

The Ohio State University
College of Arts and Sciences

Biology Minor (BIOLOGY-MN)

Center for Life Sciences Education, 260 Jennings Hall, 1735 Neil Ave., Columbus, OH 43210-1220; 614-292-1704; <http://clse.osu.edu>
biology@osu.edu

Recent years have seen dramatic changes in the methods and techniques used in biological research, resulting in dramatic changes in our understanding of biology at all levels, from molecular to global. Students who major in other areas, like engineering and education, who want a deeper understanding of the biological sciences than they would get in the coursework incorporated into their major, pre-professional students who wish to major in a non-science area, business students pursuing careers in biotechnology or pharmaceutical industries, students in journalism or strategic communications, and many more, will benefit from the breadth and depth of education that the biology minor provides.

Required prerequisites (5-7 courses, 23-27 CH)

1. Biology 1113.xx (4) and 1114.xx (4)

-AND-

2. Chemistry 1210 (5) and 1220 (5)

-OR- Chemistry 1206 (3), 1208 (4) and 1220 (5)

-OR- Chemistry 1610 (5) and 1620 (5)

-OR- Chemistry 1910H (5) and 1920H (5)

-AND-

3. Math 1148 (4) and Statistics 1450 (3)

-OR- Math 1148 (4) and 1149 (3)

-OR- Math 1150 (5) or higher

The Biology Minor consists of 15 credit hours beyond the prerequisites listed above. The minor includes Biology 3401 (Integrated Biology), and other courses that present fundamental topics in biology, including biochemistry, anatomy, physiology, genetics, microbiology, ecology, and evolution. Students must choose two courses from a list of seven of those fundamental courses, and they will be able to choose at least one additional elective for the minor. Honors versions of courses substitute freely.

Required core course (1 course, 4 CH)

Chose one of the following:

Biology 3401 (4) – *Integrated Biology*

Additional required courses (2 courses, 6-8 CH)

Choose at least 2 of the following:

Biochemistry 4511 (4) – *Introduction to Biological Chemistry*

EEOB 2510 (3) – *Human Anatomy*

EEOB 2511 (4) – *Human Anatomy*

EEOB 2520 (3) – *Human Physiology*

EEOB 3310.01 (4) - *Evolution*

-OR-

3310.02 (4) - *Evolution*

-OR-

3310.20 (3) **AND** 3310.22 (1) - *Evolution*

EEOB 3410 (4) - *Ecology*

Microbiology 4000.xx (4) – *Basic and Practical Microbiology*

Molecular Genetics 4500.xx (3) or 4500E (4) – *General Genetics*

Electives (1-2 courses, 3-5 CH)

Chose at least one course within the parameters below, *keeping in mind that all minor course work must TOTAL at least 15 credit hours:*

- Electives may be chosen from courses in Biochemistry, Biology, Evolution, Ecology and Organismal Biology (EEOB), Microbiology, and Molecular Genetics
- Electives must be at the 2000 level or higher (except for Biology 2100 & 2194, which do not count toward the minor)
- At least 6 of the 15 hours in the minor must be at the 3000 level or above
- Electives and any substitutions to the list of additional required courses above must be approved by a biology advisor before enrolling in those courses (and may require additional prerequisites)

Biology minor program guidelines

Credit hours required A minimum of 15 credit hrs. 1000 level courses shall not be counted in the minor. At least 6 credit hrs must be upper-division courses (3000 level and above) as defined by the College of Arts and Sciences.

Transfer and EM credit hours allowed

A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

Overlap with the GE A student is permitted to overlap up to 6 credit hours between the GE and the minor.

Overlap with the major and additional minor(s)

- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).

Grades required

- Minimum C- for a course to be counted on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 credit hours of course work graded Satisfactory/Unsatisfactory may count toward the minor.

X193 credits No more than 3 credit hours.

Minor approval The minor program must be approved by a biology advisor.

Filing the minor program form The minor program form must be filed at least by the time the graduation application is submitted to a college/school advisor.

Changing the minor Once the minor program is filed in the college office, any changes must be approved by a biology advisor

College of Arts and Sciences
Curriculum and Assessment Services
306 Dulles Hall, 230 Annie and John Glenn Ave
<http://artsandsciences.osu.edu>

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