Professor Strang's Greatest Hits:

That's a good rule of thumb for this class: if you run out of time, just guess (1 1 1).

It's really nice!

I like vectors to stand up properly.

This is one great rule.

Wow! Let me write this one down.

That one amp will bppzzjhhh down through there.

Now, I'm going to lift that board and forget about that stuff.

That's a long way to say "counting things."

This is legal! You don't do it every day, but you should.

I guess I don't know how you feel about your own life. I feel pretty lucky.

Oh, dear. Looks a bit messy.

OK, that's my speech for today!

What if I had to use determinants? I'd shoot myself!

We haven't thought about this—but, no thinking is required!

Taylor! He made a lot of trouble for millions of students.

Here, things go to pot.

This is quite fun and, for a small one, we can do it together.

Look at all my bars! Oh yeah, you could sell it at Home Depot.

We don't need to know all of the stupid matrix.

Nonlinear elasticity is serious business!

I'll follow your advice here.

Is there another mechanism? Since no one said it, I don't think there is. But that's not exactly a proof.

There's a mechanism there. I'll stake my tenure on it!

Unless I go crazy ☺

It's just... cool.

You learned it, like mother's milk, in freshman calculus.

What's that in there?

It gets quite exciting. In 1D, they're not exciting—boring, actually. But in 2 or 3D, exciting!

I'm afraid Berkeley was in the lead here. And Germany. Crazy guys. Arrogant really. And the Polish! Hmph....

It's a suspiciously familiar number....

Damn! I don't like this construction, so I haven't thought it through.

Haha! I've got a better idea. Good. Good thinking.

Too many wiggles—I'm not happy.

That would be nice, if that were true. But, that's not true.

There's a math word for it, but basically, don't go there.

Let me jazz that up a little bit.

I'm not too good at this stuff....

This is a great theorem!

A flat roof! Actually, I think that's brilliant!

I can't read the board. What does that say?

This is something calculus does right.

Oh, boy!

The French guy was a great mathematician, but not God. But the German guy—unbelievable!

I'll put "great." Just 'cause it is. Amazing!

Basic, but beautiful.

Or, whatever pipes send out.

Maybe you don't give a damn?

Finite differences would have to scratch its head, and figure out what to do. Finite elements would just do it.

And finite elements does it again!

Look at this one! They were tough in those days. Wait, that's only 2009. Living people solved that!

Grades come out the way they should.

Stuff fills in.

It's a very, very special matrix.

Linear problems are #1 in all of science!

It's just beautiful.

I didn't like it, but I learned to live with it.

Rain is not coming in this roof!

What is that? A pagoda, maybe?

You see the fun.

Killing sounds kind of violent—let's call it orthogonality.

I've got everybody in here! The whole crowd.

I did that last class? Good, that gives us some probability of correctness.

My chalk waivered a little.

Oh, I'm not sure of anything!

How the hell did that come up?

This is terrible. Don't tell anyone!

All I want to do here is amaze you with the beauty of this transform!

I give 1st place to symmetric matrices. But, orthogonal matrices are #2.

It's the most important complex orthogonal matrix the world will ever see.

In this universe, 4=0.

Are they orthogonal? Life is going to end on earth, it they're not!

It's the fastest Fourier transform in the west!

Do you ever take powers of 2 in your head? I do, at the dentist.

Maybe Bessel himself remembered those stupid functions.

I put that there, more or less for the hell of it.

Let me remind you of this great fact.

So… I frankly don't know what it would be.

Maybe it's a little old-fashioned now, but it's still beautiful.

This is the world plan for eigenvectors.

In a lot of these cases, you just have to be lucky.

I'm delaying actual work.

More thinking, less book stuff.

Did you get caught up in the power outage? I was computing away and boom! I thought the stupid chemists did something.

It's a new room. Our life is changing.

Why did I jiggle this matrix?

Everything here is beautiful!

Math is beautiful. You get some really nice answers. You can quote me on that!

There's a host of dead guys who have their names associated with this.

Am I talking to myself here, or do you see it, too?

It's the tall building with the mushroom on top. I don't know what it's for. So we can watch the Russians, or something.

Golden fleece will not be on the exam.

What did I do wrong? Oh god, I've failed this course!

What's up with that equation?

I think it's good to remember that MIT isn't a picnic all the time.

That's, like, amazing.

That's really a day well spent.

It's kind of a short list, what you really need from calculus.

Those crazy Germans!

Variation of parameters—whatever the hell that is.

Professors would say "everything is important" but that's not the truth.

It ends, and then you move on with your life.

That's my answer. That's where the course ends.

Professor Strang,
Thank you for a great course. We learned a lot, and we had fun doing it.
~Jen Landry #52, Matt Lewis #58 and Laura Stevens #105