

# Financial Econometrics

Theodore Panagiotidis

[tpanag@uom.edu.gr](mailto:tpanag@uom.edu.gr)

## Syllabus

1. Univariate Time Series Modelling: AR, MA, ACF, PACF, ARMA  
Brooks Chapter 5, Enders Chapter 2, Hamilton Chapter 3, Greene 19.
2. VAR Models: Block Significance, Impulse Response Functions, Variance Decomposition  
Brooks Chapter 6, Enders Chapter 5, Hamilton Chapter 11, Greene Chapter 20.
3. Stationarity and Unit Root Testing, Cointegration: Engle Granger, Johansen  
Brooks Chapter 7, Enders Chapter 4&6, Hamilton Chapter 15&19, Greene Chapter 22.
4. Modelling Volatility and Correlation: Symmetric and Asymmetric GARCH models, Multivariate GARCH models.  
Brooks Chapter 10, Verbeek Chapter 10, Greene Chapter 9.

## **References**

Brooks C. (2019) *Introductory Econometrics for Finance*, Cambridge University Press.

Enders, W. (2015) *Applied Econometric Time Series*, Wiley.

## **Additional Reading**

Greene W.H. (2008) *Econometric Analysis*, Pearson.

Hamilton J.D. (1994) *Time Series Analysis*, Princeton University Press.

Verbeek, M. (2012) *A Guide to Modern Econometrics*, Wiley.

Software:

**EViews**

Assessment:

Final Assessment to be submitted by email by the 30<sup>th</sup> of June 2022 at 23:59.