

CHECKLIST to complete the **Organisms, Ecology, and Evolution** track of the Biology major.1. **Two** introductory units from: [] []

- BY 105 (Biology of Plants)
- BY 106 (Biology of Animals) (no credit if taken after BY108 or BY109)
- BY 107 (Biology of Microbes) (no credit if taken after BY101)
- BY 108
- BY 109 (Biology of Vertebrates)
- List courses taken to fulfill this requirement here:

Check with your advisor to find out if AP or IB credit can fulfill one of these requirements.

...2. BY 208 (Ecology) []

3. BY 131 (Introduction to Molecular and Cellular Biology) []

Check with your advisor to find out if AP or IB credit can fulfill this requirement.

4. BY 280 (Population Genetics) OR BY 231 (Genetics)

- List course taken to fulfill this requirement here:

5. **Five** approved Biology electives [] [] [] [] [] []

- Three must be Biology (BY) courses at the 300 level or higher [] [] []
- One unit of elective credit may be CH251, CH382, GY205, GY300, SC206, or SC301
- One unit must be an approved senior capstone course []
- Any BY course except BY100 and BY104 may count as an elective
- BY101 (FYE) counts as one unit of lower-level elective
- It is possible to petition the department to ask for other courses to count as electives.
- List courses taken to fulfill this requirement here:

6. **Three** units in **Chemistry**

- CH 107 (General Chemistry I) []
- CH 108 (General Chemistry II) []
- CH 250 (Structures of Organic Molecules) []

*Check with your advisor to find out if AP or IB credit can fulfill CH 107/108 requirement.**NOTE: Graduate schools often require BOTH CH 250 (Structure of Organic Molecules) AND CH 251 (Reactions of Organic Molecules).*7. **One** unit of calculus from: []

- MA 125-6 (Pre-Calculus and Calculus I)
- MA 126 (Calculus I)
- MA 127 (Calculus I and II Accelerated)
- MA 129 (Calculus II)
- List course taken to fulfill this requirement here

*Check with your advisor to find out if AP or IB credit can fulfill the calculus requirement.*8. **One** unit of statistics or mathematical modeling from: []

- BY 220 (Biostatistics and Experimental Design)
- MA 256/BY 256 (Mathematical modeling in Biology)
- List course taken to fulfill this requirement here:

Check with your advisor to find out if AP or IB credit can fulfill the statistics requirement. Check with your advisor to find out if MA117 or MA217 can be used to fulfill the statistics requirement.

9. Senior Capstone Experience...During your senior year, you must

- Attend five approved biology research seminars
- Write abstracts summarizing those seminars and submit them to your advisor on or before the Monday following Biology Day.
- Take the Biology ETS exam or the Biology GRE exam.
 - Register to take the ETS early in Block 3 or early in Block 6, the only two times Biology offers the exam
 - To take the Biology GRE in time to fulfill this requirement, you must take it in November or December and you must list Colorado College as a recipient of the GRE scores.
 - Check with your advisor to find out if the Molecular Biology and Biochemistry GRE exam can fulfill this requirement.
- Complete an approved Senior Capstone Course as one of your electives (requirement #5 above), in **one** of the following ways:

- BY 499 (Senior Thesis; required to graduate with distinction)
- BY 409 (Advanced Research in Biology)
- An approved Senior Capstone course. The current list is: BY308 Advanced Ecology, BY365 Plant Physiology, BY366 Comparative Animal Physiology, BY378 Laboratory Investigation in Molecular Microbiology, BY410 Ornithology, BY412 Entomology, BY415 Evolution, BY421 Conservation Biology, BY443 Techniques in Molecular Ecology, BY463 Senior Seminar in Bacterial Pathogenesis, BY466 Developmental Biology, BY450 Seminar in Molecular Biology.