Biology majors are expected to apply many of the things that they learn into the modern world. Society has many environmental and social issues that are directly related to biology and remedies have been investigated through experiments and discoveries. Two notable classes that helped me grasp the severity of these issues in society was my Biology: 288 and Biology:488 class.

My biology 288 project looked at the potential dangers of plastic pollution. This type of pollution can cause many health problems in various individuals. Some dangers are endocrine disruption, birth defects, and the development of various cancers. Because we are making approximately 5 million tons of plastic every year, this problem will inevitably get much worse. A recent discovery in 2016 sparked my interest for this project. Scientists discovered a bacterium in Japan that makes an enzyme that has the ability to degrade plastic. This enzyme (PETase) has unique structures that can give it the ability to degrade plastics known as polyethylene triphosphate. This type of plastic is primarily found in water bottles and accounts for 75% of all plastic pollution on earth. The implementation of the Bacteria into the environment may lead to an extreme reduction of overall plastic pollution in the environment thus potentially minimizing the harmful effects of it. This class showed me that nature has the capability of fixing our mistake. This class also integrates the various other subjects of biology such as evolution and genetics.

In my biology 488 class, I looked a New York Times article that brings about concern over the major glaciers in antartica melting. This shows us the dire effects of climate change and the changes that our planet is undergoing because of it. One of the major glaciers in antartica called the Thwaites glacier is approximately 3.5 degrees higher than the freezing point. This is causing rapid melting and may lead to an overall increase of the worlds water level more than a meter. This is enough to flood many major coastal cities and potentially causing many areas uninhabitable. It will has have devastating effects on the food chain and other wildlife. Potential solutions to this problem are eliminating our dependence on fossil fuels, Recycling, Biofuels, lifestyle changes (restricting consumption of meat, Buying less products that are produced by fossil fuels)

Both of these classes showed me how problems of the Earth are directly related to us. We are the stewards of the earth and are meant to protect it. It saddens me to see that we are the reason for its demise. This class showed that there are ways to reverse and fix the changes. I happy to see that nature, like the enzyme PETase, is adjusting to our changes and are making remedies of their own. These classes really opened my eyes to the problems that we are making to the Earth. This increased my awareness to help save the environment.