

MSU Denver
Department of Biology

REQUIREMENTS FOR B.S. IN BIOLOGY
(2020-2021 or future catalogs ONLY)

A grade of “C-” or better is required for each BIO prefix course to count towards the major

Required Biology Courses

- BIO 1080 (3 credits)** - General Biology I
- BIO 1090 (1 credit)** - General Biology Lab I
- BIO 1081 (3 credits)** - General Biology II
- BIO 1091 (1 credit)** - General Biology Lab II

- BIO 3520 (3 credits)** - General Ecology

Pick ONE Genetics option:

- BIO 3600 (4 credits)** - General Genetics (no lab)
- BIO 3610 (4 credits)** - Genetics: Principles & Analysis (has lab)

Pick ONE of the following options:

Option 1: BIO 2100 (5 credits) - General Botany

Option 2: BIO 2400 (5 credits) - General Microbiology

Option 3: BIO 2310 AND BIO 2320 (4 credits each) - Anatomy & Physiology I & II
(You must take both semesters to get credit for this option.)

Option 4: BIO 3200 - Invertebrate Zoology (4 credits) OR BIO 3260 - Vertebrate Zoology (4 credits)
(If you wish to take both courses, the other will count as an upper division elective.)

Pick a Senior Experience course (required):

Senior Experience Options:	
BIO 4050 (3 credits) - Advanced Cell & Molecular Biology	BIO 4850 (3 credits) - Evolution
BIO 4230 (3 credits) - Issues in Conservation Biology	BIO 4510 (4 credits) - Microbial Ecology
BIO 4300 (3 credits) - Neurobiology	BIO 4540 (4 credits) - Plant Ecology
BIO 4820 (4 credits) - Developmental Biology	BIO 4550 (4 credits) - Animal Ecology

Elective Biology Courses:

Biology courses from 2000, 3000, and 4000 must be completed to bring the total of biology courses approved for the major to 40 credits. ***At least 21 of these Biology credits must be 3000 or 4000 level courses taken in the Department of Biology.***

Total Credit Hours in Biology (minimum of 40) _____

Upper Division Biology Credit Hours (minimum of 21) _____

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Non-BIO Course Requirements:

- CHE 1800 (4 credits) – General Chemistry I
- CHE 1801 (1 credit) – General Chemistry I Lab
- CHE 1810 (4 credits) – General Chemistry II
- CHE 1811 (1 credit) – General Chemistry II Lab
- CHE 3100 (4 credits) – Organic Chemistry I
- CHE 3120 (1 credit) – Organic Chemistry I Lab
- CHE 3110 (3 credits) – Organic Chemistry II

Those interested in taking CHE 4310 – Biochemistry will be required to complete both Organic Chemistry I (CHE 3100) and Organic Chemistry II (CHE 3110)

Math Requirement:

- Two Semesters of Math _____

Choose from the following math courses:

MTH 1108-1109 (Stretch College Algebra)*, MTH 1111 and MTH 1101 (College Algebra with lab), MTH 1110 (College Algebra), MTH 1112 (College Algebra through Modeling), MTH 1120 (Trigonometry), MTH 1115 and MTH 1116 (College Algebra through Modeling with lab), MTH 1210 (Intro to Statistics), MTH 1410 (Calculus I)**

MTH 1108-1109 is a Stretch Course and only counts as ONE of the required math courses for the BIO BS.

Students planning to take Calculus must take MTH 1108-1109, MTH 1110, or MTH 1111

For **General Studies Requirements (33 credits total)**, please visit
<http://www.msudenver.edu/advising/facultystaff/generalstudiesrequirements/>

Total Credits (Minimum 120) _____

Total Upper Division Credits
(Minimum 40 TOTAL) _____

What is your Minor?
(required) _____