

IMPORTANT: This document is meant to serve as an example and a planning tool. It is not a substitute for meeting with your academic advisor. Be sure to review your course plans with your advisor and check DegreeWorks regularly to keep track of your progress toward graduation.

The course scheduling details shared here are for planning purposes only. They do not guarantee when or how often specific courses will be offered. Course offerings can change depending on faculty availability and student demand. For the most up-to-date and accurate information, always check the online course schedule and consult with your academic advisor.

Keep in mind that there are many different ways to complete a major or program of study, including opportunities like study away or other special options. Your advisor can help you design an academic pathway that best fits your goals and interests.

Bioinformatics Major Pathway (see also CS Road Maps [here](#))

Year	Fall Semester	Spring Semester	Important Notes
First	FYE		- BIO 114 (fall) - COMP 115, 118 and MATH 101, 151 are usually offered both fall and spring
	BIO 114 Intro to Biological Sciences	MATH 151 Introduction to Data Science	
	CHEM 153 Chemical Principles		
Second	BIO 211 Genetics	COMP 118 Object-Oriented Programming	- BIO 211 (fall); BIO 114 is a prerequisite - CHEM 153 (fall) - COMP 218 offered every fall; check with CS advisor
	COMP 115 Problem Solving and Programming		
Third	BIO 316 Molecular Bio and Genomics OR BIO/CHEM 305 Principles of Biochemistry	COMP 3XX Elective (COMP 318 "Algorithms" is recommended)	- BIO/CHEM 305 (fall) or BIO 316 can be taken in the third or fourth year; both have prerequisites - COMP 3XX elective should be chosen with CS advisor's guidance - MATH 241 and MATH 251 are typically offered in alternate years - Alternate MATH classes may satisfy (e.g., "Models and Simulation in R") with CS advisor's guidance
	MATH 241 Theory of Probability OR MATH 251 Methods of Data Analysis		
	COMP 218 Data Structures		
Fourth	Capstone or Senior Seminar	Elective 2	- Two additional electives in BIO, CHEM, CS, MATH, or PHIL can be taken anytime - See major requirements for eligible courses - One elective must be at the 300 level - Capstone experience is determined in consultation with your academic advisor
	Elective 1		