BIOLOGY

FOR TRANSFER STUDENTS

PROGRAM OVERVIEW

Biology is the study of life, and integrative biology emphasizes the study and understanding of living organisms at different levels of organization-from cell and molecular to the biosphere. We teach biology students core information that serves as a foundation for advanced study and professional training. This basic knowledge includes concepts central to our understanding of molecular biology, as well as the relationship between structure and function, and the genetic mechanisms of inheritance. In addition, biology students are educated in cell biology and genetics, as well as the technological breakthroughs that have led to discoveries in these fields. They learn how organisms adapt to diverse environments and about energy flow and nutrient cycles through ecosystems, worldwide biodiversity and how ecological function can be altered by human impacts.

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. 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.

ACADEMIC ADVISING

The College of Liberal Arts and Sciences (CLAS) supports students to graduation using a shared advising system. CLAS students have two academic advisors with whom they should meet regularly to discuss academic and degree progress: a CLAS Academic Advisor and a major/faculty advisor.

For questions related to CU Denver Core Curriculum, CLAS, general graduation requirements, university/college academic policies, or campus resources contact:

CLAS Academic Advising

clas advising@ucdenver.edu
Visit the CLAS Advising website here
North Classroom (NC) Building 1030
303-315-7100

For questions related to major requirements, major course prerequisites, or evaluation of transfer coursework in your major contact:

Kim Regier

kimberly.regier@ucdenver.edu or Visit the department website here Science Building Room 2071 303-315-7600 For questions about admission requirements, transfer policies, applying, and the transfer process contact:

Office of Admissions

admissions@ucdenver.edu
Visit the Admissions website here
Student Commons 1007
303-315-2601

GENERAL GRADUATION REQUIREMENTS & POLICIES

All CU Denver CLAS students are required to complete the following minimum general graduation requirements to be eligible to apply for graduation:

- 1. Complete a minimum of 120 semester hours
- 2. Achieve a minimum 2.0 CU cumulative grade point average (GPA)
- Complete a minimum of 45 upper-division (3000- to 4000-level) semester hours
- 4. Complete all CU Denver Core, CLAS, and major requirements
- Complete a minimum of 30 CLAS hours at CU Denver

The following are **maximum** semester hours that can apply toward the minimum 120 hours required for graduation:

- 56 semester hours in major department/prefix courses
- 16 semester hours Pass/Fail
- 12 semester hours of Independent Study/Directed Research
- 12 semester hours of internship credit
- 8 semester hours of physical education credit

PROGRAM REQUIREMENTS & POLICIES

The following program requirements are based on degree requirements for the current Catalog year at CU Denver and are subject to change. Students are responsible for completing degree requirements based on the Catalog year for which they are admitted.

Students are responsible for meeting with the major/faculty advisor in the department to confirm major requirements. In addition to completing all CU Denver Core and CLAS requirements, students completing the Biology B.S. Degree are required to complete the following minimum program requirements:

- 1. Students must complete a total of 67-69 credit hours, including a minimum of 36 BIOL credit hours and 31-33 credit hours in ancillary (supporting math and sciences) coursework.
- 2. Students must complete a minimum of 18 upper division (3000- level and above) BIOL credit hours.
- 3. Students must earn a minimum grade of C- (1.7) in all major courses taken at CU Denver and must achieve a minimum cumulative major GPA of 2.0. All graded attempts in required and elective courses are calculated in the major GPA. Students cannot complete major or ancillary course requirements as pass/fail.
- 4. Students must complete a minimum of 18 upper division (3000-level and above) BIOL credit hours with CU Denver faculty and at least 3 credits must be at 4000-level.
- 5. All upper division biology courses applied to the undergraduate biology major must be completed within 10 years of graduation.
- 6. Biology majors are advised to complete either ENGL 3154 Technical Writing or ENGL 4175 Writing in the Sciences to fulfill the CLAS Communicative Skills requirement.
- 7. Intro Experimental Physics labs I and II (PHYS 2321 and PHYS 2341) are specifically designed for students in non-Physics majors and can be paired with either College Physics (PHYS 2010 and PHYS 2020) or General Physics (PHYS 2311 and PHYS 2331) lectures. Students pursuing a second major in Physics should complete General Physics lectures (PHYS 2311 and PHYS 2331) and Applied Physics Labs (PHYS 2351 and PHYS 2361).

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COURESWORK THAT CAN BE COMPLETED AT PREVIOUS INSTITUTION

The following is a "bucket" of requirements students can complete prior to transferring to CU Denver, including equivalent Colorado Community College System (CCCS) courses. To determine the equivalencies of courses to be completed at non-CU Denver institutions, students can visit www.transferology.com. It is critical students connect with a CU Denver academic advisor to ensure planned courses will transfer and apply to CU Denver degree requirements. All non-CU Denver coursework must be completed with a C- or better to be eligible for transfer.

Students interested in completing an Associate (A.A. or A.S.) Degree or a <u>Colorado Statewide Transfer Articulation Agreement or Degree with Designation (DWD)</u> must work with their community/junior college academic advisor to create an academic plan that accounts for all degree or transfer articulation agreement requirements. Colorado Community College Students may also explore the option to complete <u>Reverse Transfer</u> at CU Denver.

