

# Stochastic Processes and Time Series Econometrics: ECON311

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## Abstract

This course develops and applies time series statistical methods for the analysis of dynamic economic models. It develops tools from probability theory, statistics and decision theory are developed and uses them to study nonlinear models of economic time series. These tools support applications in empirical macroeconomics and finance.

## Course Outline

- I. Decision Theory: 1.5 lectures
- II. Stationarity, Law of Large Numbers, Central Limit Approximation: 2.5 lectures
- III. Recursive Learning and Maximum Likelihood: 2 lectures
- IV. GMM Theory: 4 lectures

\*\*For updated class notes, please refer to [larspeterhansen.org](http://larspeterhansen.org) > Teaching > Class Notes. Other materials will be distributed as necessary.