Water Quality Project Final Proposal

Field Ecology

This proposal will identify the study you will be carrying out looking at water quality in Jackson Creek. This assignment is an individual assignment, and it needs to be typed. This assignment is due at the end of the period today; please e-mail it to dan.bregar@corvallis.k12.or.us with the subject "per *X your name* WQ Final Proposal".

Your proposal should describe what you will investigate and how you will conduct your study. Use this format to compose your proposal.

1. Question: In "what is the relationship between" form, write the question that you will be trying to answer. One of the factors you look at will be either pH or turbidity. You can choose the other factor – if you were here for the pilot study last Friday, you should have a good idea of what to do. Otherwise, you will need to pick a second factor from the brainstorming activity we did at the end of the first semester.
2. Background Information: This section of your proposal should consist of three parts and will need to come from research that you do on the internet:
    a. One or two paragraphs summarizing the relevant research you did first semester in the "Water Quality Project Research and Proposal". (If you haven't finished this assignment, or can't find it, you can look at the assignment on our website and use it to guide your writing.)
    b. A paragraph that describes the general location of Jackson Creek in the Willamette Valley, the types of plants found on CV's campus (you can use the information from your Plant Portfolio), and a general description of the appearance of the creek and the surrounding area.
    c. A paragraph that explains why water quality is important to look at – and why your chosen factor in particular is useful to measure.
3. Methods: For each factor in your question, describe HOW you will collect your data. Be as specific as possible – your methods should take the form of step-by-step lists that anyone could follow. In writing your methods, think about the instructions you would need to give someone in order for them to collect your data for you. Part of this section should include the information that we have discussed in class for setting up the sensors, collecting your samples, and using the sensors to take measurements. Another part of this section will describe specifically how you plan to collect your data for the other factor in your question.
4. Data Form: Make a blank data table that you could fill in as you collect data. The form should have blanks for all the necessary information you will be collecting – including sample collection locations and spaces for any calculations you'll be making.
5. Materials: Include a list of all the materials you will need for your study and identify who will provide each material (if you need anything from the school, be sure highlight these materials so I can make sure that they are available).
6. Proposed Analysis: In three or four sentences, explain how you will use your data to answer your question. Give some examples of the kinds of data you think you might see and how you would interpret that data. Your interpretation should be readable as an answer to your "What is the relationship between" question.