

MICROBIOLOGY B.S.

K-STATE CORE:	35 Cr.
English	6
ENGL 100 Expository Writing 1	3
ENGL 200 Expository Writing 2	3
Communications	3
Public Speaking or Interpersonal Comm.	3
Mathematics & Statistics	4
Recommended: MATH 220 Analytical	4
Geometry & Calculus 1	
Natural Sciences w/ lab	4
Recommended: BIOL 198 Principles of Biol.	4
Social & Behavioral Sciences	6
At least 2 courses from 2 different subjects	
Arts & Humanities	6
At least 2 courses from 2 different subjects	
Electives at 100-200 level	6
At least 6 credits at the 100-200 level, excluding	
those already used above	

GRADUATION REQUIREMENTS	120 credits
45 credits at the 300-level or higher	
15 of the last 30 hours (300+level) MUST be taken at K-State	
Minimum 30 credits at K-State	
Maximum 60 credits from a two-year colleg	e
Max of 30 credits from Credit for Prior Learn	ning (CPL)

For class descriptions and prerequisites, visit: catalog.k-state.edu Approved curriculum for Fall 2025. Requirements and course options are subject to change. Please check with an advisor for the most upto-date information on program requirements.

CONTACT US: Biology@ksu.edu k-state.edu/biology 116 Ackert Hall

PROGRAM REQUIREMENTS	Credits
BIOL 100 Biology First-year Orientation	1
Outside Concentration	9

Choose one option to fulfill the outside concentration:

- Certificate, minor, major, or secondary major offered outside the department and Life Sciences.
- 9 credits of one prefix, outside BIOL, at the 300 level or with a prerequisite in the same prefix.
- 9 credits of microcredential.

Overlays	[9]
Ethical Reasoning Overlay	[3]
Global Perspectives Overlay	[3]
US Multicultural Overlay	[3]
Required Microbiology Courses	
BIOL 198 Principles of Biology	4
BIOL 255 General Microbiology	4
BIOL 398 Principles of Genetics	4
BIOL 541 Cell Biology	3
CHM 210 Chemistry 1	4
CHM 230 Chemistry 2	4
CHM 350 General Organic Chemistry OR CHM	3
531 Organic Chemistry 1 (w/ CHM 550	
recommended)	
CHM 351 General Organic Chemistry	2
Laboratory or CHM 532 Organic Chemistry	
Laboratory	
BIOCH 521 General Biochemistry	3
MATH 220 Analytical Geometry & Calculus 1	4
PHYS 113 Physics 1	4
PHYS 114 Physics 2	4
Choose 1 course (3-4 credits): CC 110 & 111, CC 210, CIS	
200, MATH 221, MATH 551, MATH 615, STAT 225, STAT	
240, STAT 701, STAT 703.	
Sub-Plan Options & Microbiology Electives	20
General Microbiology	20

ach 120 total credits 8+	Free Electives to reach 120 to
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Medical Microbiology

B.S. Arts/Humanities Restricted Elective

B.S. Social Sciences Restricted Elective

20

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3



MICROBIOLOGY B.S.

GENERAL MICROBIOLOGY	20 cr.
General Microbiology Option	9
BIOL 520 Evolution or BIOL 521 Evolution of Infectious Disease	3
BIOL 675 Genetics of Microorganisms	3
BIOL 687 Microbial Ecology	3
Microbiology Electives	11

Choose a total of 11 hours of major electives with at least 5 hours of labs. No more than 6 credits can be counted from courses outside of BIOL (Research Courses do not count toward this limit). Courses used here may not be used elsewhere.

MEDICAL MICROBIOLOGY	20 cr.
Medical Microbiology Option	9
BIOL 670 Immunology	3

Choose 2 courses (6 credits) from:

- BIOL 530 Pathogenic Microbiology
- BIOL 545 Human Parasitology
- BIOL 675 Genetics of Microorganisms
- BIOL 730 Virology

Microbiology Electives

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Choose a total of 11 hours of major electives with at least 5 hours of labs. No more than 6 credits can be counted from courses outside of BIOL (Research Courses do not count toward this limit). Courses used here may not be used elsewhere.