

## 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