Longwood University does a great job of integrating the major biological principles into our curriculum through our pillar system. Through this, I have been able to critically analyze and apply the major principles of organismal biology through Biol 315: Invertebrate Zoology and Biol 346: The Resource Curse: Conservation and Economics in the Amazon Rainforest.

In Biology 315, we had a slightly different method for our semester long final project. Instead of a poster or oral presentation, we were required to write a blog about any invertebrate of our choice. Here, we had to list the animal’s phylogeny, form, physiology, morphology, nutrition, ecology, and methods of reproduction. I chose the black ant, because they are so small, yet so mighty. Using what I learned from introductory level classes, I was able to effectively find sources that gave information pertaining to the categories. A few interesting facts I found while researching included: Males and queens are the only black ants that possess wings, the antennae are used for pheromone detection, and the males die shortly after mating. This project was more integrative in the way it was set up then a normal poster or oral presentation, so I feel that it gave me a creative outlet.

In Biology 346, I mentioned in an earlier reflection that this study abroad was a once in a lifetime opportunity. The courses focus was on the negative effects that oil drilling and industries have on the Amazon Rainforest. In a previous assignment I mentioned an activity where we surveyed a reserve for the leaves in order to determine deforestation increases. In the picture here, we were completing the same experiment, except this time we were on the riverbank in order to test whether there was a difference in degradation based on location. The same method was used to randomly determine a location to survey. We had to close our eyes, throw a stick, and make a perimeter where the stick landed in order to count the leaves that randomly fell within the vicinity. The incredibly large leaf pictured was used as a tray table in order to properly sort the leaves. It was incredibly wet by the riverbank, therefore the leaves were wet and had decomposed for the most part. All we were able to find was bits, pieces, and outlines of old fallen leaves. Because of this, it was hard to determine the effects had on the area. What we were able to account for was the variety of leave that had increased. Our location by the riverbank was much more remote than at the reserve, which led us to think that human interference was less of a concern.

These classes allowed me to truly grasp the concept of organismal biology. While I’m no professional in the field, these classes have allowed me to understand basic concepts necessary for a career working either in the field or in a lab.