University of Colorado - Department of Economics Econ 7828 - Econometrics - Spring 2015 Professor Carlos Martins-Filho

O ce. Economics Building 105

Meetings. Tuesdays and Thursdays from 11:00 AM - 12:15 PM in ECON 119.

O ce hours. Tuesdays 12:30 PM - 2:30 PM or by appointment. For appointment send an email to carlos.martins@colorado.edu.

Class URL. http://spot.colorado.edu/ martinsc/Econ _7828.html

Prerequesites. ECON 7818 (or equivalent) or consent of instructor.

Objectives. This course is the second semester of your rst-year graduate sequence in Econometrics. The rst semester covered some fundamental concepts in probability and statistics and introduced you to estimation and tests of hypotheses. In this course our objective is to introduce you to various parametric models of regression. They include the classical linear regression model and associated models that relax several of its constituent assumptions. We will also treat regression models where some or all regressors are \endogenous" as well as models with multiple regressands. Time permitting we will also deal with models for regressands that are either discrete or in some other way limited.

Grades. Your course grade depends on four homework sets, a midterm and a nal examination. Relevant dates are given below.

Evaluation	Percentage	Dates
Homework sets	30	announced in class
Midterm examination	30	March 10, in class
Final examination	40	

- 2. Casella, G. and Berger, R., 2002, Statistical inference, Duxbury, Paci c Grove, CA.
- 3. Davidson, J., 1994, Stochastic Limit Theory, Oxford University Press, Oxford.
- 4. Grimmett, G.R. and D.R. Stirzaker, 1992, Probability and Random Processes, Oxford University Press, Oxford.
- 5. Jacod, J. and P. Protter, 2000, Probability Essentials, Springer, Berlin.

B. Econometrics

- 1. Davidson, J., 2000, Econometric Theory, Blackwell Publishers, Oxford.
- 2. Hansen, B., 2013, Econometrics, unpublished, available at http://www.ssc.wisc.edu/ bhansen/econometrics
- 3. Schmidt, P., 1976, Econometrics, Marcel-Dekker, New York.

Topics .

- 1. The classical linear regression model: estimation and testing.
 - Nonnormality

Restricted estimation

Generalized Least Squares (GLS) and Feasible Generalized Least Squares (FGLS)

2. Endogeneity

Instrumental variable (IV) and Generalized Method of Moments (GMM) estimation and testing

- 3. Simultaneous equations
- 4. Panel data models
- 5. Limited regressand models

Important information.

If you qualify for accommodations because of a disability, please submit a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the

Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with di erences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See polices at www.colorado.edu/policies/classbehavior.html. and at www.colorado.edu/studenta airs/judiciala airs/code.html#student __code.

All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; 303-725-2273). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at www.colorado.edu/policies/honor.html and at www.colorado.edu/academics/honorcode/.

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