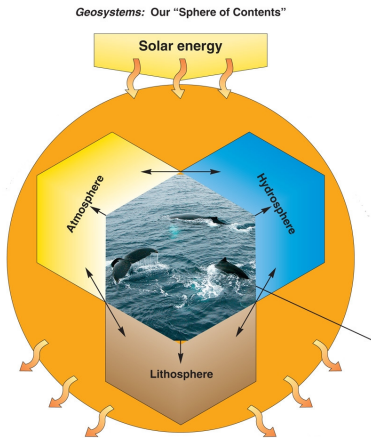


Introduction to Physical Geography
(GARP 0102, 4 credits)



Physical Geography is the study of the physical phenomena and processes that shape the surface of the Earth and their associated variability in time and space.

We will explore the four interlocking ‘geosystems’ of the Earth, including the Atmosphere (weather, climate), Lithosphere (landforms), Hydrosphere (surface/ground water), and Biosphere (life).

We will also discuss the interactions between (us) humans and our (natural?) changing surroundings.

This course consists of three lecture classes per week (MWF, 09:20 to 10:10) and one (of two) lab sessions (MF, 10:25 to 12:05). No prerequisites.

<u>Regular Section (GARP 0102-001, CRN# 31311)</u>	<u>Honors Section (GARP 0102-H01, CRN# 30077)</u>
Lecture: MWF 09:20 to 10:10, Wilson 138	Lecture: MWF 09:20 to 10:10, Wilson 138
Lab: F 10:25 to 12:05, Bates 05	Lab: W 10:25 to 12:05, Bates 05

Learning Goals

1. Knowledge and Geographic Literacy
Facts and concepts in Physical Geography; Systems and processes of the Earth.
2. Skills and Critical Thinking
Application of geographic knowledge and concepts; Intellectual inquiry using the scientific method; Effective scientific communication.
3. Perspective and Implications
Space, spatial patterns, and change as global concepts; Interactions between human and environmental systems.

Your Instructor

Dr. Carsten Braun cbraun@wsc.ma.edu
www.wsc.ma.edu/garp/faculty/cb.html
 413.572.5595, Office: Bates 217
 Office Hours: MWF, 12:15 to 13:15 (or anytime by appointment)

➔ My goal for this course is simple: I want to get you excited about the Earth and the natural environment that surrounds us. Physical Geography is actually quite applicable and useful on a daily basis: You will learn what goes on around you and why! So, the next time it rains/snows, or you come across a river/lake, you will know why, how, and so what!

➔ If you feel that you are not progressing as well as you hoped, please feel free to talk to me during my office hours or a mutually convenient time – the sooner the better! Please do not wait until the end of the semester. I’m happy to support you to help you succeed.

Textbook (required)

Tom L. McKnight and Darrel Hess: Physical Geography: A Landscape Appreciation – 9th Edition

- Pearson Prentice-Hall (ISBN-13: 978-0-13-223901-1)
- Available at the WSC bookstore
- Online version: <http://www.safarix.com>

This is a fantastic, well-designed, informative, and well-illustrated textbook. The comprehensive companion website and CD-Rom provide additional media, illustrations, and very useful self-test features. I encourage you to make use of these free resources – they will help you expand and test your knowledge throughout the semester.

Course Logistics

The first section of the course focuses on Climatology (Weeks 1 to 8), the second section of the semester focuses on Geomorphology (Weeks 10 to 17). We will not cover the entire textbook. Instead, the course is structured around carefully selected themes and associated textbook chapters and lab exercises.

