Through the study of biology, students are introduced to the cornerstones of the discipline within an evolutionary context, thereby leading to an appreciation for the diversity of life on earth and the processes supporting it. As such, graduates are well-prepared for diverse careers in biology, as well as the health sciences. Many students pursue professional degrees in dentistry, medicine, nursing, pharmacy, and physical therapy. Others seek advanced degrees in academic areas as diverse as environmental biology, genetic counseling and cell biology, which lead to jobs in academia, and the public or private sector. In conjunction with teacher certification, the major prepares students to teach at the secondary school level. Regardless, our majors are instilled with a respect, concern, and sense of responsibility for life and the environment, as well as the knowledge to understand and evaluate biological advances that are transforming society. Our curriculum is designed to offer, through core and ancillary courses, a firm foundation in those areas that provide an important background for understanding life processes. Choosing from among a variety of biology electives accommodates individual interests.

General Notes

- Students must complete a minimum of 36 semester hours of biology courses (specified below).
- All courses in the major must be taken for a letter grade; pass/fail grades will not apply.
- Students must earn a “C-” (1.7) or higher in all courses used to satisfy degree requirements, with an overall minimum CU-Denver Biology cumulative GPA of a 2.0.
- 18 upper division credit hours (3000-4000+) must be taken in residence from UCD Biology faculty.
- Courses must be taken within 10 years of graduation.
- Biology courses taken at other colleges and universities (including CU-Boulder and CU-Colorado Springs) must be approved by the UC Denver Biology BS Advisor before they can be applied toward the major requirements.
- Departmental honors will be awarded to students based on their grade point average in biology classes taken at UCD and their cumulative UCD GPA. Both GPA’s must meet the following: *cum laude* ≥3.5; *magna cum laude* ≥3.7; *summa cum laude* ≥3.9.
- All majors are encouraged to consult a Biology major advisor annually and must meet with an advisor within two semesters of graduation.
- Students with transfer credit, Advanced Placement (AP), International Baccalaureate (IB), or CLEP credits, please see our website (http://clas.ucdenver.edu/biology/) and the Biology major advisor for placement.
- Students declared pre-health should also consult a Health Careers advisor.
- Students pursuing a double major should consult advisors in both departments; Biology courses may not apply to satisfy major requirements for both majors.
- In addition to the biology major requirements listed, students must meet all graduation requirements set by the College of Liberal Arts and Sciences. Students should consult the University Catalog and CLAS Advising Office (NC 4002) for specific requirements.

For more information about the department, please visit our website at: http://www.ucdenver.edu/academics/colleges/CLAS/Departments/biology
I. Biology total (required courses plus electives) 36 credits — each class must be completed with a “C-” (1.7) or higher and an overall CU Denver Biology cumulative GPA of a 2.0.

A. REQUIRED BIOLOGY COURSES 18 CREDITS
These courses should be completed prior to the Biology electives (#B below). These courses cannot be applied to the upper division Biology electives.
1. General Biology I with Lab (BIOL 2051-3 and BIOL 2071-1)
2. General Biology II with Lab (BIOL 2061-3 and BIOL 2081-1)
   – credit cannot be received for both
4. General Cell Biology (BIOL 3611-3)
5. General Genetics (BIOL 3832-4)

B. UPPER DIVISION BIOLOGY ELECTIVE COURSES 18 CREDITS (selected to accommodate individual interests and professional goals)
1. Select one upper division biology lab course from the following list:
   Human Physiology (BIOL 3225-4)
   Human Anatomy (BIOL 3244-5)
   Ecology Laboratory (BIOL 3413-2)
   Cell Biology Lab (BIOL 3612-2)
   General Microbiology (BIOL 3654-5)
   Molecular Biology Lab (BIOL 4125-3)
   Plant Science (BIOL 4335-4)
   Flora of Colorado (BIOL 4345-4)
   Mammalogy (BIOL 4640-4)
   Advanced Human Anatomy (BIOL 4644-2)
   Field Studies (BIOL 4910-3)

2. 11-13 credits of 3000-4000 courses to create a total of 36 BIOL credit hours for the major.

3. 3 credits of a 4000 level BIOL course -- taken in residence from UCD Biology faculty (NOTE: BIOL 4840 and 4990 do not satisfy this requirement).

Elective Notes:
 o Majors are encouraged to include in their program of study: Evolution (BIOL 4974) or Population and Evolutionary Genetics (BIOL 4494); Biochemistry (CHEM 3810); Internship or Independent Study; and Introductory Biostatistics (BIOL 3763).
 o Biochemistry (CHEM 3810-4 or 4820-3) may be counted as biology elective hours, if taken in addition to a second semester Organic chemistry.
 o Four hours in biochemistry (CHEM 3810-4 or both CHEM 4810-3 and 4820-3) may be counted as biology elective hours, if not taken in place of second semester organic chemistry.
 o A maximum of six hours of Independent Study (BIOL 3840/4840) or a combined total of six hours of Independent Study and Internship/Cooperative Education (BIOL 3939), including a maximum of three credits of BIOL 3939, may be counted toward the upper-division electives in biology.

II. Required Ancillary Courses 31-33 credits — each class must be completed with a “C-” (1.7) or higher
A. Math requirement, choose one of the following three options:
   1. Calculus I (MATH 1401-4)
   2. College Algebra (MATH 1110-3) and Applied Statistics (MATH 4830-3)
   3. College Algebra (MATH 1110-3) and Introductory Biostatistics (BIOL 3763-3)
B. College Physics I and II with labs (PHYS 2010-3 and 2030-2; PHYS 2020-3 and 2040-2) or General Physics I and II with labs (PHYS 2311-4, 2321-1, 2331-4, and 2341-1)
C. General Chemistry I and II with labs (CHEM 2031-3 and 2038-1; CHEM 2061-3 and 2068-2)
D. Organic Chemistry I (CHEM 3411-4)
E. Organic Chemistry II (3421-4) or Biochemistry (CHEM 3810-4)

For more information about the department, please visit our website at: http://www.ucdenver.edu/academics/colleges/CLAS/Departments/biology

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