

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>						
Students not placed into MATH 12002 (required in semester 3) should take MATH 11010 (Kent Core course) in first year of study						
!	BSCI 10110 Biological Diversity	4		■	KBS	
!	CHEM 10060 General Chemistry I	4		■	KBS	
!	CHEM 10062 General Chemistry I Laboratory	1		■	KBS	
	US 10097 Destination Kent State: First Year Experience <sup>1</sup>	1				
	Kent Core Requirement	3				
	Kent Core Requirement	3				
<b>Semester Two [15 Credits]</b>						
!	BSCI 10120 Biological Foundations	4		■	KBS	
!	CHEM 10061 General Chemistry II	4		■	KBS	
!	CHEM 10063 General Chemistry II Laboratory	1		■	KBS	
	Kent Core Requirement	3				
	Kent Core Requirement	3				
<b>Semester Three [14 Credits]</b>						
!	BSCI 30156 Elements of Genetics	3		■		
!	CHEM 20481 Basic Organic Chemistry I (4) or CHEM 30481 Organic Chemistry I (3)	3 - 4		■		
!	Organic Chemistry Option <sup>2</sup>	0 - 1		■		
!	MATH 12002 Analytic Geometry and Calculus I	5		■	KMC	
	Kent Core Requirement	3				
<b>Semester Four [13 Credits]</b>						
!	Organic Chemistry Option <sup>2</sup>	0 - 3		■		
!	MATH 12003 Analytic Geometry and Calculus II (5) or MATH 30011 Basic Probability and Statistics (3)	3 - 5		■		
	Zoology Electives <sup>3</sup>	7 - 8		■		
	Kent Core Requirement	3				
<b>Semester Five [16 Credits]</b>						
	BSCI 40600 Writing in the Biological Sciences	1	C <sup>4</sup>	■	WIC	
	Foreign Language <sup>5</sup>	4 - 5				
	Zoology Electives <sup>3</sup>	4		■		
	BSCI and/or CHEM and/or PHY electives <sup>6</sup>	7 - 8		■		
<b>Semester Six [16 Credits]</b>						
	Foreign Language <sup>5</sup>	4 - 5				
	Kent Core Requirement	3				
	BSCI and/or CHEM and/or PHY electives <sup>6</sup>	9		■		
<b>Semester Seven [13 Credits]</b>						
	BSCI 40163 Evolution	3		■		
	BSCI and/or CHEM and/or PHY electives <sup>6</sup>	7		■		
	General Electives <sup>7</sup>	3				
<b>Semester Eight [16 Credits]</b>						
	BSCI and/or CHEM and/or PHY electives <sup>6</sup>	3		■		
	General Electives <sup>7</sup>	13				

### 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

- US 10097 is not required of transfer students with 25 credits (excluding College Credit Plus and dual-enrollment credit) or students age 21+ at time of admission
- Organic Chemistry Option (1-3 credits) – If CHEM 30475 is chosen, the course must be taken in Semester Three. If CHEM 20482 or CHEM 30482 is chosen, the course must be taken in Semester Four.

#### Choose from the following:

CHEM 20482 Basic Organic Chemistry II (2)	CHEM 30475 Organic Chemistry Laboratory I (1)
CHEM 30482 Organic Chemistry II (3)	

3. Zoology Electives (11-12 credits)

<b>Choose from the following:</b>	
BSCI 30140 Cell Biology (4)	BSCI 30171 General Microbiology (4)
BSCI 30360 General Ecology (4)	BSCI 30518 Vertebrate Anatomy (4)
BSCI 30519 Vertebrate Embryology and Developmental Anatomy (4)	BSCI 30560 Invertebrate Zoology (4)
BSCI 30580 Entomology (4)	BSCI 40430 Animal Physiology (3)
BSCI 40433 Mammalian Physiology I (3)	BSCI 40434 Mammalian Physiology II (3)
BSCI 40515 Animal Behavior (3)	BSCI 40556 Vertebrate Zoology (4)
BSCI 40581 Animal Parasitology (4)	

4. A minimum C (2.000) grade must be earned in BSCI 40600 to fulfill the writing-intensive requirement.

5. Fulfills College General Requirement.

6. BSCI and/or CHEM and/or PHY Electives (26-27 credits)

<b>Choose from the following:</b>	
BSCI Biology courses * (in consultation with advisor) (11-26)	PHY 13001 General College Physics I (4) <b>and</b>
CHEM 30475 Organic Chemistry Laboratory I (1) [ELR]	PHY 13021 General College Physics Laboratory I (1)
CHEM 30476 Organic Chemistry Laboratory II (1)	<b>or</b> PHY 23101 General University Physics I (5)
CHEM 20482 Basic Organic Chemistry II (2)	PHY 13002 General College Physics II (4) <b>and</b>
<b>or</b> CHEM 30482 Organic Chemistry II (3)	PHY 13022 General College Physics Laboratory II (1)
	<b>or</b> PHY 23102 General University Physics II (5)
<b>Must choose one of the following (maximum 6 credit hours of any combination allowed) ** :</b>	
BSCI 30005 Career Pathways in Biology (1)	BSCI 40192 Internship in Biological Sciences (3-12) [ELR]
BSCI 40099 Senior Honors Thesis (1-10) [ELR]	BSCI 40196 Individual Investigation (1-3) [ELR]
BSCI 40191 Senior Seminar (1)	

\*\*no more than 4 credit hours may be S/U graded

7. Number of credits required depends on meeting minimum 120 credit hours and minimum 42 upper-division credit 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/elf](http://www.kent.edu/catalog/elf).

**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