

# NATURAL SCIENCE, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

## Program Description

This interdepartmental minor in Natural Science is designed for nonscience students who wish to gain a better appreciation for science and the scientific method. The courses required in the minor include 3 to 4 credits of general education science designed for nonscience students, 3 to 4 credits of mathematical science, 8 to 9 credits of life or physical science, including some laboratory work, and 6 credits of 400-level science courses. Certain combinations of courses are disallowed (as listed in the curriculum description), and higher-level courses are generally accepted as substitutes for lower-level courses if both are offered by the same department. Any substitutes for laboratory courses must also be laboratory courses. Advising for students in this minor will be available through the Eberly College of Science Academic Advising Center and approval of curriculum exceptions will be through the faculty committee and professor in charge of the program.

## What is Natural Science?

Science is a way of knowing. The Natural Science minor is designed for students in non-science majors to explore their curiosity and passion about the natural world. From introductory level to upper division immersion, you can delve into science topics and the scientific method. Students in majors of the Eberly College of Science are ineligible for this broad, interdepartmental minor.

## You Might Like This Program If...

You are inherently curious about the natural sciences, mathematics and/or statistics and their applications in everyday life.

## Program Requirements

Requirement	Credits
Requirements for the Minor	20-23

## Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10>). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Code	Title	Credits
<b>Prescribed Courses</b>		
<i>Prescribed Courses: Require a grade of C or better</i>		
SC 400	Consequences of Science	1
<b>Additional Courses</b>		
<i>Additional Courses: Require a grade of C or better</i>		
Select 3-4 credits of the following:		3-4
ASTRO 1	Astronomical Universe	
ASTRO 10 & ASTRO 11	Elementary Astronomy and Elementary Astronomy Laboratory	
BISC 1	Structure and Function of Organisms <sup>1</sup>	

BISC 2	Genetics, Ecology, and Evolution <sup>1</sup>	
BISC 3	Environmental Science	
BISC 4	Human Body: Form and Function	
BMB 1	The Science of Sickness	
CHEM 1	Molecular Science <sup>2</sup>	
CHEM 3	Molecular Science With Laboratory <sup>2</sup>	
MICRB 106 & MICRB 107	Elementary Microbiology and Elementary Microbiology Laboratory <sup>4</sup>	
PHYS 1	The Science of Physics <sup>3</sup>	
Select 3-4 credits of the following:		3-4
CMPSC 101	Introduction to Programming	
CMPSC 121	Introduction to Programming Techniques	
CMPSC 201	Programming for Engineers with C++ or CMPSC 202	
CMPSC 203	Introduction to Spreadsheets and Databases	
MATH 110	Techniques of Calculus I	
MATH 140	Calculus With Analytic Geometry I	
STAT 200	Elementary Statistics	
STAT 250	Introduction to Biostatistics	
Select 8-9 credits of the following:		8-9
BIOL 11 & BIOL 12	Introductory Biology I and Introductory Biology II <sup>1</sup>	
BIOL 110	Biology: Basic Concepts and Biodiversity <sup>1</sup>	
CHEM 110 & CHEM 111	Chemical Principles I and Experimental Chemistry I <sup>2</sup>	
CHEM 112 & CHEM 113	Chemical Principles II and Experimental Chemistry II <sup>2</sup>	
MICRB 201 & MICRB 202	Introductory Microbiology and Introductory Microbiology Laboratory <sup>4</sup>	
PHYS 250	Introductory Physics I <sup>3</sup>	
PHYS 251	Introductory Physics II <sup>3</sup>	

## Supporting Courses and Related Areas

*Supporting Courses and Related Areas: Require a grade of C or better*

Select 0-2 credits of 496 (independent studies) courses from the Eberly College of Science course offerings

Select 3-5 credits of 400-level courses (other than independent studies) from the Eberly College of Science course offerings

<sup>1</sup> A student may not use credit for BISC 1 or BISC 2 along with credit for BIOL 11 and BIOL 12, or BIOL 110.

<sup>2</sup> A student may not use credit for CHEM 1 or CHEM 3 along with credit for CHEM 110 and CHEM 111 or CHEM 112 and CHEM 113.

<sup>3</sup> A student may not use credit for PHYS 1 along with credit for PHYS 250 or PHYS 251.

<sup>4</sup> A student may not use credit for MICRB 106 and MICRB 107 along with credit for MICRB 201 and MICRB 202.

## Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (<https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/>)

## **University Park**

### **Beth Johnson**

Director, Science Major  
225B Ritenour Building  
University Park, PA 16802  
814-863-3889  
bai107@psu.edu

## **Berks**

### **Ike Shibley**

Program Coordinator, Associate Professor  
Luerssen 101G  
Reading, PA 19610  
610-396-6185  
BKNatureScience@psu.edu

## **Contact**

### **University Park**

SCIENCE MAJOR PROGRAM OFFICE  
225B Ritenour Building  
University Park, PA 16802  
814-863-3889  
bai107@psu.edu

### **Berks**

DIVISION OF SCIENCE  
Luerssen Science Building  
Reading, PA 19610  
610-396-6185  
BKNatureScience@psu.edu