# BIOLOGY B.A. - NATURAL HISTORY

# Bachelor of Arts - Biology; Natural History Concentration

### **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	robiology Lower-Division Core	17
Upper-Divisi Concentrati	on Core Courses Required by Natural History on	24
Required Co	ourses Outside of the Major	34
Chemistr	y and Geology	
Cognate	Electives	
Total Hours		75

**Degree Specific Credits: 75** 

**Required Cumulative GPA: 2.0** 

Minimum Required Grade: C-

**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.).

#### **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	litle	Hours
Complete all of t	he following courses:	
BIOB 160N	Principles of Living Systems	3
BIOB 161N	Principles of Living Systems Lab	1
BIOB 170N	Principles of Biological Diversity	3
BIOB 171N	Principles of Biological Diversity Lab	2
BIOB 260	Cellular and Molecular Biology	4
BIOB 272	Genetics and Evolution	4
Total Hours		17

# 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 General Ecology Lab (equivalent to 271)	
Complete all of the	ne 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  Minimum Require	ed Grade: C-	24

## Required Courses Outside of the Major

Chemistry	, and	<b>Earth</b>	<b>Sciences</b>
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Code	Title	Hours
Complete a	all of the following courses:	

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Chemistry:		
CHMY 121N	Introduction to General Chemistry	4
CHMY 123	Introduction to Organic and Biochemistry	4
CHMY 124	Introduction to Organic and Biochemistry Lab	2
Geology:		
ERTH 101N	Earth Systems Science	3
ERTH 103N	Earth Systems Science Lab	1
Total Hours		14

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 10 credits in English - writing, journalism, photography, art, modern & classical language, business management, or other appropriate field.

Code	Title	Hours
•	O credits in the following disciplines, with a of 10 credits in any one discipline:	a 20
Anthrope	ology (ANTY)	
Astronor	my (ASTR)	

Chemistry (CHMY) - excluding CHMY 121N, 123, and 124 Geography (GPHY)

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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-