Being able to evaluate and interpret data from scientific literature and other sources may be one of the most crucial skills in the biology field. The only way for scientific research to persevere is by reading past research and figuring out ways to improve it. Professors have stressed from the beginning of my college career how we can’t become knowledgeable in our field unless we review the work of valid sources. I have evaluated and interpreted data from scientific literature in every biology course I’ve taken at Longwood. This includes credible online sources, peer reviewed articles, and information posted by professionals in the field. I believe the work that best represents my knowledge on how to interpret and evaluate data comes from my two big college review papers and article analysis assignments in Biol 288: Sophomore Seminar, Biol 488: Senior Capstone, and Biol 455: Invasive Species Biology.

In Biology 288, we were allowed to choose any topic to write a review paper about. My love for animals and marine life led me to write my review about rising temperatures and their effects on sea turtles. Review papers are much different from regular scientific articles, so I remember how hard it was for me to figure out where to start. Scientific articles are sectioned off based on the work that is being conducted, but for the review we were tasked with using other peer reviewed articles to support our chosen topic. The organization has always helped me proceed in the writing process, therefore I decided to split my paper up into sections. I introduced my topic, gave background information, discussed the effects of sea turtle nesting sites, rising sea levels, and gender determination. I gathered data from the results in many papers and use it to make educated claims on the effect that rising temperatures had on sea turtles. My final product helped me to analyze the work of others rather than always focusing on the results of my own.

In Biology 455, I had the opportunity to take a class that wasn’t necessarily experiment based. Rather than designing and carrying out an experiment, we were tasked with analyzing and presenting work, which came from scientific literature and other sources. Each class period, a different student was tasked with finding a peer reviewed article on an invasive species and presenting the information effectively to the class. On top of this presentation, each student was required to fill out an article reading outline in order to make sure everyone read and understood what was being presented. Although it was a guided outline, I was able to critically analyze and pick out the most important information from each article we had to read. It can be hard to determine what is important and what can be dismissed, because each point made leads to another finding. After a few weeks of analyzing and outlining articles, I was able to get the hang of it. From there on out, I have been able to imagine the outline guide in my head when reviewing articles for other classes. It helps tremendously when reading a difficult paper, I am able to pick out key elements of information and has helped me style my writing as well.

**\***In Biology 488, we were tasked with creating a semester long research proposal. At this point, the final proposal is in the editing stage, therefore it has not yet been completed. Once the final version of the paper is complete, I will go back and add this artifact.”