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Best Majors for GRE Scores in 2013: Philosophy Dominates

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The peak of summer has passed, and many students are slowly turning their minds to the upcoming school year. As back to school specials start hitting stores, many prospective students are hitting the books for graduate school entrance exams or poring over their scores from spring tests.

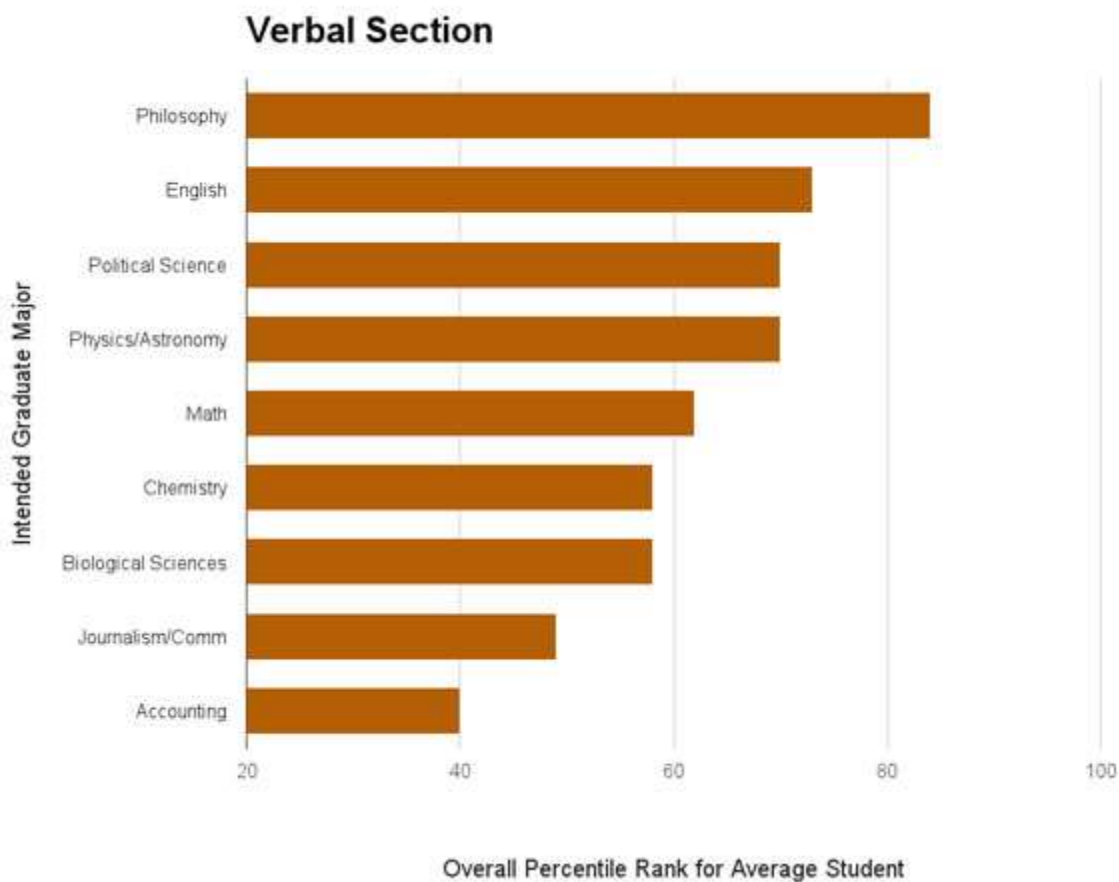
The most pervasive general graduate school exam in the U.S., the [GRE](#), recently released its scoring data for the 1.5 years since a major overhaul of the test in late 2011. Within the dataset, the ETS has grouped average scores by the test-takers' intended graduate major, inevitably contributing to the bragging rights of "major" elitists.

So which majors reign supreme on the GREs? Let's have a look at the data for the test's three main sections: verbal, quantitative, and analytical writing.

Verbal Reasoning

The [verbal section](#) measures a student's critical thinking ability, reading comprehension, and vocabulary mastery through a series of multiple choice questions. The questions require students to complete sentences with the most fitting word or phrase available and glean information from short passages.

Here's how a selection of majors fared:



Data for tests taken between August 2011 and April 2013. These are a selection of representative majors, but you can find data for all majors in the ETS table. Source: [ETS](#)

