

BIOLOGY MAJOR CHECKLIST

Class of 2021 and earlier

NAME: _____
ADVISOR: _____

CLASS: _____

REQUIREMENTS:

To complete a major, students should take the following biology courses:

1. **Introductory courses:** BIOL-181 and BIOL-191. See below for Placing Out instructions.
2. Five additional advanced courses in Biology (not including Special Topics or courses numbered below BIOL 181) subject to four constraints: First, at least three must be laboratory courses (italicized below). Second, one course at the 400 level which includes Seminars or Honors, but not special topics. Third, the five courses must include at least one course in each of three areas (Bins I, II, III below). Lastly, two of these courses must be completed by the end of the junior year, preferably in different Bins.

Off Campus: to count toward the major, courses taken off campus must be approved by the Department

Fall 2020: update for Current Biology Majors to allow for Equity & Inclusion exploration:

For the 2020-2021 academic year, current biology majors can substitute a major course requirement (with the exception of BIOL-181, BIOL-191, and either the two advanced core or the three bin requirements based on class year) with *HSTEM* (BIOL-250) or another similar science-oriented course that's approved by the department and that focuses on issues of diversity, equity, and inclusion. Specifically, the course can count as either one of the four general science courses, or as one of the five advanced biology courses (BIOL-200 or above) including the three advanced laboratory courses (BIOL-200 or above), or the seminar course (BIOL 400 or above) requirement.

The following courses will count for the 2020-21 Academic Year:

Fall 2020

[ANTH-211: Feminist Science Studies](#)

[ENST-226: Social Drivers of Ecological Crises and Environmental Inequality](#)

[ANTH-245: Medical Anthropology](#)

January 2021

[BIOL-250: Being Human in STEM \(HSTEM\)](#)

Spring 2021

[SWAG-231: Race, Gender, and Embodiment in Biomedicine](#)

[ENST-328: The Pandemic](#)

[PHIL-212: Public Health Ethics during COVID-19](#)

INTRODUCTORY COURSES:

Can be taken in either order (BIOL-191 requires completion/co-registration in CHEM-161)

Placing Out: Students wishing to place out of either Biology 181 or Biology 191 must first seek Departmental approval. The Place Out form is available on the Biology web site. Students must provide written documents verifying an AP score of 5. Students placing out of BIOL-181 must substitute a course from Bin III (Evolutionary Explanations); students placing out of BIOL-191 must substitute a course from Bin I (Molecular and Cellular Mechanisms). Students who place out must take a minimum of four semesters of laboratory work (Placing out of 1: 1 Intro + 3 upper-level labs; Placing out of both: 4 upper-level labs).

BIOL-181 AC: _____ Placed out: _____ Off campus: _____
BIOL-191 AC: _____ Placed out: _____ Off campus: _____

If placing out of BIOL-181: Additional Course (Bin III) _____

If placing out of BIOL-191: Additional Course (Bin I) _____

BIOLOGY MAJOR CHECKLIST (continued)

UPPER-LEVEL COURSES:

All have pre-requisite of BIOL-181 or BIOL-191 (or both) circle/fill in below:

<u>Course Requirement:</u>	<u>AC Courses:</u>	<u>Off Campus Course:</u>
<i>I. Molecular & Cellular Mechanisms</i>	291 301 310 330 331 370 371 376 400	Off campus: _____
<i>II. Integrative Processes</i>	201 213 221 241 260 264 265 270 271 350 351 372 380 381	Off campus: _____
<i>III. Evolutionary Explanations.</i>	211 230 280 281 320 321	Off campus: _____
<i>IV. Fourth Upper-Level Course</i>	_____	Off campus: _____
<i>V. Seminar or Honors</i>	400 Level or Honors, but not Special Topics Honors _____	

Three Lab courses: _____

Comprehensive Exam: 1. Senior year attendance at Monday Biology Seminars is required.
2. All Biology Majors must successfully complete the Senior Comprehensive Examination administered by the department in the fall semester.

Passed: _____

Date: _____

General Sciences: Students are required to take two courses in chemistry—Chemistry 151/155 and Chemistry 161/165 or above—and two courses in mathematics, statistics, and/or physics at the level of Math 111, Stats 111, and Phys 116 or above. Students with Advanced Placement scores may satisfy the requirement by taking upper-level courses.

1. Chemistry 151/155 or equivalent: _____
2. Chemistry 161/165 or equivalent: _____
3. Mathematics 111, Statistics 111, or Physics 116/123 or equivalent: _____
4. Mathematics 111, Statistics 111, or Physics 116/123 or equivalent: _____

Please note:

- Seminar courses count as Biology major courses but not for any particular Bin area.
- Non-majors courses (BIOL-104, 106, 108, 110, 114 and 131) and *Special Topics* courses do not count toward the major.
- Honors students must still satisfy bin distribution and lab requirements.
- Majors are expected to take at least 3 of the 5 courses beyond BIOL-181/191 at Amherst College unless approved in advance by the Department.

BIOLOGY MAJOR CHECKLIST (continued)

- A Biology course cannot be counted towards the Biology major if it is also being used to meet the requirements of another major, unless the course in question is required by both majors.
- **In order to count toward the major, all courses taken off campus must be approved by petitioning the Department and cannot be approved by your Advisor alone.** It is better to do this in advance. For off-campus courses note the institution, number and course name and when approval was granted. In petitioning, indicate which AC course you want to substitute and your reasons. Include a copy of the catalog description of the course you are substituting and any additional pertinent information. If your Honors project is done off campus, you are expected to follow the same guidelines as students working on campus, and assignment of levels of Honors and grades will be made by the Department, taking into consideration recommendations by your Advisor.

The Biology Major, with place-out options:

	2 Semesters of Intro	1 Semester of Intro	0 Semesters of Intro
Distribution Requirement:	3 bin areas	3 bin areas	3 bin areas
Minimum Lab Requirement:	2 Intro + 3 Upper = 5 labs	1 Intro + 3 upper = 4 labs	0 Intro + 4 upper = 4 labs
Upper-Level Course Requirements:			
a) No Honors	5	6	7
b) With Honors	4 + 3 thesis	5 + 3 thesis	6 + 3 thesis