

# Data Science For Everyone

## Lab I

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# My Information

Call me Will, it's my name

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Office Hours: Thursday (that's today!), 3:15 to 5:15

Location: Politics Building, 19 West 4th St, room 420

# Contact

Please feel free to contact me about anything.

Feel free to ask questions via email

- Will respond within 24 hours (Follow up if I don't!)

Technical questions (math, code, etc.) are usually better to discuss in person.

If you can not meet during office hours, please email me.

Come to office hours for:

Help with material, labs, homeworks, test, code, etc.

# What Lab is for...

Lab is for hands on learning

This means working through mathematical examples

Getting basic code and platforms to work

Asking questions and discussing what we are doing

Reviewing key material

ALWAYS BRING YOUR LAPTOP

NO YOUTUBE, FACEBOOK, NEWS, etc though..

# What We'll Do in Lab...

We'll review code and material from class.

Following that we'll sometimes break into small groups and work on either:

- The lab assignments
- Practice material

Please look at the lab assignments BEFORE lab!

You should either finish or make significant progress on lab assignments in lab - so come.

All of my code (Jupyter notebooks) and practice material will be posted online.

# How to Utilize the Lab

Lab is for you, so use it

BUT if you are already comfortable with the code, math or ideas we are going over in lab, you don't have to come/stay

Lab is not about wasting your time

The best way to utilize lab is go over the lectures, material, or homeworks beforehand so you can come to lab with questions or issues

If you can complete a lab assignment on your own, you may not need to attend lab that week

# Homework and Lab Assignments

Homework policy (from the syllabus):

For homeworks and the project, every day late results in a 20% drop in your grade for that assignment. There are no exceptions.

Lab Assignment Policy (from the syllabus):

No late labs.

But you should get most of the lab assignments done in class!

# General Advice

New things are hard

Nothing we are doing in this class is super advanced or incredibly complicated

But new material will still feel challenging, even if it is straightforward

You can definitely handle everything we are doing in this class

Do not be afraid to ask for help!

Do not worry if others are more comfortable with the material, your backgrounds with the material are very different



# Coding Advice

I can help you code, but only you can actually teach yourself

Review lab assignments and practice material BEFORE lab!

Learning to code requires being stubborn and figuring it out

You will get errors, make mistakes, and be confused (a lot!)

Even very experienced coders consult Google or stackexchange constantly

Consult the official documentation!

You can figure it out, I promise. Just try.

# Learning How to Code

Top websites to use when coding:

1. Google
2. Google
3. Google
4. Google
5. Google
6. Google
7. More Google

But also stackexchange

# Math/Stats Advice

Do not just memorize the math

Try to understand what is going on and why

Doing this makes it much, much easier to remember and use the material

The only way to really learn math is to struggle with it

That means doing problems, thinking it through, and doing the hard work of understanding

Don't be afraid to ask questions

# Your Skills..

Do you feel comfortable programming in Python?

Have you used numpy, pandas, scikit learn?

Do you feel comfortable programming in another language?

Have you have run a linear regression?

Can you tell me what variance is?

If you answered yes to all (or most) these questions, you may want to speak with professor Jones-Rooy about skipping this class.

# Next Week....

We'll go over:

Jupyter Notebooks

Python

How to submit labs and homeworks

Bring your laptop!

Now let's look at code