

# Concept 0 | Economic Data Analysis

Welcome!

I'm very excited to have you here.

If you're in this room you belong here.

If you were on the fence about whether to take this class, you've made the right decision.

If you're like me you're going to take a lot of classes at Pitt that you'll forget about in a couple of years. That's the way school goes.

This is not one of those classes, at least for many of you.

## Dada Analysis

You've taken Econ theory courses, where you talk about things like the demand curve or marginal cost and such.

You write out some equation with a  $y$  variable and some  $x$  variables and some parameters.

Think about the inverse demand curve for a second, we have price is equal to some intercept term plus a slope parameter times quantity.

It's such a fundamental idea in our field, allowing us to talk about what people like.

But have you ever wondered where that slope parameter comes from?

Does someone just make it up? No.

We get it from data.

Many classes you'll take will give you some toy tools to play with when working with data.

In this field we have powerful tools that we share across the sciences.

Let me be clear: this is an intro course and it will feel like an intro course.

You need some statistics but you do not need to have any more technical background than that.

We've worked hard to deliver a course that will not give you just the toys.

You're getting the real thing. That should be exciting.

By the end of the semester you will be able to understand how to read models of data that others have written, build models with data on your own, and be able to communicate your models to an audience.

That's the core skillset we're developing in this class.

And we're going to do it from the ground floor.

I played tennis in high school.

How many of you have seen a tennis serve? You stand sideways behind the line, your racket is in your dominant hand with your elbow pointed into the air, racket behind your head, you toss the ball up into the air with your non-dominant hand, crouch a bit and jump just as the ball reaches apogee, swinging the racket forward to hit the ball as it falls, aiming for a tiny part of the court across the net in such a way that the ball spins as it flies, then catching yourself before you fall, watching the ball fly, and then getting in position to move to where your opponent will hit it.

One summer as an early tennis player when I was learning the basics of tennis this looked absolutely unachievable to me.

But as my instructor correctly told us, it turns out that practicing each one of these steps separately and then together, it's actually very achievable to perform something that looks complicated at the start.

Nothing in this class should feel overwhelming.

We're going to work with big ideas and powerful tools but we're going to do it step by step in an intuitive way.

That's not to say that nothing will feel challenging. It will.

But no single step will feel like too much.

And by the end you'll have the basics of the real tools we use in the field.

That should be exciting to anyone interested in what we do as economists.

## Course Logistics

I was a student once. I like a good class. I like learning something big, insightful, or useful. I don't like exams. I don't like useless assignments. I don't like feeling lost or bored. I like fairness. I like a classroom that's considerate.

And that's what we're doing here. I've set this class up to be the class I would want as a student. It's more work for me but I love my job and I give that as a gift to you as my students.