Pre-Lab Expectations -

1. Before class, all pre-labs are to be placed in the collection box on the black shelves in lab.

2. Pre-labs include the following sections for each experiment being performed that day:
   a) Heading (Name, Section, and “Pre-Lab” written on the top of the page)
   b) Statement of Purpose (1 point per entry)
   c) Hypothesis (2 points per entry)
   d) Predictions (1 point per entry)
   e) Neatness, organization, and attention to detail are worth an additional point (1 point per entry)

3. A hypothesis is an educated guess which concerns the experiment and how you expect the experimental trials to differ from your control. In other words, it should always address a specific question which is to be answered through the process of experimentation. It should usually be worded in the affirmative and should be no more than one sentence.

   ex. The workload of a teaching assistant can be greatly reduced if his expectations are made clear. Stated in the if: than format; If the TA makes is expectations clear, his workload will be greatly reduced.

4. A prediction differs from a hypothesis in that it does not seek to tell you the reasons why an experiment goes a particular direction. Rather, the prediction is simply a description of what you believe you will see when conducting your experiment. Your predictions should serve to confirm your hypothesis. A prediction is not a statement of whether or not you expect to complete the experiment nor a statement of your success or failure. It is simply what you expect to see in terms of results and how they relate to your hypothesis. In other words, if my hypothesis is true, how do I expect my results to look.

   ex. I predict that after making my expectations clear, I will see fewer raised hands at the end of the lab assignment. I also predict that fewer mistakes will be made on pre-lab assignments and there will be less red ink on them following grading.
Post-Lab Expectations -

1. Post-labs contain the following sections of the experiment is completed in one laboratory period:
   a) Heading (including section number)
   b) Purpose
   c) Restatement of Hypothesis
   d) Restatement of Predictions
   e) Methods
   f) Results (including diagrams, illustrations, and tables)
   g) Discussion

2. If the experimental results are to be observed in a future laboratory period, omit the results and discussion section. If the experimental results are from a previous laboratory period and the lab report was written in a previous week, include the results and discussion section but do not rewrite all the other sections. Make it clear which lab report you are referring to.

3. The majority of points in your lab reports are earned in your discussion section. This section is not a reflection on how amazing you thought the experiment was, nor is it a restatement of your hypothesis. It is a scientific evaluation of your results and how they served to confirm or invalidate your hypothesis. Include the following in your discussion:
   a) Did your results confirm your hypothesis?
   b) Why did your results confirm or invalidate your hypothesis?
   c) What were potential causes for error (besides human error) in your experiment?
   d) What is the scientific basis for your results (i.e. if fungi prefer acidic environments, why does that make sense)?

4. Grades of below 7.5 contain major errors or are incomplete. Grades from 7.6 to 8.4 are complete and satisfactory. Grades of 8.5 and higher are complete and make connections between the laboratory experiment and the theoretical basis of the experiment.