

# Photo-Reflection Assignments

Beth Hundey, Ph. D. Candidate  
Department of Geography, UWO  
[ehundey@uwo.ca](mailto:ehundey@uwo.ca)

This assignment was designed for *Introduction to Physical Geography* GEO1300b, but could be adapted as a component of any Natural Science course in need of a creative, reflective, experiential learning make-over.

## INTRODUCTION

A typical physical geography undergraduate course (and many other science courses) consists of a busy lecture and lab schedule, and it often seems a struggle move beyond the standard transmission approach to engage alternative learning styles. Even five years after undergrad, my fellow undergraduate classmates remember the most from courses in which they were able to experience geographic processes in action than from lectures. However, the constraints of time, resources, and student numbers make leading field trips a difficult task. The “Photo-reflection Assignment” was created to both engage alternate learning styles and to encourage students to engage with the material more closely and with greater understanding by applying concepts to their own experiences.

## KEY CONCEPTS

This first year physical geography course is designed to address the following key concepts:

- Break free from the typical first year “recipe-following” laboratory assignment.
- Provide an outlet for creative students that is rare in laboratory assignments.
- Encourage students to consider how physical geography processes apply to their own lives and experiences.
- Encourage independent thought beyond the concepts provided in lecture and lab.
- Encourage a deeper understanding of concepts by moving beyond memorization to application to personal examples and reflective observation
- Encourage students to read the landscape, moving from asking the “What?” to asking (and answering!) the “How?”

## LEARNING GOALS

The learning goals for the student completing the photo-reflection assignment are:

1. Apply geographic concepts to personal experiences.
  2. Apply knowledge and concepts acquired during the course to come up with plausible explanations for geographic phenomena.
  3. To improve the ability to read the landscape like a geographer.
  4. To effectively communicate geographic processes.
-

## **DESCRIPTION OF PHOTO-REFLECTION ASSIGNMENT**

This description is an abbreviated version of what the students will receive at the beginning of the course. The assignment will be handed in at the end of term, with the intention that they will try to relate concepts in lectures and labs to their own experiences throughout the course. See Appendix for one example photo-reflection.

### **Introduction:**

In your day-to-day life and in your travels, you have likely been intrigued by interesting landscapes, landforms, weather patterns, etc. in your surroundings. An understanding of Physical Geography allows us to appreciate these phenomena in a different way, as we begin to understand the processes that create the features that we see. Whether it be an opportunistic plant taking root in a crack in the pavement, a magnificent canyon with layers upon layers of striations, or rain that falls but never quite reaches the ground, Physical Geography is everywhere. In this assignment, you creatively apply the concepts you have learned in any component of Geography 1300b.

### **Deliverables:**

Compile or take 4 *original* photographs that you find interesting and that remind you of something you have learned in Geography 1300b. With each photo, include a type-written description of the components/ processes of physical geography as you perceive them in the photograph.

### **Format:**

Acceptable formats include:

- Printed photos with descriptions
- Photoblog with text (e.g. tumblr or other blog site), or
- Other – check with your TA.

### **Marking:**

Your job is to convince your TA that you understand the processes that could lead to the features in your photographs, *not* that you can simply research and regurgitate information about a phenomenon or place. To illustrate the depth of your understanding, focus on what can be seen in the photograph and make specific reference when possible to components within the photo.

### **Helpful Hints:**

1. If you are stuck for ideas, remember that Physical Geography is everywhere you look. You need not have been to the Grand Canyon or taken a picture of a meandering river from an airplane to find interesting geographic processes at work. These processes also occur as much in areas that are 'untouched' by humans as they do where humans have the greatest impact. Erosion and mass movements occur in open pit mines, ecological succession occurs in cities and towns. You could even find 4 processes to describe on the UWO campus.
2. For inspiration, check out the example Tumblr blog at: <http://geo1300b.tumblr.com/>. (Password: geography). New examples may be added throughout the course so check back.

3. Pay attention in lectures. Take note if the lecture reminds you of something you have seen. Photos are used throughout lectures that may give you ideas of how lecture topics are linked to what we see on Earth.
  4. Browse your textbook for ideas. For example, note the variety of discussion questions with a photo as simple as is shown on p. 117.
  5. Your TAs will be available to discuss your ideas/ answer questions with you during your lab time on April 2 and 3.
- 

### Appendix 1: Example of photo reflection



I took this photo in July 2011 in the Bernese Alps (in Switzerland). Behind the small peak (approximate elevation 1950 m.asl) in this photo is the town of Interlaken. Although snowy days are not common in this region in the middle of summer, it is not especially surprising that snow fell at higher elevations. The air was unusually cool in the lowlands that week. As the airmass was forced (over the mountain) to higher elevations, it expanded in volume and therefore lost even more heat (orographic effect), and in this case resulted in snow.

This photo was taken in the middle of the day, a few hours after snowfall ceased. The pattern in the snowfall (on one side and not the other) is due to the aspect (direction the slope is facing) of the hill. The right side is facing NW and the left side is facing SE. Both slopes would have received similar snowfall in the morning, but because the South facing slope receives more sun (because the Alps are in the northern hemisphere) and primarily from the east by mid-day (because the sun rises in the east) the snow is melting faster on the SE slope. This pattern may also affect biogeography on a micro scale, as sun loving plants such as the tall yellow flowers (goldenrod?) will be more successful on the SE slope. The biogeography of the slope is also affected by the slope angles. The trees seem to be clustered where the slope is not so steep (e.g. on rocky outcrops) even though there is soil on the slope below.

---