BIOLOGY MAJOR CHECKLIST

NAME: ___________________________________________ CLASS: _________
ADVISOR: _________________________________________

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, Biology majors who do not complete an Honors thesis must take an advanced seminar course (BIOL course numbers in the 400s). 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

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)_____________________

UPPER-LEVEL COURSES: All have pre-requisite of BIOL181 or BIOL191 (or both)
circle/fill in below:

<table>
<thead>
<tr>
<th>Course Requirement:</th>
<th>AC Courses:</th>
<th>Off Campus Course:</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Molecular &amp; Cellular Mechanisms</td>
<td>291 301 310 330 331 370 371 400</td>
<td>Off campus:_______</td>
</tr>
<tr>
<td>II. Integrative Processes</td>
<td>201 213 221 241 260 264 270 271 350 351 372 380 381</td>
<td>Off campus:_______</td>
</tr>
<tr>
<td>III. Evolutionary Explanations.</td>
<td>211 230 280 281 320 321</td>
<td>Off campus:_______</td>
</tr>
<tr>
<td>IV. Fourth Upper-Level Course</td>
<td>_________</td>
<td>Off campus:_______</td>
</tr>
<tr>
<td>V. Seminar or Honors</td>
<td>404 410 414 420 424 430 434 440 444 445 450 454 457 460 470</td>
<td>Honors_______</td>
</tr>
</tbody>
</table>

Which are your 3 lab courses?
__________________________________________________________

Comprehensive Exam:
Passed: ________________ Date: ________________
Physical Sciences: Students are required to take two courses in chemistry—Chemistry 151/155 and Chemistry 161 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 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—106, 108, 110, 114 and 131—and Special Topics courses do not count toward the major.
- Honors students must still satisfy 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.
- 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:

<table>
<thead>
<tr>
<th>Distribution Requirement:</th>
<th>2 Semesters of Intro</th>
<th>1 Semester of Intro</th>
<th>0 Semesters of Intro</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 areas</td>
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</tr>
<tr>
<td>Minimum Lab Requirement:</td>
<td>2 Intro + 3 Upper = 5 labs</td>
<td>1 Intro + 3 upper = 4 labs</td>
<td>0 Intro + 4 upper = 4 labs</td>
</tr>
<tr>
<td>Upper-Level Course Requirements:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) No Honors</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>b) With Honors</td>
<td>4 + 3 thesis</td>
<td>5 + 3 thesis</td>
<td>6 + 3 thesis</td>
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