- In addition to the textbook, you need a 3-ring binder (to organize the hand-outs) and a notebook for your lecture notes. I urge you to be organized with your time and your materials. Take good notes, use your critical thinking when studying, and don't try to 'blindly' memorize facts without understanding the underlying concepts. I encourage you to study with someone else or in a small group, so you can 'test' each other and expand your knowledge by explaining things to each other.
- Each of the four tests will draw from the materials presented in class (lecture and lab), the hand-outs, and the assigned textbook readings. The tests will last the entire class period and consist of a combination of Multiple Choice questions and Short-Answer questions.
- There are no make-up tests, unless you are experiencing a documented emergency. Let me know in advance, or as soon as possible thereafter. Make-up tests, if necessary, will be administered during the Spring 2010 Exam period. It is not possible to take any test early, so plan accordingly.
- Review the Academic Honesty Policy at Westfield State College (available on our website). Cheating or Plagiarism will be severely sanctioned. Depending on the gravity of the situation, you may find yourself interacting with the Dean of Students.
- The 8 homework assignments are designed to formalize the reading and learning process through writing. The assignments will require you to answer a series of review questions from the textbook in a few paragraphs each (for maximum 2 pages combined). These are not 'trick' questions – the answers are readily available in the textbook. I expect the homework assignments typed, printed, and written in acceptable English – proof-read as needed.
- Wednesday (05/05/2010) is a mandatory All-Day Field Trip – we will explore some of the natural highlights of Western Massachusetts. Please arrange your schedule accordingly. This field trip requires some reasonable amount of hiking on mostly paved trails, although there are a few steeper dirt trail sections. More detailed information will be given in class. Please consult with me in advance if you have any concerns about participating in this field trip – we can always figure out an alternative assignment if necessary.

Grading Policy

Your final grade is a function of your performance throughout the entire semester and combines the four tests, the lab exercises, and the homework assignments. You will not 'flunk' this course based on any one poor test result, lab exercise, or homework assignment.

- If you are concerned about your grades or performance in the course – please talk to me.
- Grading is a time-consuming process – please allow at least one week for the test, lab exercises, and homework assignments to be graded.

- Tests** 60 percent of the final grade
No make-up tests, 'skipped' = zero
- Labs** 25 percent of the final grade (13 lab exercises)
Late = Zero, 'skipped' = zero, no make-up/late labs
- Homework** 15 percent of the final grade (8 homework assignments)
Late = Zero, 'skipped' = zero, no make-up assignments

Grade Conversion	
A	93-100
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69
D	60-66
F	0-59

Westfield State College Academic Calendar (Spring 2010)

SPRING 2010	
January 18	Martin Luther King, Jr. Day - No Classes
January 19	Classes begin
February 15	Presidents' Day - No Classes
February 26	Last Day to Withdraw for Session A
March 12	Session A Classes End
March 15-19	Spring Break
March 22	Classes Resume and Session B Classes Begin
April 16	Last Day to Withdraw for Full Semester Classes
April 19	Patriots' Day - No Classes
April 20	Follow Monday Schedule
April 26	Last Day to Withdraw for Session B
April 28	Community Service Day (classes held)
May 10	Classes End - Day Division †
May 11	Reading Day (No Classes - Day Division Only)
May 12, 13, 14, 17	Examination Period †
May 19	Senior Grades Due by Noon
May 22	Commencement
May 25	All Other Grades Due by Noon

“Geography is to Space what History is to Time.”

(J.E. Dobson, 2007, ArcNews, 29(1), 1-5)

Geography (from Greek γεωγραφία - geografia) is the study of the earth and its features, inhabitants, and phenomena. A literal translation would be “to describe or write about the Earth”. Four historical traditions in geographical research are (1) the spatial analysis of natural and human phenomena (geography as a study of distribution), (2) area studies (places and regions), (3) study of human-land relationship, and (4) research in earth sciences. Modern geography is an interdisciplinary science that seeks to understand the world and all of its human and natural complexities – not merely where objects are, but how they have changed and come to be. As “the bridge between the human and physical sciences” geography is divided into two main branches: human geography and physical geography.

Human geography focuses largely on the built environment and how space is created, viewed, and managed by humans as well as the influence humans have on the space they occupy. Physical geography examines the natural environment and how the climate, vegetation, life, soil, water, and landforms are produced and interact. As a result of the two subfields using different approaches a third field has emerged, which is environmental geography. Environmental geography combines physical and human geography and looks at the interactions between the environment and humans.

