**BIOINFORMATICS (IAB)**

**IAB 620 Introduction to Bioinformatics 3**
The class will introduce concepts and methods to analyze biological data including DNA sequence data, genome assembly and annotation, DNA sequence comparison, phylogeny construction and protein structure analyses.

**IAB 621 Bioinformatics 3**
A variety of concepts required to analyze biological data will be discussed. Sample topics include biological databases, sequence alignment, ontologies, reproducible science, etc.

**Prerequisites:** IAB 620 or permission of instructor.

**IAB 622 Advanced Bioinformatics 3**
Understanding key concepts and advanced tools in bioinformatics. Managing, manipulating, and analyzing biological data for genomics, haplotypes, data mining, transcriptomics, biological databases and ontologies, and hypothesis testing.

**Prerequisites:** IAB 620 or permission of instructor.

**IAB 689 Capstone Project in Bioinformatics 3**
Capstone course. Students work with local industries and nonprofit organizations to solve important data science problems under the supervision of a mentor.