Statistics 133 Final Paper: Cal Answers Data Exploration

Grade Point Averages of Departments

Among faculty and students, there is a competitive spirit in the conversation of who has the toughest department or classes. There is great honor knowing that one is the taking courses in toughest department at UC Berkeley. Typically, there is not much agreement on which department is the hardest to take courses in because of bias, so this paper will try to find the true answer.

First, we took 18 semesters of grades starting from the 2010 school year to the present (2010 summer semester to 2016 spring semester). Our GPA calculation deviates from the normal Berkeley GPA calculation–instead, we counted A+ as 4.3 grade points. Our reasoning is that A+ is the hardest grade to get; in fact, out of 1189583 letter grades only 61124 people got A+'s, which only is five percent of that population! In addition, a course that is consistently giving out A+'s to students is definitely easier than a course than gives out as many A's. So, we found the average GPA by department, and the twenty departments with the highest GPA's came out as one might predict. 70% of this category is made up by language departments like Filipino, Tamil, Turkish, Korean, Vietnamese, etc. However, does this near-uniformity in subject hold for the twenty lowest GPA's?
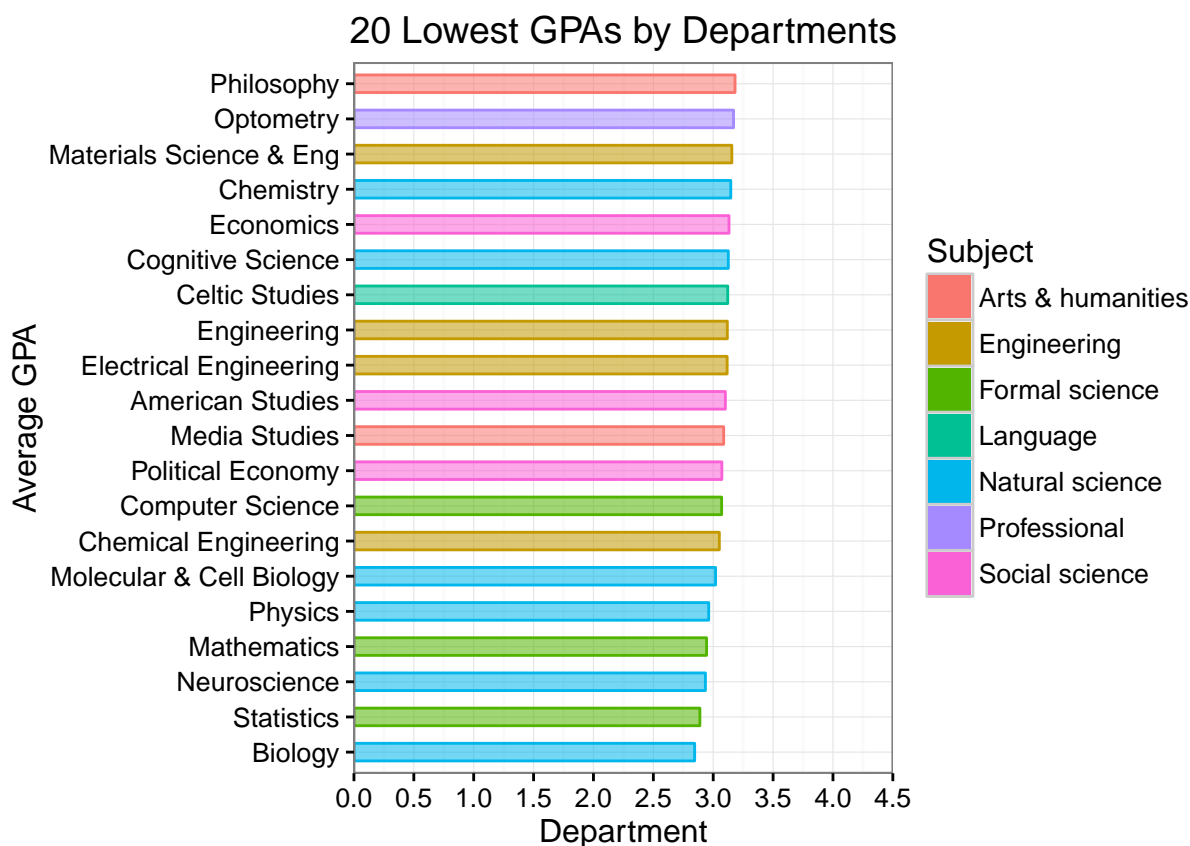

Figure 1: As you can see, there is a lot more variety