

This roadmap is a recommended semester-by-semester plan of study for this major. However, courses and milestones designed as critical (!) must be completed in the semester listed to ensure a timely graduation.

Critical	Course Subject and Title	Credit Hours	Min. Grade	Major GPA	Attribute	Notes
Semester One [17 Credits]						
!	BSCI 10120 Biological Foundations	4		■	KBS	
!	CHEM 10060 General Chemistry I and CHEM 10062 General Chemistry I Laboratory or CHEM 10960 Honors General Chemistry	5		■	KBS KBS KBS	
!	MATH 12021 Calculus for Life Sciences¹	4		■		
	US 10097 Destination Kent State: First Year Experience ²	1				
	Kent Core Requirement	3				
Semester Two [14 Credits]						
!	CHEM 10061 General Chemistry II and CHEM 10063 General Chemistry II Laboratory or CHEM 10961 Honors General Chemistry	5		■	KBS KBS KBS	
!	MATH 12022 Probability and Statistics for Life Sciences¹	3		■		
	Kent Core Requirement	3				
	Kent Core Requirement	3				
Semester Three [15 Credits]						
!	BSCI 30156 Elements of Genetics	3		■		
!	CHEM 30475 Organic Chemistry Laboratory I³	1		■	ELR	
!	CHEM 30481 Organic Chemistry I³	3		■		
!	PHY 13001 General College Physics I	4		■	KBS	
!	PHY 13021 General College Physics Laboratory I	1		■	KBS	
	Kent Core Requirement	3				
Semester Four [15 Credits]						
!	BSCI 30140 Cell Biology	4		■		
!	CHEM 30301 Inorganic Chemistry I⁴	2		■		
!	CHEM 30476 Organic Chemistry Laboratory II⁵	1		■		
!	CHEM 30482 Organic Chemistry II⁵	3		■		
!	PHY 13002 General College Physics II	4		■	KBS	
!	PHY 13022 General College Physics Laboratory II	1		■	KBS	
Semester Five [14 Credits]						
!	BSCI 40430 Animal Physiology	3		■		
!	CHEM 40567 Basic Concepts of Physical Chemistry⁶	4		■		
	Foreign Language ⁷	4 - 5				
	Kent Core Requirement	3				
Semester Six [16 Credits]						
!	BSCI 30171 General Microbiology	4		■		
!	CHEM 40245 Biochemical Foundations of Medicine⁵	4		■		
!	CHEM 40568 Elementary Physical Chemistry Laboratory⁴	1		■		
	Foreign Language ⁷	4 - 5				
	Kent Core Requirement	3				
Semester Seven [14 Credits]						
!	CHEM 30105 Analytical Chemistry I⁶	3		■		
!	CHEM 30107 Analytical Chemistry Laboratory I	1	C ⁸	■	WIC	
!	CHEM 40248 Advanced Biological Chemistry⁶	3		■		
	Concentration electives ⁹	2		■		
	Kent Core Requirement	3				
	General Electives ¹⁰	2				
Semester Eight [15 Credits]						
!	CHEM 40251 Advanced Biological Chemistry Laboratory	2	C ⁸	■	WIC	
!	CHEM 40263 Physical Biochemistry I⁴	3		■		
	Concentration electives ⁹	3		■		
	General Electives ¹⁰	7				

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours 30000 – 40000 level course	Minimum Kent Core Hours	Minimum	
			Major GPA	Overall GPA
120	42	36	2.000	2.000

- The following three courses may be taken as a package instead of MATH 12021 and 12022: MATH 12002 Analytic Geometry and Calculus I (5), MATH 12003 Analytic Geometry and Calculus II (5) and MATH 30011 Basic Probability and Statistics (3).
- US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.
- Offered in fall and summer only
- Offered in spring only
- Offered in spring and summer only
- Offered in fall only
- Fulfills College General Requirement
- A minimum C (2.000) grade must be earned in CHEM 30107 (offered in fall only) or CHEM 40251 (offered in spring only) to fulfill the writing-intensive requirement.

9. Concentration electives (5 credits)

Choose from the following:

BSCI 30518 Vertebrate Anatomy (4)	BSCI 40174 Immunology (3)
BTEC 40191 Seminar: Recent Developments in Biotechnology (1)	BTEC 40220 Bioinformatics (3)
CHEM 30106 Analytical Chemistry II (2)	CHEM 40295 Special Topics in Biochemistry (1 - 3)
CHEM 40302 Inorganic Chemistry II (2)	CHEM 40365 Biological Inorganic Chemistry (3)
CHEM 40477 Intermediate Organic Chemistry Laboratory (1)	CHEM 40483 Intermediate Organic Chemistry (1)
CHEM 40796 Individual Investigation (1 - 3)	

- Credits required depend on meeting minimum 120 credit hours and minimum 42 upper-division credit hours.

Notes:

The following Kent Core courses are strongly recommended for this concentration: COMM 15000 Introduction to Human Communication (Additional); ECON 22060 Principles of Microeconomics (Social Sciences); PHIL 21001 Introduction to Ethics (Humanities); PSYC 11762 General Psychology (Social Sciences); SOC 12050 Introduction to Sociology (Social Sciences).

The following elective courses are recommended for this concentration: ECON 42086 Economics of Health Care; PSYC 40111 Abnormal Psychology; PSYC 41363 Biopsychology; SOC 42563 Sociology of Health and Health Care.

University Requirements: Bachelor's degree-seeking students must meet Kent Core (general education requirements), diversity, writing-intensive and experiential learning requirements. For more information about these requirements, please read the following sections in the University Catalog: Kent Core – www.kent.edu/catalog/kent-core; Diversity Course Requirement – www.kent.edu/catalog/diversity; Writing-Intensive Course Requirement – www.kent.edu/catalog/wic; Experiential Learning Requirement – www.kent.edu/catalog/elr.

Attribute Legend: **DD** Diversity–Domestic; **DG** Diversity–Global; **ELR** Experiential Learning; **KAD** Kent Core Additional; **KBS** Kent Core Basic Sciences; **KCM** Kent Core Composition; **KFA** Kent Core Fine Arts; **KHU** Kent Core Humanities; **KMC** Kent Core Mathematics and Critical Reasoning; **KSS** Kent Core Social Sciences; **WIC** Writing Intensive