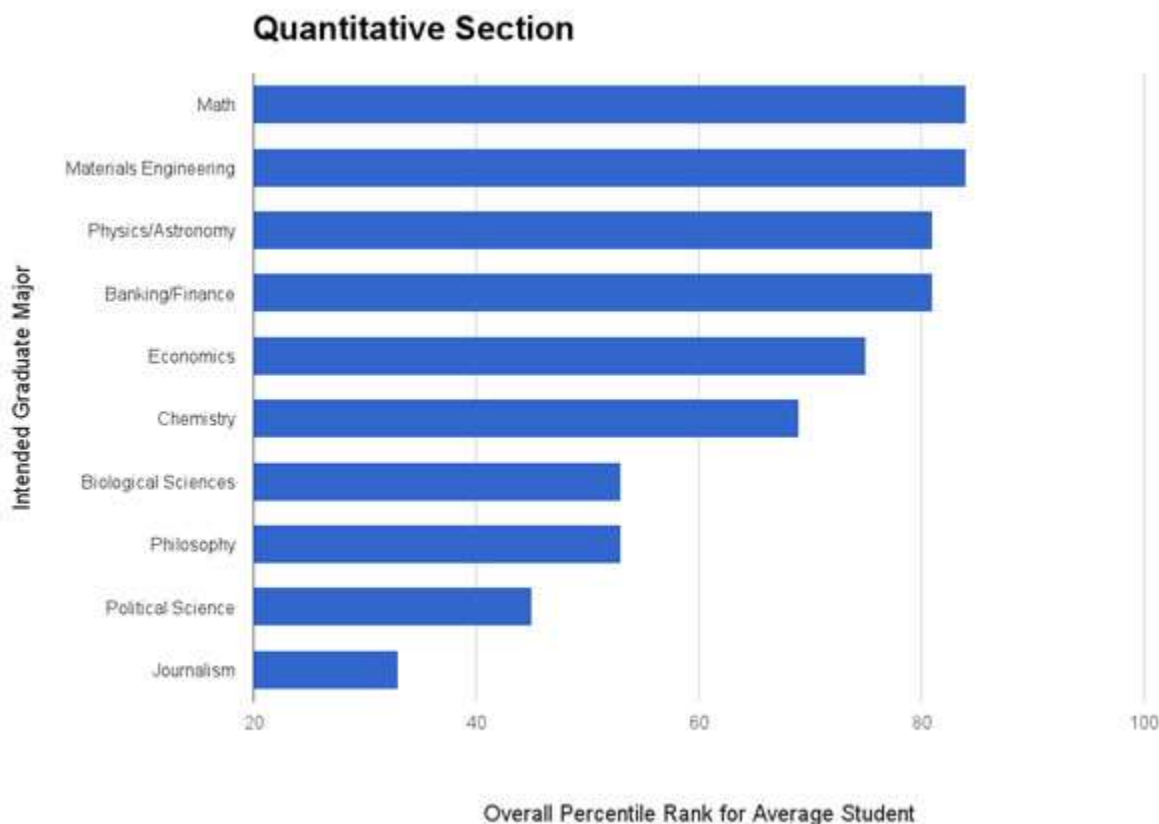
In the chart above, I've plotted the average score for several individual majors as a percentile of all scores. For instance, the average philosophy student's score (mean score) on the verbal section was 84 percent higher than all of the scores across all intended majors.

Philosophy outranked all other majors by a significant margin while physics students topped the charts among math and science majors. Ironically, journalism and communications majors performed worse than many science students on the verbal section of the exam.

Quantitative Reasoning

Math lies at the heart of the [quantitative reasoning section](#). Most topics on this section should have been covered in high school with topics including algebra, geometry, and data analysis. Questions in this section prompt students to determine averages, use basic probability, recognize numerical patterns, and glean information from charts and graphs.

Unsurprisingly, mathematics students shared the top spot, and physics majors tied for second with several other majors.



