To whom it may concern,

This statement should adequately demonstrate that I can satisfy the requirement for statistics to apply for the Master of Environmental Science program at the Evergreen State College. Although I've taken both general and analytical statistics, I haven't taken a formal class since 2013. I received my associate degree at the end of 2015, and I've only taken natural science courses since then. However, natural science courses that include research methods rely heavily on statistical analysis and I hope to use that experience here to satisfy the requirement.

In 2020, I enrolled at Evergreen to finish my undergraduate degree. I've taken several classes here that teach research methods and apply analytical statistics to data that we collect. Field Ornithology with Dr. Alison Styring included ornithological study as well as hands-on experience with avian research methods. The class culminated in a project of my choosing, where I collected audio recordings of bird song and applied chi-square tests to determine if there was a significant difference between habitats. Chi-square tests are used for investigating relationships between nominal and ordinal groups of data, which made it ideal for this research and a simple formula in Excel.

In 2021, I began studying Forests with Dr. Dylan Fischer which included the principals of forest ecology as well as applied forest research methods. After learning to construct a forest inventory database in that fall quarter, I continued studying forest ecosystem services with Dr. Fischer and The Nature Conservancy. I spent the last six months of my degree, and most of the following summer, working on a project to elucidate the interface between adaptive forest management and carbon dynamics in a recovering old-growth forest. For the analysis, we conducted an ANOVA test because we wanted to consider several groups including young and mature forests that were either commercially, or pre-commercially thinned. This analysis is relatively complex compared to the Chi-square test, and I was massively interested in learning the R programming language, so we conducted that analysis using a combination of RStudio, JMP, JASP, and the US Forest Service's Forest Vegetation Simulator.

I graduated with a Bachelor of Science emphasizing on natural resource management in June, but I reenrolled as a post-baccalaureate student so that I could study and work as Dylan's research assistant. We're studying the hydrologic differences between tree size classes now, but I'm still working in R and trying to build a web application with RShiny to automate the calculation and data visualization steps of our monitoring process. This should adequately demonstrate my general understanding of statistics, but I hope to truly master it at MES next Fall.

Best,

Steven Quick