Biology, Minor (Science)

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 minor is designed for students in non-Life Science majors, who desire to obtain an in-depth and well-rounded knowledge of Biology – the science of life and living organisms. This minor is not intended for “Life Science” oriented majors, including Biological Anthropology, Premedicine, and Science, Life Science option. After taking an introductory survey course which exposes students to the basics of Biology, including the chemistry of life, cell structure, genetics, mechanisms of evolution and evolutionary history of biological diversity, plant and animal form and function, and ecology, students select additional courses based on their biological emphasis to account for a total of 18-20 credits. In conjunction with the student’s major, the minor prepares students for entry to graduate school or professional school programs, as well as for technical or research careers with governmental agencies or industry. Majors complemented by this minor would include but not be limited to other life and physical sciences, engineering, and business.

What is Biology?
Biology is the scientific study of life: the diversity and organization of organisms, from single-celled bacteria to multi-cellular plants and animals, including humans. These different levels of biological organization range from the molecules and cells that compose an organism, to the interacting organisms that make up an ecosystem.

You Might Like this Program If...
• You want to complement your major by acquiring additional knowledge and skills in biology.
• You have an interest in learning more about biology, but do not have enough time to complete the major.

Program Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Requirements for the Minor</td>
<td>18-20</td>
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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>
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<tbody>
<tr>
<td>BIOL</td>
<td>Biology: Basic Concepts and Biodiversity</td>
<td>4</td>
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Prescribed Courses
Prescribed Courses: Require a grade of C or better

Additional Courses
Additional Courses: Require a grade of C or better
Select 7-8 credits of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>BIOL 129</td>
<td>Mammalian Anatomy</td>
</tr>
<tr>
<td>BIOL 141</td>
<td>Introductory Physiology</td>
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<tr>
<td>BIOL 142</td>
<td>Physiology Laboratory</td>
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<tr>
<td>BIOL 222</td>
<td>Genetics</td>
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BIOL 220W  Biology: Populations and Communities
BIOL 230W  Biology: Molecules and Cells
BIOL 240W  Biology: Function and Development of Organisms
BIOL 322  Genetic Analysis

Supporting Courses and Related Areas
Supporting Courses and Related Areas: Require a grade of C or better
Select 6-9 credits from 400-level Biology courses

1 BIOL 400, BIOL 496, and SC 495 credits may not be used to fulfill this requirement.

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 advisee’s role 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 need 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)

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