

BACHELOR OF SCIENCE DEGREE IN MICROBIOLOGY

CATALOG YEAR 2020

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

Credit Type – EN=Enrollment at UA, IP=In Progress, TR=Transfer Credit, TE=Test Credit

NAME _____

SID # _____ DATE: _____

GENERAL REQUIREMENTS

Mathematics Requirement: (3- 5 Units)

Complete **one** of the following:

- MATH 113 – Elements of Calculus 3_____
- MATH 122A/B – Functions of Calculus /First-Semester Calculus 5_____
- MATH 125- Calculus I 3_____

Composition Requirements: (3-6 Units)

- ENGL 101 – Freshman Composition 3_____
- ENGL 102 – Freshman Composition 3_____
- or
- ENGL 109H – Advanced First Year Composition 3_____

Second Language Requirements: (0-8 Units)

Complete **one** of the following:

- Pass a language proficiency exam at 2nd semester level _____
- Complete courses through 2nd semester proficiency _____

General Education Requirements: (21-24 Units)

Tier I Individuals and Societies

- _____ 150 A, B, C or D 3_____
- _____ 150 A, B, C or D 3_____

Tier I Tradition and Cultures

- _____ 160 A, B, C or D 3_____
- _____ 160 A, B, C or D 3_____

Tier II Individuals & Societies 3_____

Tier II Humanities 3_____

Tier II Arts 3_____

Diversity Emphasis Course 3_____

Note: Certain Tier I and Tier II courses can also be used to meet this requirement

**Tier I and II Natural Sciences Requirement is satisfied by MICRO major coursework.

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: _____

MICRO 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 (SP 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_____

Communication: Complete **one** of the following:

- ALC 422 – Communicating Knowledge in Agriculture and Life Sciences (F only) 3_____
- COMM 101 – Introduction to the Study of Communication 3_____
- COMM 119 – Public Speaking 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_____

Statistics: Complete **one** of the following:

- AREC 239 – Introduction to Statistics and Data Analysis (SP only) 4_____
- MATH 263 – Introduction to Statistics and Biostatistics 3_____
- PSY 230 – Psychological Measurements and Statistics 3_____
- SBS 200 – Introduction to Statistics for the Social Sciences 3_____

MAJOR CORE COURSEWORK (28 Units)

- MIC 328R – Microbial Physiology (SP only) 3_____
- MIC 350 – Molecular Microbiology (Fall only) 3_____
- MIC 419 – Immunology (Fall only) 4_____
- MIC 421B – Microbial Techniques (Fall only) 5_____
- MIC 428R – Microbial Genetics (SP only) 3_____
- MIC 428L – Microbial Genetics (SP only) 2_____

MIC Electives _____ out of 8 units

For more information, please contact:

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(520) 621- 3058

Microbiology Electives (2020 Catalog)

*Up to 3 units of Directed Research (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 403R- Biology of Animal Parasites (3)
ACBS 403L - Biology of Animal Parasites Lab (1)
ACBS 443- Research Animal Methods (3)
ACBS 466- Principles of Disease (3)
ACBS 467- Computation in Biomedicine (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)
BIOC 385- Metabolic Biochemistry (3)
ECOL 320- Genetics (4)
ECOL 326- Genomics (3)
ENTO 310- Living in Symbiosis (3)
ENVS 425- Environmental Microbiology (3)
ENVS 426- Environmental Microbiology Lab (2)
MCB 422- Problem Solving with Genetic Tools (3)
PLP 305- Introductory Plant Pathology (3)
PLP 320- Microbiomes (3)
PLP 427R- General Mycology (3)
PLP 427L- General Mycology Lab (2)

Summer Semester

ACBS 317- One Health: A Microbial Perspective
MIC 329A- Microbial Diversity (3)
BIOC 385- Metabolic Biochemistry (3)
ECOL 320- Genetics (4)
ECOL 326- Genomics (3)
MCB 422- Problem Solving with Genetic Tools (3)

Spring Semester

ACBS 313- Principles of Animal Genetic Systems (3)
ACBS 317- One Health: A Microbial Perspective (3)
ACBS 405- Principles of Livestock Health Management (3)
ACBS 423- Mechanisms of Disease (3)
MIC 430- Food Microbiology and Biotechnology (3)
MIC 430L- Food Microbiology and Biotechnology Lab (2)
MIC 433- Medical and Molecular Virology (4)
BIOC 385- Metabolic Biochemistry (3)
ECOL 475-Freshwater and Marine Algae (4)
MCB 410- Cell Biology (3)
MCB 422- Problem Solving with Genetic Tools (3)
MCB 473- Recombinant DNA Methods and Applications (4)
PLS 333- General Virology (3)
PLS 456- Topics in Biotechnology (3)

Notes:
