

**CATHERINE
DRENNAN:**

So at MIT, there are several options of chemistry courses. Everyone has to place out of chemistry or take one semester, and even if you're going to be an economics major, you need that semester of chemistry, and there are several options. And this particular course is designed that if you don't have a very strong background in chemistry or maybe if you do but maybe it's not your favorite subject, that this is one you can come in and take even if you haven't taken chemistry before.

And the backgrounds are actually quite diverse. There are absolutely students who have never taken it before. There are other students who have taken two years who probably could have taken a more advanced class, but they thought this one sounded like it would be more fun. So there's quite a bit of mixture in terms of background.

A lot of people coming in are not that excited about chemistry, and this was one of my tremendous surprises when I taught here. I realized in high school not everybody is jumping at the bit to take the chemistry class, but at MIT, these are scientists and engineers. Everyone walking through the door should be in love with chemistry, and I discovered that absolutely was not the case and that it was my job to help convince them, these people who were generally interested in science and engineering, that chemistry was important. And I just thought it was obvious, but then I had to remember back to my experience, and it wasn't obvious to me the value of chemistry the first time I stepped in a chemistry course.

So on the first day of class, I like to show a picture from my college yearbook, a picture of myself and college yearbook picture of one of my classmates who is Lisa Kudrow, who is Phoebe on *Friends*, and I put both of our pictures up. We were in the same class, and I asked them to guess who we are. They usually get it.

And then I ask them to guess what I went to college to study. They guessed chemistry. I tell them drama. I ask them to guess about Lisa Kudrow, and they guessed drama, but it was actually biology, and she was a biology major at Vassar. And so then I said, how did this happen? How did I become a chemist and she become an actress?

And I let them know this because I said, you may have come to MIT to study something, but that might not be what you end up studying. You might be taking this class because it's required, but that's just because you have not found your passion for chemistry yet, and you

will find it. Maybe you'll find it this semester. Maybe it will be next year at MIT. Maybe it won't be for years until you're an engineer and all of a sudden you're working with chemists and you're like, oh, man, I really need to understand chemistry to do my engineering job better, and then that's when you fully appreciate the value of chemistry.

But I hope that if you haven't found your passion yet, you will find it this semester, and I'm going to try to help you understand why chemistry is so amazing and how it can affect all sorts of different disciplines. And so if you really embrace it and look at it, you realize there's just wealth of information that is in there. And if you get these main tools that we're going to cover-- I'm going to teach you really all the basics that you need to know-- if you can get those, you can go on and do all sorts of things with that chemistry.

And I have a 7-year-old daughter, and the world is a pretty scary place right now. There are a lot of problems associated with it, and we need people who understand chemistry to make the world better and to make the world better for my daughter. So this is a very personal exercise for me. I want everyone to come out of the class with this background in chemistry that they can save the world, because the world needs saving and my daughter is really cute, and I'd like to show a picture of her and say, make this world a better place for her.