

**Fall 2019**  
**Bachelor of Science in Biology**  
**Specialization in Marine & Aquatic Biology**

**BG Perspective (BGP) Requirements**

**Must complete at least 1 course in each of the following:**

English Composition and Oral Communication	
Course	Credits
_____	_____
Quantitative Literacy	
_____	_____

**Must Complete at least 2 courses in each of the following:**

Humanities and the Arts	
_____	_____
_____	_____
Natural Sciences - at least one Lab Science required	
_____	_____
_____	_____
Social and Behavioral Sciences	
_____	_____
_____	_____

**Complete total required BGP credit hours by selecting courses from any of the above categories:**

_____	_____
_____	_____
_____	_____

**University Requirements** Designated courses in Humanities and the Arts and the Social and Behavioral Sciences domains may be used to fulfill both the BGP requirement and one of the following university requirements:

Cultural Diversity in the US	_____
International Perspective	_____

**Composition Requirement:**

WRIT 1120 Research Writing	_____
Total BGP Credits: Must be at least 36	_____

**Arts & Sciences Requirements**

**Foreign Language** (\_\_\_\_ yrs of HS \_\_\_\_\_)

_____	1010	_____
_____	1020	_____
_____	2010	_____
_____	2020/2120	_____

**Lab Science**

_____	_____
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**Quantitative Literacy**

_____	_____	<b>EITHER MATH 1310 OR MATH 1340 &amp; MATH 1350</b>
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**Multidisciplinary Component** Select from approved offerings, in consultation with an advisor and a faculty mentor. Four courses total, each with a different subject prefix. At least two courses at 3000/4000 level. Courses applied to the Arts & Sciences MDC may not be used to fulfill other Arts and Sciences degree requirements, nor may they be used to fulfill major, minor, BGP or other program requirements.

_____	_____	_____
_____	_____	_____
_____	_____	_____

**Major Requirements (36+ Hrs.)**

Core courses in Biology (16 hours)

Hrs	Grade	
1	_____	BIOL 2000 Biology Today
4	_____	BIOL 2040 Concepts in Biology I
4	_____	BIOL 2050 Concepts in Biology II
4	_____	BIOL 3500 Genetics
3	_____	BIOL 3510 Evolution

**Marine & Aquatic Biology Specialization**

Courses required (11+ hours)

3	_____	BIOL 3540 Principles of Ecology
3	_____	BIOL 3700 Intro to Inland Marine Res
3	_____	BIOL 3740 Marine Biology <b>or</b>
		BIOL 4250 Limnology*
1	_____	BIOL 4520 or BIOL 4540
1-6	_____	Field Course (BIOL 4750 or 4880)

\*Note: BIOL 3740 and BIOL 4250 may not count in both the Specialization requirements and the Group requirements.

Ensure that you have at least 10 hours of Biology courses at the 4000-level selected from any of the elective groups listed below. Complete courses required for the Specialization and Biology electives. For electives, select at least 1 course from each of Groups A-D.

A maximum of 5 credit hours from the following courses may be included in the required 10 credit hours of 4000-level Biology required for the major: BIOL 4010, 4520, 4530, 4540, 4700, 4890. These courses may be repeated.

**Group A: Ecology & Conservation**

3	_____	BIOL 4090 Conservation Biology
3	_____	BIOL 4100 Conservation Biology in Practice
3	_____	BIOL 4160 Landscape Ecology
4	_____	BIOL 4200 Animal Behavior
4	_____	BIOL 4220 Restoration Ecology
3	_____	BIOL 4250 Limnology
3	_____	BIOL 4290 Evolutionary Ecology
4	_____	BIOL 4450 Environmental Microbiology
3	_____	BIOL 4710 Sensory Ecology
3	_____	ENVS 4120 Great Lakes Ecosystems

**Group B: Biodiversity**

4	_____	BIOL 3130 Microbiology
4	_____	BIOL 3430 Botany
4	_____	BIOL 3740 Marine Biology
4	_____	BIOL 4050 Parasitology
4	_____	BIOL 4140 Plant Taxonomy and Evolution
4	_____	BIOL 4270 Invertebrate Biology
3	_____	BIOL 4300 Wildlife Biology
4	_____	BIOL 4350 Entomology
3	_____	BIOL 4720 Ichthyology
4	_____	BIOL 4730 Mammalogy
3	_____	BIOL 4760 Herpetology
3	_____	BIOL 4770 Ornithology

