



WELCOME

Econometría I – Econometrics I

UNAM - FE

# Basic Information Course



## Class name & course code

Matemáticas III

Econometría I

Álgebra Lineal y  
modelos  
económicos

Econometría II



## Description

This course focuses on **designing, estimating** and **interpreting** results from econometric models based on macroeconomics and microeconomics



## Prerequisites

- Intermediate **Probs & Statistics**
  - Intro to **Econometrics**
  - **English** (B1-B2)
- Basic **Econometric Software** Knowledge (stata, e-views)



## **Benjamín García**

Tenured Lecturer

PhD in Economics from UNAM  
and Master of Science from  
Faculty of Engineering,  
University of London.

Studies in Environmental  
Technology and Energy  
Economics and Development  
from the Imperial College of  
Science and University of  
Surrey.



## **Humberto Acevedo**

Associate professor

Bachelor of Economics, and  
Major in Applied Econometrics,  
UNAM

Working as a Data analyst with  
more than 2 years of  
experience.

Currently enrolled for a master's  
degree



## **Emilio Sandoval**

Collaborator

Currently studying bachelor of  
economics, UNAM

Working as a Machine Learning  
developer.

# Material we need

01

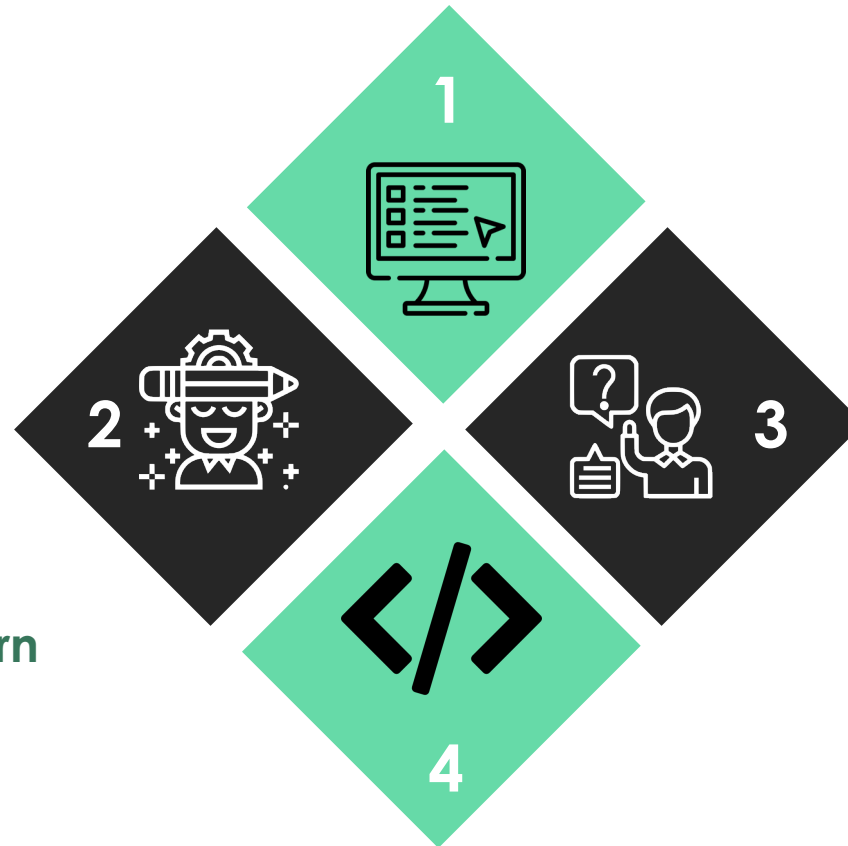
## Computer

In order to econometric  
**software**

02

## Full of enthusiasm to learn

We will provide all  
material, you just have to  
worry about of paying  
attention



03

## Willingness to ask

Think about it, if you ask  
you don't lose anything  
but we all gain!

