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| **Degree Requirements for a BS in Biological Sciences – Organismal Biology Option** | | | | | | |
| **2018 - 2019 Catalog** | | **Name:** | | | **Date:** | |
| **Subject/#** | **Course Title** | | **Credits** | **Semester** | | **Year** |
| **Freshman Year** | | |  |  | |  |
| BIOB 170IN | Principles of Biological Diversity | | 4 | F S (F) | |  |
| CHMY 141 | College Chemistry I *(M121 prereq or placement in Level 4 math\*)* | | 4 | F S Su (F) | |  |
| COMX 111US or | Public Speaking | | 3 | F S Su (F) | |  |
| CLS 101US | Knowledge & Community | | 3 | F S (F) | |  |
| University Core/Math Prereqs | Check with advisor | | 3-4 | F S Su (F) | |  |
| BIOB 160 | Principles of Living Systems *(CHMY 121IN prereq\*)* | | 4 | F S (S) | |  |
| CHMY 143 | College Chemistry II | | 4 | F S Su (S) | |  |
| WRIT 101W | College Writing I *(semester assigned by MSU)* | | 3 | F S Su | |  |
| University Core/Math Prereqs | Check with advisor | | 3-4 | F S Su (S) | |  |
| **\*\*Note:**  Students should maintain an average of 30 credits per academic year **TOTAL:** | | |  |  | |  |
| **Sophomore Year** | | | **Credits** | **Semester** | | **Year** |
| PHSX 205 | College Physics I | | 4 | F S Su (F) | |  |
| STAT 216Q | Introduction to Statistics | | 3 | F S Su (F) | |  |
| CHMY 211 | Elements of Organic Chemistry | | 5 | F S (F) | |  |
| University Core/Bio Electives | Check with advisor | | 3-9 | F S Su | |  |
| STAT 217Q | Intermediate Statistical Concepts | | 3 | F S Su (S) | |  |
| BCH 380 | Biochemistry | | 5 | F S Su (S) | |  |
| M 161Q | Survey of Calculus | | 4 | F S Su | |  |
| University Core/Bio Electives | Check with advisor | | 3-9 | F S Su | |  |
| **\*\*Note:**  Students should maintain an average of 30 credits per academic year **TOTAL:** | | |  |  | |  |
| **Junior Year** | | | **Credits** | **Semester** | | **Year** |
| BIOB 375 | General Genetics | | 3 | F S Su (F) | |  |
| University Core/Bio Electives | Check with advisor | | 9-12 | F | |  |
| BIOE 370 | General Ecology | | 3 | F S (S) | |  |
| BIOB 420 | Evolution | | 3 | S | |  |
| Take one of the following: |  | |  |  | |  |
| BIOO 412 | Animal Physiology | | 3 | F | |  |
| BIOO 433 | Plant Physiology | | 3 | S | |  |
| BIOB 425 | Advanced Cell and Molecular Biology | | 3 | F S | |  |
| University Core/Bio Electives | Check with advisor | | 6-9 | F S Su | |  |
| **\*\*Note:**  Students should maintain an average of 30 credits per academic year **TOTAL:** | | |  |  | |  |
| **Senior Year** | | | **Credits** | **Semester** | | **Year** |
| Biology Electives | Check with advisor | | 12-15 | F | |  |
| BIOE 499 | Senior Thesis/Capstone | | 4 | S | |  |
| Biology Electives | Check with advisor | | 12-15 | S | |  |
| **\*\*Note:**  Students should maintain an average of 30 credits per academic year **TOTAL:** | | |  |  | |  |

\* Most required courses have prerequisites; however, we have only listed those that are often overlooked. Please check the course catalog for current prerequisites or speak with your academic advisor. ( ) Indicates Semester Suggestion

PREREQUISITES

For admission to upper division (numbered 300 or higher) Biology (BIOB, BIOE, BIOO, BIOM) and Fish and Wildlife Management (WILD) courses, students must have completed at least 45 total university credits with a cumulative GPA of at least 2.5 for all courses and have also earned a "C-"or better for any prerequisite courses. Limited exceptions may be made by consent of instructor. Any student who obtains enrollment in an upper division biology course without satisfying these requirements will be required to withdraw from the course. Individual courses may have additional pre-requisites (such as math level) as listed in the catalog.

\*Pre Med students

• should take BIOB 260 to meet the prerequisites for BIOH electives

• should take CHMY 321 and 323 instead of CHMY 211

\*\* SEE MORE INFORMATION ON DEGREE REQUIREMENTS ON BACK PAGE

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| **Degree Requirements for a BS in Biological Sciences – Organismal Biology Option** | | | | |
| **2018 - 2019 Catalog Biology/Theme Electives** | | | | |
| **Subject/#** | **Course Title** | **Credits** | **Semester** | **Year** |
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| **Biology Elective Courses** require at least **20** credits total, of which   * **18** of the 20 come from **ANSC, NRSM, BIOB, BIOE, BIOO, WILD, BCH** (UD only), **BIOM** (EXCEPT 497); * **16** of the 20 are Upper Division (UD) credits; * Up to 4 total credits may be from **BIOE 490 or 492** (individualized) courses; * Up to 2 total credits may be from BIOB 497 - Educational Methods: Biology * Up to 6 credits of certain courses in basic biological sciences from departments other than these may be included, with the prior approval of the advisor and Organismal Biology Certifying Officer **before the course is taken**. | | | | |

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| **CORE 2.0 REQUIREMENTS - Must be a grade C- or better** | **Course** | **Semester** | **Year** |
| Seminar (US)\* | COMX 111US or CLS 101US or CLS 201US |  |  |
| College Writing (W)\* | WRIT 101W\*\* |  |  |
| Quantitative Reasoning (Q)\* | M 161Q or STAT 216Q |  |  |
| Diversity (D) |  |  |  |
| Contemporary Issues in Science (CS)\* | CHMY 121IN |  |  |
| Arts (IA or RA) |  |  |  |
| Humanities (IH or RH) |  |  |  |
| Social Sciences (IS or RS) |  |  |  |
| Natural Science (IN or RN)\* | BIOB 170IN |  |  |
| Research & Creative Experience (R, RA, RH, RN or RS) |  |  |  |

\*Satisfied by departmental requirements

Notes:

1. A grade of C- or better is required in all Core 2.0 courses.
2. Completion of at least two approved natural science courses with a grade of C- or better satisfies both the Contemporary Issues in Science and the Inquiry Natural Science requirements.
3. Courses designated RA RH, RN, or RS count as two Core 2.0 requirements.

\*\*Students with an ACT English score of 28 or higher or an SAT Critical Reading score of 650 or higher are exempt from the College Writing Core 2.0 requirement. Students are told at orientation in which semester they should take WRIT 101W. Please refer to your academic advisor to determine if you should take an additional writing course.

**Information on Core 2.0 can be found at** [**www.montana.edu/core2/students.html**](http://www.montana.edu/core2/students.html)

ELECTIVES & GRADUATION REQUIREMENTS

* A minimum of 120 credits is required for graduation; 42 of these credits must be in upper division courses (those numbered 300 and higher). The curriculum includes 35-40 upper division credits, so additional courses must be selected.
* Students are expected to be aware of all requirements for graduation, including **university CORE 2.0** requirements and to ensure that they meet these requirements (D, IA, IH, IS, and R are not included in the above program).
* MSU requires a cumulative GPA of at least **2.0** (C average) to graduate.

ELECTIVES LIMITATIONS

If you want a **second degree** from Cell Biology and Neurosciences, the 20 credits in Biology Electives must be in addition to courses required for either degree. Required courses for a **minor or second major** may count as electives for this option.