

BA (Bachelor of Arts) in Ecology & Biodiversity

Coursework in Biological Sciences: (44 qtr hrs total that include General Requirements and Category Elective Requirements)

General Requirements: (24 hrs)

- BIOL 10xx Concepts series (with labs) (12 hrs)
or NATS series by permission
- BIOL 2010 General Ecology (4 hrs)
- BIOL 2050 Conservation Biology (4 hrs)
- FIELD COURSE REQUIREMENT:
BIOL 3070 Ecological Field Methods (4 hrs)
or BIOL 3030 Alpine Ecology (4 hrs)
or alternative field course experience by permission
(BIOL 3030 Alpine Ecology and BIOL 3070 Ecological
Methods can count for **EITHER** the field course
requirement **OR** upper division elective credit ... not
both.)

Category Elective Requirements: (at least 20 hrs)

- (No more than 5 hrs of BIOL 3991 Independent Study
and/or BIOL 3950 Undergraduate Research may count
toward the minimum requirements.)
- **ECOLOGY**: (minimum of 4 hrs) selected from
BIOL 3020 Aquatic Ecology (4 hrs)
BIOL 3030 Alpine Ecology (4 hrs)
BIOL 3060 Tropical Ecology (3 hrs)
BIOL 3070 Ecological Field Methods (4 hrs)
BIOL 3090 Microbial Ecology (4 hrs)
BIOL 3700 Adv Top Ecology (1-4 hrs)
- **BIODIVERSITY**: (minimum of 4 qtr hrs) selected from
BIOL 2310 Biodiversity of Flowering Plants (4 hrs)
BIOL 3120 General Microbiology (4 hrs)
BIOL 3130 Molecular Evolution (4 hrs)
BIOL 3200 Invertebrate Evolution (4 hrs)
BIOL 3370 Ornithology (4 hrs)
BIOL 3370 Paleobiology (3 hrs)
- **OTHER**: selected from
BIOL 2510 General Genetics (5 hrs)
BIOL 3010 Evolution & Speciation (4 hrs)
BIOL 3110 Special Topics (1-5 hrs as approved)
BIOL 3410 Animal Behavior (4 hrs)
BIOL 3550 Population Genetics (1-4 hrs)
Other BIOL courses that receive departmental approval

Math: (8 qtr hrs of mathematics/statistics)

- **Either** MATC 1101 Analytical Inquiry I (4 hrs)
or MATC 1200 Calculus for Business and Social Science
(4 hrs)
or MATH 1951 Calculus I
AND
- **Either** PSYC 2300 Intro to Statistics (5 hrs)
or BIOL 2090 Biometry (4 hrs) or an approved business
stats course

Chemistry:

- CHEM 1010 — General Chemistry (with lab) (4 hrs)
or NATS course by permission

BS (Bachelor of Science) in Ecology & Biodiversity

Coursework in Biological Sciences: (49 qtr hrs total that include General Requirements and Category Elective Requirements)

General Requirements: (33 hrs)

- BIOL 101x Concepts series (with labs) (12 hrs)
or NATS series by permission
- BIOL 2010 General Ecology (4 hrs)
- BIOL 2050 Conservation Biology (4 hrs)
- BIOL 2510 General Genetics (5 hrs)
- BIOL 2090 Biometry (4 hrs - satisfies half of math
requirement)
- FIELD COURSE REQUIREMENT:
BIOL 3070 Ecological Field Methods (4 hrs)
or BIOL 3030 Alpine Ecology (4 hrs)
or alternative field course experience by permission
(BIOL 3030 Alpine Ecology and BIOL 3070 Ecological
Methods can count for **EITHER** the field course
requirement **OR** upper division elective credit ... not
both.)

Category Elective Requirements: (at least 16 hrs)

- (No more than 5 hrs of BIOL 3991 Independent Study
and/or BIOL 3950 Undergraduate Research may count
toward the minimum requirements.)
- **ECOLOGY**: (minimum of 4 hrs) selected from
BIOL 3020 Aquatic Ecology (4 hrs)
BIOL 3030 Alpine Ecology (4 hrs)
BIOL 3060 Tropical Ecology (3 hrs)
BIOL 3070 Ecological Field Methods (4 hrs)
BIOL 3090 Microbial Ecology (4 hrs)
BIOL 3700 Adv Top Ecology (1-4 hrs)
- **BIODIVERSITY**: (minimum of 4 qtr hrs) selected from
BIOL 2310 Biodiversity of Flowering Plants (4 hrs)
BIOL 3120 General Microbiology (4 hrs)
BIOL 3130 Molecular Evolution (4 hrs)
BIOL 3200 Invertebrate Evolution (4 hrs)
BIOL 3370 Ornithology (4 hrs)
BIOL 3370 Paleobiology (3 hrs)
- **OTHER**: selected from
BIOL 3010 Evolution & Speciation (4 hrs)
BIOL 3110 Special Topics (1-5 hrs as approved)
BIOL 3410 Animal Behavior (4 hrs)
BIOL 3550 Population Genetics (1-4 hrs)
Other BIOL courses that receive departmental approval

Math: (12 qtr hrs of mathematics/statistics)

- **EITHER** PSYC 2300 Intro to Statistics (5 hrs)
or BIOL 2090 Biometry (4 hrs) or an approved business
stats course
AND
- Minimum of two quarters (8 hrs) of calculus.

Chemistry:

- CHEM 1010 General Chemistry (with lab) (4 hrs)
- CHEM 2451 Organic Chemistry I (with lab) (4 hrs)
- CHEM 2240 Intro to Environmental Chemistry (4 hrs)

(BS requirements continued on pg. 2)

(BS requirements continued from pg. 1)

Physics:

- PHYS 101x series General Physics (with labs) (15 hrs)

Minor Requirement for BS:

- One minor from any other department in the Division of Natural Sciences and Mathematics (Chem/Biochem, Geography, Physics, or Mathematics)
- A second minor from any department in the University.

Additional notes for BA/BS in Ecology & Biodiversity:

All Biology majors must satisfy [University Undergraduate Requirements](#)

Advanced Placement (AP) credit for Calculus AB or Calculus BC may count toward the MATH 195x series for either the BA or the BS according to the University approval policy (see the [University of Denver Undergraduate Bulletin](#) for details). Approval through the Department of Mathematics is required.

ONE YEAR OF CALCULUS is recommended by many graduate medical programs and is required for a few.

ONE YEAR OF CALCULUS is required for many graduate research programs in the basic sciences. Check the requirements for the school(s) to which you hope to make application before you decide about math options.

At least TWO YEARS OF CHEMISTRY, including one year of inorganic plus one year of organic, is required by most graduate medical programs and graduate research programs in the basic sciences. Some graduate programs require or recommend biochemistry.

- The **BA degree** requires the major plus ONE minor.
- The **BS degree** requires the major plus TWO minors (See requirements above).
- A **BA-BA double major** does not require a minor.
- A **BS-BS double major** requires ONE minor. (See requirements above).

To declare a major or minor fill out and submit a Declaration of Major/Minor form to the Registrar's Office. This form is available in the Registrar's office (University Hall) and online <http://www.du.edu/registrar/forms/index.html>