

# BIOLOGY B.S. DEGREE REQUIREMENT CHECKLIST

*(For students who declared Biology BA as a major on or after August 1, 2023)*

revised 3/14/2023

### MAJOR DECLARATION REQUIREMENTS:

In order to declare a BS in Biology, students must first complete BIOL 3000, 3010 and 3020, and have a cumulative 2.700 GPA in these three courses. This is an overall GPA requirement for these three courses, not an individual course grade requirement.

**MAJOR GPA and OVERALL CREDITS:** Students are required to complete 6 core courses, at least 6 credits of lab work, and at least 9 credits of 4000---level elective courses (outlined here in 5---7). The coursework presented for the BS degree must have an average GPA of at least 2.000.

### 1. INTRODUCTORY BIOLOGY:

BIOL 2100 & 2200 (or AP, transfer, or dual enrollment credit) are required.

	<u>Grade / Planned Term</u>
<input type="checkbox"/> <b>BIOL 2100</b> (or AP, transfer, dual enrollment or IB credit)	_____
<input type="checkbox"/> <b>BIOL 2200</b> (or AP, transfer, dual enrollment or IB credit)	_____

### 2. CHEMISTRY:

The chemistry requirement must be satisfied by completing CHEM 1410, 1420, 1411 and 1421 (or CHEM 1810, 1811, 1420) and two semesters of organic chemistry (CHEM 2410, 2420) with labs (CHEM 2311+2321 -or- 2411+2421). Students with AP chemistry credit must still complete the laboratory courses. Completion of the accelerated chemistry course series CHEM 1810, 1811, 1820, 1821, 2810, and 2820 (or 1420) satisfies all introductory and organic chemistry lecture and laboratory requirements.

	<u>Grade / Planned Term</u>
<input type="checkbox"/> <b>CHEM 1410</b>	_____
<input type="checkbox"/> <b>CHEM 1420</b>	_____
<input type="checkbox"/> <b>CHEM 2410</b>	_____
<input type="checkbox"/> <b>CHEM 2420</b>	_____

#### LABORATORY REQUIREMENTS

<input type="checkbox"/> <b>CHEM 1411</b>	_____
<input type="checkbox"/> <b>CHEM 1421</b>	_____
<input type="checkbox"/> <b>CHEM 2311 or 2411</b>	_____
<input type="checkbox"/> <b>CHEM 2321 or 2421</b>	_____

### 3. MATH and STATISTICS:

Students are required to complete biostatistics (STAT 2020) or intro to statistics (STAT 2120), a course in calculus (MATH 1190, 1210, or 1310), and a second semester of calculus or statistics from the following list: (MATH 1220 or 1320 or STAT 1601 or 1602 or 3220). Calculus requirement may be satisfied by AP, transfer, or dual enrollment credit.

	<u>Course Subject/Number</u>	<u>Grade / Planned Term</u>
<input type="checkbox"/> <b>STAT 2020 or STAT 2120</b>	_____	_____
<input type="checkbox"/> <b>MATH 1190 or 1210 or 1310:</b>	_____	_____
<input type="checkbox"/> <b>MATH 1220 or 1320 or STAT 1601 or 1602 or 3220:</b>	_____	_____

### 4. INTRODUCTORY PHYSICS:

This requirement may be satisfied with any of the following three combinations of two semesters of intro physics and their two associated 'workshops' (labs): (PHYS 2010, 2020, 2030, 2040) or (PHYS 1420, 1429, 2410, 2419) or (PHYS 1425, 1429, 2415, 2419).

	<u>Course</u>	<u>Grade / Planned Term</u>
<input type="checkbox"/> <b>Physics 1</b>	_____	_____
<input type="checkbox"/> <b>Physics 1 Workshop (lab)</b>	_____	_____
<input type="checkbox"/> <b>Physics 2</b>	_____	_____
<input type="checkbox"/> <b>Physics 2 Workshop (lab)</b>	_____	_____

### 5. BIOLOGY CORE COURSES:

BIOL 3000, 3010, 3020, 3030, 3040 and 3050 are all required for the Biology BS. These courses must be taken at UVA. Generally, transfer credit for these courses is not accepted.

	<u>Grade / Planned Term</u>	<u>Credit</u>
<input type="checkbox"/> <b>BIOL 3000</b>	_____	3
<input type="checkbox"/> <b>BIOL 3010</b>	_____	3
<input type="checkbox"/> <b>BIOL 3020</b>	_____	3
<input type="checkbox"/> <b>BIOL 3030</b>	_____	3
<input type="checkbox"/> <b>BIOL 3040</b>	_____	3
<input type="checkbox"/> <b>BIOL 3050</b>	_____	3

### 6. BIOLOGY LABORATORY COURSES:

Students must complete at least 6 credits of laboratory work at/above the 3000---level. The lab requirement can be satisfied by any combination of: i) a 3--- or 4---credit departmental laboratory course, ii) any 3000---level or higher field course at Mountain Lake Biological Station, iii) two semesters of independent research (BIOL 4910/4920), conducted in the same laboratory. A maximum of 4 credits of Independent Research may be applied toward the laboratory requirement.

	<u>Course</u>	<u>Grade / Planned Term</u>	<u>Credit</u>
<input type="checkbox"/> <b>BIOL Lab</b>	_____	_____	_____
<input type="checkbox"/> <b>BIOL Lab</b>	_____	_____	_____
<input type="checkbox"/> <b>2x IND RES</b>	_____	_____	_____

### 7. 4000---LEVEL COURSES:

Students must complete at least 9 credits of 4000---level or above (lecture or lab) elective courses (min. 3 credits each). Independent Research, DMP Seminar, and courses from the Department of Environmental Sciences may be applied to this requirement, subject to stipulations listed on the Biology website.

	<u>Course</u>	<u>Grade / Planned Term</u>	<u>Credit</u>
<input type="checkbox"/> <b>BIOL 4000---level+</b>	_____	_____	_____
<input type="checkbox"/> <b>BIOL 4000---level+</b>	_____	_____	_____
<input type="checkbox"/> <b>BIOL 4000---level+</b>	_____	_____	_____