

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
<b>Semester One [16 Credits]</b>						
<b>Note: Students not placed into MATH 12002 (required in semester 3) should take MATH 11010 (Kent Core course) in first year of study</b>						
!	<b>BSCI 10110 Biological Diversity</b>	4		■	KBS	
!	<b>CHEM 10060 General Chemistry I</b>	4		■	KBS	
!	<b>CHEM 10062 General Chemistry I Laboratory</b>	1		■	KBS	
	PSYC 11762 General Psychology	3		■	DD/KSS	
	US 10097 Destination Kent State: First Year Experience <sup>1</sup>	1				
	Kent Core Requirement	3				
<b>Semester Two [15 Credits]</b>						
!	<b>BSCI 10120 Biological Foundations</b>	4		■	KBS	
!	<b>CHEM 10061 General Chemistry II</b>	4		■	KBS	
!	<b>CHEM 10063 General Chemistry II Laboratory</b>	1		■	KBS	
	SOC 12050 Introduction to Sociology	3		■	DD/KSS	
	Kent Core Requirement	3				
<b>Semester Three [16 Credits]</b>						
!	<b>BSCI 30140 Cell Biology</b>	4		■		
!	<b>MATH 12002 Analytic Geometry and Calculus I</b>	5		■	KMC	
	CHEM 20481 Basic Organic Chemistry I (4) or CHEM 30481 Organic Chemistry I (3)	3-4		■		
	CHEM 30475 Organic Chemistry Laboratory I	1		■	ELR	
	Kent Core Requirement	3				
<b>Semester Four [14 Credits]</b>						
!	<b>BSCI 30005 Career Pathways in Biology</b>	1		■		
!	<b>BSCI 30156 Elements of Genetics</b>	3		■		
	BSCI 40600 Writing in the Biological Sciences	1	C <sup>2</sup>	■	WIC	
	CHEM 20482 Basic Organic Chemistry II (2) <sup>3</sup> or CHEM 30482 Organic Chemistry II (3) <sup>3</sup>	2-3		■		
	CHEM 30476 Organic Chemistry Laboratory II	1		■		
	MATH 12003 Analytic Geometry and Calculus II (5) or MATH 30011 Basic Probability and Statistics (3)	3-5		■		
	Kent Core Requirement	3				
<b>Semester Five [15 Credits]</b>						
!	<b>BSCI 30030 Human Physiology (4) or BSCI 40430 Animal Physiology (3)</b>	3-4		■		
	Biology Electives <sup>4</sup>	4		■		
	Physics Series <sup>5</sup>	5		■		
	Kent Core Requirement	3				
<b>Semester Six [16 Credits]</b>						
<b>Note: Pre-med students should take the MCAT if applying to medical school summer or fall of the senior year (consult with advisor)</b>						
!	<b>BSCI 30171 General Microbiology</b>	4		■		
	CHEM 30284 Introductory Biological Chemistry (4) or CHEM 40245 Biochemical Foundations of Medicine (4)	4		■		
	Biology Electives <sup>4</sup>	3		■		
	Physics Series <sup>5</sup>	5		■		
<b>Semester Seven [14 Credits]</b>						
	BSCI 40163 Evolution	3		■		
	Biology Electives <sup>4</sup>	3		■		
	Foreign Language <sup>6</sup>	4-5				
	General Electives <sup>7</sup>	4				
<b>Semester Eight [14 Credits]</b>						
	Biology Electives <sup>4</sup>	4		■		
	Foreign Language <sup>6</sup>	4-5				
	General Electives <sup>7</sup>	6				

### 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

1. US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.
2. A minimum C (2.000) grade must be earned to fulfill the writing-intensive requirement.
3. Students must stay within a single organic chemistry series. CHEM 20482 is required if CHEM 20481 is selected in the major core; CHEM 30482 is required if CHEM 30481 is selected in the major core.

4. Biology Electives (14 credits). Highly recommended courses: BSCI 30518 Vertebrate Anatomy, BSCI 40174 Immunology, BSCI 40517 Medical Histology, BSCI 40433 Mammalian Physiology I and BSCI 40434 Mammalian Physiology II. Students may take the following (maximum 6 credits total, maximum 4 credits S/U graded) for biology electives, but not required to do so.

BSCI 40099 Senior Honors Thesis (1-10) (ELR)	BSCI 40192 Internship in Biological Sciences (3-12) (ELR)
BSCI 40191 Senior Seminar (1)	BSCI 40196 Individual Investigation (1-3) (ELR)

5. Physics Series (10 credits)

Choose either 130xx or 231xx series:	
PHY 13001 General College Physics I (4) (KBS)	PHY 23101 General University Physics I (5) (KBS)
PHY 13002 General College Physics II (4) (KBS)	PHY 23102 General University Physics II (5) (KBS)
PHY 13021 General College Physics Laboratory I (1) (KBS)	
PHY 13022 General College Physics Laboratory II (1) (KBS)	

6. Fulfills College General Requirement
7. Number of general elective credits required depends on meeting minimum 120 credit hours and 42 upper-division hours.

The following courses may **NOT** be used in the elective category for majors or minors in the Department of Biological Sciences:

BSCI 10001 Human Biology	BSCI 10002 Life on Planet Earth
BSCI 10003 Laboratory Experience in Biology	BSCI 10100 Anatomy for Veterinary Technicians
BSCI 11001 Anatomy for Physical and Occupational Therapy	BSCI 11010 Foundational Anatomy and Physiology I
BSCI 11020 Foundational Anatomy and Physiology II	BSCI 16001 Horticultural Botany
BSCI 20020 Biological Structure and Function	BSCI 20021 Basic Microbiology
BSCI 20022 Basic Microbiology Laboratory	BSCI 21010 Anatomy and Physiology I
BSCI 21020 Anatomy and Physiology II	BSCI 26002 Ecological Principles of Pest Management
BSCI 26003 Plant Identification and Selection I	BSCI 26004 Plant Identification and Selection II
BSCI 30050 Human Genetics	BSCI 40020 Biology of Aging

**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](http://www.kent.edu/catalog/kent-core); Diversity Course Requirement – [www.kent.edu/catalog/diversity](http://www.kent.edu/catalog/diversity); Writing-Intensive Course Requirement – [www.kent.edu/catalog/wic](http://www.kent.edu/catalog/wic); Experiential Learning Requirement – [www.kent.edu/catalog/elr](http://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