University of Hawaii at Manoa  
Department of Economics  

Course Syllabus  
Economics 628 - Econometrics I  
Spring 2016

Class Time: MW 1:30-2:45pm  
Class Location: SAKAM A104  
Instructor: Peter Fuleky  
Office: 508 Saunders Hall  
Office Hours: anytime by appointment  
E-mail: fuleky@hawaii.edu

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Textbooks:

The main text for the course is Davidson and McKinnon: *Econometric Theory and Methods*. I will also draw upon material in other lecture notes and books. For a detailed list please see the course website: [http://www2.hawaii.edu/~fuleky/econ628/econ628.html](http://www2.hawaii.edu/~fuleky/econ628/econ628.html).

Overview/SLO:

This course aims to provide first year economics Ph.D. students with an introduction to probability theory and statistical inference as well as modern econometric methods and theory.

Prerequisites:

There are no formal prerequisites, but students are expected to have completed prior coursework in statistics and calculus at the undergraduate level.

Course Structure:

There will be two lectures per week. Attendance is not mandatory at lectures, but exams and homework assignments will focus primarily on material presented in lecture.

Homework problems and answers to homework problems, as well as important information with regard to exams and announcements will be posted on Google Classroom: [https://classroom.google.com/](https://classroom.google.com/). To join the class, use code: vW9o5z.

It is your responsibility to check the website for announcements, assignments, and any possible changes related to the course plan.

Rough Outline of Topics:

1) Probability Theory
   - Random Variables
   - Distribution Functions
   - Expectations, Transformations
   - Joint Distributions
   - Conditional Distributions
   - Covariance, Correlation
   - Convergence
   - Central Limit Theorem

2) Econometrics
   - Ordinary Least Squares
   - Asymptotics
   - Maximum Likelihood
   - Heteroskedasticity, Serial Correlation
   - Instrumental Variables
   - Generalized Method of Moments