Roadmap: Biology - Pre-Medicine/Pre-Osteopathy/Pre-Dentistry - Bachelor of Science



AS-BS-BSCI-PMOD

College of Arts and Sciences Department of Biological Sciences Catalog Year: 2014-2015

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.

complete	d in the semester listed to ensure a timely graduation.	0 II'4					
Critical	Course Subject and Title	Credit Hours	Upper Div.	Min. Grade	Major GPA	Type	Term Taken
Semeste	r One [16 Credits]	nours	DIV.	Graue	GFA		
	udents not placed into MATH 12002 (required in semester 3) should	take MAT	TH 11010 (Kent Core	course)	in first ve	ar of study
1	BSCI 10110 Biological Diversity	4	11111010	Tront Oor	= = = = = = = = = = = = = = = = = = =	KBS	ur or study
	CHEM 10060 General Chemistry I	4				KBS	
	CHEM 10062 General Chemistry I Laboratory	1				KBS	
	PSYC 11762 General Psychology	3				DD/KSS	
	US 10097 Destination Kent State: First Year Experience ¹	1			_	DD/NOO	
	Kent Core Requirement	3					
	r Two [15 Credits]	J					
	BSCI 10120 Biological Foundations	4			_	KAD	
	CHEM 10061 General Chemistry II	4			-	KAD	
	CHEM 10063 General Chemistry II Laboratory	1				KBS	
	SOC 12050 Introduction to Sociology				-	DD/KSS	
		3				טט/אכט	
	Kent Core Requirement	3					
	r Three [16 Credits]		_		_		
	BSCI 30140 Cell Biology	4				1/110	
	MATH 12002 Analytic Geometry and Calculus I	5				KMC	
	CHEM 20481 Basic Organic Chemistry I (3)	3-4			•		
	or CHEM 30481 Organic Chemistry I (4)					1	
	CHEM 30475 Organic Chemistry Laboratory I	1					
	Kent Core Requirement	3					
	r Four [14 Credits]						
	BSCI 30005 Career Pathways in Biology	1					
	BSCI 30156 Elements of Genetics	3		_			
	BSCI 40600 Writing in the Biological Sciences	1		С		WIC	
	CHEM 20482 Basic Organic Chemistry II (2) ²	2-3					
	or CHEM 30482 Organic Chemistry II (3) 2						
	CHEM 30476 Organic Chemistry Laboratory II	1					
	MATH 12003 Analytic Geometry and Calculus II (3)	3-5					
	or MATH 30011 Basic Probability and Statistics (5)				_		
	Kent Core Requirement	3					
Semeste	r Five [15 Credits]			1			
	BSCI 30030 Human Physiology	3-4			•		
	or BSCI 40430 Animal Physiology						
	Biology Electives ³	4					
	Physics Series ⁴	5					
	Kent Core Requirement	3					
	r Six [16 Credits]						
	e-med students should take the MCAT if applying to medical school	1	or fall of	the senior	year (co	nsult with	advisor)
	BSCI 30171 General Microbiology	4					
	CHEM 30284 Introductory Biological Chemistry (4)	4					
	or CHEM 40245 Biochemical Foundations of Medicine (4)		_		-		
	Biology Electives ³	3					
	Physics Series ⁴	5					
	r Seven [14 Credits]						
	BSCI 40163 Evolution	3					
	Biology Electives ³	3					
	Biology Electives					1	-
	Foreign Language ⁵	4-5					
	Foreign Language ⁵ General Electives ⁶	4-5 4					
Semeste	Foreign Language ⁵ General Electives ⁶ r Eight [14 Credits]						
Semeste	Foreign Language ⁵ General Electives ⁶ r Eight [14 Credits] Biology Electives ³	4			•		
Semeste	Foreign Language ⁵ General Electives ⁶ r Eight [14 Credits]	4			•		

Graduation Requirements Summary

Minimum Total Hours	Minimum Upper-Division Hours	Minimum Kent Core Hours	Minimum		
Millinum Total Hours		Willimani Kent Core Hours	Major GPA	Overall GPA	
120	42	36	2.000	2.000	

PROGRAM NOTES:

- 1. US 10097 is not required of transfer students with 25 credits or students age 21+ at time of admission.
- 2. 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.

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3. Biology Electives (14 credits). Highly recommended courses: BSCI 30518 Vertebrate Anatomy, BSCI 40174 Immunology, BSCI 40517 Medical Histology, BSCI 40433 Mammalian Physiology I and BSCI 40434 Mammalian Physiology II. Students may take the following (maximum 6 credits total, maximum 4 credits S/U graded) for biology electives, but not required to do so.

BSCI 40099 Senior Honors Thesis (1-3) [ELR]	BSCI 40192 Internship in Biological Sciences (3-4) [ELR]
BSCI 40191 Senior Seminar (1)	BSCI 40196 Individual Investigation (1-3) [ELR]

4. Physics Series (10 credits)

Choose either 130xx or 231xx series:	
PHY 13001 General College Physics I (4)	PHY 23101 General University Physics I (5)
PHY 13002 General College Physics II (4)	PHY 23102 General University Physics II (5)
PHY 13021 General College Physics Laboratory I (1)	
PHY 13022 General College Physics Laboratory II (1)	

- 5. Fulfills College General Requirement
- 6. Number of general elective credits required depends on meeting minimum 120 credit hours and 42 upper-division hours.

DEPARTMENT NOTES:

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

2. 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 Anatomy and Physiology I for Allied Health
BSCI 11020 Anatomy and Physiology II for Allied Health	BSCI 16001 Horticultural Botany
BSCI 20020 Biological Structure and Function	BSCI 20021 Basic Microbiology
BSCI 20022 Basic Microbiology Laboratory	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 Summary

Туре	Categories	Course(s) Satisfying Category	Remaining Requirements
KCIVI	Kent Core I. Composition Enrollment based on placement test	visit www.kent.edu/catalog/kent-core	6
KMC	Kent Core II. Mathematics and Critical Reasoning Enrollment based on placement test	MATH 12002	fulfilled
KHU	Kent Core III. Humanities Minimum one course from humanities in Arts and Sciences; may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	3
KFA	Kent Core IV. Fine Arts Minimum one course from the fine arts; may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	3
KFH	Kent Core V. Humanities or Fine Arts One additional course from either the humanities or fine arts category, may fulfill diversity requirement	visit www.kent.edu/catalog/kent-core	3
KSS	Kent Core VI. Social Sciences Must be selected from two curricular areas; may fulfill diversity requirement	SOC 12050, PSYC 11762	fulfilled
KBS	Kent Core VII. Basic Sciences Must include one laboratory	BSCI 10110, BSCI 10120	fulfilled
KAD	Kent Core VIII. Additional May fulfill diversity requirement	CHEM 10060, CHEM 10061, CHEM 10062, CHEM 10063,	fulfilled
DD	Domestic Diversity Course Requirement Either domestic or global diversity must be from Kent Core	PSYC 11762 or SOC 12050	fulfilled
DG	Global Diversity Course Requirement Either domestic or global diversity must be from Kent Core	visit www.kent.edu/catalog/diversity	one course
ELR	Experiential Learning Requirement Either course or non-course experience approved by the appropriate faculty member.	www.kent.edu/catalog/elr	one course or activity
	Writing-Intensive Course Requirement Minimum C (2.000) grade	BSCI 40600	fulfilled