



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

Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Important Notes
Semester One: [16 Credit Hours]					
Note: 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			■	Fulfills Kent Core Basic Sciences
CHEM 10060 General Chemistry I	4			■	Fulfills Kent Core Basic Sciences
CHEM 10062 General Chemistry I Laboratory	1			■	Fulfills Kent Core Basic Sciences
US 10097 Destination Kent State: FYE	1				Not required for transfer students with 25 credits
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
Semester Two: [15 Credit Hours]					
BSCI 10120 Biological Foundations	4			■	Fulfills Kent Core Additional
CHEM 10061 General Chemistry II	4			■	Fulfills Kent Core Basic Sciences
CHEM 10063 General Chemistry II Laboratory	1			■	Fulfills Kent Core Basic Sciences
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
Semester Three: [13-16 Credit Hours]					
CHEM 20481 Basic Organic Chemistry I or CHEM 30481 Organic Chemistry	3-4			■	
CHEM 20482 Basic Organic Chemistry II (2) or CHEM 30475 Organic Chemistry Laboratory I (1) or CHEM 30482 Organic Chemistry II (3)	1-3			■	Students may take CHEM 30284 Introductory Biological Chemistry instead of CHEM 20482 or 30482 with major advisor approval
BSCI 30140 Cell Biology	4			■	
MATH 12002 Analytic Geometry and Calculus I	5			■	Fulfills Kent Core Mathematics and Critical Reasoning
Semester Four: [17 Credit Hours]					
BSCI 30156 Elements of Genetics	3	■		■	
BSCI and/or CHEM and/or PHY elective	3	■		■	See note on page 2
MATH 12003 Analytic Geometry and Calculus II or MATH 30011 Basic Probability and Statistics	3-5			■	
Kent Core Requirement	3				See Kent Core Summary on page 2
Kent Core Requirement	3				
General Elective (lower or upper division)	2				2 credits required if students take MATH 30011
Semester Five: [16-17 Credit Hours]					
Foreign Language (Elementary I)	4-5				Fulfills College General Requirement
Kent Core Requirement	3				See Kent Core Summary on page 2
BSCI and/or CHEM and/or PHY Electives	9			■	See note on page 2
Semester Six: [15-16 Credit Hours]					
Required for pre-med students: MCAT if they plan to apply in summer or fall of senior year (consult with advisor)					
BSCI 40158 Molecular Biology	3	■		■	
Foreign Language (Elementary II)	4-5				Fulfills College General Requirement
BSCI and/or CHEM and/or PHY Electives	8	■		■	See note on page 2
Semester Seven: [14 Credit Hours]					
BSCI 40163 Organic Evolution	3	■		■	
BSCI 40600 Writing in the Biological Sciences	1	■	C	■	Fulfills writing-intensive course requirement
Kent Core Requirement	2				See Kent Core Summary on page 2
BSCI and/or CHEM and/or PHY Electives	8	■		■	See note on page 2
Semester Eight: [15 Credit Hours]					
BSCI and/or CHEM and/or PHY Elective	3	■		■	See note below
General Electives (upper division)	12	■			Number of credits required depends on meeting minimum 121 credit hours and 42 upper-division hours



Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Diversity Course Global / Domestic Kent Core or General Electives	Writing-Intensive	Minimum	
					Major GPA	Overall GPA
121	42	36		BSCI 40600	2.0	2.0

Kent Core Summary

Kent Core Categories	Important Notes	Remaining Credit Hours
Composition (6-8 credit hours) <i>ENG 11002, 11011, 21011; HONR 10197, 10297</i>	Enrollment based on placement test	6-8
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major with MATH 12002	0
Humanities and Fine Arts (9 credit hours) <i>Minimum one course from humanities in Arts and Sciences category and minimum one course from fine arts category</i>	May fulfill diversity requirement	9
Social Sciences (6 credit hours) <i>Must be selected from two curricular areas</i>	May fulfill diversity requirement	6
Basic Sciences (6-7 credit hours) <i>Must include one laboratory</i>	Fulfilled in this major with BSCI 10110, CHEM 10060, CHEM 10061, CHEM 10062 and CHEM 10063	0
Additional (6 credit hours) <i>Must be selected from two Kent Core categories</i>	4 credits fulfilled in this major with BSCI 10120; may fulfill diversity requirement	2

Note: **BSCI and/or CHEM and/or PHY electives** (31 Credit Hours*) choose from the following:

BSCI courses** (in consultation with advisor)	16-31	PHY 13001 General College Physics I (4) and PHY 13021 General College Physics Laboratory I (1) or PHY 23101 General University Physics I (5)	5
CHEM 20482 Basic Organic Chemistry II or CHEM 30482 Organic Chemistry II	2-3		
CHEM 30475 Organic Chemistry Laboratory I	1	PHY 13002 General College Physics II (4) and PHY 13022 General College Physics Laboratory II (1) or PHY 23102 General University Physics II (5)	5
CHEM 30476 Organic Chemistry Laboratory II	1		

*Maximum 4 credit hours of elective courses may be satisfactory/unsatisfactory graded.

****Must choose one of the following:**

BSCI 40430 Animal Physiology is recommended for pre-med students to help with material for MCAT.

Maximum 6 credit hours of any combination of the following may be used to fulfilling this elective:

BSCI 30005 Career Pathways in Biology	1	BSCI 40192 Internship in Biological Sciences	3-6
BSCI 40099 Senior Honors Thesis	1-3	BSCI 40196 Individual Investigation	1-3
BSCI 40191 Senior Seminar	1		

Note: All courses taken from the list of major program requirements are used in the calculation of the major GPA.

The following Biological Sciences (BSCI) courses may not be used in the elective category for majors or the minor in the Department of Biological Sciences:

10001 Human Biology	11010 Anatomy and Physiology I for Allied Health	20022 Basic Microbiology Lab
10002 Life on Planet Earth	11020 Anatomy and Physiology II for Allied Health	26002 Ecological Principles of Pest Mgmt
10003 Laboratory Experience in Biology	16001 Horticultural Botany	26003 Plant Identification and Selection I
10010 Lake Erie Environmental Science	20001 Zoological Foundations of Medicine	26004 Plant Identification and Selection II
10100 Anatomy for Veterinary Technicians	20020 Biological Structure and Function	30050 Human Genetics
11001 Anatomy for Physical and Occupation Therapists	20021 Basic Microbiology	40020 Biology of Aging

Kent Core

Students must complete a minimum 36 credit hours of the Kent Core. Certain courses required in programs and in student's major field may also fulfill the Kent Core. Honors equivalents shall satisfy the Kent Core. None of the courses on the Kent Core list may be taken with a pass/fail grade. Visit www.kent.edu/catalog/kent-core for course list.

Diversity Course Requirement

Students must complete a two-course diversity requirement, consisting of one with a domestic (U.S.) focus and one with a global focus. One course must come from the Kent Core. The second course may be taken as a second Kent Core, within a major or minor, or as a general elective; or, with dean's approval, by completing one semester of study in another country. Visit www.kent.edu/catalog/diversity for course list.

Writing-Intensive Course Requirement

Students must complete a one-course writing-intensive requirement in their major and earn minimum C (2.00) grade. Visit www.kent.edu/catalog/wic for course list.

Upper-Division Requirement



Students must complete a minimum 39 upper-division (numbered 30000 to 49999) credit hours of coursework. Programs in the College of Arts and Sciences require a minimum of 42 hours of upper-division coursework.

Foreign Language

Visit www.kent.edu/catalog/foreign-languages for course list.

