

# BIOLOGY - B.A.

College of Arts and Sciences  
Department of Biological Sciences  
www.kent.edu/biology

## About This Program

Explore the fascinating world of biology with Kent State's Biology B.A. program. Gain a deep understanding of the complexities of life, from the molecular level to the ecosystem level, through engaging coursework and hands-on experience. Our program prepares you for a variety of career paths, from healthcare to research and beyond. Enroll now for endless opportunities in biology. Read more...

## Contact Information

- Program Coordinator: **Edgar Kooijman** | ekooijma@kent.edu | 330-672-8568
- Speak with an Advisor
  - Kent Campus
  - Stark Campus
- Chat with an Admissions Counselor: Kent Campus | Regional Campuses

## Program Delivery

- **Delivery:**
  - In person
- **Location:**
  - Kent Campus
  - Stark Campus

## Examples of Possible Careers and Salaries\*

### Biological scientists, all other

- 2.2% slower than the average
- 44,700 number of jobs
- \$85,290 potential earnings

### Biological technicians

- 4.9% about as fast as the average
- 87,500 number of jobs
- \$46,340 potential earnings

### Secondary school teachers, except special and career/technical education

- 3.8% about as fast as the average
- 1,050,800 number of jobs
- \$62,870 potential earnings

\* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics' Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

## Admission Requirements

The university affirmatively strives to provide educational opportunities and access to students with varied backgrounds, those with special talents and adult students who graduated from high school three or more years ago.

**First-Year Students on the Kent Campus:** First-year admission policy on the Kent Campus is selective. Admission decisions are based upon cumulative grade point average, strength of high school college preparatory curriculum and grade trends. Students not admissible to the Kent Campus may be administratively referred to one of the seven regional campuses to begin their college coursework. For more information, visit the admissions website for first-year students.

**First-Year Students on the Regional Campuses:** First-year admission to Kent State's campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Twinsburg Academic Center, is open to anyone with a high school diploma or its equivalent. For more information on admissions, contact the Regional Campuses admissions offices.

**International Students:** All international students must provide proof of English language proficiency unless they meet specific exceptions. For more information, visit the admissions website for international students.

**Transfer Students:** Students who have attended any other educational institution after graduating from high school must apply as undergraduate transfer students. For more information, visit the admissions website for transfer students.

**Former Students:** Former Kent State students or graduates who have not attended another college or university since Kent State may complete the reenrollment or reinstatement form on the University Registrar's website.

Admission policies for undergraduate students may be found in the University Catalog.

Some programs may require that students meet certain requirements before progressing through the program. For programs with progression requirements, the information is shown on the Coursework tab.

## Program Requirements

### Major Requirements

Code	Title	Credit Hours
<b>Major Requirements (courses count in major GPA)</b>		
BSCI 10110	BIOLOGICAL DIVERSITY (ELR) (KBS) (KLAB)	4
BSCI 10120	BIOLOGICAL FOUNDATIONS (ELR) (KBS) (KLAB)	4
BSCI 30156	ELEMENTS OF GENETICS	3
BSCI 40163	EVOLUTION	3
BSCI 40600	WRITING IN THE BIOLOGICAL SCIENCES (WIC) <sup>1</sup>	1
CHEM 10060	GENERAL CHEMISTRY I (KBS)	4
CHEM 10061	GENERAL CHEMISTRY II (KBS)	4
CHEM 10062	GENERAL CHEMISTRY I LABORATORY (KBS) (KLAB)	1
CHEM 10063	GENERAL CHEMISTRY II LABORATORY (KBS) (KLAB)	1
MATH 11010	ALGEBRA FOR CALCULUS (KMCR)	3
MATH 11022	TRIGONOMETRY (KMCR)	3
Biology (BSCI) Electives <sup>2</sup>		5
Biology (BSCI) Upper-Division Electives (30000 or 40000 level) <sup>2</sup>		11

Additional Requirements (courses do not count in major GPA)		
UC 10001	FLASHES 101	1
Foreign Language (see Foreign Language College Requirement below)		14-16
Kent Core Composition		6
Kent Core Humanities and Fine Arts (minimum one course from each)		9
Kent Core Social Sciences (must be from two disciplines)		6
General Electives (total credit hours depends on earning 120 credits hour, including 39 upper-division credit hours)		37
Minimum Total Credit Hours:		120

- <sup>1</sup> A minimum C grade must be earned to fulfill the writing-intensive requirement.
- <sup>2</sup> Students should consult with a biology advisor to determine the most appropriate courses given their disciplinary interests and career aspirations. Maximum 6 credit hours total of any combination of the following courses may be used toward fulfilling electives: BSCI 40191, BSCI 40192, BSCI 40196, BSCI 40199.

Graduation Requirements

Minimum Major GPA	Minimum Overall GPA
2.000	2.000

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

Code	Title	Credit Hours
BSCI 10001	HUMAN BIOLOGY (KBS)	3
BSCI 10002	LIFE ON PLANET EARTH (KBS)	3
BSCI 10003	LABORATORY EXPERIENCE IN BIOLOGY (KBS) (KLAB)	1
BSCI 10005	ANATOMY FOR VETERINARY TECHNICIANS	5
BSCI 11010	FOUNDATIONAL ANATOMY AND PHYSIOLOGY I (KBS) (KLAB)	3
BSCI 11020	FOUNDATIONAL ANATOMY AND PHYSIOLOGY II (KBS) (KLAB)	3
BSCI 16001	HORTICULTURAL BOTANY	3
BSCI 20019	BIOLOGICAL STRUCTURE AND FUNCTION	4
BSCI 20021	BASIC MICROBIOLOGY	3
BSCI 20022	BASIC MICROBIOLOGY LABORATORY	1
BSCI 21010	ANATOMY AND PHYSIOLOGY I (KBS) (KLAB)	4
BSCI 21020	ANATOMY AND PHYSIOLOGY II	4
BSCI 26002	ECOLOGICAL PRINCIPLES OF PEST MANAGEMENT	3
BSCI 26003	PLANT IDENTIFICATION AND SELECTION I	3
BSCI 26004	PLANT IDENTIFICATION AND SELECTION II	3
BSCI 30050	HUMAN GENETICS	3
BSCI 40020	BIOLOGY OF AGING	3

Foreign Language College Requirement, B.A.

Students pursuing the Bachelor of Arts degree in the College of Arts and Sciences must complete 14-16 credit hours of foreign language.<sup>1</sup> To complete the requirement, students need the equivalent of Elementary I and II in any language, plus one of the following options<sup>2</sup>:

- Intermediate I and II of the same language
- Elementary I and II of a second language
- Any combination of two courses from the following list:
  - Intermediate I of the same language
  - ARAB 21401
  - ASL 19401
  - CHIN 25421
  - MCLS 10001
  - MCLS 20001
  - MCLS 20091
  - MCLS 21417
  - MCLS 21420
  - MCLS 22217
  - MCLS 28403
  - MCLS 28404

- <sup>1</sup> All students with prior foreign language experience should take the foreign language placement test to determine the appropriate level at which to start. Some students may start beyond the Elementary I level and will complete the requirement with fewer credit hours and fewer courses. This may be accomplished by (1) passing a course beyond Elementary I through Intermediate II level; (2) receiving credit through one of the alternative credit programs offered by Kent State University; or (3) demonstrating language proficiency comparable to Elementary II of a foreign language. When students complete the requirement with fewer than 14 credit hours and four courses, they will complete remaining credit hours with general electives.
- <sup>2</sup> Certain majors, concentrations and minors may require specific languages, limit the languages from which a student may choose or require coursework through Intermediate II. Students who plan to pursue graduate study may need particular language coursework.

