GE 104 Spring 2011 Syllabus

Natural Environments: The Physical Landscape

Monday, Wednesday, & Friday: 1-2pm STO 143

Instructors
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Office Hours: Monday 2-3, Wednesday 4-5, or by appointment

Teaching Fellow: Preeti Rao, CAS 435, 617-353-8342
E-mail: preeti06.rao@gmail.com
Office Hours: Monday 11-12pm & Friday 1-2pm

Course description:
Welcome to GE 104! This course is about understanding and interpreting the natural world as you see it locally, regionally, and globally. Along the way, you will learn quite a bit of science—the science of physical geography—as well as how to think and observe like a scientist.

My approach in this course will be to facilitate your learning, not to only lecture in the usual sense. While there will be some lecturing, we will spend much of our time observing, discussing physical geography in the news, and learning the concepts and ideas of physical geography. Measurement and prediction are important parts of science, and you will also learn some simple math and statistical models that physical geographers use.

The objective of this course is to present a survey of the properties and mechanisms governing our physical environment.

The course will be structured according to three general topic areas:
I The atmosphere and climate
II Geological substrates, erosion, and weathering
III Soils, vegetation, and global environment change

You will need to read and study the reading assignments BEFORE the week begins. To encourage you to do this, I will give a 10-minute quiz on the reading contents on Mondays and Fridays. On Wednesday, part of our class will concern the quantitative example found in each chapter. One or two problems will be assigned, which will be due on Friday.

Place Study
To provide a concrete focus for your learning, you will prepare a place study entitled: Physical Geography of ____. At the beginning of the course, you will choose a place for your study, and each week you will write a one-page report relating the topics of the text chapter to your study area. Your weekly report will also have two accompanying graphics to illustrate your points. Place-study reports will be due on the Wednesday session immediately following the week of the chapter. At the end of the course, you will merge all the reports together, add a one-page introduction, a
one-page conclusion, and a bibliography, and turn in a final report.

Prerequisites
There are no college-level prerequisites for this course. However, students should have basic science and math skills, including algebra and graph reading.

Textbook

Lab
Most weeks of the term you will have a written lab exercise to carry out during the two-hour lab portion of the course. In the labs, you will interact with maps, diagrams, and illustrations for specific learning objectives. Nine labs are planned.

Labs: B1: Monday 3:00-5:00, STO 456; C1: Tuesday 11:00-1:00, STO 327. Labs will not start to meet until the week of January 31st.

CourseInfo
GE104 has a BU CourseInfo (Blackboard) web page on which relevant materials and grades will be posted. It can be reached at: http://blackboard.bu.edu

Attendance
Attendance is part of both the lecture and lab grades. Attendance will be taken orally or by work given out and returned in class. Your attendance grade will be as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>A</th>
<th>A-</th>
<th>B+</th>
<th>B</th>
<th>B-</th>
<th>C+</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture Absences</td>
<td>0-2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Lab Absences</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
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Grading

Lecture (80%)
Chapter quizzes (Mon, Fri): 20%
Homework: 15%
Place Study: 20%
Attendance: 5%
Final Exam: 20%

Lab (20%)
Lab Reports: 15%
Lab Attendance: 5%

Total 100%
Final Exam
The final exam will be held on May 14 from 3-5pm. You MUST be present to take the exam or receive a grade of 0. There is no make-up exam. There is no early exam. One half of the exam material will be recycled from your bi-weekly quiz materials and the other half will be new material not previously included on the quizzes.

Cellphones and Laptops
Cellphones and laptops may not be used in class.

Due Dates, Make-Ups and Dropped Grades
Work must be turned in on time. LATE WORK WILL BE ACCEPTED, BUT THE GRADE FOR THAT ASSIGNMENT WILL BE REDUCED BY 50%. IN-CLASS QUIZZES CANNOT BE MADE UP FOR ABSENCE. MISSING QUIZES WILL RECEIVE A GRADE OF 0. If you miss a quiz because of documented illness, sports team participation, or other BU-sanctioned event, it will be made up as an oral exam. See me for details.

At the end of the course, your lowest quiz grade will be dropped from your final quiz grade. Any missing place study reports must be made up without credit and turned in with the final place study at the completion of the course.

Collaboration
All work prepared for this course must be prepared by you as an individual without collaboration (unless you are explicitly directed otherwise by the teaching staff).

Originality of Work
All work prepared for this course must be written in your own words and prepared specifically for this course. You may not copy phrases, sentences, or paragraphs in written work from ANY source without quotes and specific attribution. This includes web sources. Copying will result in a 0 grade and repeated copying will be considered academic misconduct.

Academic Code
It is your responsibility to know and understand the provisions of the CAS Academic Conduct Code. Copies are available in CAS 105. Suspected cases of academic misconduct will be referred to the Dean's Office.
<table>
<thead>
<tr>
<th>Week Beginning:</th>
<th>Topic</th>
<th>Text Chapter</th>
<th>Lab #</th>
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</thead>
<tbody>
<tr>
<td>17-Jan*</td>
<td>Landscapes &amp; geography tools</td>
<td>Introduction</td>
<td>—</td>
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<tr>
<td>24-Jan</td>
<td>The Earth</td>
<td>Chapter 1</td>
<td>—</td>
</tr>
<tr>
<td>31-Jan</td>
<td>The sun, Earth, and energy</td>
<td>Chapter 2</td>
<td>1 (Google earth)</td>
</tr>
<tr>
<td>7-Feb</td>
<td>Earth materials &amp; Plate Tectonics</td>
<td>Chapter 11</td>
<td>1 (Google earth)</td>
</tr>
<tr>
<td>14-Feb</td>
<td>Volcanic &amp; Tectonic Landforms</td>
<td>Chapter 12</td>
<td>2 (plate tectonics, volcanoes)</td>
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<tr>
<td>21-Feb**</td>
<td>Weathering &amp; Mass Wasting</td>
<td>Chapter 13</td>
<td>—</td>
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<tr>
<td>28-Feb</td>
<td>Fresh Water of the Continents</td>
<td>Chapter 14</td>
<td>3 (fresh water)</td>
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<tr>
<td>7-Mar</td>
<td>Landforms Made by Running Water</td>
<td>Chapter 15</td>
<td>4 (mass wasting, weathering)</td>
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<td>14-Mar</td>
<td>Spring Break</td>
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<tr>
<td>21-Mar</td>
<td>Landforms Made by Waves &amp; Wind</td>
<td>Chapter 16</td>
<td>5 (fluvial/hydro)</td>
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<tr>
<td>28-Mar</td>
<td>Glacial Landforms &amp; the Ice Ages</td>
<td>Chapter 17</td>
<td>6 (glaciers/coastal processes)</td>
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<tr>
<td>4-Apr</td>
<td>Soils</td>
<td>Chapter 10</td>
<td>7 (soils)</td>
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<tr>
<td>11-Apr</td>
<td>Biogeography</td>
<td>Chapters 8 &amp; 9</td>
<td>8 (biogeography)</td>
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<tr>
<td>18-Apr***</td>
<td>Global Environmental Change</td>
<td>To be distributed</td>
<td>8 (biogeography)</td>
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<tr>
<td>25-Apr</td>
<td>Student Presentations</td>
<td>--</td>
<td>9 (plants &amp; orienteering)</td>
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<tr>
<td>2-May</td>
<td>Wrap-up &amp; review</td>
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<td>9-May</td>
<td>Final Exams</td>
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* Class meets on Wednesday, January 19 * Friday, January 21
**Monday schedule on Tuesday, February 22.
***Monday schedule on Thursday, April 21