

# Special Topics in Bioinformatics

## CSE 397 / 497

Fall Semester 2005  
Day and Time: TBD  
Room: TBD

Professor Daniel Lopresti  
Department of Computer Science and Engineering  
Webpage: <http://www.cse.lehigh.edu/~lopresti/>  
Email: [dal9@lehigh.edu](mailto:dal9@lehigh.edu)

### Course Description

Bioinformatics is the development of new computational techniques to assist in the analysis of the vast quantities of biological data arising from such efforts as the Human Genome Project and DNA microarray experiments. In this special topics course, we will focus on a small number of specific problem areas to be decided at the start of the semester. These may include genomics, microarray analysis, phylogenetics, and structural bioinformatics. We will conduct an intensive study, reading technical papers from the literature and examining existing algorithms. Mandatory group meetings will be held once a week. A final paper and/or project is required. Opportunities may arise to work with biologists on real problems of interest.

**Prerequisite:** a previous course on bioinformatics algorithms, either at Lehigh or elsewhere.