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. The courses required in the minor include immersion, you can delve into science topics and the scientific method. The courses required in the minor include

Program Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements for the Minor</td>
<td>20-23</td>
</tr>
</tbody>
</table>

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. (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Prescribed Courses: Require a grade of C or better</td>
<td></td>
</tr>
<tr>
<td>SC 400</td>
<td>Consequences of Science</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Additional Courses: Require a grade of C or better</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Select 3-4 credits of the following:</td>
<td>3-4</td>
</tr>
<tr>
<td>ASTRO 1</td>
<td>Astronomical Universe</td>
<td></td>
</tr>
<tr>
<td>ASTRO 10</td>
<td>Elementary Astronomy</td>
<td></td>
</tr>
<tr>
<td>&amp; ASTRO 11</td>
<td>and Elementary Astronomy Laboratory</td>
<td></td>
</tr>
<tr>
<td>BISC 1</td>
<td>Structure and Function of Organisms</td>
<td>1</td>
</tr>
<tr>
<td>BISC 2</td>
<td>Genetics, Ecology, and Evolution</td>
<td>1</td>
</tr>
<tr>
<td>BISC 3</td>
<td>Environmental Science</td>
<td></td>
</tr>
</tbody>
</table>

Select 3-4 credits of the following: 3-4

- CMPSC 101 Introduction to C++ 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 Introductory Biology I & BIOL 12 and Introductory Biology II 1
- BIOL 110 Biology: Basic Concepts and Biodiversity 1
- CHEM 110 Chemical Principles I & CHEM 111 and Experimental Chemistry I 2
- CHEM 112 Chemical Principles II & CHEM 113 and Experimental Chemistry II 2
- MICRB 201 Introductory Microbiology & MICRB 202 and Introductory Microbiology Laboratory 4
- PHYS 250 Introductory Physics I 3
- PHYS 251 Introductory Physics II 3

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 3-5

1. A student may not use credit for BISC 1 or BISC 2 along with credit for BIOL 11 and BIOL 12, or BIOL 110.
2. 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.
3. A student may not use credit for PHYS 1 along with credit for PHYS 250 or PHYS 251.
4. 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 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy)

University Park
Ronald Markle
Professor and Director, Premedicine & Science Majors
225B Ritenour Building
University Park, PA 16802
814-865-7620
ram29@psu.edu

Berks
Ike Shibley
Program Coordinator, Associate Professor
Luerssen 101G
Reading, PA 19610
610-396-6185
ias1@psu.edu

Contact
University Park
COLLEGE OF SCIENCE
225B Ritenour Building
University Park, PA 16802
814-865-7620
ram29@psu.edu

http://science.psu.edu/sciencebs/advising

Berks
DIVISION OF SCIENCE
Luerssen Science Building
Reading, PA 19610
610-396-6185
ias1@psu.edu