MTH 101 Writing Project Instructions

For this writing project, you will rank the happiness of 10 countries using a weighted average. There are 2 parts to this project.

WP1 (4% of your grade)- Follow the instructions below to upload completed spreadsheet by Feb 3

Step 1: You will need to select 5 metrics from gapminder.org/data that you will use to rank the countries' happiness. On sheet 1 of the excel file, type in the full names of the metrics in the blue blanks provided.

Step 2: You will need to select 10 countries that you wish to rank. On sheet 2 of the excel file, type in the full names of the countries that you wish to rank.

Step 3: You will need to collect data (50 values) from gapminder. For each of the 5 metrics, you will need to collect its corresponding country data and enter this data into the excel file on sheet 3. At this point you will need to fill in any missing data through google search.

Step 4: Look at the 4th sheet of the excel file and see if the data was refined correctly. All data should be rescaled. You will need to understand how and why this is done.

Step 5: Decide the "weight" of each metric and enter those weights into the excel file on sheet 5 in the proper locations. Like categories on a syllabus, the weights for the metrics should add to 100%. You will also need to determine whether or not you believe each chosen metric is positively or negatively contributing to the happiness of a country and follow the instructions on sheet 5.

Step 6: The excel spreadsheet is created with formulas embedded to correctly calculate the happiness scores using a weighted average formula. View sheet 6 to see the happiness score for each country.

Step 7: Use sheet 7 in this excel file to create a chart and to correctly rank your countries in order.

Step 8: Sheet 8 is correctly formatted for your WP1 submission to D2L. Copy the final sheet 8-WP1 Upload into a new excel sheet. Save as an .xls sheet with the name "LASTNAME_FIRSTNAME_SEC#" and upload to D2L by Feb. 3.

WP2 (6% of your grade)- Follow the instructions below to complete a short essay which will be uploaded to D2L by March 16.

The file that you submit should contain the following information:

- Page 1:
    - Identifying Information:
        - File name "LASTNAME_FIRSTNAME_SEC#_paper"
        - Header on paper with Name, Section
    - Answers to the following questions in complete sentences.
        1. Explain how ranking countries by happiness is mathematically similar to calculating your grade in a course.
        2. List one possible issue that might occur if the data collected from gapminder is not refined.
        3. Critique the following statement: "People in Denmark are much happier than people in the US."

- Page 2:
    - A 500-700 word, news article, that contains:
        - Headline or Title of your "press release" news article
        - the ranking itself (that is, the ten countries from most to least happy).
          You must include a clearly labeled graph which displays the ranking itself.
            - The axes should be labeled and a title/legend included.
            - Graph cannot be drawn by hand.
        - Information about the metrics
            - What they are and given weights.
            - Why are they important
        - two or more limitations in your analysis, and
        - Is there anything interesting the the reader should notice about the data-geographical patterns, etc... .

Timeline of Writing Project:
- Lab/Recitation on 1/23 - begin work on project.
- Upload completed Excel Sheet by Feb 3.
    - **File format must be .xls --other files will not be accepted**
    - Name of file should be "LASTNAME_FIRSTNAME_SEC#"
- Lab/Recitation on 2/20 - bring two printed copies of the draft of your writing project to lab for peer revisions
- Final version of Writing Project due Monday, March 16 by 10 pm - uploaded to D2L
    - **Must be .pdf format. Other formats will not be accepted.**
    - Name of file should be "LASTNAME_FIRSTNAME_SEC#_paper"