## GEOGRAPHY: PHYSICAL GEOGRAPHY: EARTH SYSTEMS AND ENVIRONMENTAL PROCESSES

## **REQUIREMENTS**

## PHYSICAL GEOGRAPHY OPTION REQUIREMENTS

In addition to completing the requirements for all options, complete these requirements specific to this option  $\frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left( \frac{1}{2} \int_{-$ 

## SKILLS, TECHNIQUES & METHODOLOGY

Code	Title	Credits
Quantitative Metho	dology (1 course)	3
GEOG 560	Advanced Quantitative Methods	
STAT 324	Introductory Applied Statistics for Engineers	
STAT 371	Introductory Applied Statistics for the Life Sciences	
Core Cartography/GIS		
GEOG/CIV ENGR/ ENVIR ST 377	An Introduction to Geographic Information Systems	4
Second Cart/GIS or	Field Methods Course(1 course)	3
GEOG 370	Introduction to Cartography	
GEOG/ENVIR ST/ F&W ECOL/ G L E/GEOSCI/ LAND ARC 371	Introduction to Environmental Remote Sensing	
GEOG 378	Introduction to Geocomputing	
GEOG 379	Geospatial Technologies: Drones, Sensors, and Applications	
GEOG/ENVIR ST/ LAND ARC/ URB R PL 532	Applications of Geographic Information Systems in Planning	
GEOG 572	Graphic Design in Cartography	
GEOG 573	Advanced Geocomputing and Geospatial Big Data Analytics	
GEOG 574	Geospatial Database Design and Development	
GEOG 575	Interactive Cartography & Geovisualization	
GEOG 576	Geospatial Web and Mobile Programming	
GEOG 578	GIS Applications	

GEOG 579	GIS and Spatial Analysis	
Total Credits		10
DEPTH		
Code	Title	Credits
3 courses required		9-12
GEOG/ GEOSCI 320	Geomorphology	
GEOG/ ATM OCN/ ENVIR ST 322	Polar Regions and Their Importance in the Global Environment	
GEOG 329	Landforms and Landscapes of North America	
GEOG/ ATM OCN/ ENVIR ST 332	Global Warming: Science and Impacts	
GEOG/ ATM OCN/ ENVIR ST/ GEOSCI 335	Climatic Environments of the Past	
GEOG/ BOTANY 338	Environmental Biogeography	
GEOG 342	Geography of Wisconsin	
GEOG 344	Changing Landscapes of the American West	
GEOG 399	Independent Study (maximum 3 credits may apply)	
GEOG/ GEOSCI 420	Glacial and Pleistocene Geology	
GEOG 523	Advanced Paleoecology: Species Responses to Past Environmental Change	
GEOG/ SOIL SCI 525	Soil Geomorphology	
GEOG/ SOIL SCI 526	Human Transformations of Earth Surface Processes	
GEOG/ ATM OCN/ ENVIR ST 528	Past Climates and Climatic Change	
GEOG 699	Directed Study (maximum 3 credits may apply)	
Total Credits		9-12