04

## Not afraid to code

Don't worry, we cover  
you as long as you show  
interest

## Class calendar



Face-to-face classes

32

sessions

2

exam days

# Grading

Exams

**30%**

Two both theoretical and practical tests of 1h 30 min each

Homework

**30%**

Practices in LaTeX (PDF and code in Overleaf)

Classroom participation

This is the best way for you and other to really engage with the class

**40%**

Final project

A short paper that shows the results for implementing time series



**Note:** we do not take into account attendance

# Classroom Policies

Important to consider



## Language

Class materials (i.e. pptx, Google Colab) are given in english.

Homeworks can be written in either spanish or english



## Attendance

Fifteen minutes for tolerance

Please, pay attention in classroom



## Penalty

You can send your practices even when the deadline has passed, but with no opportunity to get the highest grade



## Ethics & plagiarism

We are all grown-ups and accountable for our actions, so please, do not make us to ban you from the class

# Course Goals

## Methodology

- Referencing
- LaTeX
- Researching
- Spelling & grammar (scientific)

## Data analysis cycle

- Access
- Explore
- Prepare
- Analyze & Report
- Export

## Coding

- Stata
- Python
- LaTeX

## Intermediate econometrics

- Logit & Probit
- Panel Data
- Simultaneous eq.
- Time Series
- Cointegration

## Econometrics foundations

- Hypothesis testing
- Functional Form
- Multicollinearity
- Normality
- Homoskedasticity
- Autocorrelation





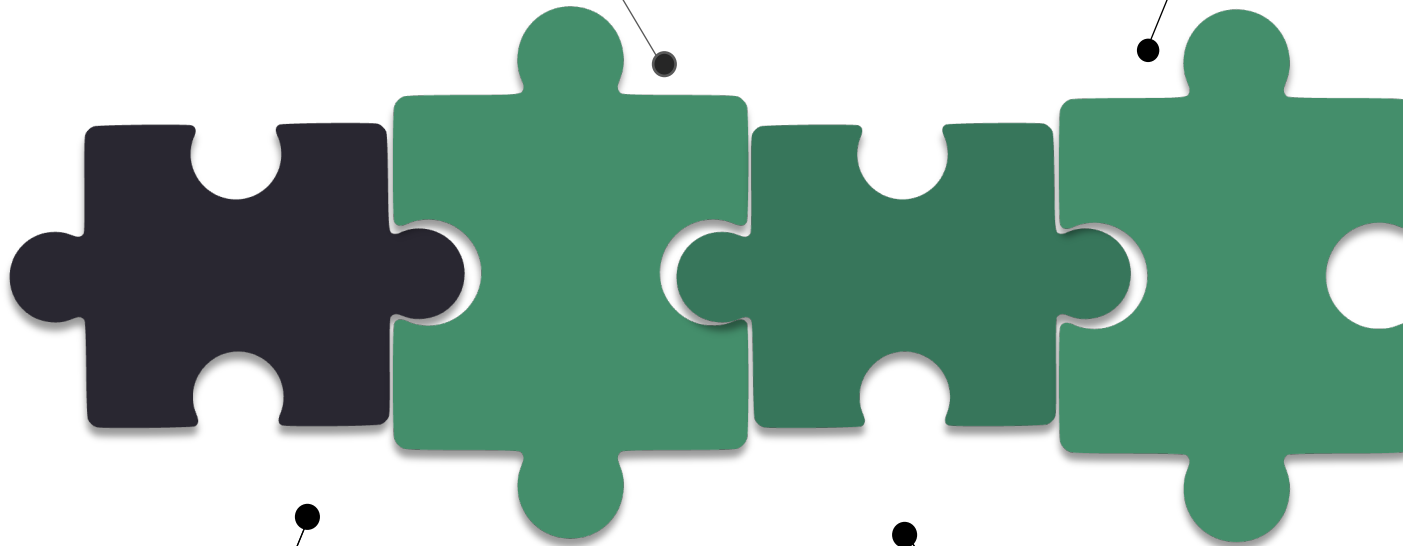
# Academic Integrity and what we expect

## Self-taught

Classes are better when they are complemented with our own time.

## No doubts at all

Feel free to ask for help. Classes are not made for feeling stress but to learn in the best possible way.



## Independence

Do not wait to be given every single thing. We are here for leading you, but not to make for you.

