

Biology B.A. Major Requirements - Course Plan/Checklist

(Catalog year 2024-2025: For declarations received on or after August 1, 2024, revised 3/20/25)

Your Name:

If you have a Biology Professor/s that you want to request to be your advisor, please list their name/s here:

Major Declaration Requirements (1 UVA BIOL course required before you declare)

Once you complete (with a grade) ONE of the following courses at UVA, you are eligible to declare the major. Incoming 3rd year transfer students may declare the B.A. degree during their first semester, provided they are enrolled in one 3000-level Biology course. Incoming 3rd year transfer students may initially only declare the B.A. degree in Biology.	Grade -or- Enrolled Term (for 3rd year transfers)
<input type="checkbox"/> BIOL 2100 Intro Bio w/Lab: Cell Biology & Genetics (fall) <input type="checkbox"/> BIOL 2200 Intro Bio w/Lab: Organismal & Evolutionary Biology (spring) <input type="checkbox"/> One 3000-level Biology Course	

Required Science Foundation Courses (8 courses + related labs, plan for Year 1 and 2)

It is recommended to complete foundational courses within your first two years. These requirements may be satisfied by equivalent transfer, AP, or dual enrollment credits. If you received equivalent test or transfer credit write "TR". Some courses may be offered in summer, check the Summer Session website <https://summer.virginia.edu>.

INTRODUCTORY BIOLOGY (2 courses)	Normally offered	Grade or Planned Term	Credits
<input type="checkbox"/> BIOL 2100 Intro Bio w/Lab: Cell Biology & Genetics	Fall		4
<input type="checkbox"/> BIOL 2200 Intro Bio w/Lab: Organismal & Evolution Biology	Spring		4

CHEMISTRY (2 courses + labs)	Normally offered	Grade or Planned Term	Credits
<input type="checkbox"/> CHEM 1410 Chemistry I (may use CHEM 1810)	Fall		3
<input type="checkbox"/> CHEM 1411 Lab (may use CHEM 1811 for both labs, less common)	Fall		1
<input type="checkbox"/> CHEM 1420 Chemistry II (may use CHEM 2820)	Spring		3
<input type="checkbox"/> CHEM 1421 Lab (may use CHEM 1811 for both labs, less common)	Spring		1

MATH AND STATISTICS (2 courses) Pick one from each section below	Normally Offered	Grade or Planned Term	Credits
Pick One <input type="checkbox"/> STAT 2020 Stats for Biologists -or- <input type="checkbox"/> STAT 2120 Intro to Stat Analysis	Fall, Spring		4
Pick One <input type="checkbox"/> MATH 1190 Survey Calculus I w/algebra or- <input type="checkbox"/> MATH 1210 Survey of Calculus I -or- <input type="checkbox"/> MATH 1310 Calculus I -or- <input type="checkbox"/> STAT 1601 Data Sci with R -or- <input type="checkbox"/> STAT 1602 Data Sci with Python -or- <input type="checkbox"/> STAT 3220 Regression Analysis	Offerings Vary Note: STAT 1601 & 1602 are not available to 4 th year students		3

PHYSICS (2 courses + labs)	Normally offered	Grade or Planned Term	Credits
<input type="checkbox"/> PHYS 2010 Physics 1 for Pre-Health Students (may also use PHYS 1420 or 1425)	Fall		3
<input type="checkbox"/> PHYS 2030 Physics 1 Workshop (may also use PHYS 1429)	Fall		1
<input type="checkbox"/> PHYS 2020 Physics 2 for Pre-Health Students (may also use PHYS 2410 or 2415)	Spring		3
<input type="checkbox"/> PHYS 2040 Physics 2 Workshop (may also use PHYS 2419)	Spring		1

Upper-Level Biology Major Courses and Major GPA (8 courses, 24 Credits total)

Students are required to complete a minimum of **24 credits** of upper-level coursework including the three core courses, BIOL 3000, 3010, 3020, 1 lab course and elective courses. The coursework presented for the BA degree must have an overall GPA of at least 2.000. No more than 6 credits from outside the Biology Department may contribute toward the Biology major. No more than 6 credit hours of independent study and research courses may be applied towards the B.A. in Biology, including BIOL 3900, BIOL 4910/4920, or BIOL 4900. BIOL 3420 Human Anatomy and Physiology II does NOT count toward the major. [Refer the undergraduate record](#) for additional requirements details.

