

**BACHELOR OF SCIENCE DEGREE IN MICROBIOLOGY**

This checklist is intended as a guide and is not an official document.

**NAME** \_\_\_\_\_ **SID** \_\_\_\_\_ **DATE:** \_\_\_\_\_**GENERAL REQUIREMENTS**UNIV 101 – Intro. to the General Ed. Experience 1 Mathematics: Complete one of the following: (3-5 units)-MATH 113 – Elements of Calc. 3 -MATH 122A/B – Functions of  
Calc./First-Sem. Calc. 5 -MATH 125 – Calculus I 3 Writing Requirement (3-6 units)-ENGL 101 – Freshman Composition 3 -ENGL 102 – Freshman Composition 3 

OR

-ENGL 109H – Advanced First Year Comp. 3 Second Language Requirement (0-8 units)Complete one of the following:-Pass a proficiency exam at 2nd semester level. -Complete courses through 2nd semester prof. General Education Requirements

Exploring Perspectives (12 Units)

-Artist \_\_\_\_\_ 3 -Humanist \_\_\_\_\_ 3 -Natural Scientist \_\_\_\_\_ 3 -Social Scientist \_\_\_\_\_ 3 

Building Connections (9 Units)

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ACBS 195 - Living Dangerously (Spring only)

MIC 195D - Colloquim: This Wormy World (Fall only)

MIC 195F - Plagues, Peoples, &amp; Society (Spring only)

MIC 195G - Careers in Microbiology (Fall only)

**UNIVERSITY REQUIREMENTS:**

out of 120 units Need:

out of 42 upper division units Need:

out of 56 4-year institution units Need:

Mid-Career Writing Assessment - Complete?

Cumulative GPA: \_\_\_\_\_ Major GPA: \_\_\_\_\_

**SUPPORTING COURSEWORK****(46-47 units)**-MCB 181R – Introductory Biology I 3 -MCB 181L – Introductory Biology I Lab 1 -ECOL 182R – Introductory Biology II 3 -ECOL 182L – Introductory Biology II Lab 1 -MIC 285R – Principles of Microbiology (Spring only) 4 -MIC 285L – Principles of Microbiology Lab (Sp. only) 1 -CHEM 151 – General Chemistry I 4 -CHEM 152 – General Chemistry II 4 -CHEM 241A – Organic Chemistry I 3 -CHEM 243A – Organic Chemistry I Lab 1 -CHEM 241B – Organic Chemistry II 3 -CHEM 243B – Organic Chemistry II Lab 1 -BIOC 384 – Foundations in Biochemistry 3 -PHYS 102 – Introductory Physics I 3 -PHYS 181 – Introductory Physics I Lab 1 -PHYS 103 – Introductory Physics II 3 -PHYS 182 – Introductory Physics II Lab 1 Communication: Complete one of the following:-ALC 422 – Comm. Knowledge in Ag. (Fall only) 3 -COMM 101 – Intro. to Communication 3 -COMM 119 – Public Speaking 3 Statistics: Complete one of the following:-AREC 239 – Intro. to Stats and Data (Spring only) 4 -MATH 263 – Intro. to Statistics and Biostats. 3 -PSY 230 – Psys. Measurements and Stats. 3 -SBS 200 – Intro. to Stats for the Social Sci. 4 **MAJOR CORE COURSEWORK\* (28 units)**-MIC 328R – Microbial Physiology (Spring only) 3 -MIC 350 – Molecular Microbiology (Fall only) 3 -MIC 419 – Immunology (Fall only, some Summers) 4 -MIC 421B – Microbial Techniques (Fall only) 5 -MIC 428R – Microbial Genetics (Spring/Summer) 3 -MIC 428L – Microbial Genetics Lab (Spring only) 2 **MIC Elective\*(8 units)** See Microbiology Elective List

\*A maximum of 9 units of your major core coursework (28 units including 8 MIC Elective units) may double dip with another major or minor. The remaining core units must be unique and cannot double dip with another major or minor.\*

For more information, contact: Ms. Micah Parrish,  
[micahparrish@arizona.edu](mailto:micahparrish@arizona.edu) or (520) 626-3807.**Expected Graduation Term:**| Credit Type – EN= Enrollment at UA, IP= In Progress, TR=Transfer Credit,  
TE= Test Credit |

## Microbiology Electives (2024 Catalog)

\*Up to 3 units of Directed Research (ACBS/MIC 492), Independent Study (MIC 399/499), Internship (MIC 493), or Preceptorship (ACBS 491) can be counted as elective units. Must be microbiology related.

