

PHYSICAL GEOGRAPHY

In addition to satisfying the general requirements for a B.S. degree in geography, a student pursuing the option in physical geography must complete additional requirements, including EARTH 303N and GPHY 317 though substitutions which 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 symbolic systems requirements (the second semester of Calculus is recommended), and the two-course sequence in science used to fulfill the B.S. requirement MUST be one of the following:

CHMY 121N & CHMY 123	Introduction to General Chemistry and Introduction to Organic and Biochemistry	6
CHMY 141N & CHMY 143N	College Chemistry I and College Chemistry II	8
PHSX 205N & PHSX 207N	College Physics I and College Physics II	8
PHSX 215N & PHSX 217N	Fund of Physics w/Calc I and Fund of Physics w/Calc II	8
BIOO 105N	Introduction to Botany	3
BIOE 172N	Introductory Ecology	3

Bachelor of Science - Geography; Physical Geography Concentration

College Humanities & Sciences

Degree Specific Credits: 47

Required Cumulative GPA: 2.5

Catalog Year: 2017-2018

Note: Depending on the courses selected the degree requirements vary from 47 to 56 credits.

General Education Requirements

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

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Total Hours	47-56

Introduction to Geography

Rule: Must 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

Select at least one of the following:		3
GPHY 141S	Geography of World Regions	
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

Rule: Must 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: Must complete the following subcategories of courses

Minimum Required Grade: C-

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).

Select at least one of the following:		3
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

Select at least one of the following: 3

GPHY 323S	Economic Geography of Rural Areas	
GPHY 421	Sustainable Cities	
GPHY 434	Food and Famine	

Total Hours 3

Minimum Required Grade: C-

Human Environment Interaction

Select at least one of the following: 3

GPHY 335	Water Policy	
GPHY 338	Mountains and Society	
GPHY 432	Human Role Environmental Change	
GPHY 433	Cultural Ecology	

Total Hours 3

Minimum Required Grade: C-

Capstone

Rule: Seniors must complete the following course

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

GPHY 400	Geography Capstone	1
Total Hours		1

Minimum Required Grade: C-

Upper Division Writing

Rule: Must complete 1 of the following courses

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.

GPHY 335	Water Policy	3
or GPHY 499	senior thesis / capstone	
Total Hours		3

Minimum Required Grade: C-

Physical Geography Option Science Electives

Rule: Must complete 1 of the following science categories

6-10 Total Credits Required

Biology

Rule: May complete the following courses

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

Minimum Required Grade: C-

Chemistry

Rule: May complete the following courses

CHMY 121N	Introduction to General Chemistry	3
CHMY 123	Introduction to Organic and Biochemistry	3
Total Hours		6

Minimum Required Grade: C-

College Chemistry

Rule: May complete the following courses

CHMY 141N	College Chemistry I	5
& CHMY 142N	and College Chemistry I Lab	
CHMY 143N	College Chemistry II	5
& CHMY 144N	and College Chemistry II Lab	
Total Hours		10

Minimum Required Grade: C-

College Physics

Rule: May complete the following courses

PHSX 205N	College Physics I	4
PHSX 206N	College Physics I Laboratory	1
PHSX 207N	College Physics II	4
PHSX 208N	College Physics II Laboratory	1
Total Hours		10

Minimum Required Grade: C-

Physics with Calculus

Rule: May complete the following courses

PHSX 215N	Fund of Physics w/Calc I	4
PHSX 216N	Physics Laboratory I w/Calc	1
PHSX 217N	Fund of Physics w/Calc II	4
PHSX 218N	Physics Laboratory II w/Calc	1
Total Hours		10

Minimum Required Grade: C-

Physical Geography Concentration Core

Rule: Must complete all of the following courses

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.

ERTH 303N	Weather and Climate	3
GPHY 311N	Biogeography	3
GPHY 317	Geomorphology	3
Total Hours		9

Minimum Required Grade: C-

Advanced Math

Rule: Must complete 1 additional math or statistics course in addition to the one chosen for Math Fundamentals. For instance, if M 171 has been taken, M 172 is recommended.

Minimum Required Grade: C-

3-4 Total Credits Required

Statistics Course (Math Fundamentals)

Note: Gen Ed credits do not count towards degree credits.

Select one of the following:	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-