

Day 02 - Models and Modeling

Sept. 10, 2020



Administrative

- **Office Hours:** We are setting these up now based on your needs. They will be posted soon.
 - Danny's office hours: 3-4pm Tuesday and Thursday (and by appointment)
- **Notebooks:** We will be posting the week's worth of work for you on the course website and D2L.
- **Slides:** Posted [online \(http://dannycaballero.info/cmse202-F20-slides/\)](http://dannycaballero.info/cmse202-F20-slides/); you can get access from D2L.
- **EGR Accounts:** These are only needed to access (<https://jupyterhub.egr.msu.edu> (<https://jupyterhub.egr.msu.edu>)) in case your Python install fails. Email support@egr.msu.edu (<mailto:support@egr.msu.edu>) if you are still having trouble.
- **Groups:** The assigned groups were posted to D2L and emailed to you. Please add your group number to your name so we can assign the groups today.
- **Homework 1:** Will be assigned next week; due the week of Sept. 28th.

Any questions?

Groups

- On D2I and in your email, you will find your group assignment (Number 1 through 8).
- Change your name on Zoom to include your group number
 - (e.g., "Danny" becomes "1 - Danny" if I were assigned to group 1).
- We will work in these groups for several weeks.

From Pre-Class Assignment

Things you said you want more practice with:

- Control structures like loops
- Using pandas to work with and analyze data
- Making models of data (i.e., regression)
- Connecting the programs I write to the models we use

Concerns you have:

- I don't remember syntax for different libraries
- I need to look at websites and notes to complete tasks

What is a scientific model?

In the pre-class assignment, you found videos that describe a model. We can think of models in a variety of ways.

One of my PhD students, John Aiken, made a short film some years ago about models when he was supposed to be writing his master's thesis. Let's watch it.

Any questions, concerns, comments?

Icebreaker for your groups

Introduce yourself

- Name
- Major
- What have you been doing for fun or to relax during the pandemic?

```
In [1]: from IPython.display import YouTubeVideo
YouTubeVideo("dkTncOPqo5Y",width=800,height=600)
```

Out[1]:

What is a scientific model?

