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| **Degree Requirements for a BS in Biological Sciences – Biology Teaching 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) | |  |
| WRIT 101W | College Writing I *(semester assigned by MSU)* | | 3 | F S Su | |  |
| M 161Q | Survey of Calculus | | 4 | F S Su (F) | |  |
| BIOB 160 | Principles of Living Systems *(CHMY 141 prereq\*)* | | 4 | F S (S) | |  |
| CHMY 143 | College Chemistry II | | 4 | F S Su (S) | |  |
| HDFS 101IS | Individual and Family Development: Lifespan | | 3 | F S Su (S) | |  |
| COMX 111US or | Public Speaking | | 3 | F S Su (S) | |  |
| CLS 101US | Knowledge & Community | | 3 | F S (S) | |  |
| University Core and Electives | Check with advisor | | 1-7 | F S Su | |  |
| **\*\*Note:**  Students should maintain an average of 30 credits per academic year **TOTAL:** | | |  |  | |  |
| **Sophomore Year** | | | **Credits** | **Semester** | | **Year** |
| CHMY 211 | Elements of Organic Chemistry | | 5 | F S (F) | |  |
| PHSX 205 | College Physics I | | 4 | F S Su (F) | |  |
| EDU 202 | Early Field Experience | | 1 | F S (F) | |  |
| EDU 223IS | Educ Psych and Adolescent Dev | | 3 | F S (F) | |  |
| BCH 380 | Biochemistry | | 5 | F S Su (S) | |  |
| BIOM 103IN or | Unseen Universe: Microbes | | 3 | F S (S) | |  |
| BIOM 360 | General Microbiology | | 5 | F S (S) | |  |
| PHSX 207 | College Physics II | | 4 | F S Su (S) | |  |
| EDU 211D | Multicultural Education *(EDU 223IS prereq)* | | 3 | F S (S) | |  |
| University Core and Electives | Check with advisor | | 2-8 | F S Su | |  |
| **\*\*Note:**  Students should maintain an average of 30 credits per academic year **TOTAL:** | | |  |  | |  |
| **Junior Year** | | | **Credits** | **Semester** | | **Year** |
| Take one of the following from each pair: | | |  |  | |  |
| BIOB 375 or | General Genetics | | 3 | F S Su (F) | |  |
| BIOB 377 | Practical Genetics | | 3 | S | |  |
| BIOO 412 or | Animal Physiology | | 3 | F | |  |
| BIOO 433 | Plant Physiology | | 3 | S | |  |
| BIOB 318 or | Biometry | | 3 | F | |  |
| STAT 216Q | Introduction to Statistics | | 3 | F S Su (F) | |  |
| EDU 382 | Assessment, Curriculum, Instruction | | 3 | F S (F) | |  |
| BIOE 370 | General Ecology | | 3 | F S (S) | |  |
| BIOB 420 | Evolution | | 3 | S | |  |
| BIOE 499 | Senior Thesis/Capstone | | 2 | F S (S) | |  |
| EDU 370 | Integrating Tech into Education | | 2 | F S Su (S) | |  |
| University Core and Electives | Check with advisor | | 8-14 | F S Su | |  |
| **\*\*Note:**  Students should maintain an average of 30 credits per academic year **TOTAL:** | | |  |  | |  |
| **Senior Year** | | | **Credits** | **Semester** | | **Year** |
| BIOE 408 or | Rocky Mountain Vegetation | | 3 | F | |  |
| BIOE 416 | Alpine Ecology | | 3 | Su | |  |
| EDU 497 | Methods: 5-12 Science | | 3 | F | |  |
| EDU 395 | Practicum: K-8 | | 3 | F S (F) | |  |
| EDSP 306 | Exceptional Learners | | 3 | F S Su (F) | |  |
| Upper Division Elective | Check with advisor | | 3-6 | F S Su | |  |
| EDU 495 | Student Teaching | | 12 | F S (S) | |  |
| EDU 408 | Professional Issues: K-12 | | 2 | F S (S) | |  |
| PRAXIS Exam |  | |  |  | |  |
| **\*\*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

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

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| **Degree Requirements for a BS in Biological Sciences – Biology Teaching Option** | | | |
| **2018 - 2019 Catalog** | | | |
| **CORE 2.0 REQUIREMENTS - Must be a grade C- or better** | **Course** | **Semester** | **Year** |
| Seminar (US)\* | COMX 111US or CLS 101US or EDU 101US |  |  |
| College Writing (W)\* | WRIT 101W\*\* |  |  |
| Quantitative Reasoning (Q)\* | M 161Q or STAT 216Q |  |  |
| Diversity (D)\* | EDU 211D |  |  |
| Contemporary Issues in Science (CS) | BIOM 103IN |  |  |
| Arts (IA or RA) |  |  |  |
| Humanities (IH or RH) |  |  |  |
| Social Sciences (IS or RS)\* | HDFS 101IS or EDU 223IS |  |  |
| 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)

The Biology Teaching Option includes 40 credits of Biology (28-30 credits of basic biology courses, plus 11-12 biology elective credits), supporting Chemistry, Physics, and Mathematics courses, 18 credits in the university Core 2.0, 24 credits of professional preparation, and Student Teaching. Biology electives must include 8 credits of advisor-approved upper division credits in biological sciences.

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 above). The curriculum includes at least 42 upper division credits.
* A grade of “C” or better is required in all professional education courses (a “C-“ is not acceptable).
* Additional upper division electives must be taken in biology or a related field. Consult with your advisor about the appropriateness of potential upper division electives taken outside the BIOE, BIOO or BIOB rubrics.
* Students are expected to be aware of all requirements for graduation, including university core requirements and to ensure that they meet these requirements (IA, IH, and R are not included in the above program).
* The University requires a cumulative GPA of at least 2.0 (C average) to graduate.

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.