

August 7, 2017

Dear EMP 113,

Next month we'll be starting your "statistics" course. Don't worry: It's not intended to turn you all into statisticians. Rather, it's focused on a single statistical tool, "regression analysis," which lets you use available data to study relationships. (If you know how your actions and decisions relate to cost, revenue, profit, or ultimately, to return on investment, you're much better prepared to make the right decisions.)

The following pages (*which I beg you to read before we meet next month*) contain four sections:

1. The course structure, and schedule.
2. Computer and software issues.

A couple of years ago I rewrote this course, with the goal of starting the discussion of regression analysis in the very first class. This will get you to where you can work on some interesting cases between the two weekends we'll spend together.

In order to get off to a fast start, I need you to do a bit of preliminary reading, which connects your recent "probability" course to the statistical language of "trust."

Regressions are used to make predictions and estimates. Clearly, you'd want to know how much those predictions and estimates can be trusted. Therefore, we need to give meaning to the phrase, "I'm 95%-confident that my prediction (or estimate) is wrong by no more than ***this*** much." (The "this much" is called the "margin of error" in the prediction or estimate.)

3. What is this "margin of error"?
4. An overview of statistics.

This is a course where your study group is an important resource. If you feel comfortable as we work forward, please do what you can to be sure that your groupmates share in your comfort.

I look forward to meeting you September 14.

Best regards,

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