithm knowledge.

Prerequisites: CS 330 (grade of “C” or better) or approval of instructor.


Special Note to Graduate Students:
1) Graduate students cannot register for both CS 438-1 and CS 591-1 this semester, and;
2) Graduate students who have previously taken CS 438 cannot register for nor receive credit for CS 591-1 this semester.