Fall Offerings
Bioinformatics Major Electives
Courses in bold satisfy the Writing Emphasis requirement. Courses in italics satisfy the Field Component. Courses marked with a * satisfy the lab component. Courses with a ^ might be offered as an iCourse. Students may only use a course once within their major electives. Courses listed on this sheet may not necessarily be offered every semester. All pre-requisites must be met prior to enrolling. This list shows courses that are typically offered. Some courses may not be available.

**BIOLOGICAL OPTIONS**
- BIOC 384 – Fundamentals of Biochemistry^  
- BIOC 385 – Metabolic Biochemistry^  
- ECOL 326 – Genomics  
- ECOL 340 – Evolution of Plant Form and Function  
- ECOL 430 – Conservation Genetics  
- ECOL 447 – Introduction to Theoretical Ecology  
- ECOL 450 – Marine Discovery  
- ECOL 482 – Ichthyology  
- ECOL 485 – Mammalogy  
- ECOL 487L – Animal Behavior Lab  
- ECOL 487R – Animal Behavior  
- MCB 325 – The Biology of Cancer  
- MCB 422 – Problem Solving with Genetic Tools  
- MCB 480 – Introduction to Systems Biology  
- MIC 419 – Immunology  
- MIC 420 – Pathogenic Bacteriology  
- MIC 425 – Environmental Microbiology  
- MIC 452 – Antibiotics - A Biological Perspective  
- MIC 350 – Molecular Microbiology  
- MIC 432 – Comparative Immunology  
- PLP 305 – Introductory Plant Pathology  
- PLP 329A – Microbial Diversity  
- PLP 427L – General Mycology Lab  
- PLP 427R – General Mycology Lecture  
- PLS 340 – Introduction to Biotechnology  
- PLS 340L – Biotechnology Laboratory

**COMPUTER SCIENCE OPTIONS**
- CSC 352 – Systems Programming and Unix  
- CSC 372 – Comparative Programming Languages  
- CSC 401A – Symbolic Logic  
- CSC 444 – Data Visualization  
- CSC 450 – Algorithms  
- CSC 460 – Database Design  
- ISTA 321 – Data Mining and Discovery  
- ISTA 421 – Introduction to Machine Learning  
- MATH313 – Introduction to Linear Algebra  
- MATH 355 – Analysis of Ordinary Differential Equations  
- MATH 362 – Introduction to Probability Theory  
- MATH 413 – Linear Algebra  
- MATH 481 – Mathematical modeling of fluid flow through and around organs and organisms