GARP 0102 Physical Geography Lecture Schedule Spring 2010

Week	Class	Date	Theme/Topic	Assignment	Reading
Week 1	Class 1	1/20 (We)	Course Overview		syllabus
	Class 2	1/22 (Fr)	Mapping the Earth I		Ch. 1/2
Week 2	Class 3	1/25 (Mo)	Mapping the Earth II	HW #1 out	Ch. 1/2
	Class 4	1/27 (We)	Climate vs. Weather		p.67-69
Week 3	Class 5	1/29 (Fr)	The Earth in Space	HW #1 due	Ch. 1
	Class 6	2/1 (Mo)	Earth's Atmosphere	HW #2 out	Ch. 3
	Class 7	2/3 (We)	Earth's Radiation Balance I		Ch. 4
Week 4	Class 8	2/5 (Fr)	Earth's Radiation Balance II	HW #2 due	Ch. 4
	Class 9	2/8 (Mo)	The Greenhouse Effect		Ch. 4
	Class 10	2/10 (We)	Climate Change/Global Warming		p.247-257
	Class 11	2/12 (Fr)	Test #1		
Week 5		2/15 (Mo)	<i>No class (President's Day)</i>		
Week 6	Class 12	2/17 (We)	Pressure and Wind I		Ch. 5
	Class 13	2/19 (Fr)	Pressure and Wind II		Ch. 5
Week 7	Class 14	2/22 (Mo)	Atmospheric Circulation I	HW #3 out	Ch. 5
	Class 15	2/24 (We)	Atmospheric Circulation II		Ch. 5
Week 8	Class 16	2/26 (Fr)	Moisture and Precipitation I	HW #3 due	Ch. 6
	Class 17	3/1 (Mo)	Moisture and Precipitation II	HW #4 out	Ch. 6
	Class 18	3/3 (We)	Mid-Latitude Climate I		Ch. 7
Week 9	Class 19	3/5 (Fr)	Mid-Latitude Climate II	HW #4 due	Ch. 7
	Class 20	3/8 (Mo)	Global Climates		Ch. 8
	Class 21	3/10 (We)	Extreme Weather and Climate		Ch. 7
	Class 22	3/12 (Fr)	Test #2		
Week 9		3/15 (Mo)	<i>No class (Spring Break)</i>		
		3/17 (We)	<i>No class (Spring Break)</i>		
		3/19 (Fr)	<i>No class (Spring Break)</i>		
Week 10	Class 23	3/22 (Mo)	Rocks and Minerals I		Ch. 13
	Class 24	3/24 (We)	Rocks and Minerals II		Ch. 13
Week 11	Class 25	3/26 (Fr)	Plate Tectonics		Ch. 14
	Class 26	3/29 (Mo)	Earth Quakes and Volcanoes	HW #5 out	Ch. 14
Week 12	Class 27	3/31 (We)	Weathering and Erosion I		Ch. 15
	Class 28	4/2 (Fr)	Weathering and Erosion II	HW #5 due	Ch. 15
Week 13	Class 29	4/5 (Mo)	Groundwater	HW #6 out	Ch. 9
	Class 30	4/7 (We)	Fluvial Processes I		Ch. 16
	Class 31	4/9 (Fr)	Fluvial Processes II	HW #6 due	Ch. 16
	Class 32	4/12 (Mo)	Test #3		
Week 14		4/14 (We)	<i>No class (CB @ AAG Meeting)</i>		
		4/16 (Fr)	<i>No class (CB @ AAG Meeting)</i>		
		4/19 (Mo)	<i>No class (Patriots Day)</i>		
Week 15	Class 33	4/20 (Tu=Mo)	Glacial Processes I	HW #7 out	Ch. 19
	Class 33	4/21 (We)	Glacial Processes II		Ch. 19
Week 16	Class 34	4/23 (Fr)	New England Geography	HW #7 due	hand-out
	Class 35	4/26 (Mo)	Glaciers and Climate Change	HW #8 out	hand-out
Week 17	Class 36	4/28 (We)	Coastal Processes I		Ch. 20
	Class 37	4/30 (Fr)	Coastal Processes II	HW#8 due	Ch. 20
	Class 38	5/3 (Mo)	Soils		Ch. 12
	Class 39	5/5 (We)	All-Day Field Trip		hand-out
	Class 40	5/7 (Fr)	Field Trip Review		hand-out
	Class 41	5/10 (Mo)	Review of the Semester		
	Class 42	5/12 (We)	Test #4 (12:20 – 14:20)		

- Adjustments to the schedule may be required to account for unforeseeable situations.
- Please refer to the Spring 2010 course booklet and academic calendar for more information.
- Be on time (i.e. get to class before class starts) and don't leave before the end of class.
- Turn off your cell phones and other electronic gizmos. Please: no texting in class!
- Attendance is mandatory.
- It is your responsibility to keep up with the course material, hand-outs, lecture notes, tests, homework assignments, grades, etc.
- If you have to miss a class...please inform me in advance.