Goal 2.1

For my first artifact for goal 2.1: being able to evaluate, interpret, and apply experimental design and draw valid conclusions form experiments I used my experimental design that I created for Dr.Fortino in biology 250. In this part of our lab we had to analyze past experiments and create an experimental design for our corbicula project. This helped with the learning process by allowing us to gather data and put that information into a well working experimental design which we then used. For my second artifact I chose my project from biology 324 with Dr.Shanle where we used CRISPR Cas9 to edit the genome of Drosophila melanogaster to express the gene wds (will die slowly) in which all offspring from the edited fruit fly died slowly. I was actually really excited for this lab as I had already had Dr.Shanle so I knew what to expect and I found the concept and application of genome editing extremely interesting. This applied to the goal because we had to follow a strict experimental design in order to gain valid results from out experiment and then once the data was collected we had to then interpret the data which was that since all of the edited cells would slowly die we could tell the gene had been expressed. For my third article I chose my research proposal for biology 488 capstone class where I had to do extended research into the main threats to marine life and then come up with projects to help fight these main threats.