**Weekly Laboratory Notebook Entries**

**Instructions and Template**

Biology 107 students,

This semester you will use electronic notebooks to record your laboratory activities. These materials are property of the course-you must submit an entry for each week you are in lab. The course instructors have developed a lab notebook template document which you will find on pages 3 and 4. It is important that you follow the instructions on Pages 1 and 2 to complete your weekly laboratory notebook entries.

NOTE: In many labs you will set up an experiment and then not see the results until a week or two later. This means that your “weekly” notebook entry may not be complete and ready to upload to the course site until a week after the experiment. e.g. If you plate bacteria during week 1, you won’t know if they grew until you get into lab on week 2. Therefore, your conclusions won’t be ready until week 2, at which time you can then complete and upload the notebook entry for week 1.

BEFORE LAB:

There are four questions (#s 1, 2, 3, and 4) to complete each week BEFORE you enter lab. You should bring with you a piece of paper with this information each week-this could be a piece of notebook paper that you have generated, or it could be that you electronically complete the sections on the template page below and then print it out and bring it to lab.

The pre-lab assignment is designed to get you to prepare for lab that week. What experiments will you perform? Do you need to set up a logic tree and make a decision once you get into lab (e.g. if I see plaques on my streak plate then I’ll do XXXX BUT if I do not see plaques then I’ll do YYYY). Being prepared will allow you to be more efficient and confident once you get into the laboratory environment.

THIS SHOULD BE WRITTEN IN YOUR OWN WORDS AND NOT BE COPIED AND PASTED FROM YOUR LAB MANUAL. This will allow you to practice rewriting things so that you have a lower chance of plagiarizing the lab manual on your lab report later in the semester.

DURING LAB EXPERIMENTS:

Have prompts 5, 6, 10 and 11 from the Template present on the sheet of paper that you bring to lab. Again, printing the template page might be the best way to go. Prompts 5 and 6 allow you to record your activities during that day’s lab, and they allow you to record any changes that you make in your experimental approaches. Questions 10 and 11 are designed to allow you to plan ahead to the next week and record any initial results you obtain while in lab that week.

AT HOME REFLECTIONS:

Questions 7, 8, and 9 are designed to get you to reflect on both your experience in the Biology 107 laboratory and your learning at WSU in general. Learning is difficult, and it often times requires patience and can lead to positive or negative emotions. Record these thoughts and reflections in your notebook and over time watch and note any changes that occur in your thinking about the laboratory, your skills as a scientist, connections you are making between the Biology 107 lecture and laboratory, or other aspects of the Biology 107 lab experience.

If you review the syllabus, you will see that you will be graded by your TA on the quality of your reflections near the middle of the semester and again near the end of the semester. You will receive feedback on your reflections before any grading occurs so that you can improve your skills.

POST LAB-UPLOADING YOUR LAB NOTEBOOK ENTRIES:

Each week after lab you should make sure that any previous weeks’ completed notebook entries are uploaded in your laboratory’s Blackboard course space. This will make sure your notebook is up to date and that you don’t forget to upload a completed weekly entry.

Instructions on how to upload laboratory notebook entries into Blackboard can be found in a document in the Content section of the lab course space.

**Notebook Template**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lab Section #\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

PRE-LAB (Complete before you walk into lab each week, print, and bring to lab)

1. Title:

2. Purpose/Objective:

3. Materials:

4. Procedure:

DURING LAB EXPERIMENTS (Bring prompts to lab and take notes on this section during lab)

5. Changes to Procedure (IF ANY):

6. Future Directions/Decision Tree:

BETWEEN LABS (Reflection about learning)

7. Describe in detail your most significant learning experience this week. In your writing, include specifically: (a) What you learned; and (b) a description of the experience that helped you learn it.

8. For the learning experience you described in Question 7, please answer the following two questions: (a) what emotions did you have; and (b) how did they impact your learning (before the event, during the event, after the event)?

9. As you think about the learning experience in Question 7, please answer the following questions: (a) what worked; (b) what didn't; and (c) what will you do in future learning to use what you learned from this experience?

POST-LABORATORY (Can start during that week’s lab and complete the following week… upload to your notebook in Blackboard when this section is completed)

10. Results:

11. Discussion: