BIOLOGY - B.A.

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

Examples of Possible Careers*

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

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

Fully Offered
• Kent Campus
• Stark Campus

*Note
Source of occupation titles and labor data is 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.

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.

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.

Freshman Students on the Kent Campus: The freshman admission policy on the Kent Campus is selective. Admission decisions are based upon the following: cumulative grade point average, ACT and/or SAT scores, strength of high school college preparatory curriculum and grade trends. The Admissions Office at the Kent Campus may defer the admission of students who do not meet admissions criteria but who demonstrate areas of promise for successful college study. Deferred applicants may begin their college coursework at one of seven regional campuses of Kent State University. For more information on admissions, including additional requirements for some academic programs, visit the admissions website for first-year students.

Freshman Students on the Regional Campuses: Kent State campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Twinsburg Academic Center, have open enrollment admission for students who hold a high school diploma, GED or equivalent.

English Language Proficiency Requirements for International Students:
All international students must provide proof of English language proficiency (unless they meet specific exceptions) by earning a minimum 525 TOEFL score (71 on the Internet-based version), minimum 75 MELAB score, minimum 6.0 IELTS score, minimum 48 PTE score or minimum 100 DET score; or by completing the ESL level 112 Intensive Program. For more information on international admission, visit the Office of Global Education’s admission website.

Transfer, Transitioning and Former Students: For more information about admission criteria for transfer, transitioning and former students, please visit the admissions website.

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.

Professional Licensure Disclosure
This program is designed to prepare students to sit for applicable licensure or certification in Ohio. If you plan to pursue licensure or certification in a state other than Ohio, please review state educational requirements for licensure or certification and contact information for state licensing boards at Kent State’s website for professional licensure disclosure.
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.

Destination Kent State: First Year Experience

Course is not required for students with 25 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 Compositions (KCMP)

36-37

Writing-Intensive Course (WIC)

1 course

Students must earn a minimum C grade in the course.

Upper-Division Requirement

39 (or 42)

Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate. Students in a B.A. and/or B.S. degree in the College of Arts and Sciences must complete 42 upper-division credit hours.

Total Credit Hour Requirement

120

Some bachelor's degrees require students to complete more than 120 credit hours.

Kent Core Requirements

Kent Core Composition (KCMP)

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

Total Credit Hours:

36-37

Biology (BSCI) Upper-Division Electives (30000 or 40000 level)

11

Additional Requirements (courses do not count in major GPA)

UC 10097 DESTINATION KENT STATE: FIRST YEAR EXPERIENCE

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

College General Requirements (must be from Kent Core Social Sciences)

3

General Electives (total credit hours depends on earning 120 credit hours, including 42 upper-division credit hours)

34

Minimum Total Credit Hours:

120

1 A minimum C grade must be earned to fulfill the writing-intensive requirement.

2 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 fulling electives: BSCI 40199; BSCI 40191; BSCI 40192; BSCI 40196.

3 Students must select a Kent Core Social Sciences course that is from one of the following College of Arts and Sciences disciplines: Anthropology (ANTH), Geography (GEOG), Criminology and Justice Studies (CRIM), Peace and Conflict Studies (PACS), Political Science (POL), Psychology (PSYC) and Sociology (SOC).

Graduation Requirements

Minimum Major GPA

2.000

Minimum Overall GPA

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

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

Program Requirements

Major Requirements

Code Title Credit Hours

BSCI 10110 BIOLOGICAL DIVERSITY (KBS) (KLAB) 4

BSCI 10120 BIOLOGICAL FOUNDATIONS (KBS) (KLAB) 4

BSCI 30156 ELEMENTS OF GENETICS 3

BSCI 40163 EVOLUTION 3

BSCI 40600 WRITING IN THE BIOLOGICAL SCIENCES (WIC) 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 5

5

The following Biological Sciences (BSCI) courses may NOT be used in the elective category for majors or minors in the Department of Biological Sciences:
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.\(^1\)
To complete the requirement, students need the equivalent of Elementary I and II in any language, plus one of the following options\(^2\):

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

\(^1\) 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.

\(^2\) 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.

<table>
<thead>
<tr>
<th>Semester One</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Note: Placement in MATH courses may require additional coursework before the spring semester in first year of enrollment</td>
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<tr>
<td>! BSCI 10110 BIOLOGICAL DIVERSITY (KBS) (KLAB)</td>
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<td>MATH 11010 ALGEBRA FOR CALCULUS (KMCR)</td>
<td>3</td>
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<td>UC 10097 DESTINATION KENT STATE: FIRST YEAR EXPERIENCE</td>
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<td>Kent Core Requirement</td>
<td>3</td>
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<td>Credit Hours</td>
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<table>
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<tr>
<th>Semester Two</th>
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<tbody>
<tr>
<td>! BSCI 10120 BIOLOGICAL FOUNDATIONS (KBS) (KLAB)</td>
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<tr>
<td>Kent Core Requirement</td>
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<tr>
<td>Credit Hours</td>
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| Semester Three | |
| ! CHEM 10060 GENERAL CHEMISTRY I (KBS) | 4 |
| ! CHEM 10062 GENERAL CHEMISTRY I LABORATORY (KBS) (KLAB) | 1 |
| MATH 11022 TRIGONOMETRY (KMCR) | 3 |
| Kent Core Requirement | 3 |
| General Elective | 3 |
| Credit Hours | 14 |

| Semester Four | |
| ! BSCI 30156 ELEMENTS OF GENETICS | 3 |
| ! CHEM 10061 GENERAL CHEMISTRY II (KBS) | 4 |
| ! CHEM 10063 GENERAL CHEMISTRY II LABORATORY (KBS) (KLAB) | 1 |
| College General Requirement | 3 |
| General Elective | 4 |
| Credit Hours | 15 |

| Semester Five | |
| Biology Electives | 7 |
| Foreign Language | 4 |
| General Elective | 3 |
| Credit Hours | 14 |

| Semester Six | |
| Biology Elective | 3 |
| Foreign Language | 4 |
| General Electives | 9 |
| Credit Hours | 16 |

| Semester Seven | |
| BSCI 40163 EVOLUTION | 3 |
| BSCI 40600 WRITING IN THE BIOLOGICAL SCIENCES (WIC) | 1 |
| Foreign Language | 3 |
| Biology Electives | 3 |
| General Electives | 6 |
| Credit Hours | 16 |

| Semester Eight | |
| Biology Elective | 3 |
| Foreign Language | 3 |
| General Electives | 9 |
| Credit Hours | 15 |

Minimum Total Credit Hours: 120