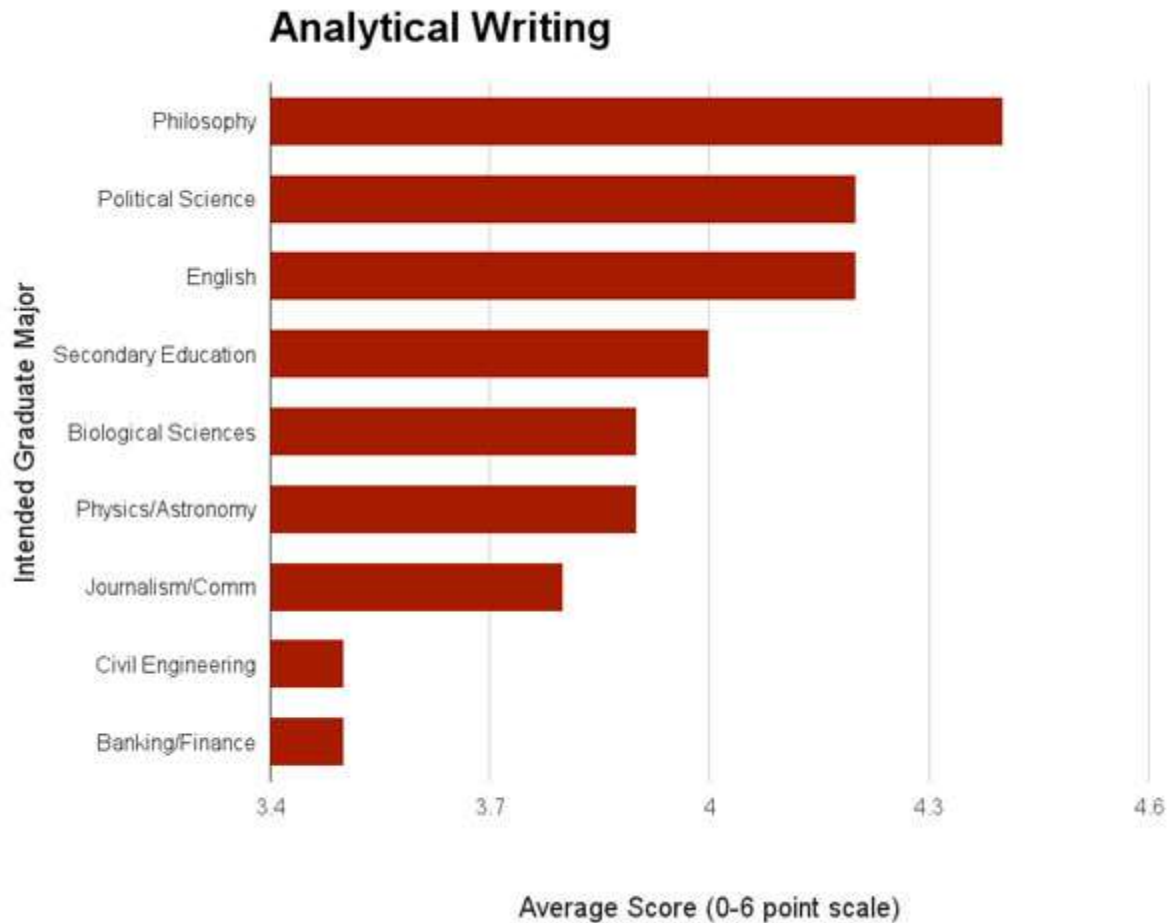
Data for tests taken between August 2011 and April 2013. These are a selection of representative majors, but you can find data for all majors in the ETS table. Source: [ETS](#)

According to [data from only 2011 and 2012](#), math majors were tied with physics majors in this category, but they averaged one point higher for this data set. Predictably, most social sciences students scored lower than science and engineering majors with notable exceptions in economics and finance.

Analytical Writing

The final third of the exam, the [analytical writing section](#), has two essay prompts. One prompt requires students to pick apart logical fallacies (e.g. strawman arguments, circular reasoning, and ad hominem attacks) in a hypothetical written argument. The other prompt is much more open-ended, requiring test-takers to take a position on a short, general statement and argue for the position effectively.

This section is graded in half-point increments from a scale between zero and six. Because the percentile ranks jump dramatically between the half-point increments, I've graphed just the raw scores for this section.



Data for tests taken between August 2011 and April 2013. These are a selection of representative majors, but you can find data for all majors in the ETS table. Source: [ETS](#)

Once again, philosophy took the top spot, edging out political science and English students by 0.2 points on average. Physics students had a strong showing as well, beating most science and engineering majors and even several liberal arts majors such as journalism/communications.

Here's the percentile scores for the analytical writing section:

- 6.0 = 99th percentile
- 5.5 = 97th percentile
- 5.0 = 93rd percentile
- 4.5 = 78th percentile
- 4.0 = 54th percentile
- 3.5 = 35th percentile
- 3.0 = 14th percentile
- 2.5 = 6th percentile
- 2.0 = 2nd percentile
- 1.5 = 1st percentile

Reflections on the Data

Before championing your chosen major as the most awesomest, smartest major ever, there are a few things to keep in mind about this data.

First, this data tracks the intended graduate major, not the actual undergraduate major chosen by the student. Because some students choose a different discipline to study in graduate school, not all intended math majors were math majors during their undergraduate career, for example.

However, in physics at least, the vast majority of graduate students have an undergraduate degree in the field. According to [data from the American Institute of Physics](#), 94 percent of domestic physics graduate students majored in physics for their undergraduate degree.

Also, correlation does not necessarily indicate causation. Just because physics majors perform extremely well on this exam doesn't necessarily imply that their physics education is entirely the cause. It's possible that physics departments attract some of the best high school students, and these students would have performed well on the GRE regardless of their major in college.

Nonetheless, I suspect that undergraduate majors can play a significant role in determining a student's success on the GREs. Philosophy departments focus heavily on logical reasoning and identifying logical fallacies, most likely leading to philosophy students' dominance of the verbal and analytical writing sections.

The relatively poor performance of students intending to study journalism or communication in graduate school surprised me. They performed worse than many science and math majors on not only the math-heavy section but also the verbal and analytical writing sections.

Finally, not much has changed from [last year's data](#), and physics students continue to perform strongly on all three areas of the exam. Philosophy students reigned supreme in two of the three sections however, suggesting a "love of wisdom" will serve you well. At least on standardized exams, that is.

Posted by Hyperspace