

[MUSIC PLAYING]

**JONATHAN GRUBER:** I think the main thing an economics course can do in this day and age is get people to be a little more flexible, a little more thoughtful about decisions they make, and seeing both sides of the problem.

**SARAH HANSEN:** Today in the podcast: seeing economics in a whole new light.

**JONATHAN GRUBER:** I've had application, a course about demand and supply, about Kim Kardashian tweeting herself out a picture of an exercise corset, and that increased demand for exercise corsets. And so thinking about how something, where students can see it and say, "Wow, I hadn't realized that economics help me think about that problem."

**SARAH HANSEN:** Welcome to Chalk Radio, a podcast about inspired teaching at MIT. I'm your host, Sarah Hansen, from MIT OpenCourseWare. In this episode, we'll be talking about the course *14.01 Introductory Microeconomics*.

This course is filled with unique and creative applications for microeconomics in our everyday lives. I'll be chatting today with the creator of this course, Professor Jon Gruber. One of the things I was most excited to find out was the way people perceive economics. So I asked Professor Gruber what misconceptions students tend to bring to this class.

**JONATHAN GRUBER:** That's a good question. I think they tend to perceive it as maybe softer than it is, maybe not perceive that you're going to derive fairly sharp tools that are going to help you explain a lot of the world fairly easily. Then, on the other hand, they often come with expectations that we'll explain more of the world than we can.

**SARAH HANSEN:** So how do you help them address these misconceptions?

**JONATHAN GRUBER:** I think by just being honest about the limitations and benefits of our models, by explaining the power that our models can deliver in fairly simple terms in explaining a lot of the world. But at the same time, representing the things the models can't easily explain and being honest about that and trying to get students interested in studying more economics that can explain those things as well. I don't expect most viewers of my videos to go on to get a PhD in economics, unfortunately. I expect they're going to go out and have other jobs, do other things, and I want them to be more educated consumers of news and to understand what's going on in the world in terms of economic policy.

**SARAH HANSEN:** Could we talk a minute about the real world applications?

**JONATHAN GRUBER:** OK.

**SARAH HANSEN:** It's a really interesting part of the course. You have LeBron James's college decision, the Uber surge pricing. Tell us about your decision to really anchor the course with these real world applications.

**JONATHAN GRUBER:** It's what makes economics fun. Once again, I'm not training people to be economics PhDs here. I'm training people to think like an economist, and thinking like an economist, if you've got a very facile mind and you look at the basic theory videos I teach you, you can understand it. But you only really understand something when you go in the real world and apply it. And so it's a chance for people to see the ways that economics rules the world but to also sort of apply what they've learned to make sure they understand it.

**SARAH HANSEN:** What tips for educators do you have about selecting really good applications?

**JONATHAN GRUBER:** I think it's just a matter of trying to find examples in the real world that are relatable. Companies they've heard of and issues they think about and that-- in a not necessarily obvious way-- teach you about the lessons you want to learn. I've had application, the course about demand and supply, about Kim Kardashian tweeting herself out a picture of an exercise corset, and that increased demand for exercise corsets. And so thinking about how something where students can see it and say, wow, I hadn't realized economics helped me think about that problem.

**SARAH HANSEN:** Professor Gruber's passion for economics is clear, and I wanted to get to the bottom of it. Why does he care so much about helping others find their passion for economics, and how did his own curiosity begin?

**JONATHAN GRUBER:** I came to MIT knowing that I was good at math, but I didn't really like it. What I liked was real world social policy types of issues, and I took 14.01 and said, oh my god, I can use math to apply to the real world. Isn't this cool? And I've been hooked ever since.

Many of your listeners will not realize that there was a time when we used to talk to people next to us on a plane, before we had smartphones. And every time I fly in a plane and tell the person next to me I was an economics professor, they'd say, oh, that was the worst course I ever took, and I thought, that can't be true. It might not be the best, but there's no way it could be the worst course someone ever took. I realized it just was generally badly taught in our school systems, and so I was always interested in trying to address that.

But I think really, where I really want to go is figure out a way to write better problems. It's easy to write a problem with a mathematical solution: "The firm has the following production functions. Solve for their profit maximization." It's harder to write problems that involve math but also derive intuition, and that's really where I want to go is, help students bridge that link between solving equations and understanding why they're doing it and what they're learning from it.

**SARAH HANSEN:** I just want to talk about that a little bit more, because you're not the first MIT faculty member to really want to hone in on intuition. And I'm just wondering, like how do we develop students' intuition, because I'm sure educators out there in all sorts of fields are wanting to do this too. Is it something that's developed over time in a field and just with experience, or is it something we can cultivate as teachers?

