Econometrics II

Level: *Master – First year - M1*
Cursus : *Economics*
Semester : S1
Teaching hours : 18 hours of lectures (CM)
Teacher : Siwar Khelifa
Contact : khelifa@gate.cnrs.fr

Objectives of the course :
The objective of this course is to introduce the maximum likelihood estimation method used when the data to be processed are of a binary or categorical nature (discrete dependent variables), and to present two types of models to be used in the modeling of this type of estimation: when the dependent variable is binary and when the dependent variable is a count variable.

Plan of the course :

3 chapters are to be treated in this course with one empirical application on R :
- Chapter 1: Maximum likelihood estimation
- Chapter 2: Binary response models
- Chapter 3: Count models

Skills developed :

- Be able to determine the nature of the estimation model to use according to the nature of the dependent variable.
- Be able to interpret the model results estimated with the maximum likelihood method.
- Use R for simple binary dependent variable model estimations.

Grading system :
One written test

Prerequisites :

- Linear regression model
- R software (the basics)

References :

- Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press.