### Fall Semester

ACBS 380R- Food Safety & Microbiology (3)  
ACBS 380L- Food Safety & Microbiology (1)  
ACBS 423- Mechanisms of Disease (3)  
ACBS 438- Ecology of Infectious Disease (3)  
BIOC 385- Metabolic Biochemistry (3)  
ECOL 320- Genetics (4)  
ECOL 326- Genomics (3)  
ECOL 409- Evolution of Infectious Diseases (3)  
ENVS 408- Scientific Writing for Env., Ag., & Life Sciences (3)  
ENVS 425- Environmental Microbiology (3)  
ENVS 426- Environmental Microbiology Lab (2)  
MCB 410- Cell Biology (3)  
MCB 422- Problem Solving with Genetic Tools (3)  
MIC 329A- Microbial Diversity (3)  
MIC 340- Introduction to Biotechnology (3)  
MIC 420- Pathogenic Bacteriology (3)  
MIC 450- Veterinary Microbiology (3)  
MIC 452- Antibiotics: A Biological Perspective (3)  
PLP 305- Introductory Plant Pathology (3)  
PLP 427R- General Mycology (3)  
PLS 434- Industrial Biotechnology (3)

### Summer Semester

ACBS 313- Principles of Animal Genetic Systems (3)  
ACBS 380R- Food Safety and Microbiology (3)  
ACBS 405- Principles of Livestock Health Management (3)  
BIOC 385- Metabolic Biochemistry (3)  
ECOL 320- Genetics (4)  
ECOL 326- Genomics (3)  
ECOL 409- Evolution of Infectious Diseases (3)  
ENVS 408- Scientific Writing for Env., Ag. & Life Sciences (3)  
ENVS 425- Environmental Microbiology (3)  
MCB 410- Cell Biology (3)  
MCB 422- Problem Solving with Genetic Tools (3)  
MIC 329A- Microbial Diversity (3)

### The following electives have not been offered recently, but are approved if available on the Schedule of Classes

ACBS 310- Living in Symbiosis (3)  
ACBS 395A- An ACBS Guide (1) - *This course has been offered recently, but priority enrollment is limited to ANS/VSC majors.*  
ACBS 403L- Parasitology Laboratory (1)  
ACBS 466- Principles of Disease (3)  
ACBS 467- Computation in Biomedicine (3)  
ECOL 320H- Genetics, honors section (3)  
MIC 320- Microbiomes (3)  
PLP 427L- General Mycology Lab (2)  
PLS 456- Topics in Biotechnology (3)

### Spring Semester

ACBS 313- Principles of Animal Genetic Systems (3)  
ACBS 317- One Health: A Microbial Perspective (3)  
ACBS 377- Food Toxicology (3)  
ACBS 403R- Biology of Animal Parasites (3)  
ACBS 405- Principles of Livestock Health Management (3)  
ACBS 409- Environmental Physiology of Domestic Animals (3)  
ACBS 443- Research Animal Methods (3)  
BIOC 385- Metabolic Biochemistry (3)  
ECOL 320- Genetics (4)  
ECOL 409- Evolution of Infectious Diseases (3)  
ENVS 408- Scientific Writing for Env., Ag., & Life Sciences (3)  
ENVS 425- Environmental Microbiology (3)  
ENVS 426- Environmental Microbiology Lab (2)  
ENVS 475- Freshwater and Marine Algae (4)  
MIC 340- Introduction to Biotechnology (3)  
MIC 430- Food Microbiology and Biotechnology (3)  
MIC 430L- Food Microbiology and Biotechnology Lab (2)  
MIC 433- Medical and Molecular Virology (4)  
MCB 411- Molecular Biology (3)  
MCB 473- Recombinant DNA Methods and Applications (4)  
PLS 333- General Virology (3)

### Comments