BIOLOGY CORE COURSES (3 courses, 9 credits)	<i>Normally offered</i>	Grade or Planned Term	Credits
This requirement may not be satisfied by post-matriculation transfer credit.			
<input type="checkbox"/> BIOL 3000 Cell Biology	<i>Fall, Spring</i>		3
<input type="checkbox"/> BIOL 3010 Genetics and Molecular Biology	<i>Fall, Spring</i>		3
<input type="checkbox"/> BIOL 3020 Evolution and Ecology	<i>Fall</i>		3

BIOLOGY ELECTIVE COURSES (15 credits)

Students must complete 15 elective credits in biology at or above the 3000-level explained below. Each course you select may only count once for credit for the major. Do not list the same course more than once in your plan. Use the courses offered page to help you plan your courses:

One Biology Laboratory Course (1 Course, 3-4 Credits) -or- two semesters of Independent Biology Research	Grade or Planned Term	Credits
<p>Select at least <u>one</u> approved Lab course:</p> <ul style="list-style-type: none"> <input type="checkbox"/> BIOL 3270 (LAB) General Microbiology with Laboratory (4) (spring) <input type="checkbox"/> BIOL 3410 (LAB) Human Anatomy & Physiology I (4) (fall) <input type="checkbox"/> BIOL 4018 (LAB) NextGen Sequencing: Minions the Microbe Detective (3) (fall) <input type="checkbox"/> BIOL 4020 (LAB) Computational Evolutionary Biology (3) (fall) <input type="checkbox"/> BIOL 4040 (LAB) Laboratory in Cell Biology (3) (spring) <input type="checkbox"/> BIOL 4070 (LAB) Developmental Biology Laboratory (3) (fall or spring) <input type="checkbox"/> BIOL 4270 (LAB) Animal Behavior Laboratory (3) (fall) <p>Summer Field Labs at Mountain Lake Biological Station https://mlbs.virginia.edu</p> <ul style="list-style-type: none"> <input type="checkbox"/> BIOL 4752 (LAB) Stream Ecology (3) <input type="checkbox"/> BIOL 4754 (LAB) Field Herpetology (3) <input type="checkbox"/> BIOL 4755 (LAB) Field Biology of Fishes (3) <input type="checkbox"/> BIOL 4762 (LAB) Field Behavioral Ecology (3) <p>The lab requirement may be also satisfied by two semesters of undergraduate biology research conducted with the same faculty mentor. Visit the Undergraduate Research page to learn more about working in a research lab within the Biology Department (BIOL 4920) or outside of the Biology Department (BIOL 4910).</p> <ul style="list-style-type: none"> <input type="checkbox"/> BIOL 4910 (LAB) Life Sciences Research - 2 semesters (2+2, 4 credits total) <input type="checkbox"/> BIOL 4920 (LAB) Biology Research - 2 semesters (2+2, 4 credits total) 		3-4

Elective Biology Courses: <u>You must include at least one course from the specific list below;</u> your second and third elective courses are open to your choice, and may also be selected from the specific elective list below, or can be any other 3 credits (or higher) 3000-level or higher BIOL course or select EVSC or CHEM classes listed on the undergraduate record, except core courses (BIOL 3000, BIOL 3010, BIOL 3020), BIOL 3420 A&P II, or independent research or study courses. Find current BIOL course offerings by semester here: https://bio.as.virginia.edu/courses-offered	Grade or Planned Term	Credits
<ul style="list-style-type: none"> <input type="checkbox"/> Specific Elective 1 (3-4 credits) (choose at least one): <ul style="list-style-type: none"> <input type="checkbox"/> BIOL 3030 Biochemistry <input type="checkbox"/> BIOL 3040 Developmental and Regenerative Biology <input type="checkbox"/> BIOL 3050 Neurobiology <input type="checkbox"/> BIOL 3090 Infectious Disease Biology <input type="checkbox"/> BIOL 3180 Plant Biology <ul style="list-style-type: none"> <input type="checkbox"/> BIOL 3240 Immunology <input type="checkbox"/> BIOL 3250 Animal Behavior <input type="checkbox"/> BIOL 3270 General Microbiology <input type="checkbox"/> BIOL 3450 Biodiversity and Conservation Biology 		
<input type="checkbox"/> Open Elective 2 (3-4 credits):		
<input type="checkbox"/> Open Elective 3 (3-4 credits):		
<p>Add additional credit here to reach 15 credits of electives; can be less than 3 credits and may include BIOL independent research or study courses (limit of 6 credits overall for the major).</p> <input type="checkbox"/> Open Elective 4:		

Total Elective Credits (Lab + Elective credits must total 15 or more):

The courses listed on your plan are your best estimation for how you will fulfill your requirements and are subject to suitable changes based on course availability and preference. Once you declare the major, you are responsible for checking your Stellic Academic Requirements report to ensure you are fulfilling the courses required for your degree and your major. **Questions?** Contact the Undergraduate Coordinator, Petra Turner, BIOL-UG@virginia.edu, 434-982-5614