Beginning Fall 2012

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 1011 (Winter Qtr) Evolution, Heredity, Biodiversity (with lab) (5 hrs) AND BIOL 1010 (Spring Qtr) Physiological Systems (with lab) (5 hrs) (or 12-hr non-majors series with approval)
- BIOL 2010 General Ecology (Fall Qtr) (5 hrs)
- BIOL 2050 Conservation Biology (Spring Qtr) (5 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)
- [MATC 1200 or 1951] and [BIOL 2090 or PSYC 2300]

Chemistry:
- CHEM 1010 — General Chemistry (with lab) (4 hrs)

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 1011 (Winter Qtr) Evolution, Heredity, Biodiversity (with lab) (5 hrs) AND BIOL 1010 (Spring Qtr) Physiological Systems (with lab) (5 hrs) (or 12-hr non-majors series with approval)
- BIOL 2010 General Ecology (5 hrs)
- BIOL 2050 Conservation Biology (5 hrs)
- BIOL 2510 General Genetics (5 hrs)
- BIOL 2090 Biometry (4 hrs - satisfies part 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)
- MATH 1951, 1952 AND BIOL 2090

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)

(Additional materials and requirements continued on pg. 2)
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:

ASSESSMENT – All Biology majors will participate in program assessment activities in their first year (knowledge pre-test) and in their last quarter at DU (knowledge post-test, Senior survey, and digital submission of an example of their best work in Biology). During the BIOL experience at DU, plan to keep digital copies of your best works (could be advanced lab, research project, analysis paper, challenging exam, or other work) for self-evaluation and submission into the Assess-It system before graduation.

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 programs and is required for a few. 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