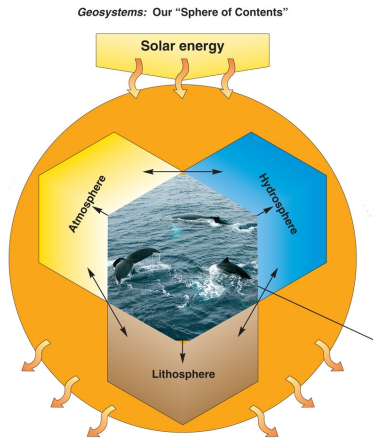


**Introduction to Physical Geography**  
(GARP 0102, 4 credits)



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.

**Lecture** GARP 0102-001 (CRN# 10756), Wilson 134, MWF 09:20 to 10:10

**Lab** GARP 0102-01A (CRN# 10758), Bates 05, Monday 10:25 to 12:05  
GARP 0102-01C (CRN# 10760), Bates 05, Friday 10:25 to 12:05  
*Please choose one of the lab sessions to accompany the lecture*

**Learning Goals**

1. Knowledge  
Facts and concepts in Physical Geography; Systems and processes of the Earth.
2. Skills and Critical Thinking  
Application of geographic knowledge; Intellectual inquiry and effective communication.
3. Perspective  
Space and spatial patterns as global concepts; Interactions between human and environmental systems.

**Your Instructor**

Dr. Carsten Braun

[cbraun@wsc.ma.edu](mailto:cbraun@wsc.ma.edu)

[www.wsc.ma.edu/garp/faculty/cb.html](http://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 – 9<sup>th</sup> 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 WWW site 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 Geomorphology (Weeks 1 to 8), the second section of the semester focuses on Climatology (Weeks 9 to 15). 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 Fall 2009 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 the WWW site). 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 (10/07/2009) 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 (12 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 (Fall 2009)**

FALL 2009	
September 1	Opening Day College Meeting
September 2	Classes Begin
September 7	Labor Day – No Classes
October 9	Last Day to Withdraw for Session A
October 12	Columbus Day – No Classes
October 14	Follow Monday Schedule
October 23	Session A Classes End
October 26	Session B Classes Begin
November 11	Veterans' Day - No Classes
November 17	Last Day to Withdraw for Full Semester Classes
November 24	Last Day to Withdraw for Session B
November 25	Thanksgiving Recess (begins at 12:20 p.m.)
November 30	Classes Resume
December 11	Classes End – Day Division †
December 14, 15, 16, 17	Examination period †
December 18	Snow Make-Up Day
December 28	All Grades Due by 9:00 a.m.

**“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 Fall 2009

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

#### The Fine Print...

- Adjustments to the schedule may be required to account for unforeseeable situations.
- Please refer to the Fall 2009 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.