

BIOLOGY - B.S.

College of Arts and Sciences
 Department of Biological Sciences
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Description

The Bachelor of Science degree in Biology is for students who are interested in pursuing an in-depth specialization as a biologist or wish to pursue a medical or health care career.

The Biology major comprises the following concentrations:

- The **Molecular and Cellular Biology** concentration is the study of biological processes within and between individual cells, allowing for a better understanding of biological principles in normal and diseased states. The focus of this program includes concepts related to the genetic basis of life, regulation of gene expression and cellular functions.
- The **Organismal Biology** concentration allows students to examine organisms in their natural environment and address fundamental principles of survival and adaptation in discrete micro-environments and entire ecosystems. While basic concepts of biological and chemical functions are covered, the focus of this concentration is comprehensive aspects of the whole organism.
- The **Pre-Medicine/Pre-Podiatry/Pre-Dentistry** concentration prepares students for careers in medicine and health care. The curriculum provides the courses necessary for admission to advanced degree programs in healthcare and biomedical science professions.

Fully Offered At:

- Kent Campus

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 new freshmen.

Freshman Students on the Regional Campuses: Kent State campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Regional Academic Center in Twinsburg, 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 or minimum 48 PTE 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:

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

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	1
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 (see table below)	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

Program Requirements

Major Requirements

Code	Title	Credit Hours
Major Requirements (courses count in major GPA)		
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	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
CHEM 20481 or CHEM 30481	BASIC ORGANIC CHEMISTRY I ORGANIC CHEMISTRY I	3-4
MATH 12002	ANALYTIC GEOMETRY AND CALCULUS I (KMCR)	5
MATH 12003 or MATH 30011	ANALYTIC GEOMETRY AND CALCULUS II BASIC PROBABILITY AND STATISTICS	3-5
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)		8
Kent Core Composition		6
Kent Core Humanities and Fine Arts (minimum one course from each)		9
General Electives (total credit hours depends on earning 120 credit hours including 42 upper-division credit hours)		10
Concentrations		
Choose from the following:		50
Molecular and Cellular Biology		
Organismal Biology		
Pre-Medicine/Pre-Podiatry/Pre-Dentistry		
Minimum Total Credit Hours:		120

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

Molecular and Cellular Biology Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
BSCI 30140	CELL BIOLOGY	4
BSCI 40158	MOLECULAR BIOLOGY	3
CHEM 20482 or CHEM 30475 or CHEM 30482	BASIC ORGANIC CHEMISTRY II ¹ ORGANIC CHEMISTRY LABORATORY I (ELR) ORGANIC CHEMISTRY II	1-3

Biology, Chemistry, Physics Electives, choose from the following: ²		31
Biology (BSCI) Electives ²		
CHEM 20482	BASIC ORGANIC CHEMISTRY II ¹	
or CHEM 30482 ORGANIC CHEMISTRY II		
CHEM 30475	ORGANIC CHEMISTRY LABORATORY I (ELR)	
CHEM 30476	ORGANIC CHEMISTRY LABORATORY II	
PHY 13001 & PHY 13021	GENERAL COLLEGE PHYSICS I (KBS) and GENERAL COLLEGE PHYSICS LABORATORY I (KBS) (KLAB)	
or PHY 23101 GENERAL UNIVERSITY PHYSICS I (KBS) (KLAB)		
PHY 13002 & PHY 13022	GENERAL COLLEGE PHYSICS II (KBS) and GENERAL COLLEGE PHYSICS LABORATORY II (KBS) (KLAB)	
or PHY 23102 GENERAL UNIVERSITY PHYSICS II (KBS) (KLAB)		

Additional Requirements (courses do not count in major GPA)		
Kent Core Social Sciences (must be from two disciplines)		6
General Electives		5
Minimum Total Credit Hours:		50

¹ CHEM 20482 may be substituted with CHEM 30284 with faculty advisor approval.

² Students should select their electives in consultation with an advisor. To fulfill this elective list, students must select a minimum of one from the following courses: BSCI 30105, BSCI 40191, BSCI 40192, BSCI 40196, BSCI 40199. However, they may only select a maximum of 6 credit hours of any combination of these courses (with no more than 4 credit hours S/U graded). Enrollment in these course must be determined with a faculty advisor.

