Economics 8838-001

Prof. Xiaodong Liu

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Course Description:

Location: Economics 5 Meeting Times: TTH 2:00-3:15 Office Hours: TTH 12:30-2:00

Spring 2016

Tentative Course Outline:

- 1. Theory of Stochastic Processes
 - a. Stochastic Processes and Dependence
 - i) Basic concepts and convergence
 - ii) Independence and stationary
 - iii) Ergodicity and mixing
 - iv) Strong and uniform mixing
 - b. Mixing
 - i) Mixing sequences and mixing inequalities
 - ii) Sufficient conditions for strong and uniform mixing
 - c. Martingales
 - i)

- b. Asymptotics for Dynamic Models
 - i) Limit results for M.D. processes and applications to ARMA processes
 - ii) Limit results for mixing and NED and applications to ARMA processes
- 5. Spatial Dependence
 - a. Spatial Autoregressive (SAR) Models
 - b. Spatial Mixing and NED

University Policies:

University policies regarding classroom behavior are available at http://www.colorado.edu/policies/classbehavior.html and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code

Information regarding the University Honor Code is available at http://www.colorado.edu/policies/honor.html and at http://www.colorado.edu/academics/honorcode. The Honor Code Council can be contacted by email at honor@colorado.edu or by telephone at 303-725-2273.

University policies regarding disabilities are available at http://www.colorado.edu/disabilityservices. Disability Services can be contacted by telephone at 303-492-8671, or in person at Willard 322.

University polices regarding religious practice are available at http://www.colorado.edu/policies/fac_relig.html.

University policies regarding Sexual Harassment and Amorous Relationships are available at http://www.colorado.edu/odh/. The Office of Discrimination and Harassment can be reached by telephone at 303-492-2127. The Office of Judicial Affairs can be reached at 303-492-5550.