**E-Portfolio Research Blog Assignment**Physics 199: Scientists at Work

STREAMS Summer Bridge 2011

These instructions are for a research blog that you will keep for the summer bridge program. The goal of this assignment is to have you write a little each night about what you are doing. Ideally, this will lead you to find out what you understand, what you have questions about, etc. For instance, if you can write about A and can’t write easily about B, then you probably understand A and not B. Also, most of what we write in the blogs is designed to be recycled into other writing assignments later in the course.

In all cases, you are expected to post your blog entry to your e-portfolio site prior to 6:00 am the following day.

Week 1

**Blog entry 1: (Tuesday, June 28)** Describe your research topics as best you can to a non-expert. (Pretend that your family is going to log on and read about what you are doing here at Bridgewater.) Write between 150 and 300 words, and try to include at least one picture.

**Blog entry 2: (Wednesday, June 29)** Explain why your research project is significant in about 100 words. (Why do people care?)

**Blog entry 3: (Thursday, June 30)** Describe the data that you are going to be working with. How will the data be collected? Analyzed? Are the special techniques or equipment that you will need to learn how to use? Write between 150 and 200 words and try to include at least one picture.

**Blog entry 4: (Friday, July 1 through the weekend)** Write a longer blog entry that combines a description of the project, its significant, and the data. You may revise /recycle material you have written in the previous three postings. You should include a few pictures or diagrams to support your work. Write about 400 to 500 words. The tone can be informal, and it is ok to express doubts or confusions. Post this before Tuesday, July 5 at 6:00 am.

Week 2

**Blog entry 5: (Tuesday, July 5)** What aspects of your research project do you not understand? Give a short list and explain what you *do* know about the things you don’t understand, and where you think you are getting confused. Write between 75 and 125 words.

**Blog entry 6: (Wednesday July 6)** Based on the texts provided by your research mentor and the notes you developed in class today, what new insights do you have into your research project?

* Part A: write 100 to 150 words that focus on any one or more of the following topics: significance, methods, data collection, data analysis. This should be more formal in language if possible.

**Blog entry 7: (Thursday July 7)** Based on the texts provided by your research mentor and the notes you developed in class Wednesday, what new insights do you have into your research project?

* Part B: write between 100 and 150 words discussing what you know now about your research project that you did not understand a week ago (when you started). How did you learn these things? Who taught you and how? What did you figure out on your own?

**Blog entry 8: (Friday, July 8 through the weekend)** Explain your research project again to a non-expert. (This is a revision or a re-do of Blog Entry 1.) Spend 200 to 300 words explaining your research project and include pictures, data, methods, etc. You CAN and probably SHOULD reuse text you have already written in other blog entries in writing this entry.

After explaining your research project, add an additional 75 to 100 words discussing your reaction to doing the research. Have you liked it? Why or why not? What was interesting and not interesting? (Be sure to reflect on why.) How did you learn what you learned? Has what you learned in any way changed your interests in science or math? Write reflectively along these lines.

Week 3

**Blog entry 9: (Monday, July 11)** Write a draft abstract for your research project. Address your abstract to well-trained undergraduate scientists and mathematicians (use technical language freely). Follow the abstract writing guidelines at <http://classweb.gmu.edu/biologyresources/writingguide/Abstract.htm>.

**Blog entry 10: (Tuesday, July 12)** What questions did your research project answer during your three weeks of the summer bridge? Write between 150 and 200 words. If you project did not come to a final place where major (large scale) findings can be reported, what smaller things were discovered? (Think about what your research uncovered in terms of methods, data analysis, serendipitous discoveries.)

**Blog entry 11: (Wednesday, July 13)** What questions did your research project NOT answer during these three weeks? Alternately, what questions did your research project raise? What could be studied next? Write between 150 and 200 words.

**Blog entry 12: (Thursday, July 14)** You will be giving an oral (poster) presentation on Saturday. Reflect on your strengths and weaknesses in performing this act. Write reflectively for 150 to 200 words about this upcoming experience.