BIOLOGY (BIOLOGY OF GLOBAL HEALTH), B.S.

Human health is intricately linked to economic development, ecological sustainability, and social inequalities. For these reasons, the Biology of Global Health program is designed for students interested in engaging human and environmental health issues on a global scale from developing to industrialized nations. It is appropriate for students who are considering diverse careers in biology from medicine to environmental conservation and who are interested in finding solutions to the biological and ecological challenges influencing human health. Graduates of the program will be equipped with fundamental scientific skills and knowledge, drawn from the breadth of biological disciplines, that will allow them to become leaders in healthcare fields at local, national, and international levels.

Admission to the Program

Students wishing to pursue the Bachelor of Science in Biology with a concentration in Biology of Global Health must have satisfied each of the requirements listed below to advance in the major and select a concentration. Further, the student must have completed a minimum of 24 credit hours in residence at Baylor, but no more than 60 hours in residence to declare the concentration in Biology of Global Health. Students can select the BGH concentration at the completion of each fall semester.

Admission to the Biology of Global Health program requires, at a minimum:

1. An overall GPA of 3.5 on a four-point scale.
2. A major GPA of 3.5 on a four-point scale.

Maintaining Status as a Biology of Global Health Student

Biology of Global Health students must maintain a minimum cumulative 3.0 GPA through their junior-level courses (including BIO 2306 Genetics & BIO 2106 Genetics Laboratory) and earn no grade lower than a C in any Biology course. Any student whose performance falls below the 3.0 minimum for two consecutive semesters or who earns less than a C grade in a biology course will be dismissed from the program.

Requirements for a Major in Biology (Biology of Global Health)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1305 &amp; BIO 1105</td>
<td>Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>or BIO 1405</td>
<td>Investigations of Modern Biology Concepts I</td>
<td></td>
</tr>
<tr>
<td>BIO 1306 &amp; BIO 1106</td>
<td>Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory</td>
<td>4</td>
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<tr>
<td>or BIO 1406</td>
<td>Investigations of Modern Biology Concepts II</td>
<td></td>
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<td>BIO 2301</td>
<td>Biology of Global Health</td>
<td>3</td>
</tr>
<tr>
<td>BIO 2306 &amp; BIO 2106</td>
<td>Genetics and Genetics Laboratory</td>
<td>4</td>
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Required Courses

Select three hours from each list:

- **Cell & Molecular Biology List**
  - BIO 3342 | Molecular Cell Biology | 3     |
  - BIO 3350 | Genomics and Bioinformatics | |
  - BIO 4306 & BIO 4106 | Molecular Genetics and Genomics and Molecular Genetics and Genomics Laboratory | |
  - BIO 4308 & BIO 4108 | Genes and Development and Genes and Development Laboratory | |

- **Ecology & Evolution List**
  - BIO 3315 | Introduction to Environmental Health | |
  - BIO 3320 | Climate Change Biology | |
  - BIO 3366 | Foundations of Evolutionary Biology | |
  - BIO 4305 | Aquatic Ecosystems | |
  - BIO 4365 | Topics in Evolution | |
  - BIO 4386 | Remote Sensing | |

- **Host & Disease List**
  - BIO 3322 | Human Physiology | 3     |
  - BIO 4301 | Immunology | |
  - BIO 4304 | Medical Entomology | |
  - BIO 4312 | Viruses and Global Health | |
  - BIO 4323 | Parasitology | |
  - BIO 4350 | Pathogenic Microbiology | |
  - BIO 4354 | Neglected Tropical Diseases | |
  - BIO 4431 | | |

Three semester hours of 3000-4000 level BIO courses | 3     |

Subtotal | 35    |

Required Courses in Other Fields

Select one of the following sequences:

- **PHY 1408 & PHY 1409** | General Physics for Natural and Behavioral Sciences I and General Physics for Natural and Behavioral Sciences II | 8     |
- **PHY 1420 & PHY 1430** | General Physics I and General Physics II | |
- **PHY 1420 & PHY 1409** | General Physics I and General Physics for Natural and Behavioral Sciences II | |

Select at least one of the following:

- ANT 4330 | Epidemiology | 3     |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ANT 4325</td>
<td>Medical Anthropology</td>
</tr>
<tr>
<td>ANT 4371</td>
<td>Evolutionary Medicine</td>
</tr>
<tr>
<td>ANT 4373</td>
<td>One Health: Connecting Global Health and Conservation Medicine</td>
</tr>
<tr>
<td>PUBH 3351</td>
<td>Epidemiology/Vital Statistics</td>
</tr>
<tr>
<td>PUBH 4340</td>
<td>Global Health</td>
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</tbody>
</table>

**Total Hours** 68

1. A grade of "C" or better in BIO courses used in the major and a GPA of 2.0 or higher on all BIO courses.
2. A grade of "C" or better in all courses required in other fields.