

## Microbiology Electives

To complete your major choose from the following electives to include at least one lab course (≥8 units)

Topic	Fall Semester	Spring Semester
<b>General</b>	ECOL 320 Genetics (4) L PLP 427R General Mycology (3) PLP 427L General Mycology Lab (2) VSC 491 Preceptorship (3)** MIC 493 Internship (3)** MIC 498 Senior Capstone (1-3) MIC 499 Independent Study (3)**	PLS 312 Animal & Plant Genetics (4) L MCB 410 Cell Biology (3) MCB 411 Molecular Biology (3) VSC 491 Preceptorship (3) MIC 493 Internship (3)** MIC 498 Senior Capstone (1-3) MIC 499 Independent Study (3)** PLP 329A Microbial Diversity (3)
<b>Animal: Microbe Interactions</b>	VSC 403R Biology of Animal Parasites (3) VSC 403L Parasitology Lab (1) VSC 433 Medical and Molecular Virology (4) VSC 443 Research Animal Methods (3) L VSC 320 Food Safety (3) L ENTO 310 Living in Symbiosis (3) MIC 452 Antibiotics: A Biological Perspective (3) ENTO 457 Medical and Veterinary Entomology (3)	VSC 420 Pathogenic Bacteriology (3) VSC 423 Mechanisms of Disease (4) L VSC 438 Ecology of Infectious Disease (3) ECOL 409 Evolution of Infectious Disease (3) ENTO 446 Insect Pathogens (3)
<b>Plant: Microbe Interactions</b>	PLP 305 Introduction Plant Pathology (3)	ECOL 475 Freshwater/Marine Algae (4; alternating years) PLP 451 Plant Pathogenic Agents (4; alternating years) VSC 456 Aquaculture (3) (spg even yrs)
<b>Environmental Microbiology</b>	SWES 425 Environmental Microbiology (3) SWES 426 Environmental Micro Lab (2)	SWES 305 Pollution Science (3) SWES 440 Biodegradation (3; alternating years)
<b>Biotechnology</b>	PLS 340 Introduction Biotechnology (3) PHYS 430 Introduction to Biophysics (2; alternating years)	MCB 416 Bioinformation and Genomic Analysis (3) MCB 473 Recombinant DNA Methods(4)

\*\*3 units of Independent Study, Internship, or Preceptorship can be counted towards the 23 units required for the MIC major and MAY satisfy the elective lab requirement.

\*\*\*MIC 424 (3) Virology Laboratory may be offered during selected summer one sessions.

NOTE: All courses are listed under their home department's letter code, however, most are cross-referenced in VSC/MIC.

For more information contact: Dr. Elaine Marchello, [evm@email.arizona.edu](mailto:evm@email.arizona.edu) or 520-621-3058  
 Dr. Jan Decker, [jdecker@email.arizona.edu](mailto:jdecker@email.arizona.edu) or 520-621-8942