CU Denver Requirements	CU Denver Credits	CCCS Equivalent Courses & Notes	CCCS Credits
CU Denver Core Curriculum Requirements	34 - 40		
ENGL 1020 – Core Composition I	3	ENG 121	
ENGL 2030 – Core Composition II	3	ENG 122	
Mathematics	3 - 4	MAT 121 or 122 or 166 recommended or GT-MA1	
Arts	3	GT-AH	
Humanities	3	GT-AH or GT-HI	
Behavioral Sciences	3 - 4	GT-SS	
Social Sciences	3 - 4	GT-SS or GT-HI*	
Natural/Physical Science with lab	4 - 5	BIO 111 or GT-SC1	
Natural/Physical Science without lab or Math	3 - 5	BIO 112 or GT-SC2 or GT-MA1 (except the course used for Core Math) or GT-SC1	
International Perspectives	3	Additional GT-AH, HI, SS* (see note below)	
Cultural Diversity	3	To be completed at CU Denver. This requirement must be completed with an upper-division course and CCCS courses will not apply.	
CLAS Graduation Requirements	15 - 29		
CLAS Communicative Skills	3	COM 115 or PHI 113	
CLAS Foreign Language	0 - 10	e.g., SPA 112 or ASL 122 Students have several options to fulfill this requirement. Please consult a CU Denver CLAS Academic Advisor.	
CLAS Humanities	3	Any transferrable LIT, HIS, HUM, or PHI course (PHI 113 recommended)	
CLAS Behavioral Sciences	3 - 4	Any transferrable ANT, COM, or PSY course (except GT-SC courses)	
CLAS Social Sciences	3 - 4	Any transferrable ECO, ETH, GEO, POS, or SOC course (except GT-SC courses)	
CLAS Biological/Physical Science with lab	3 - 5	CHE 111 or GT-SC1 If students complete only one science course with a lab for the CU Denver Core Curriculum, this course must have an associated lab.	
BIOL Major Courses	27		
BIOL 2051 & 2071 General Biology I with lab	4	BIO 111 Course can fulfill CU Denver Core Natural/Physical Science with lab	
BIOL 2061 & 2081 General Biology II with lab	4	BIO 112 Course can fulfill CU Denver Core Natural/Physical Science with lab	
CHEM 2031 & 2038 General Chemistry I with lab	4	CHE 111 Course can fulfill CU Denver CLAS Biological/Physical Science with lab	
CHEM 2061 & 2068 General Chemistry II with lab	5	CHE 112	
PHYS 2010 & 2321 College Physics I with lab or PHYS 2311 & 2321 General Physics I with lab	5	PHY 111 or PHY 211	
PHYS 2020 & 2341 College Physics II with lab or PHYS 2331 & 2341 General Physics II with lab	5	PHY 112 or PHY 212	
Minimum Applicable Transfer Credits Recommended:	60	Students completing less than 60 applicable transfer credits will have additional credits to complete at CU Denver. Students needing general elective credits should consult a CU Denver CLAS Academic Advisor.	

*The applicability of Guaranteed Transfer (GT Pathways) courses to specific CU Denver Core Curriculum requirements requires completion of a block of five courses: two GT-AH courses; one GT-HI course; one GT-SS course; and one additional GT-AH, GT-HI, or GT-SS course.

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SAMPLE PLAN – COURESWORK TO BE COMPLETED AT CU DENVER

Based on successful completion of 60 applicable transfer credits and the complete "bucket" of requirements outlined above, students would have the following remaining to complete at CU Denver. At CU Denver, students must tailor this plan based on the evaluation of previously completed college coursework (e.g., AP, IB, CLEP, dual/concurrent enrollment, and transfer credit), course availability, individual preferences related to course load, summer term courses, part-time or full-time student status, or add-on programs such as minors or double-majors.

Note: this plan assumes students have completed the CLAS Foreign Language proficiency requirement. Students must demonstrate foreign language proficiency through a 2nd semester college-level course equivalent (e.g., SPA 112 or ASL 122), proficiency testing through CU Denver's Department of Modern Languages, or submitting their high school transcript demonstrating completion of a 2nd year (Level II) high school course with a minimum grade of "C-" (1.7) in the 2nd semester of the 2nd year. Students who have not fulfilled this requirement must work with a CU Denver CLAS Academic Advisor to modify this plan.

Students must not exceed 56 hours in their major prefix.

ee	Fall	CRS
	MATH 1401 PE, 4830 PE or BIOL 3763 PE	3-4
hr	BIOL 3611 PE	3
Year T	CHEM 3411 PE or 3481 PE	4
	General Elective	3
	Total Credit Hours	13-14

Spring	
BIOL 3411 PE	3
BIOL 3445 PE	3
BIOL 3832 PE	3
CU Denver Core Cultural Diversity	
Upper-Division General Elective	
Total Credit Hours	

Year Four	Fall	CRS
	BIOL Upper-Division Course with lab PE PR	4
	BIOL Upper-Division Course PE (Consider Internship/Directed Research)	3
	BIOL Upper-Division Course PE	3
	Upper-Division General Elective	3
	General Elective	4
	Total Credit Hours	16

Spring	
BIOL 4000-Level Course PE	
BIOL Upper-Division Course PE	
Upper-Division General Elective	
Upper-Division General Elective	
General Elective	
Total Credit Hours	

Major Course Available C CU Denver Core Course PE Prerequisite Enforced PR Prerequisite Recommended