

# BIOLOGY, MASTER OF SCIENCE

## Overview

The Master of Science in Biology at Texas A&M-San Antonio aims to provide an advanced collegiate life science curriculum with broad coverage of common major topics within the discipline of biology. Successful students earning a master's degree at A&M-San Antonio will solidify their appreciation for the diversity of living organisms, their understanding of basic biological processes and how biological science impacts the environment and society, and acquire knowledge of and experience with a variety of approaches used to study them.

## Administrative Officers

Dr. Elizabeth Borda, *Graduate Coordinator (Biology)*, STEM Building

## Admissions

### Admission Process

#### Prerequisites

Students must have:

- 18 semester hours of undergraduate courses including: General Biology, General & Organic Chemistry, Biostatistics, Genetics, Evolution, Ecology, Cell Biology, Cell / Animal Physiology and/or Microbiology and an undergraduate cumulative grade point average of 3.00\* or higher.

Or

- A combination of the above disciplines, including 12 advanced semester hours in these disciplines and an undergraduate cumulative grade point average of 3.00\* or higher.

The Department has the right to examine students' prerequisites and to accept equivalent hours or to require additional work if necessary.

\*Students falling below the GPA minimum are encouraged to apply. Students are evaluated holistically based on several criteria (see Application instructions and Required Documents)

## Graduate Admissions Required Test Scores

GRE composite (Q+V) score\* of 285 (score times 800 for tests taken prior to August 2011). The Department has the right to examine students' prerequisites and to accept equivalent hours or to require additional work if necessary.

International applicants must demonstrate English proficiency by scoring a minimum TOEFL score of 550 (paper-based), 213 (computer-based) or 79 (Internet-based).

Texas A&M University-San Antonio GRE code is 6712

Please view the MS Biology curriculum and degree plans to learn how to fulfil the requirements.

For more information, please contact Dr. Elizabeth Borda, eborda@tamusa.edu (<https://catalog.tamusa.edu/graduate/arts-sciences/life-sciences/biology-ms/eborda@tamusa.edu>), Graduate Coordinator (Biology).

## Application Instructions and Required Documents

- Complete the GradCAS application and submit the appropriate fees and prepare/request the following required documents:
- Official e-transcripts from all US institutions attended to be sent to GradCAS through their online order portal. If your institution does not have official e-transcripts available, they can be mailed to the GradCAS processing center.
- International Students: Credentialing reports of transcripts from all foreign institutions can be sent electronically through the World Education Services (WES) link in the Academic History section of the application or by mail if using another credentialing agency. International applicants, please visit our International Affairs webpage for more information: <https://www.tamusa.edu/internationalaffairs/international-students/applyingforadmission.html>
- Personal statement outlining the reason for applying for the Master of Science in Biology, career goals and research interests.
- Resume or Curriculum Vitae
- Letters from three references
- Supplemental Information Form: We strongly encourage contacting potential faculty mentor(s) prior to applying to the program to ensure sufficient space in Faculty labs and compatibility of research interests. Please select up to three faculty members in ranking order of priority. For Thesis Track applicants this form will also be used to indicate if they would like to be considered for a Graduate Assistantship (see Application Deadline).

## Application Deadlines (Domestic and International):

Fall Entrance: July 15th: Final deadline

Spring Entrance: December 5th: Final deadline

Summer Entrance: May 5th: Final deadline

## Requirements Program Details

There are two tracks in the program - a Thesis Track and a non-Thesis Track. Students pursuing the degree should consult with their thesis advisor and declare for one of the two tracks at the time of application. Of the 30-36 SCH to fulfill the coursework required to graduate, students declaring the Thesis Track will have a minimum of 6 SCH allotted for a research thesis, whereas those in the Non-Thesis Track will have a maximum of 6 SCH (minimum 3 SCH) credited for independent study.

- Thesis Track: Submission of a thesis based on the in-depth analysis of a research study. The thesis should conform to the format required by the Biology program and must be approved by a Research (Advisory) Committee.
- Non-Thesis Track: Submission of a literature review or research report based on a topical study. The report will also need to conform to the required format. The research report must be approved by the academic advisor, and at least one other TAMUSA graduate faculty member.

## Curricula

### Thesis Track

Code	Title	Credits
BIOL 5105	Graduate Seminar (Repeated Four Times)	4
BIOL 5310	Graduate Scientific Scholarship	3

BIOL 5315	Biostatistics I	3
BIOL 5306	Thesis	6-12
BIOL Elective or Independent Study		6-14
BIOL 5101	Independent Study	
BIOL 5201	Independent Study	
BIOL 5301	Independent Study	
BIOL 5303	Ecosystems Ecology	
BIOL 5305	Population & Community Ecology	
BIOL 5311	Molecular Ecology	
BIOL 5320	Biostatistics II	
BIOL 5370	Special Graduate Topics in Bio	
BIOL 5404	Biotechnology	
BIOL 5405	Cellular Mechanisms	
<b>Total Credits</b>		<b>36</b>

### Non-Thesis Track

Code	Title	Credits
BIOL 5105	Graduate Seminar (Repeated Four Times)	4
BIOL 5310	Graduate Scientific Scholarship	3
BIOL 5315	Biostatistics I	3
BIOL 5X01 (Independent Study)		3-6
BIOL Electives		20-26
BIOL 5101	Independent Study	
BIOL 5201	Independent Study	
BIOL 5301	Independent Study	
BIOL 5303	Ecosystems Ecology	
BIOL 5305	Population & Community Ecology	
BIOL 5311	Molecular Ecology	
BIOL 5320	Biostatistics II	
BIOL 5370	Special Graduate Topics in Bio	
BIOL 5404	Biotechnology	
BIOL 5405	Cellular Mechanisms	
<b>Total Credits</b>		<b>36</b>