**JONATHAN GRUBER:** I think that it is something we can cultivate. I think that it comes from not assuming people know things they don't know. It comes from teaching in layers. So that if there's a set of things I teach that I'd be really disappointed if not everyone came out with intuition from my class, there's other more subtle concepts that if not everyone remembers them, understands them, then that's not the end of the world.

But I'd like students who want to go on to be like, oh, that's interesting. I want to go down that path. So I think it's really about getting the things that you really want people to know, hammering them, but the other thing I like that I do in my class is really always have a constant roadmap.

I always tell the students, OK, here's where we came from. Here's where we're going. Here's where it fits in. So they can have a holistic sense of how it all fits together.

**SARAH**  
**HANSEN:** In our conversation, I asked Professor Gruber what he believes educators can do practically to transfer problems from the classroom into the real world, and his answer touched on a point that is coming into play all over our modern world-- the complexity and truth about, well, truth.

**JONATHAN**  
**GRUBER:** I think the main number one thing is just to teach a healthy respect for the scientific method, to teach students that there are objective truths and that there is this long standing scientific method for how we get at them. The other thing, however, is to recognize that there are two sides of almost every issue. And that this is something that a lot of students at MIT sometimes have problems with my class which is it's not just an equation with one right answer. There's pros and cons to a lot of these things.

So I think it's teaching a search for the objective truth that can help you come to the conclusion that works for you. That there's not necessarily one right answer. You and I might disagree about a topic, but we should agree on an objective set of facts and have a scientific method for getting to our conclusion. I think that's the key-- in today's world especially-- that's the key is just getting people to have a healthy disagreement rather than an unhealthy disagreement.

**SARAH**  
**HANSEN:** One of the most compelling parts of this course is how it emphasizes ways to carry its concepts forward into the real world. Students are given specific pathways they might follow in their career or lives outside of school, where they can use these concepts. This was something really important to Professor Gruber, and I wanted to know why.

**JONATHAN**  
**GRUBER:** I feel that economics is enormously powerful. I'm what you might call an imperialistic economist. I feel like economics can explain lots of things in the world, and there's very few situations where a good economic framework can't help you at least go forward in thinking about it. And I don't want students to just take the AP test and forget about it, quite frankly. I want this to be something they bring with them and actually keep with them.

There's a famous old Saturday Night Live skit about what you remember five years after college, and it's five minutes, and three and a half minutes of it is spring break. I want them to try to have a basic set of intuitions that they can understand can apply to decisions they're going to make about how much to save in their 401(k) to how hard to work, to what car to choose, to how to buy a house, et cetera. And quite frankly, to me personally, how to vote and think about public policy, a set of tools that they can bring to bear on thinking about these important problems in America today.

One slight difficulty we have is a lot of students come in much too determined and set in their ways in what they're going to do. I'm going to be an engineer. I'm going to be a computer scientist, and they're often not flexible enough. So part of I view my job, and a lot of times when they're taking economics, they're just taking it because they have to.

And my job is to get them to say, hey, I actually like this, and I love nothing more when I get an email from a student saying, wow, I wasn't even going to study economics. But I like your course, and want to major in economics. That was wonderful, but I also want the student that is not going to major in economics to several years later saying, hey, yeah, that's something I can relate what I learned in economics to how I think about that problem, and that could help me in my life.

Microeconomics is basic economics. Macroeconomics is essentially applied micro. It's basically about every decision we make, every decision firms make, can all be informed by economic framework, and that can be informed in a particularly healthy way today. Because the economic framework really is about trade-offs and about thinking the fact that nothing's easy, everything involves pros and cons and trade-offs, and there's shades of gray to every decision we make. And I think the main thing an economics course can do in this day and age is get people to be a little more flexible, a little more thoughtful about decisions they make and seeing both sides of the problem.

**SARAH**

**HANSEN:**

If you're interested in learning more about microeconomics or viewing his real world application videos, you can visit Professor Gruber's interactive online MIT course on edX. To access his full lecture videos from his on-campus teaching, head over to his scholar course on our site at [ocw.mit.edu](https://ocw.mit.edu). You'll also find 20 plus additional courses just on microeconomics on OCW.

If you're an instructor, head on over to the OCW Educator Portal at [ocw.mit.edu/educator](https://ocw.mit.edu/educator) to find resources just for you. Thanks for listening. Until next time, I'm Sarah Hansen from MIT OpenCourseWare.

[MUSIC PLAYING]