On Why Laura Is Requiring You To Learn LaTeX

Overt propoganda to positively reinforce your embrace of LaTeX and the benefits that shall result

When I first decided to require that my students use LaTeX, I wasn't sure whether or not it was a good idea. Despite – and perhaps also because of – some of the bumpy roads this will force us to go down, I am now absolutely convinced that it is a good thing. I'm a strong believer in letting you know *why* I require you to do the things that I do, so just in case I haven't preached about it enough in class, this document lists some of my reasons.

The benefits of learning to use LaTeX are many. They include:

1. Pretty documents. Pride in your work. Attention to detail and style.
2. Typesetting forces you to really focus on the presentation of the homework problem you are typing up, and how to make your work as clear and concise as possible. For each section you write up one or two problems very carefully, making it as perfect as possible. Paying attention to the presentation will also make you pay attention to the logical structure of the argument itself.
3. The primary goal of Math 245 is to make a bridge that gets you from the lower-level/computational courses to the upper-level/theoretical courses in the department. Part of the "mathematical maturity" process that you are going through concerns learning how to work within a structured logical framework, like dealing with abstract definitions and logical arguments. LaTeX is sort of like a computer version of that, where your notation matters and structure is important. It is a parallel topic that teaches the same skills as the mathematics we are learning.
4. Experience with a sort of mini-programming language, or at least experience with compiling, staying within strict syntax parameters, being able to deal with non-WYSIWYG situations, etc. This could be helpful to you when you get to Math 248 and have to write computer programs.
5. If you're serious about mathematics and continue in the subject then at some point you WILL have to use LaTeX. Every mathematics graduate student in the country uses it, and if you go to graduate school you will write your thesis in LaTeX. Even in industry you will have occasion to make respectable, typed-up mathematical documents.
6. When was the last time you handed in a chicken-scratch handwritten paper in a writing class?
7. Word's Equation Editor is so 1993. And it is ugly.
8. LaTeX is cool. I mean super-math-geek cool. So now YOU are cool. Because you can write stuff up in LaTeX and you rock.