



Universidade Presbiteriana

**Mackenzie**

**CCSA - Centro de Ciências Sociais e Aplicadas**

Programa de Pós-Graduação em Economia e Mercados

## Course Syllabus

### Department/Faculty

Applied Social Science Center

### Graduate Program

Economics and Markets – Professional Master's

### Degree

Academic Master's

Doctorate (PhD)

Professional Master's

### Course Name

Economic Statistics and Econometrics

### Professor(s)

Pedro Raffy Vartanian

### Office hours

48 hours

### Course Overview

Data and Descriptive Statistics. Random variables. Study of probability distributions. Application of estimation techniques. Hypothesis testing. Understanding and use of linear models. Introduction to unit root tests. Understanding of issues related to the exogeneity and causality. Study of Vector Autoregression model. Binary dependent variables. Time series regression analysis and prediction. Introduction to the estimation of dynamic causal effects.

### Topics outline

Data and Descriptive Statistics.

Random variables.

Study of probability distributions.

Application of estimation techniques.

Hypothesis testing.

Linear models.

Unit root tests.

Understanding of issues related to the exogeneity and causality.

Study of Vector Autoregression model.

Binary dependent variables.

Time series regression analysis and prediction.

Estimation of dynamic causal effects.

### Letter Grade Assignment

Grade A (Excellent)

Grade B (Good)

Grade C (Satisfactory)

Grade D (Unsatisfactory)



Universidade Presbiteriana

**Mackenzie**

**CCSA - Centro de Ciências Sociais e Aplicadas**

Programa de Pós-Graduação em Economia e Mercados

---

### Texts, Materials, and supplies

#### Basic Bibliography

GREENE, William H. **Econometric analysis**. 6th ed. Upper Saddle River, N.J.: Pearson Prentice Hall, 2008.

STOCK, James H; WATSON, Mark W. **Econometria**. São Paulo: Pearson/Addison Wesley, 2004. WOOLDRIDGE, Jeffrey M. **Econometric analysis of cross section and panel data**. Cambridge, Mass.: The MIT Press, 2002.

#### Complementary Bibliography

GUJARATI, Damodar N.; PORTER, Dawn C. **Econometria básica**. 5. ed. São Paulo: AMGH, 2012.

HAYASHI, Fumio. **Econometrics**. Princeton, N.J.: Princeton University Press, 2000.

HEIJ, C. **Econometric methods with applications in business and economics**. Oxford: Oxford University Press, 2004.

KENNEDY, Peter. **Manual de econometria**. Rio de Janeiro: Elsevier, c2009.

WOOLDRIDGE, Jeffrey M. **Introdução à econometria: uma abordagem moderna**. São Paulo: Thomson, 2007.