# **BIOLOGY B.A. - NATURAL HISTORY**

# **Bachelor of Arts - Biology; Natural History Concentration**

#### **College of Humanities & Sciences**

**Degree Specific Credits:** 74

**Required Cumulative GPA: 2.0** 

### Catalog Year: 2018-2019

**Note:** The Natural History concentration is designed for students who seek an interdisciplinary science program. This concentration is not research-oriented and is not considered a preparatory program for traditional research-based graduate programs. It is, however, designed for students seeking careers in environmental education, science writing or illustration, natural history or wildlife film-making, or natural history centers or museums. There is enough latitude in the requirements to allow for a minor or even a double major in a related field of interest (e.g. journalism, art, media arts, etc.).

# **General Education Requirements**

Information regarding these requirements can be found in the General Education Section (http://catalog.umt.edu/academics/general-education-requirements) of the catalog.

## Summary

Code	Title	Hours
Biology/Mic	17	
Upper-Divisi Concentrati	24	
Required Co	33	
Chemistry and Geology		
Cognate	Electives	
Total Hours		74

### **Biology/Microbiology Lower-Division Core**

**Note**: The lower-division core should be completed before attempting most upper-division major courses. AP Biology credit with a score of 3 may be substituted for either BIOB 160N/BIOB 161N or BIOB 170N/BIOB 171N.

Code	Title	Hours		
Complete all of the following courses:				
BIOB 160N	Principles of Living Systems	3		
BIOB 161N	Prncpls of Living Systems Lab	1		
BIOB 170N	Princpls Biological Diversity	3		
BIOB 171N	Princpls Biological Dvrsty Lab	2		
BIOB 260	Cellular and Molecular Biology	4		
BIOB 272	Genetics and Evolution	4		
Total Hours		17		

Minimum Required Grade: C-

### Upper-Division Core Courses Required by Natural History Concentration

Code	Title	Hours
Complete one of	the following Ecology courses:	5
BIOE 342	Field Ecology	
BIOE 370 & BIOE 371	General Ecology and Gen Ecology Lab (equiv to 271)	
Complete all of the following courses:		
BIOE 406	Behavior & Evolution	3
BIOO 320	General Botany	5
BIOO 335	Rocky Mountain Flora	3
BIOO 462	Entomology	4
Complete one of	the following courses:	4
BIOO 470	Ornithology	
BIOO 475	Mammalogy	
Total Hours		24

Minimum Required Grade: C-

### Required Courses Outside of the Major Chemistry and Geology

Code	litle	Hours		
Complete all of the following courses:				
Chemistry:				
CHMY 121N	Introduction to General Chemistry	3		
CHMY 123	Introduction to Organic and Biochemistry	4		
CHMY 124	Introduction to Organic and Biochemistry Lab	2		
Geology:				
GEO 101N	Introduction to Physical Geology	3		
GEO 102N	Introduction to Physical Geology Lab	1		
Total Hours		13		

Minimum Required Grade: C-

#### **Cognate Electives**

#### Note:

- Students should plan on taking M 121 or higher level M course (prerequisite for BIOB 272 and GER math requirement) and STAT 216 (pre- or co-requisite for BIOE 371).
- Students interested in combining the Natural History concentration with another subject area may, with the advisor's permission, substitute 20 credits in English - writing, journalism, photography, art, modern & classical language, business management, or other appropriate field.

Code	Title	Hours
Complete 20 credits in the following disciplines, with a maximum of 10 credits in any one discipline:		20
Ant	hropology (ANTY)	
Ast	ronomy (ASTR)	
Che	mistry (CHMY) - excluding CHMY 121N, 123, and 12	24

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Geography (GPHY) Geology (GEO) - excluding GEO 101N and 102N Forestry/Natural Resource Management (FORS/NRSM) Mathematics/Statistics (M/STAT) Physics (PHSX) Wildlife Biology (WILD) Total Hours

20

Minimum Required Grade: C-