

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
<i>Recommended: MATH 220 Analytical Geometry & Calculus</i>	4
Natural Sciences w/ lab	4
<i>Recommended: BIOL 198 Principles of Biology</i>	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 college	
Max of 30 credits from Credit for Prior Learning (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 up-to-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 Biology Courses	
BIOL 198 Principles of Biology	4
BIOL 398 Principles of Genetics	4
BIOL 520 Evolution or BIOL 521 Evolution of Infectious Disease	3
CHM 210 Chemistry 1	4
CHM 230 Chemistry 2	4
CHM 350 Gen. Organic Chem. OR CHM 531 Org. Chem. 1 (w/ CHM 550 Org. Chem. 2 recommended)	3
CHM 351 Gen. Org. Chem lab or CHM 532	2
BIOCH 521 Gen. 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 & Biology Electives	26-40
Animal Biology	26
Cellular and Molecular Biology	26
Computational Biology	40
Ecology and Evolutionary Biology	26
Human Health Biology	26
Integrative Biology	26
Plant Biology	26
B.S. Arts/Humanities Restricted Elective	3
B.S. Social Sciences Restricted Elective	3

Free Electives to reach 120 total credits	0+
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ANIMAL BIOLOGY	26 cr.
Animal Biology Option	12
BIOL 221 Organismic Biology	5
BIOL 513 Physiological Adaptations of Animals	4
BIOL 541 Cell Biology	3
*Biology Electives	14
Choose 14 credit hours from approved electives. Must include 1 lab class. Courses used here may not be used elsewhere.	

CELLULAR & MOLECULAR BIOLOGY	26 cr.
Cellular & Molecular Biology Option	13
BIOL 255 General Microbiology	4
BIOL 541 Cell Biology	3
BIOL 580 Molecular Biol. of Genes & Genomes	3
1 course (3 credits) from:	
• BIOL 461 Phage Hunters 1 • BIOL 676 Molecular Genetics Laboratory • BIOL 695 Internship in Biology • BIOL 698 Research in Biology	
*Biology Electives	13
Choose 13 credit hours from approved electives. Must include 2 lab classes. Courses used here may not be used elsewhere.	

COMPUTATIONAL BIOLOGY	40 cr.
Computational Biology Option	30
BIOL 734 Intro. to Genomics & Bioinformatics	4
CC 110 Intro to computing	2
CC 111 Element of Computer Programming	1
CC 210 Fundamental Computer Programming	4
CC 310 Data Structures and Algorithms	3
CC 410 Advanced Programming	4
MATH 312 Finite Applications of Mathematics	3
CC 535 or CIS 531	3
2 courses of BIOL, STAT, CC, CIS, or MATH at 400 level or above	6
*Biology Electives	10
Choose 10 credit hours from approved electives. Courses used here may not be used elsewhere.	

***Note:** Biology electives may include no more than 3 credits numbered ≤399. BIOL 221 and BIOL 255, if not used in the Option requirements, can be included and will not be counted toward the allowed 3 credits numbered 399 or lower.

ECOLOGY AND EVOLUTIONARY BIOLOGY	26 cr.
Ecology and Evolutionary Biology Option	12
BIOL 221 Organismic Biology	5
BIOL 529 Ecology	3
BIOL 632 Ecology Laboratory	1
BIOL 640 Population Biology	3
*Biology Electives	14
Choose 14 credit hours from approved electives. Must include 1 lab class. Courses used here may not be used elsewhere.	

HUMAN HEALTH BIOLOGY	26 cr.
Human Health Biology Option	15
BIOL 255 General Microbiology	4
BIOL 441 Human Body I	4
BIOL 442 Human Body II	4
BIOL 541 Cell Biology	3
*Biology Electives	11
Choose 11 credit hours from approved electives. Courses used here may not be used elsewhere.	

INTEGRATIVE BIOLOGY	26 cr.
Integrative Biology Option	11
BIOL 221 Organismic Biology	5
BIOL 529 Ecology	3
BIOL 541 Cell Biology	3
*Biology Electives	15
Choose 15 credit hours from approved electives. Must include 2 lab classes. Courses used here may not be used elsewhere.	

PLANT BIOLOGY	26 cr.
Plant Biology Option	12
BIOL 221 Organismic Biology	5
BIOL 500 Plant Physiology	3
BIOL 551 Taxonomy of Flowering Plants	4
1 course (3 credits) from:	
• BIOL 461 Phage Hunters 1 • BIOL 676 Molecular Genetics Laboratory • BIOL 695 Internship in Biology • BIOL 698 Research in Biology	
*Biology Electives	11
Choose 11 credit hours from approved electives. Must include 2 lab classes. Courses used here may not be used elsewhere.	