

GRADUATE – Disciplines Menu  
Doctorate and Masters in Economics

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|---|---|
| DISCIPLINE: Statistics II   | CODE: MDPEEC003   |
| ACRONYM: ESTII  |   |
| PROFESSOR:<br>Marcelo Jovita Moreira  | WORKLOAD: 40h<br><br>CREDIT HOUR: 4   |
| MANDATORY:<br><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO   | COURSE:<br><input type="checkbox"/> M <input type="checkbox"/> D <input checked="" type="checkbox"/> MD |
| PREREQUISITES:  |   |
| CONCENTRATION AREA:<br>Statistics and Econometrics  |   |
| STUDY PLAN  |   |
| <p><b>Course in Statistics II</b></p> <p>This is an MA/Ph.D. course in statistics and econometric theory. Topics to be addressed include sufficient statistics (CB 6); point estimation (CB 7); hypothesis analysis (CB 8); asymptotic theory (CB 5); matrix algebra (G 14), ordinary least squares estimator (G 15-17); inference (G 18-22) in linear regression models, generalized least squares estimator (G 26-28), nonlinear regression (G 29), and a generalized method of moments. Typically, the class meets on Mondays and Fridays (usually 11:00 a.m. - 1:00 p.m.), and the sessions are held on Wednesdays (at a time to be agreed).</p> <p>There will be 4 exercise lists. In the calculation of your total grade, the lowest grade of 4 sets of problems will be discarded. The assistant will give a 10 grade for each student (PS). The grade will not be counted in the general grade, if the final grade is better. You will receive a 40 grade on the medium-term exam (MT) and a 50 grade on the final exam (FI). The global classification of the course will be determined by the following formula: <math>CG = \max(PS, 1/5 * FI) + MT + FI</math></p> |   |
| <p><b>GOALS</b></p> <p>The goal of the Statistics II course is to provide an overview of the methods and techniques used currently in econometrics. Prerequisites for the course are: linear algebra and statistics I. The first part of the course will present basic concepts of asymptotic theory, estimation, and hypothesis tests. The second part of the course will address least squares estimator, inference in linear regression models, generalized least squares estimator, and nonlinear regression.</p>   |   |
| <p><b>BIBLIOGRAPHY</b></p> <p><b>Books:</b><br/>Casella, G. and R. Berger, Statistical Inference. [CB]</p> <p>Goldberger, A., A Course in Econometrics. [G]</p> <p><b>Other books:</b></p>  |   |

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Hayashi, F., Econometrics. [H]

Wooldridge, J., Econometric Analysis of Cross Section and Panel Data. [W]