BIOINFORMATICS MINOR CURRICULUM

Bioinformatics is the rapidly-developing field that applies computational methods to address biological questions, and includes new advances in computer science, mathematics, and biology. Students entering the field of bioinformatics should have some training in each of these fields.

The minor is designed for students pursuing a B.S. who would have the necessary prerequisites for the required courses. Students pursuing a B.A. may participate if the prerequisites for the required courses are fulfilled. Each department (biological sciences, computer science, mathematics) will designate a minor advisor. The student's minor advisor will be chosen from outside of their major area of study.

Required courses (in approximate recommended order):

BIO SCI 1113	General Biology	3
COMP SCI 1570 & COMP SCI 1580	Introduction To Programming and Introduction To Programming Laboratory	4
COMP SCI 1575 & COMP SCI 1585	Data Structures and Data Structures Laboratory	4
BIO SCI 2213	Cell Biology	3
or BIO SCI 2223	General Genetics	
COMP SCI 2300	File Structures And Introduction To Database Systems	3
BIO SCI 4323	Molecular Genetics	3
STAT 5425	Introduction to Biostatistics	3+
or STAT 5346	Regression Analysis	
or STAT 5353	Statistical Data Analysis	
One additional course, either at the 2000-level or above in MATH or COMP SCI, or at the 3000-level or above in BIO SCI, outside of the major area of study, and as agreed upon by the minor advisor.		3+
BIO SCI 5323/ COMP SCI 5700	Bioinformatics (It is strongly recommended that this course be taken after the other BIO SCI and COMP SCI requirements.)	3