

BIOLOGY B.S. DEGREE REQUIREMENT CHECKLIST (B.A. declared prior to 8/1/15)

revised 6/27/15

MAJOR DECLARATION REQUIREMENTS:

In order to declare a BS in Biology, students must 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 at least 33 credits of upper level courses including the core courses, lab courses, 4000-level courses and elective courses (outlined here in 4-7). The coursework presented for the BS degree must have an average GPA of at least 2.000.

1. INTRODUCTORY BIOLOGY:

BIOL 2010, 2020, 2030 and 2040 are required. Students who have AP or IB credit for BIOL 2010 and 2020 are exempt from the requirement for the introductory lab courses.

| | <u>Grade / Planned Term</u> | |
|--|-----------------------------|--|
| <input type="checkbox"/> BIOL 2010 (or AP/IB credit) | _____ | |
| <input type="checkbox"/> BIOL 2020 (or AP/IB credit) | _____ | |
| <input type="checkbox"/> BIOL 2030 (unless exempt) | _____ | |
| <input type="checkbox"/> BIOL 2040 (unless exempt) | _____ | |

2. CHEMISTRY:

The chemistry requirement must be satisfied by completing CHEM 1410, 1420, 1411 and 1421 and two semesters of organic chemistry (CHEM 2410 and 2420). Students with AP chemistry credit must still complete the laboratory courses. The entire B.S. chemistry requirement may be fulfilled by completing the chemistry majors' sequence (CHEM 1810, 1820, 2810, 2820), along with at least 2 semesters of the associated labs.

| | <u>Grade / Planned Term</u> | |
|--|-----------------------------|--|
| <input type="checkbox"/> CHEM 1410 (or AP credit, CHEM 1810/1610) | _____ | |
| <input type="checkbox"/> CHEM 1420 (or AP credit, CHEM 1820/1620)) | _____ | |
| <input type="checkbox"/> CHEM 2410 | _____ | |
| <input type="checkbox"/> CHEM 2420 | _____ | |
| LABORATORY REQUIREMENT | | |
| <input type="checkbox"/> CHEM 1411 (or CHEM 1811/1611) | _____ | |
| <input type="checkbox"/> CHEM 1421 (or CHEM 1821/1621) | _____ | |

3. MATH and PHYSICS:

Students are required to complete two courses in calculus (MATH 1210, 1220, 1310 or 1320) or statistics (STAT 2020, 2120, or an equivalent or higher level course in another department), as well as three credits of Physics (PHYS 1425, 1610, 2010).

| | <u>Course Subject/Number</u> | <u>Grade / Planned Term</u> |
|--------------------------|-------------------------------|-----------------------------|
| <input type="checkbox"/> | MATH/STAT COURSE: _____ | |
| <input type="checkbox"/> | MATH/STAT COURSE: _____ | |
| <input type="checkbox"/> | PHYSICS COURSE (3 cr.): _____ | |

4. BIOLOGY CORE COURSES:

BIOL 3000, 3010, and 3020 are all required for Biology majors. 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"/> BIOL 3000 | _____ | 3 |
| <input type="checkbox"/> BIOL 3010 | _____ | 4 |
| <input type="checkbox"/> BIOL 3020 | _____ | 3 |

5. BIOLOGY LABORATORY COURSES:

Students must complete 6 credits of laboratory coursework at or above the 3000-level. This lab requirement can be satisfied with a laboratory course at UVA or through a field course taught at the Mountain Lake Biological Station. Two semesters of independent research (BIOL 4910/4920, 4911-4918), conducted in the same laboratory, is equivalent to one lab course. Three semesters of independent research will satisfy the B.S. laboratory requirement completely.

| | <u>Course</u> | <u>Grade / Planned Term</u> | <u>Credit</u> |
|--------------------------|------------------|-----------------------------|---------------|
| <input type="checkbox"/> | BIOL LAB/IND RES | _____ | |
| <input type="checkbox"/> | BIOL LAB/IND RES | _____ | |
| <input type="checkbox"/> | IND RES | _____ | |

6. 4000-LEVEL COURSES:

Students must complete a minimum of four 4000-level BIOL or above (lecture or lab) courses of at least 3 credits each. Two semesters of independent research will satisfy one 4000-level requirement; three semesters will satisfy two 4000-level requirements. 4000-level courses from the Departments of Chemistry and 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"/> | BIOL 4000-level+ | _____ | |
| <input type="checkbox"/> | BIOL 4000-level+ | _____ | |
| <input type="checkbox"/> | BIOL 4000-level+ | _____ | |
| <input type="checkbox"/> | BIOL 4000-level+ | _____ | |

7. UPPER LEVEL BIOLOGY ELECTIVES:

Students should complete as many 3000-level and above courses as are necessary to reach the 33 credits required for the BS. Up to 6 credits of elective courses may be taken outside the Biology Department [e.g. EVSC 3200 (3 credits) or CHEM 4410+4420 (3 credits)]. No more than 6 credits of independent research and/or study may be applied to the overall Biology BS degree. Students who are double-majors in Biology and another department must have 18 Biology credit hours that are not shared with another major. (See Number of Credits on the Declaring a Major page.)

| | <u>Course</u> | <u>Grade / Planned Term</u> | <u>Credit</u> |
|--------------------------|------------------|-----------------------------|---------------|
| <input type="checkbox"/> | BIOL 3000-level+ | _____ | |
| <input type="checkbox"/> | BIOL 3000-level+ | _____ | |
| <input type="checkbox"/> | BIOL 3000-level+ | _____ | |