**Groups C-D and Minor are listed on the next page.**

**Group C: Cell, Molecular & Regulatory Biology**

4	BIOL 4070 Cell Biology
3	BIOL 4080 Molecular Biology
4	BIOL 4110 Animal Physiology
3	BIOL 4180 Neurophysiology
3	BIOL 4210 Molecular Biotechnology
3	BIOL 4310 Developmental Biology
3	BIOL 4370 Light Microscopes and 3D Imaging
4	BIOL 4380 Endocrinology
3	BIOL 4390 Immunobiology
3	BIOL 4400 Molecular Neurobiology
3	BIOL 4420 Virus and Plasmid Biology
3	BIOL 4430 Microbial Physiology
4	BIOL 4460 Scanning Electron Microscopy
3	BIOL 4470 Microbial Genetics
3	BIOL 4480 Molecular Evolution
3	BIOL 4660 Genomics

**Group D: Quantitative & Applied Science**

1-4	BIOL 4010 Biological Research
1-3	BIOL 4890 Biology Internship
3	GEOG 4130 Introduction to Remote Sensing
4	GEOG 4240 Geog. Info. Systems
4	GEOL 4400 Geologic Remote Sensing
3	SEES 3000 Geospatial Science
3	Statistics (STAT 2110, MATH 2470, BIOL 4620)

**Biology Electives:** These courses do not meet the group requirements but do count toward the 10 hours of required courses at the 4000 level: BIOL 4500, 4700, 4900.

**Additional Biology Required Courses:** Chemistry & Physics

**General Chemistry I**

4	CHEM 1230 General Chemistry I and
1	CHEM 1240 General Chemistry I Lab <b>OR</b>
5	CHEM 1350 General Chemistry w/Lab

**General Chemistry II**

4	CHEM 1270 or CHEM 1370 General Chemistry
1	CHEM 1280 or CHEM 1380 Gen Chemistry Lab

**Organic Chemistry**

4-5	CHEM 3060 Basic Organic Chemistry <b>OR</b>
	CHEM 3410 Organic Chemistry

**Physics**

5	PHYS 2010 College Physics I <b>OR</b>
	PHYS 2110 University Physics I

**Minor Requirements:** A "general science" minor is offered to students in place of a conventional minor. Consult your Faculty Advisor. (A conventional minor may also be chosen, usually 20 hours, no Biology courses can be used.)

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\_\_\_\_\_  
Name (Print First & Last Name)

\_\_\_\_\_  
BGSU ID#

\_\_\_\_\_  
Phone (Cell or Local Number)

**For Graduation You Will Need:**

1. 122 credit hours minimum.

**In Progress/Completed** \_\_\_\_\_ **Needed** \_\_\_\_\_

2. Minimum GPA 2.00.

**Current GPA** \_\_\_\_\_

3. At least 30 credit hours of BGSU course work.

**In Progress/Completed** \_\_\_\_\_ **Needed** \_\_\_\_\_

4. 40 credit hours at the 3000/4000 level.

**In Progress/Completed** \_\_\_\_\_ **Needed** \_\_\_\_\_

5. Completion of all degree requirements, including the BG Perspective Core.

**In Progress/Completed** \_\_\_\_\_ **Needed** \_\_\_\_\_

6. A major, and if required, a minor, specialization or emphasis.

**Declared with the College Office**  **Yes**  **No**

Any substitution or waiver of courses required for your major or minor program must originate in the department/school offering the major or minor and must be approved by the College Office.

To ensure a timely graduation, see a **College Advisor** during the semester prior to your intended graduation.

Remember to complete an **Application for Graduation** by the end of the second week of classes during the fall semester or spring regular session, or by the end of the first week of the summer semester. For the specific dates, check your DARS. You may log onto MyBGSU to complete the online application. After the deadlines, you will need to complete an application in person in the College Office.