Roadmap

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

Semester One		Credits
Note: Placement in MATH courses may require additional coursework before the spring semester in first year of enrollment		
!	BSCI 10110 BIOLOGICAL DIVERSITY (ELR) (KBS) (KLAB)	4
	MATH 11010 ALGEBRA FOR CALCULUS (KMCR)	3
	UC 10001 FLASHES 101	1
	Kent Core Requirement	3
	Kent Core Requirement	3
Credit Hours		14
Semester Two		
!	BSCI 10120 BIOLOGICAL FOUNDATIONS (ELR) (KBS) (KLAB)	4
	MATH 11022 TRIGONOMETRY (KMCR)	3
	Kent Core Requirement	3
	Kent Core Requirement	3
	Kent Core Requirement	3
Credit Hours		16
Semester Three		
!	CHEM 10060 GENERAL CHEMISTRY I (KBS)	4

!	CHEM 10062	GENERAL CHEMISTRY I LABORATORY (KBS) (KLAB)	1
	Kent Core Requirement		3
	Kent Core Requirement		3
	General Elective		3
	<b>Credit Hours</b>		<b>14</b>
	<b>Semester Four</b>		
!	BSCI 30156	ELEMENTS OF GENETICS	3
!	CHEM 10061	GENERAL CHEMISTRY II (KBS)	4
!	CHEM 10063	GENERAL CHEMISTRY II LABORATORY (KBS) (KLAB)	1
	General Electives		7
	<b>Credit Hours</b>		<b>15</b>
	<b>Semester Five</b>		
	BSCI 40600	WRITING IN THE BIOLOGICAL SCIENCES (WIC)	1
	Biology Electives		7
	Foreign Language		4
	General Elective		3
	<b>Credit Hours</b>		<b>15</b>
	<b>Semester Six</b>		
	Biology Elective		3
	Foreign Language		4
	General Electives		9
	<b>Credit Hours</b>		<b>16</b>
	<b>Semester Seven</b>		
	BSCI 40163	EVOLUTION	3
	Biology Elective		3
	Foreign Language		3
	General Electives		6
	<b>Credit Hours</b>		<b>15</b>
	<b>Semester Eight</b>		
	Biology Elective		3
	Foreign Language		3
	General Electives		9
	<b>Credit Hours</b>		<b>15</b>
	<b>Minimum Total Credit Hours:</b>		<b>120</b>

## University Requirements

All students in a bachelor's degree program at Kent State University must complete the following university requirements for graduation.

**NOTE:** University requirements may be fulfilled in this program by specific course requirements. Please see Program Requirements for details.

Flashes 101 (UC 10001)	1 credit hour
Course is not required for students with 30+ transfer credits (excluding College Credit Plus) or age 21+ at time of admission.	
Diversity Domestic/Global (DIVD/DIVG)	2 courses
Students must successfully complete one domestic and one global course, of which one must be from the Kent Core.	
Experiential Learning Requirement (ELR)	varies
Students must successfully complete one course or approved experience.	
Kent Core (see table below)	36-37 credit hours
Writing-Intensive Course (WIC)	1 course
Students must earn a minimum C grade in the course.	

Upper-Division Requirement	39 credit hours
Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate.	
Total Credit Hour Requirement	120 credit hours

## Kent Core Requirements

Kent Core Composition (KCOMP)	6
Kent Core Mathematics and Critical Reasoning (KMCR)	3
Kent Core Humanities and Fine Arts (KHUM/KFA) (min one course each)	9
Kent Core Social Sciences (KSS) (must be from two disciplines)	6
Kent Core Basic Sciences (KBS/KLAB) (must include one laboratory)	6-7
Kent Core Additional (KADL)	6
<b>Total Credit Hours:</b>	<b>36-37</b>

## Program Learning Outcomes

Graduates of this program will be able to:

1. Understand the fundamental biological principles.
2. Acquire the fundamental skills necessary for laboratory and field investigations.
3. Conduct proper experimental design, analyze biological data and communicate research results.
4. Know and appreciate the role that biology plays in societal issues, such as those related to the environment, biodiversity, ethics, human health and disease.

## Full Description

The Bachelor of Arts degree in Biology is for students who are interested in the biological sciences, but who also want a degree with a strong liberal arts component. This program provides a basic background in biology while offering the opportunity to take a wide range of classes in other disciplines.

Biologists work in a variety of settings, and career opportunities are available in government agencies, privately owned companies and non-profit groups. Graduates may also choose to further their education beyond a bachelor's degree by attending graduate or professional school. The Department of Biological Sciences has several mechanisms to help students prepare for their future careers.