Organismal Biology Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
CHEM 20482 or CHEM 30475 or CHEM 30482	BASIC ORGANIC CHEMISTRY II ¹ ORGANIC CHEMISTRY LABORATORY I (ELR) ORGANIC CHEMISTRY II	1-3
Organismal Core Electives, choose from the following:		7-8
BSCI 30171	GENERAL MICROBIOLOGY	
BSCI 30270	GENERAL PLANT BIOLOGY	
BSCI 30275	LOCAL FLORA (ELR)	
BSCI 30360	GENERAL ECOLOGY	
BSCI 30560	INVERTEBRATE ZOOLOGY	
BSCI 30580	ENTOMOLOGY	
BSCI 40272	PLANT ANATOMY	
BSCI 40430	ANIMAL PHYSIOLOGY	
BSCI 40556	VERTEBRATE ZOOLOGY	

Biology, Chemistry, Physics Electives, choose from the following: ²

Biology (BSCI) Electives ²		30
CHEM 20482	BASIC ORGANIC CHEMISTRY II ¹	
or CHEM 30482 ORGANIC CHEMISTRY II		
CHEM 30475	ORGANIC CHEMISTRY LABORATORY I (ELR)	
CHEM 30476	ORGANIC CHEMISTRY LABORATORY II	
PHY 13001 & PHY 13021	GENERAL COLLEGE PHYSICS I (KBS) and GENERAL COLLEGE PHYSICS LABORATORY I (KBS) (KLAB)	
or PHY 23101 GENERAL UNIVERSITY PHYSICS I (KBS) (KLAB)		
PHY 13002 & PHY 13022	GENERAL COLLEGE PHYSICS II (KBS) and GENERAL COLLEGE PHYSICS LABORATORY II (KBS) (KLAB)	

or PHY 23102 GENERAL UNIVERSITY PHYSICS II (KBS) (KLAB)

Additional Requirements (courses do not count in major GPA)	
Kent Core Social Sciences (must be from two disciplines)	6
General Electives	6
Minimum Total Credit Hours:	50

- ¹ CHEM 20482 may be substituted with CHEM 30284 with faculty advisor approval.
- ² Students should select their electives in consultation with an advisor. To fulfill this elective list, students must select a minimum of one from the following courses: BSCI 30105, BSCI 40191, BSCI 40192, BSCI 40196, BSCI 40199. However, they may only select a maximum of 6 credit hours of any combination of these courses (with no more than 4 credit hours S/U graded). Enrollment in these course must be determined with a faculty advisor.

Pre-Medicine/Pre-Podiatry/Pre-Dentistry Concentration Requirements

Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
BSCI 30105	CAREER PATHWAYS IN BIOLOGY	1
BSCI 30130	HUMAN PHYSIOLOGY	3
or BSCI 40430	ANIMAL PHYSIOLOGY	
BSCI 30140	CELL BIOLOGY	4
BSCI 30171	GENERAL MICROBIOLOGY	4
CHEM 20482	BASIC ORGANIC CHEMISTRY II ¹	2-3
or CHEM 30482	ORGANIC CHEMISTRY II	
CHEM 30284	INTRODUCTORY BIOLOGICAL CHEMISTRY	4
or CHEM 40245	BIOCHEMICAL FOUNDATIONS OF MEDICINE	
CHEM 30475	ORGANIC CHEMISTRY LABORATORY I (ELR)	1
CHEM 30476	ORGANIC CHEMISTRY LABORATORY II	1
PSYC 11762	GENERAL PSYCHOLOGY (DIVD) (KSS)	3
SOC 12050	INTRODUCTION TO SOCIOLOGY (DIVD) (KSS)	3
Biology (BSCI) Upper-Division Electives (30000 or 40000 level) ²		14
Physics Electives, choose from the following:		10
PHY 13001 & PHY 13002 & PHY 13021 & PHY 13022	GENERAL COLLEGE PHYSICS I (KBS) and GENERAL COLLEGE PHYSICS II (KBS) and GENERAL COLLEGE PHYSICS LABORATORY I (KBS) (KLAB) and GENERAL COLLEGE PHYSICS LABORATORY II (KBS) (KLAB)	
PHY 23101 & PHY 23102	GENERAL UNIVERSITY PHYSICS I (KBS) (KLAB) and GENERAL UNIVERSITY PHYSICS II (KBS) (KLAB)	
Minimum Total Credit Hours:		50

- ¹ 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.
- ² Students should select their upper-division biology electives in consultation with an advisor. The following courses are not required, but highly recommended for this major: BSCI 30518, BSCI 40174, BSCI 40517, BSCI 40433, BSCI 40434. In addition, students may take the following (maximum 6 credits total, maximum 4 credit hours S/U graded) for biology electives, but are not required to do so: BSCI 40191, BSCI 40192, BSCI 40196, BSCI 40199.

GRADUATION REQUIREMENTS

Minimum Major GPA	Minimum Overall GPA
2.000	2.000

Foreign Language College Requirement

- Students pursuing the Bachelor of Science degree in the College of Arts and Sciences must complete 8 credit hours of foreign language. ¹
- Minimum Elementary I and II of the same language

- 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 begin their university foreign language experience 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 the Elementary I through Intermediate II level or (2) receiving credit through Credit by Exam (CBE), the College Level Examination Program (CLEP), the Advanced Placement (AP) exam or credit through the International Baccalaureate (IB) program; or (3) being designated a "native speaker" of a non-English language (consult with the College of Arts and Sciences Advising Office for additional information) . When students complete the requirement with fewer than 8 credit hours and two courses, they will complete the remaining hours with general electives.

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

Roadmaps

- Molecular and Cellular Biology Concentration
- Organismal Biology Concentration
- PreMedicine/PrePodiatry/PreDentistry Concentration

MOLECULAR AND CELLULAR BIOLOGY CONCENTRATION

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
!	BSCI 10110 BIOLOGICAL DIVERSITY (KBS) (KLAB)	4
!	CHEM 10060 GENERAL CHEMISTRY I (KBS)	4
!	CHEM 10062 GENERAL CHEMISTRY I LABORATORY (KBS) (KLAB)	1
	UC 10097 DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
	Kent Core Requirement	3
	Kent Core Requirement	3
Credit Hours		16
Semester Two		
!	BSCI 10120 BIOLOGICAL FOUNDATIONS (KBS) (KLAB)	4
!	CHEM 10061 GENERAL CHEMISTRY II (KBS)	4
!	CHEM 10063 GENERAL CHEMISTRY II LABORATORY (KBS) (KLAB)	1
	Kent Core Requirement	3
	Kent Core Requirement	3
Credit Hours		15
Semester Three		
!	BSCI 30140 CELL BIOLOGY	4
!	CHEM 20481 BASIC ORGANIC CHEMISTRY I or OR ORGANIC CHEMISTRY I CHEM 30481	3-4
	CHEM 20482 BASIC ORGANIC CHEMISTRY II or OR ORGANIC CHEMISTRY LABORATORY I CHEM 30475 (ELR) or OR ORGANIC CHEMISTRY II CHEM 30482	0-3
!	MATH 12002 ANALYTIC GEOMETRY AND CALCULUS I (KMCR)	5
!	Biology, Chemistry, Physics Electives	3
Credit Hours		16
Semester Four		
!	BSCI 30156 ELEMENTS OF GENETICS	3
	CHEM 20482 BASIC ORGANIC CHEMISTRY II or OR ORGANIC CHEMISTRY LABORATORY I CHEM 30475 (ELR) or OR ORGANIC CHEMISTRY II CHEM 30482	0-3
!	MATH 12003 ANALYTIC GEOMETRY AND CALCULUS II or BASIC PROBABILITY AND STATISTICS MATH 30011	3-5
	Kent Core Requirement	3
	Kent Core Requirement	3
	General Electives	2
Credit Hours		14
Semester Five		
	Biology, Chemistry, Physics Electives	9
	Foreign Language	4
	Kent Core Requirement	3
Credit Hours		16
Semester Six		
	BSCI 40158 MOLECULAR BIOLOGY	3
	Biology, Chemistry, Physics Electives	8

Foreign Language	4
Credit Hours	15
Semester Seven	
BSCI 40163 EVOLUTION	3
BSCI 40600 WRITING IN THE BIOLOGICAL SCIENCES (WIC)	1
Biology, Chemistry, Physics Electives	8
General Electives	2
Credit Hours	14
Semester Eight	
Biology, Chemistry, Physics Electives	3
General Electives	11
Credit Hours	14
Minimum Total Credit Hours:	120

Organismal Biology Concentration

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
!	BSCI 10110 BIOLOGICAL DIVERSITY (KBS) (KLAB)	4
!	CHEM 10060 GENERAL CHEMISTRY I (KBS)	4
!	CHEM 10062 GENERAL CHEMISTRY I LABORATORY (KBS) (KLAB)	1
	UC 10097 DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
	Kent Core Requirement	3
	Kent Core Requirement	3
Credit Hours		16
Semester Two		
!	BSCI 10120 BIOLOGICAL FOUNDATIONS (KBS) (KLAB)	4
!	CHEM 10061 GENERAL CHEMISTRY II (KBS)	4
!	CHEM 10063 GENERAL CHEMISTRY II LABORATORY (KBS) (KLAB)	1
	Kent Core Requirement	3
	Kent Core Requirement	3
Credit Hours		15
Semester Three		
!	CHEM 20481 BASIC ORGANIC CHEMISTRY I or CHEM 30481 or ORGANIC CHEMISTRY I	3-4
	CHEM 20482 BASIC ORGANIC CHEMISTRY II or CHEM 30475 (ELR) or ORGANIC CHEMISTRY LABORATORY I or CHEM 30482 or ORGANIC CHEMISTRY II	0-3
	Biology, Chemistry, Physics Electives	4
	Organismal Core Electives	4
	Kent Core Requirement	3
Credit Hours		15
Semester Four		
!	BSCI 30156 ELEMENTS OF GENETICS	3
	CHEM 20482 BASIC ORGANIC CHEMISTRY II or CHEM 30475 (ELR) or ORGANIC CHEMISTRY LABORATORY I or CHEM 30482 or ORGANIC CHEMISTRY II	0-3
!	MATH 12002 ANALYTIC GEOMETRY AND CALCULUS I (KMCR)	5
	Kent Core Requirement	3
	Kent Core Requirement	3
Credit Hours		14
Semester Five		
!	MATH 12003 ANALYTIC GEOMETRY AND CALCULUS II or MATH 30011 or BASIC PROBABILITY AND STATISTICS	3-5
	Biology, Chemistry, Physics Electives	9
	Foreign Language	4
Credit Hours		16
Semester Six		
	Biology, Chemistry, Physics Electives	7
	Organismal Core Electives	3-4
	Foreign Language	4
Credit Hours		14

