

BIOLOGY OF GLOBAL HEALTH, MS

The MS in Biology of Global Health is an option restricted to Biology students in the Biology of Global Health B.S./M.S. 4+1 degree program. Students enrolled in the BGH B.S./M.S. 4+1 degree plan are immersed in scientific literature and hands-on research experiences with experts in the field, either at Baylor University (BU, Track 1) or Baylor College of Medicine (BCM, Track 2). By allowing dual credit for upper-level undergraduate courses, the 4+1 program provides an accelerated pathway for highly qualified students to obtain both the B.S. degree (124 hours) and the M.S. degree (30 hours) in five years of full-time study.

Admission Requirements

- 1) 4 semesters at Baylor University
- 2) An overall GPA of 3.5 on a four-point scale
- 3) A written application demonstrating a commitment to understanding the global health issues, tropical diseases, their etiology, and control

Requirements for a M.S. in Biology of Global Health

This program is only offered as a part of the Accelerated BS Biology/MS Biology of Global Health (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/biology/accelerated-bgh-bs-ms/>) program. At least 12 hours of this coursework (excluding the 6 hours of BIO 5V99 Thesis) must be at the 5000 level. Most students who fulfill the requirements for 4000-level courses in the B.S. in Biology (Biology in Global Health) (<https://catalog.baylor.edu/undergraduate/college-arts-sciences/academic-departments/biology/biology-biology-global-health-concentration-bs/#requirementstext>) will simultaneously fulfill the maximum number of 4000-level course credits allowed for credit toward the MS degree in Biology of Global Health, but those courses must be approved for graduate credit and approved by the Program Coordinator.

Code	Title	Hours
Required Courses		
BIO 5V99	Thesis	6
<i>Additional Graduate Coursework</i>		
BIO 4302 & BIO 4102	General Microbiology and General Microbiology Lab	4
Select one 5000-level course from BIO		3
Select one course from the following:		3
BIO 4301	Immunology	
BIO 4304	Medical Entomology	
BIO 4323	Parasitology	
BIO 4350	Pathogenic Microbiology	
BIO 4354	Neglected Tropical Diseases	
Select one course from the following: ²		3-4
ANT 4330	Epidemiology	
ANT 4325	Medical Anthropology	
ANT 4371	Evolutionary Medicine	

ANT 4373	One Health: Connecting Global Health and Conservation Medicine
GEO 4485	Introduction to Geographic Information Systems
PUBH 4340	Global Health

Select one track:

Students that are part of the Accelerated UG/GR program will select either the Standard Track or the Baylor College of Medicine Track for their remaining coursework. 11-12

Standard Track

BIO 5101	Graduate Scientific Communications
BIO 5201	Research Methods in Biology
BIO 5202	Research Methods in Biology II
STA 5300 or BIO 5412	Statistical Methods ³ Biometrics
BIO 5V90	Special Problems ⁴

Baylor College of Medicine Track

BIO 5203	Tropical and Emerging Infectious Diseases
BIO 5204	Applied Epidemiology, Biostatistics, and Public Health
BIO 5205	Vector Biology and Vector Borne Diseases
BIO 5116	Biotechnology Operations
BIO 5117	Preclinical Models in Biotechnology
BIO 5118	Bench to Bedside: Biopharmaceuticals, vaccine antigen production and transition to the clinic
BIO 5119	Topics in Advocacy and Policy for the Neglected Tropical and Emerging Infectious Diseases
BIO 5120	GIS and Health
BIO 5121	Diagnostics of Neglected Tropical and Emerging Infectious Diseases

Total Hours **30-32**

- ¹ Up to two hours of BIO 5100 Seminars in Biology, or other appropriate seminars approved by the student's committee and graduate program director may be applied toward a master's program; repeat credit requires a change in topic from previous registrations.
- ² Other 4000-level non-BIO courses that are approved for graduate credit can apply to this requirement.
- ³ Or substitute other quantitative course such as BIO 5412 Biometrics
- ⁴ Not more than 3 hours may be applied towards master's degree requirements.