## Responsibility

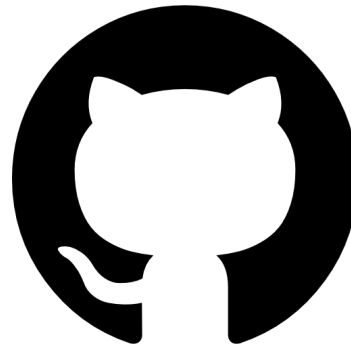
Even when we adapt material for each group independently, we expect you to take full responsibility to keep track of your studies.

## Tools



### Code

Create econometrics models with STATA, replicate them in Python with google colab, and write a report with LaTeX



### Repository

All material are provided and available in a github repository



### Brilliant & webpages

For visual explanations

Now tell us about your expectative, desires and  
opinons



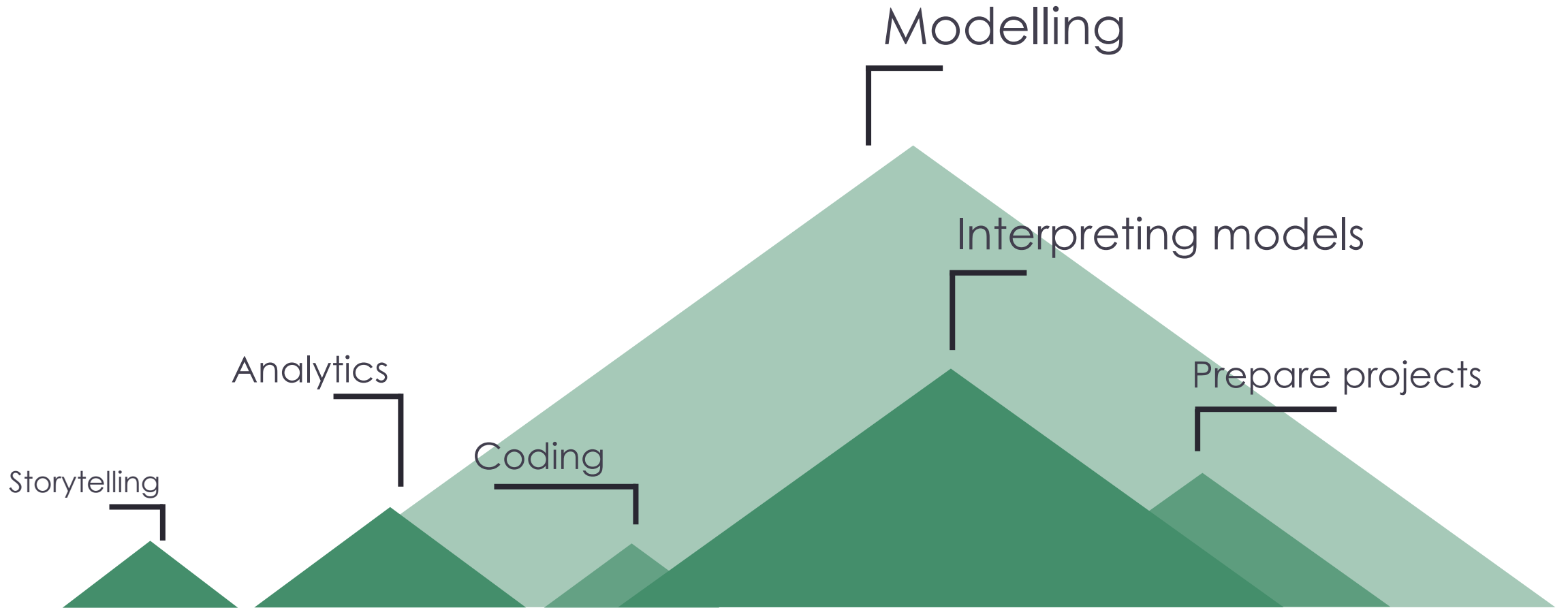
# Typeform

Please, fill the following survey



# Future Skills

What you are going to develop by taking this course



Please, visit the Whimsical  
we prepare for the class:

[Link](#)





Visit our GitHub Repository  
where scripts and PPTX  
slides are hosted

[Link](#)

# THANK YOU

Any question?

Do not hesitate to contact us!



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