



1. Title: **Mathematics and Science: General Biology**

2. Summary of Goals—Learning Outcomes:

At the completion of courses for the Biology major at GWC, successful students will be able to:

- Compare and contrast different life forms that inhabit earth regarding modes of reproduction, metabolism, and adaptation.
- Identify or describe the various interrelationships that exist between life forms and also the interactions that occur in different ecosystems on earth.
- Relate how the theory of evolution unifies the significant principles of biological science.
- Correctly perform various experiments and activities in biology lab classes, including the proper use of different types of standard biology lab equipment.
- Apply critical thinking and analytical skills to correctly interpret data.
- Explain biological concepts, theories, current research or other related topics clearly and concisely in the form of lab reports, essays, formal written papers or oral presentations.
- Identify or explain how biology correlates with other sciences such as chemistry, astronomy, ecology, geology or physics.

3. Course Listing (Minimum of 19-23 Units):

Required Courses:

Biology G180, Cell and Molecular Biology	5 Units
Chemistry G180, General Chemistry A	5 Units
Chemistry G185, General Chemistry B	5 Units
AND	
Biology G182, Zoology or	
Biology G183, Botany	4 units

And one of the following:

Math G170 (4), Pre-Calculus OR Placement (through examination) into Math G180, Calculus 1

It is highly recommended that students also take Biology G210, General Microbiology, and Chemistry G220 and G225, Organic Chemistry, A & B.

Required Subtotal:	19-23 units
Completion of GE Requirements:	21-41 units
Additional Electives (as needed to reach 60):	_____
Degree Total:	60 units