University of Wyoming, College of Business
Department of Economics and Finance

ECON 5370
Advanced Econometric Theory III
Spring 2018

Instructor: David Aadland
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Class Homepage: http://www.uwyo.edu/aadland/classes/econ5370/

Course Description:
More in-depth coverage of topics in ECON 5350 and 5360. Topics are selected based on current advancements in econometrics and students' research interests and may include generalized method of moments (GMM), nonparametric estimation, state-space models and the Kalman filter, mixed and nested logit models, multinomial discrete-choice models, and simulated maximum likelihood.

Course Prerequesites: ECON 5350 & 5360.

Primary Text: None
Supplementary Texts: None

- *Econometric Analysis* by William H. Greene (7th ed.)
- *Time Series Analysis* by James D. Hamilton
- *Econometric Analysis of Cross Section and Panel Data* by Jeffrey M. Wooldridge (2nd ed.)

Course Objectives:
The primary objective of this course is to offer a survey of advanced topics in econometrics. A second objective is to help students initiate their own econometric analysis with the goal of successful dissertation defense and publication in refereed academic journals.

Course Requirements:

- Computer Software Packages. We will be using a combination of Matlab and Stata throughout the course.

- Take-Home "Quizzes". There will be five short take-home quizzes. Each will be assigned on Thursday and will be due at the beginning of class on Tuesday. The assignments must be typed and no longer than three double-spaced pages.

- Research Project. Each student will write a short empirical research paper. In addition to the paper, each student will complete a formal research proposal, graded rough draft, and an oral presentation. Details to follow.

Grading: Examinations and problem sets will be weighted as follows:

5 Quizzes	(100 pts)	50%
Research Project	(100 pts)	50%
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	(200 pts)	100%

Attendance Policy: Regular attendance is expected.

Academic Dishonesty Policy:
UNIREG 802, Revision 2, defines academic dishonesty as "an act attempted or performed which misrepresents one's involvement in an academic task in any way, or permits another student to misrepresent the latter's involvement by assisting the misrepresentation." Academic dishonesty will not be tolerated in this class; any instances will be referred to the university's established procedure for judging such cases, with severe penalties as found appropriate.

Disclaimer:
Subsequent changes may be made to any aspect or detail of this Syllabus if and when necessary. Any changes will be announced in class as soon as practical.

Course Topics (tentative):

- Review of ECON 5340 & 5350
- Time Series Econometrics
- Simultaneous Equations
- Non-Market Valuation Econometrics
- Non-Parametric and Spatial Econometrics (Prof. Delgado, Purdue University, Feb. 19-20)
- Econometrics of Program Evaluation (Prof. Gilbert, Colorado School of Mines, April 5-6)
- Simultaneous Equation Models with Discrete and Censored Depenent Variables & Conjoint Analysis (Prof. Donald Waldman, CU-Boulder, April 12-13)