

GEOGRAPHY B.S. - PHYSICAL GEOGRAPHY

In addition to satisfying the general requirements for a B.S. in Geography, a student pursuing the concentration in Physical Geography must complete additional requirements, including EARTH 303N and GPHY 317, though substitutions that broaden the student's curriculum may be approved by their advisor. Also, students must complete an additional appropriate math course above the 150 level to complement the one used to fulfill their degree mathematics requirements (the second semester of Calculus is recommended).

Bachelor of Science - Geography; Physical Geography Concentration

College of Humanities & Sciences

Degree Specific Credits: 44-46

Required Cumulative GPA: 2.5

Catalog Year: 2018-2019

Note: Depending on the courses selected the degree requirements vary from 45 to 56 credits.

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
	Introduction to Geography	7
	Regional Geography Course	3
	Geographic Methods	6
	Upper-Division Systematic Geography	9
	Physical Geography	
	Geography and Society	
	Human Environment Interaction	
	Capstone	1
	Upper-Division Writing	3
	Science Electives	6-8
	Biology	
	Chemistry	
	College Chemistry	
	College Physics	
	Physics with Calculus	
	Physical Geography Concentration Core	9
	Math Requirement	
	Advanced Math Requirement	
	Total Hours	44-46

Introduction to Geography

Code	Title	Hours
Complete all of the following courses:		
GPHY 111N	Intro to Physical Geography	3
GPHY 112N	Intro to Phys Geography Lab	1
GPHY 121S	Human Geography	3
Total Hours		7

Minimum Required Grade: C-

Regional Geography Course

Code	Title	Hours
Complete one of the following courses:		
GPHY 141S	Geography of World Regions	3
GPHY 144	Glacier National Park in Winter	
GPHY 241	Montana	
GPHY 245X	The Middle East	
GPHY 342	North America	
GPHY 344	Crown of the Continent	
GPHY 347	Regional Geography (Multiple Regions)	
GPHY 348	Field Studies in Geography	
GPHY 444	High Asia	
Total Hours		3

Minimum Required Grade: C-

Geographic Methods

Code	Title	Hours
Complete all of the following courses:		
GPHY 284	Intro to GIS and Cartography	3
GPHY 385	Field Techniques	3
Total Hours		6

Minimum Required Grade: C-

Upper-Division Systematic Geography

Rule: Complete the following subcategories of courses. 9 total credits required.

Physical Geography

Note: These courses simultaneously count towards the Upper Division Systematic Geography-Physical Geography and the Physical Geography Concentration core (see below).

Code	Title	Hours
Complete one of the following courses:		
ERTH 303N	Weather and Climate	
GPHY 311N	Biogeography	
GPHY 314	Global Mountain Environments	
GPHY 317	Geomorphology	
GPHY 438	Mountain Field Study	

GPHY 525	Advanced Physical Geography	
Total Hours		3

Minimum Required Grade: C-

Geography and Society

Code	Title	Hours
Complete one of the following courses:		
GPHY 323S	Economic Geography of Rural Areas	3
GPHY 421	Sustainable Cities	
GPHY 434	Food and Famine	
Total Hours		3

Minimum Required Grade: C-

Human Environment Interaction

Code	Title	Hours
Complete one of the following courses:		
GPHY 335	Water Policy	3
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Community Resilience	
Total Hours		3

Minimum Required Grade: C-

Capstone

Note: Seniors must enroll in GPHY 400 in fall, attend GPHY 500 in fall, and complete course requirements in spring.

Code	Title	Hours
Complete the following course:		
GPHY 400	Geography Capstone	1
Total Hours		1

Minimum Required Grade: C-

Upper-Division Writing

Note: GPHY 335 will also count toward the upper division core requirements. GPHY 499 will also count toward upper division elective credits. Other science-based writing courses (e.g. GEO 320, GEO 499, BIOO 470, BIOO 475) may be approved by the advisor.

Code	Title	Hours
Complete one of the following courses:		
GPHY 335	Water Policy	3
GPHY 433	Community Resilience	
GPHY 499	Senior Thesis	
Total Hours		3

Minimum Required Grade: C-

Science Electives

Rule: Must complete 1 of the following science categories. 6-8 total credits required.

Biology

Code	Title	Hours
BIOE 172N	Introductory Ecology	3
BIOO 105N	Introduction to Botany	3
Total Hours		6

Minimum Required Grade: C-

Chemistry

Code	Title	Hours
CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	4
Total Hours		7

Minimum Required Grade: C-

College Chemistry

Code	Title	Hours
CHMY 141N	College Chemistry I	4
CHMY 143N	College Chemistry II	4
Total Hours		8

Minimum Required Grade: C-

College Physics

Code	Title	Hours
PHSX 205N	College Physics I	4
PHSX 207N	College Physics II	4
Total Hours		8

Minimum Required Grade: C-

Physics with Calculus

Code	Title	Hours
PHSX 215N	Fund of Physics w/Calc I	4
PHSX 217N	Fund of Physics w/Calc II	4
Total Hours		8

Minimum Required Grade: C-

Physical Geography Concentration Core

Note: One course can be used to satisfy the Upper Division Systematic Geography – Physical Geography. Substitutions which broaden the student's curriculum may be approved by their advisor.

Code	Title	Hours
Complete all of the following courses:		
ERTH 303N	Weather and Climate	9
GPHY 311N	Biogeography	
GPHY 317	Geomorphology	
Total Hours		9

Minimum Required Grade: C-

Math Requirement

Code	Title	Hours
Complete one of the following courses:		3-4
M 162	Applied Calculus	
M 171	Calculus I	
M 172	Calculus II	
STAT 451	Statistical Methods I	
Total Hours		3-4

Minimum Required Grade: C-

Advanced Math Requirement

Note: Example - if M 171 has been taken, M 172 is recommended.

Code	Title	Hours
Complete 1 additional Math or Statistics course in addition to the one chosen for the Math Requirement.		3-4
Total Hours		3-4

Minimum Required Grade: C-