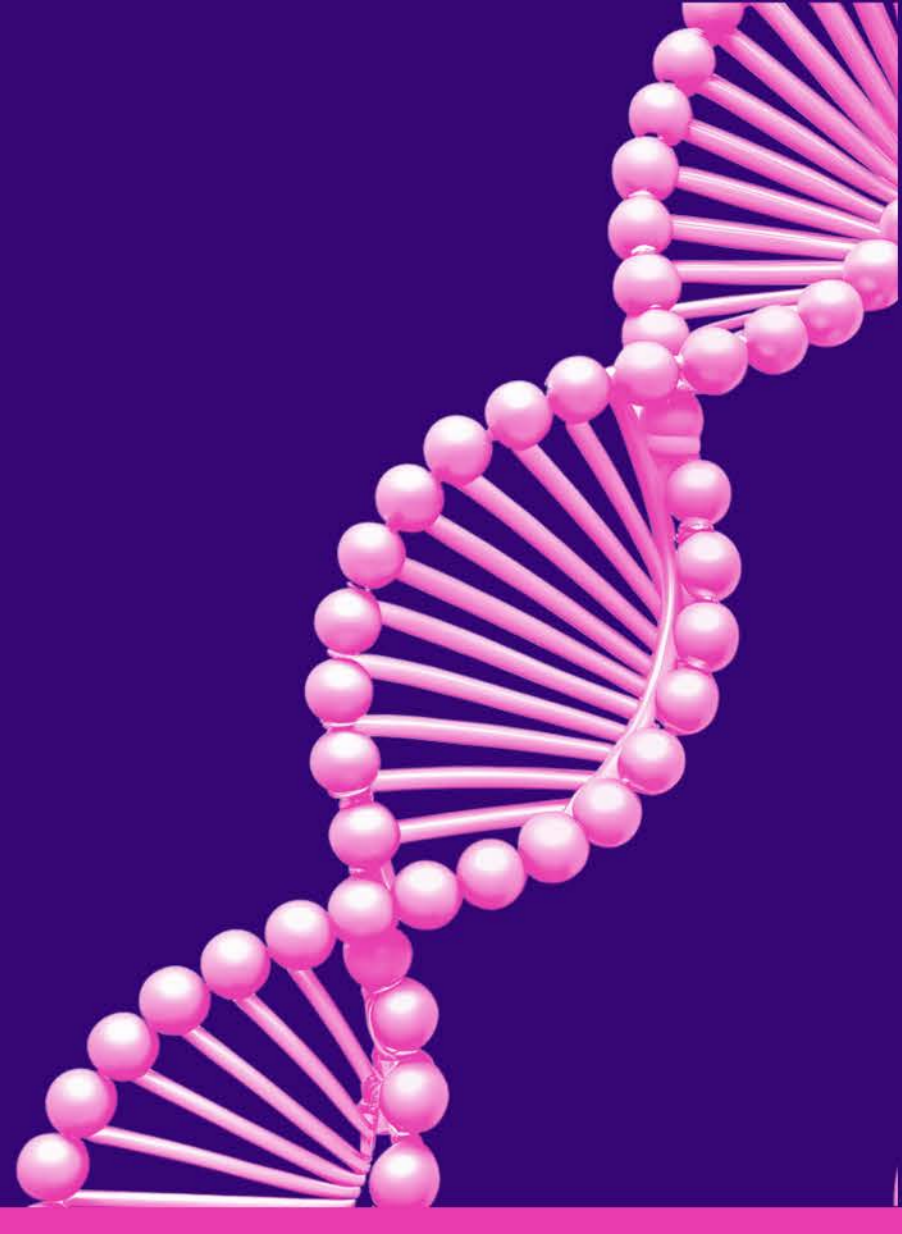




# BIOINFORMATICS ELECTIVES

Summer



Courses in **BOLD** satisfy the **WRITING EMPHASIS** requirement. Students may only use a course once within their major electives.

## CELL & MOLECULAR BIOLOGY

ECOL 326 - Genomics  
ECOL 345 - Biodiversity and the Tree of Life  
ENVS 477 - Principles of Ecotoxicology  
IMB 401 - Medical Microbiology and Immunology  
MCB 410 - Cell Biology  
MCB 411 - Molecular Biology  
**MCB 422 - Problem Solving with Genetic Tools**  
**MIC 419 - Immunology**  
NROS 307 - Cellular Neurophysiology  
NROS 310 - Molecular and Cellular Biology of Neurons  
**PLP 428R - Microbial Genetics**

## GENETICS

ECOL 326 - Genomics  
ECOL 345 - Biodiversity and the Tree of Life  
**MCB 422 - Problem Solving with Genetic Tools**  
**PLP 428R - Microbial Genetics**  
WFSC 430 - Conservation Genetics

## SCIENCE & SOCIETY

**ANTH 307 - Ecological Anthropology**  
ECOL 406R - Conservation Biology  
ECOL 409 - Evolution of Infectious Disease  
**HIST 311 - History of Epidemics**  
HPS 387 - Health Disparities & Minority Health  
**MCB 404 - Bioethics**  
PHIL 321 - Medical Ethics  
PHIL 323 - Environmental Ethics  
PHIL 347 - Neuroethics

## ORGANISMAL BIOLOGY

ECOL 409 - Evolution of Infectious Disease  
**ECOL 437 - Vertebrate Physiology**  
**ECOL 488 - Arizona Mammals**  
IMB 401 - Medical Microbiology and Immunology  
IMB 402 - Medical Microbiology Basics  
IMB 404 - Medical Virology Basics  
IMB 406 - Human Immunology  
PLP 329A - Microbial Diversity  
**PLP 428R - Microbial Genetics**

## ECOLOGY, EVOLUTION, & BEHAVIOR

**ANTH 307 - Ecological Anthropology**  
ECOL 326 - Genomics  
ECOL 345 - Biodiversity and the Tree of Life  
ECOL 406R - Conservation Biology  
ECOL 409 - Evolution of Infectious Disease  
**ECOL 488 - Arizona Mammals**  
ENVS 477 - Principles of Ecotoxicology  
GEOS 330 - Introduction to Remote Sensing  
PLP 329A - Microbial Diversity  
RNR 417 - Geographic Information Systems for Natural and Social Sciences  
WFSC 385 - Zoo and Aquarium Conservation  
**WFSC 444 - Wildlife Ecology, Conservation, and Management**  
WFSC 447 - Wildlife Conservation Behavior



## PHYSICAL SCIENCE

ENVS 275 - Data analysis for life and environmental sciences  
ENVS 477 - Principles of Ecotoxicology  
GEOS 212 - Introduction to Oceanography  
GEOS 330 - Introduction to Remote Sensing  
RNR 417 - Geographic Information Systems for Natural and Social Sciences

## BIOINFORMATICS

BIOC 384 - Fundamentals of Biochemistry  
BIOC 385 - Metabolic Biochemistry  
GAME 310 - Gamification in Society  
ISTA 321 - Data Mining and Discovery  
ISTA 322 - Data Engineering  
ISTA 421 - Introduction to Machine Learning

