Take A Hike- ESCI 1101-006 with Dr. Jefferson - Due April 28th, 2008, 12:30 pm

- 1. Go for a hike in an outdoor location or visit a local, state, or national park or forestland. While you are there, take some (physical or mental) notes about the earth science features and processes you are seeing. Also make sure to get a photo, map, or brochure.
- 2. Write a 200- to 300-word descriptive essay about at least four earth science features or processes that you observed. You should make sure to use correct terms to identify the features and describe how you knew what you were looking at. (ex., The cumulus cloud was puffy and billowing in height.) Also make sure that your essay includes geographical information (trail, park, nearest city, state).
- 3. Provide a copy of a trail map, brochure, or photo that you took on your hike.
- 4. Some local places to consider are Van Landingham Glen, Reedy Creek Nature Preserve, Latta Plantation, and McDowell Park.

You will turn in: Your description AND the map, brochure, or photo.

Grading will be based on content (70%), writing, spelling, and grammar (20%), and neatness and professionalism (10%). Late assignments will be reduced 20% of the given points for each day that they are late. Assignments should indicate that some thought and analysis has gone into the activity, and they should be free of spelling and grammatical errors. They should be well organized and clearly presented. These assignments should be something you would be willing to give a potential employer as an example of your work. Writing assistance is available through the Writing Resources Center (http://www.uncc.edu/writing/wrcindex.html, 687.HELP).

Grading Criteria: Content (35 points)

1. Is the assignment of appropriate length (200-300 words)? (5 points)

Length	Points
Way too short (<100 words)	2
Somewhat too short (<120 words)	3
Slightly too short (<160 words)	4
Appropriate length (200-300 words)	5
Too long (>340 words)	4
Way too long (>400 words)	3*

^{*}Assignments will not be read past 400 words.

In order to describe at least four earth science features in such a short space (200-300 words), you will have to write efficiently. You may need to revise your paper to eliminate excess words and convey your meaning in a more concise manner. Your friends may be able to help you with this, and so can the Writing Center.

2. Is there appropriate supporting documentation? (5 points)

Provide a copy of a trail map, brochure, or photo that you took on your hike.

3. Is the location of the hike adequately described? (5 points)

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Name of park	2 pts
Name of trail	1 pt
Name of nearest city	1 pt
State	1 pt

4. Describe what you saw and how it relates to the topics in this class. (20 points)

Identified and described earth science features	2 points each, up to 8 points total
Used correct terms to describe features	1 point each, up to 4 points total
Explained how the features were identified	2 points each, up to 8 points total

This is the heart of the assignment. You should identify and describe several earth science features, using appropriate terminology from the class. (In the example below, I underlined the terms I used, but this isn't necessary.) You should explain how you were able to identify these features. (In the example below, I talked about how I knew it was a streambed) You can even use what you have learned in the class to make some deductions about how processes that you cannot see may be working (in the example below, I discussed where I thought the water table was and why the stream was a losing stream.) It is not necessary to describe something related to every topic we've covered in class, and it is better to concentrate on a few features. In the example below, I identified and described primary succession, a knickpoint, a losing stream, and a mountain stream (among others).

In order to describe at least four earth science features in such a short space (200-300 words), you will have to write efficiently. You may need to revise your paper to eliminate excess words and convey your meaning in a more concise manner. Your friends may be able to help you with this, and so can the Writing Center.

Writing, spelling, and grammar (10 points)

There will be a simple formula used to grade the writing, spelling, and grammar portion of the assignment. The graders will count the number of spelling and grammar errors, and they will be especially watchful for the word "I" not being capitalized. The table below will determine the points earned. Running a spelling and grammar check before submitting your work won't ensure you a perfect paper, but it will help!

Number of Errors	Points earned
0-2	10
3-5	9
6-8	7
9 or more	5
Meaning is obscured by the number of errors	2

Neatness and professionalism (5 points)

All sheets, including the article, must be stapled together (-2 points if not).

Assignments must be typed (-2 points if not typed).

Assignments should not be wrinkled or dog-eared (-2 points if messy).

Assignments must be submitted in class (-3 points if emailed, - 5 points if slid under office door).

Here's an example submission:

On October 8th, I hiked the Proxy Falls trail in the Willamette National Forest, near Belknap Springs, Oregon. The trail is about 1 ¼ miles long and crosses a lava flow that is about 1600 years old. The <u>soil</u> is very thin or absent on the lava flow, and the rock can be seen in most places. The lava is partially covered by moss and lichen and there are a few conifer trees. The plant community seems to be at an early stage of <u>primary succession</u>, based on the bare rock and species such as moss and lichen.

On the far side of the lava flow, there is a ~100 ft high waterfall. This waterfall is an example of a <u>knickpoint</u>. At the base of the waterfall, there are some large blocks of rock, indicating that the waterfall may be <u>eroding</u> headward over time. The stream below the waterfall is a <u>mountain</u> <u>stream</u>, because it is steep, relatively straight, and not meandering or braided.

Farther along the trail, there was a little bridge over a dry streambed. I could tell it was a streambed because there were rounded pebbles and sticks that were aligned in a downstream direction. It was interesting that there was no water in the stream. It hadn't rained for several weeks before my hike, but usually streamflows between rains are sustained by groundwater. Since water was absent, I can conclude that the <u>water table</u> was below the level of the streambed, and that it was probably a <u>losing stream</u> when it carried water. The high <u>porosity</u> of the lava also suggests that there would be a high <u>infiltration</u> rate.

Documentation: Here is a link to the trail description and map: http://www.fs.fed.us/r6/willamette/recreation/tripplanning/trails/mckenziepass/proxy3532.html Here is a photograph I took during the hike:



(Note that you would only need to provide one form of documentation.)