**Sophomore to Junior Science Research Summer Assignment**

You will be working with your mentor to set up specific goals over the summer. You must document 90 hours working on continuing your research. You and your mentor need to design your summer plans. Your requirements are:

1. 90 hours documented working on your research (this could be working with your mentor, furthering your research through reading articles, or working on techniques you will use in your future experiment. All details should be documented in your notebook and on your summer time log.
   1. Make sure to show documented evidence of attempts to overcome obstacles and problem-solve over the course of the summer.
2. A minimum of 10 contacts with your mentor throughout the summer and have attended the lab or talked with your mentor at least once every two weeks.
3. Read and demonstrate knowledge of at least three scientific journal articles pertaining to your area of research. (Must be documented in your lab notebook.)
4. Write a minimum of two drafts of your research paper. Each draft must be edited by your mentor and one other person. Keep track of changes and both drafts will be handed in on the first day of school. A more detailed description of this paper is provided in this packet.
5. Design a 8-12 minute PowerPoint of your research (all parts of your research paper) and a review of everything you did over the summer to present in the first week of school
6. Check in with Ms. Rinaldo on the 15th and 30th of July and August to show your progress on completing all your goals. This can be done by email, phone, or in person. In addition, mandatory biweekly meetings will be scheduled.

\*Stay tuned for BBQ and Other Event Information this Summer\*

**SOPHOMORE TO JUNIOR YEAR SUMMER RESEARCH PAPER**

In order to highlight your summer science research accomplishments you need to document your experience in the form of a 10 page paper that should include the following:

* An introduction based on your summer experience. This means funnel into what you were specifically working on.
* Problem statement/Hypothesis
* A detailed section on all the methodology and materials that you used. This includes an explanation as well as the protocol for each step of the procedure. This also tell us what role this particular procedure played in your experimental design.
* Results section: Present results in graph and/or table format. (If you are not conducting your experiment this summer, then this will be anticipated results.)
* Discussion: What do your results mean and how do they pertain to your future research.
* Where do you see yourself going as a result of your summer experience? What is your proposed timeline for 1st quarter? 1st semester? By June?
* Bibliography
* Paper Format: Title page, Internal Citations, Times New Roman size 12, Double spaced one inch margins, Passive voice.

\*\*REMEMBER to BE SPECIFIC in ALL SECTIONS of your paper\*\*

PHS SR Summer Time Log

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| Date | Time on Task | Location | Pgs in Lab Notebook | Description of what was done |
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**\*Make multiple copies of this form if needed**\*