

Roadmap: Physical Science - Bachelor of Science in Education
[EH-BSE-PHSC]
College of Education, Health, and Human Services
School of Teaching, Learning and Curriculum Studies

Catalog Year: 2010-2011

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

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Course Subject and Title	Credit Hours	Upper Division	Min. Grade	Important Notes		
Semester One: [18 Credit Hours]						
CHEM 10060 General Chemistry I	4		С	Fulfills Kent Core Basic Sciences		
CHEM 10062 General Chemistry Laboratory I	1		С	Fullills Reflit Cole Basic Sciences		
MATH 11010 Algebra for Calculus	3			Fulfills Kent Core Mathematics and Critical Reasoning; may be waived by passing the placement exam		
PSYC 11762 General Psychology	3			Fulfills Kent Core Social Sciences and domestic diversity requirement		
US 10097 Destination Kent State: FYE	1			Not required of transfer students with 25 credits		
Kent Core Requirements	6			See Kent Core Summary on page 2		
Semester Two: [16 Credit Hours]						
Requirement: successful completion of Praxis I Read	ng (score	174), Writi	ng (score	e 172) and Mathematics (score 174)		
CULT 29535 Education in a Democratic Society	3		С			
CHEM 10061 General Chemistry II	4		С	Fulfille Kant Oans Basis Osissasa		
CHEM 10063 General Chemistry Laboratory II	1		С	Fulfills Kent Core Basic Sciences		
MATH 11022 Trigonometry	2					
SOC 12050 Introduction to Sociology	3			Fulfills Kent Core Social Sciences		
Kent Core Requirements	3			See Kent Core Summary on page 2		
Semester Three: [16 Credit Hours]						
Requirement: minimum cumulative 2.75 GPA by end	of term; mi	nimum C g	grade and	d 2.6 GPA required in content area coursework		
EPSY 29525 Educational Psychology	3		С			
MATH 12002 Analytic Geometry and Calculus I	5			Fulfills Kent Core Additional		
PHY 23101 General University Physics I	5		С	Fulfills Kent Core Additional		
Kent Core Requirement	3			See Kent Core Summary on page 2		
Semester Four: [18 Credit Hours]						
Requirement: apply and be accepted for Advanced St	udy. 2.75 ı	minimum c	umulativ	e GPA required		
PHY 23102 General University Physics II	5		С			
BSCI 10120 Biological Foundations	4		С	Fulfills Kent Core Basic Sciences		
CHEM 20481 Basic Organic Chemistry I	4		С			
MATH 12003 Analytical Geometry and Calculus II	5		С			
Semester Five: [16 Credit Hours]						
Requirement: apply for student teaching						
ADED 32142 Principles of Teaching Adolescents	3		С	Fulfills writing intensive requirements; offered in fall only		
ITEC 19525 Educational Technology	3		С			
CHEM 10105 Analytical Chemistry I	3		С			
CI 47330 Reading and Writing in Adolescence	3		С			
PHIL 11001 Introduction to Philosophy	3			Fulfills Kent Core Humanities		
SPED 23000 Introduction to Exceptionalities	3		С	Fulfills domestic diversity requirement		



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Critical requirements are boldface in shaded areas

Course Subject and Title	Credit Hours	Upper Division	Min. Grade	Important Notes
Semester Six: [17 Credit Hours]				
ADED 32277 Teaching Science in Secondary Schools	3	-	С	
CHEM 30301 Inorganic Chemistry I	2		С	
CHEM 30284 Introduction to Biological Chemistry	4		С	
PHY 21430 Frontiers in Astronomy or PHY 24001 Astronomy	3		С	Fulfills Kent Core Basic Sciences
PHY 30020 Intermediate Physics Laboratory	2		С	Fulfills writing-intensive course requirement
PHY 36001 Introduction to Modern Physics	3		С	
Semester Seven: [16-17 Credit Hours]				
Requirements: apply for graduation				
ADED 42277 Topics in Secondary School Science	3		С	
ADED 42292 Field Work Practicum	3	-	С	
CHEM 40567 Basics of Physical Chemistry	4		С	
GEOG 31062 Meteorology	3		С	
PHY 32511 Electronics or PHY 36002 Applications of Modern Physics	3-4		С	
Semester Eight: [12 Credit Hours]				
ADED 42357 Secondary Student Teaching	9		S	
ADED 49525 Inquiry into Professional Practice	3		С	

Graduation Requirements Summary

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Minimum	Minimum Upper-	Minimum	Diversity Course	Writing Intensive	Minimum		
Total Hours	Division Hours	Kent Core Hours	Global / Domestic	Writing-Intensive	Major GPA	Overall GPA	
131	39	36	SPED 23000 / PHIL 11001	ADED 32142	2.6	2.75	

Kent Core Summary

Kent Core Categories	Important Notes	Remaining Credit Hours
Additional (6 credit hours) Must be selected from two Kent Core categories	Fulfilled in this major with MATH 12002; and PHY 21430 or 24001	0
Basic Sciences (6-7 credit hours) Must include one laboratory	Fulfilled in this major with CHEM 10060 and 10062; and PHY 23101	0
Composition (6-8 credit hours) ENG 11002, 11011, 21011; HONR 10197, 10297	Enrollment based on placement test; minimum grade of C must be earned in both courses	6-8
Humanities and Fine Arts (9 credit hours) Minimum one course from humanities in Arts and Sciences category and minimum one course from fine arts category	3 credit hours fulfilled in this major with PHY 11001	6
Mathematics and Critical Reasoning (3-5 credit hours)	Fulfilled in this major with MATH 11010	0
Social Sciences (6 credit hours) Must be selected from two curricular areas	Fulfilled in this major with PSYC 11762 and SOC 12050	0

Note on Licensure:

- 1. Successful complete Praxis II "Principles of Learning and Teaching" and Praxis II specialty test "Chemistry–Content Knowledge" (passing score 152) and "Physics–Content Knowledge" (passing score 132) by the end of second semester.
- 2. Apply for teaching license (pick up licensure packet in 304 White Hall).

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.





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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.

