**Physical Geography Weather Report (25 points)** **Name**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Important Dates:**

Data Collection: **Morning of February 25 through evening of February 28**

Report due **March 5 by 11 pm**

This assignment involves observing, collecting, and interpreting weather phenomena. To show how conditions can change over several days, collect the information over 4 days at three different times each: morning, afternoon, and evening. It doesn’t have to be the exact same times each day. This will take about 5 minutes each time. Your observations should include the following for those times:

Temperature -C

Dewpoint - C

Relative humidity - %

Barometric pressure- millibars (will show as hpa)

Wind speed – meters/second

Wind direction

Cloud and fog types

Precipitation – mm

**Recommended resources for this assignment:**

1. Your personal observations of cloud types and fog whenever you are outside or passing by a

window. If you have a rain gauge or outdoor thermometer at home, you could also use those.

2. Weather Underground <http://www.wunderground.com/>

To switch to metric units, go to the upper right corner of the web page and click on the gear symbol.

Enter your zip code or town, state, and country and Search. There will be several weather stations,

use an official site such as an airport or radio/tv station. Select Full Forecast. You will need to make

a personal observation for the actual cloud or fog types. Record the data in a data table that you

make. If you miss a data collection time, scroll down and find the History/Almanac

Section. Change the date and get what data you are missing.

3. Textbook

**Grading Rubric - Your typed report should include the following sections**

1. Introduction – purpose

2. Methods – where (which weather station) or how (personally collected) did you get the weather data?

3. Results - in the form of a data table that you made

4. Brief Summary for each day –

“On Thursday the low was 13 C at 5:53 am and the high was 29 C at 4 pm.

No precipitation occurred. Friday brought a change in the wind direction and temperatures dropped

to a low of 4 C at 6:22 am with a high temperature of only 18 C. 0.22 millimeters of rain fell.”

5. Graphs should include:

temperature and dew point with time

relative humidity with time

barometric pressure with time

precipitation with time if appropriate

If you use a spreadsheet for your data table (like excel) graphs are easy to make!

You can also construct graphs by hand on graph paper.

All graphs should have appropriate scales, labels, and titles.

6. Interpretations and analysis - about the weather system(s) over this area during the study. Use the

graphs to help you explain patterns or relationships between the weather variables. You will need

to discuss the relationship between temperature and relative humidity, the passage of warm and cold

fronts if applicable, any lifting mechanisms and precipitation, and the high and low pressure systems

that formed as supported by the data you collected or observed.

Proofread your report or ask someone else to proofread it.