

Why Take Statistics?

The Philosophical:

Statistics deals with how we can learn about the world from observations when those observations are fallible. It teaches us to work with randomness and make it a tool for discovering the unknown rather than something to fear. The reasoning of statistics is the foundation of scientific reasoning. When examined closely, it is amazing that we actually can draw conclusions from a random sample or fallible experiment. If nature were just a bit more intransigent, we'd be unable to get anywhere. There is something quite amazing and beautiful in reasoning and methods that tread so close to the edge of the impossible and yet are so fundamental to scientific progress.

The Political:

Your parents may have told you that their statistics course was the worst experience of their academic lives, but things are different now. The AP course is a modern course that focuses on data rather than on probability theory and combinatorics. We use calculators and computers and deal with real-world problems. We use discovery learning methods and multimedia materials. I guarantee that your experience will be nothing like what your parents suffered through.

The Practical:

Statistics is used by charlatans to fool the masses. Statistical literacy is good self-defense in a world of advertising and political claims that only seem to be based on data. This course will arm you with the necessary understanding so you can smell a statistically-disguised lie a mile away. And think of the money you'll save not playing the lottery.

The Crass:

1) Statistics is one of those courses that will get you a job and/or a promotion. When we survey the companies that hire our graduates (I teach at Cornell) they tell us that they'd like our students to know more statistics and more computing. When we survey our recent graduates (5-years out), they tell us that statistics was one of the most important courses to them in getting their current positions.

2) Statistics is required by virtually every social science major, engineering, pre-med, and many others. It is now required for most law degrees. AP Statistics credit is therefore a useful commodity -- it will save you time and money in college.

--Paul Velleman

From a post to the AP Stat List serve