Semester Seven

BSCI 40163	EVOLUTION	3
BSCI 40600	WRITING IN THE BIOLOGICAL SCIENCES (WIC)	1
Biology, Chemistry, Physics Electives		7
General Electives		3

Credit Hours 14

Semester Eight

Biology, Chemistry, Physics Electives		3
General Electives		13

Credit Hours 16

Minimum Total Credit Hours: 120

PreMedicine/PrePodiatry/PreDentistry Concentration

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
!	BSCI 10110 BIOLOGICAL DIVERSITY (KBS) (KLAB)	4
!	CHEM 10060 GENERAL CHEMISTRY I (KBS)	4
!	CHEM 10062 GENERAL CHEMISTRY I LABORATORY (KBS) (KLAB)	1
	PSYC 11762 GENERAL PSYCHOLOGY (DIVD) (KSS)	3
	UC 10097 DESTINATION KENT STATE: FIRST YEAR EXPERIENCE	1
Kent Core Requirement		3
Credit Hours		16
Semester Two		
!	BSCI 10120 BIOLOGICAL FOUNDATIONS (KBS) (KLAB)	4
!	CHEM 10061 GENERAL CHEMISTRY II (KBS)	4
!	CHEM 10063 GENERAL CHEMISTRY II LABORATORY (KBS) (KLAB)	1
	SOC 12050 INTRODUCTION TO SOCIOLOGY (DIVD) (KSS)	3
Kent Core Requirement		3
Credit Hours		15
Semester Three		
!	BSCI 30140 CELL BIOLOGY	4
	CHEM 20481 BASIC ORGANIC CHEMISTRY I or CHEM 30481 or ORGANIC CHEMISTRY I	3-4
	CHEM 30475 ORGANIC CHEMISTRY LABORATORY I (ELR)	1
!	MATH 12002 ANALYTIC GEOMETRY AND CALCULUS I (KMCR)	5
Kent Core Requirement		3
Credit Hours		16
Semester Four		
!	BSCI 30105 CAREER PATHWAYS IN BIOLOGY	1
!	BSCI 30156 ELEMENTS OF GENETICS	3
	BSCI 40600 WRITING IN THE BIOLOGICAL SCIENCES (WIC)	1
	CHEM 20482 BASIC ORGANIC CHEMISTRY II or CHEM 30482 or ORGANIC CHEMISTRY II	2-3
	CHEM 30476 ORGANIC CHEMISTRY LABORATORY II	1
	MATH 12003 ANALYTIC GEOMETRY AND CALCULUS II or MATH 30011 or BASIC PROBABILITY AND STATISTICS	3-5
Kent Core Requirement		3
Credit Hours		14
Semester Five		
!	BSCI 30130 HUMAN PHYSIOLOGY or BSCI 40430 or ANIMAL PHYSIOLOGY	3
	Biology (BSCI) Upper-Division Electives (30000 or 40000 level)	4
	Physics Electives	5
Kent Core Requirement		3
Credit Hours		15
Semester Six		
!	BSCI 30171 GENERAL MICROBIOLOGY	4
	CHEM 30284 INTRODUCTORY BIOLOGICAL CHEMISTRY or CHEM 40245 or BIOCHEMICAL FOUNDATIONS OF MEDICINE	4
	Biology (BSCI) Upper-Division Electives (30000 or 40000 level)	3

Physics Electives	5
Credit Hours	16
Semester Seven	
BSCI 40163 EVOLUTION	3
Biology (BSCI) Upper-Division Electives (30000 or 40000 level)	3
Foreign Language	4
General Electives	4
Credit Hours	14
Semester Eight	
Biology (BSCI) Upper-Division Electives (30000 or 40000 level)	4
Foreign Language	4
General Electives	6
Credit Hours	14
Minimum Total Credit Hours:	120